

Examining the Generalisability of 'Social Drama' for Young People with Autism Spectrum Disorders to Natural Environments

Submitted by:

Elaine Clotworthy

2022

Submitted in fulfilment of the requirement for Doctor of Philosophy

Supervised by Professor Carmel O'Sullivan

Declaration

I declare that this thesis has not been submitted as an exercise for a degree at this or any other university and it is entirely my own work.

I agree to deposit this thesis in the University's open access institutional repository or allow the Library to do so on my behalf, subject to Irish Copyright Legislation and Trinity College Library conditions of use and acknowledgement.

I consent to the examiner retaining a copy of the thesis beyond the examining period, should they so wish (EU GDPR May 2018).

Clains Clotworthy

Dedication

This thesis is dedicated to family. Families who participated in this study, friends being the family we choose for ourselves, and my own family. In particular, this thesis is dedicated to my Mum and husband David. Thank you both for everything.

Acknowledgements

Firstly, I wish to thank everyone who participated in this study; teachers, SNAs and in particular the families. Those whose case studies are presented, but also those for whom this was not possible. You opened your homes, invited me to events, shared meals with me and allowed me to be 'a part of the furniture and family'. I learned more than is captured in this thesis from you all, especially Fred and Peadar; you will always hold a special place in my heart.

A huge thank you to my supervisor and friend, Professor Carmel O'Sullivan, without whom I never would have believed I could start a PhD, let alone finish one. Your generosity, encouragement and hours spent working with me goes above and beyond, and I am so grateful. To Trish, who made the most impossible part of this journey possible.

To my Marino family; Michael, Máire and Gene for their leadership, advice, and encouragement over the last number of years. To the Castle Bellingham crew, Breed and Sineád. To Miriam, for always lightening the load. To Bernie and the lads, Ian, Martin, Tadhg and Darren, for all the company and support when no one was on campus. A special thanks to Ian for always checking in and many pep talks. To Mairead for all the love and support. To Claire and Suzy, for endless advice, support, encouragement and belief on every journey.

To friends, the family we choose for ourselves, with whom I am so fortunate. To the ladies, in particular Sineád and Emma, to Susan, Anna and Jen for the constant support and understanding. To Casey, for always being there, and to Tom for the swims, support, and being the best friend. To my family; the McGiverns for their support and always understanding my absence, the Clotworthys, especially Uncle John for everything. To Auntie Yvonne and Dad, who I know would be so proud. To Ian, and especially Mum, for showing me the value of hard work, always being there and supporting me in everything I do.

Finally, to my husband David, a life time of thank yous would not be enough. Without you, this journey would not have been possible. We have experienced life's highs and lows during this journey, and I cannot wait for the next chapter in the story of our life. Not forgetting Elon, who has offered endless support without even realising!

Summary

Autism Spectrum Disorders (ASD) are becoming more prevalent in Ireland, with literature positing that a common challenge for those with ASD is generalising social skills from intervention settings to natural environments. This research aimed to assess the generalisability of social skills demonstrated by participants in O'Sullivan's Social Drama model, and identify the factors that enhance and inhibit the demonstration of participants' social skills in all environments. This study employed an ethnographic case study approach, with two case studies. The data collection tools used were document analysis, questionnaires, observation and interviews and these were designed around the operationalisation of generalisability for this study, which focused on time, setting, individuals present and responses/behaviours of participants. Findings from both case studies show that social skills demonstrated in Social Drama do not generalise to other environments, however, certain elements of the model generalised such as the use of imagination, fictional worlds and role to interact with peers without facilitation in multiple settings. The findings indicate that the type of environments, teaching methodologies, levels of structure and formality in settings outside Social Drama did not enable participants to generalise social skills to these settings. A lack of inclusive education for both participants in their schools was an unexpected finding. The successful methods used to elicit child voice in this study are of note including; modification approach, child led, individualised interviews, role play, co-created improvised storytelling, creation of fictional worlds, games and embodied think aloud protocols. The importance of individualising techniques, and the interviewer knowing the participants was found to be significant in this study. Recommendations include the use of Social Drama methods in educational and home settings to enhance demonstration and generalisability of social skills, education for teachers and parents in use of these methods, and policy changes incorporating compulsory Continuous Professional Development (CPD) for teachers working with children with ASD, inclusion of child voice in research relating to their lives, and embedding creative and imaginative teaching methods in curriculum documents. Limitations in the study included the small sample size, therefore findings are not generalisable to others attending Social Drama classes.

Table of Contents

C	hapter (One Introduction	1
	1.1	Study Overview	1
	1.2	Policy Background	2
	1.3	Positionality	4
	1.4	Research Focus	5
	1.4.1	Research Questions	5
	1.4.2	Methodology	5
	1.4.3	Limitations	6
	1.5	Contribution to Knowledge	6
	1.6	Thesis Overview	7
С	hapter 7	Two Autism Spectrum Disorder and Pathological Demand Avoidance	9
	2.1	Introduction	9
	2.2	Autism Spectrum Disorder and Pathological Demand Avoidance	9
	2.2.1	Autism Spectrum Disorder	9
	2.2.2	Pathological Demand Avoidance	10
	2.2.3	Theory of Mind	12
	2.2.4	Executive Function	18
	2.2.5	Central Coherence	20
	2.2.6	Anxiety	24
	2.2.7	Social Motivation and Stimuli	26
	2.2.8	Emotions	29
	2.2.9	Friendship	34
	2.2.10	Collaborative Group Work	35
	2.2.11	Imagination	37
	2.2.12	Conclusion	41
С	hapter 7	Three Generalisation	42
	3.1	Introduction	42
	3.2	Generalisability Theories and Implications	42
	3.3	Social Skills Interventions and Generalisability	44
	3.4	Didactic and Experiential Approaches	46
	3.5	Characteristics of Social Skills Interventions which Evidence Generalisability	47
	3.5.1	Multiple Exemplars	47
	3.5.2	Homework	49
	3.5.3	Parental Involvement	50
	3.5.4	Typically Developing Peers	51
	3.5.5	Self-Monitoring and Self-Regulation	54
	3.6	Drama and Social Skills Interventions and Generalisability	55
	3.7	Assessing Generalisability	57

	3.7.1	Parents	57
	3.7.2	Participant Voice	58
	3.7.3	Teachers	59
	3.7.4	Peers	59
	3.8	Stimuli	60
	3.9	Natural Environment.	. 61
	3.10	Social Motivation	. 62
	3.11	Conclusion	. 63
C	hapter l	Four Drama, Theatre and Autism	65
	4.1	Introduction	65
	4.2	Drama in Education	. 65
	4.2.1	The Emergence of Process over Performance	65
	4.2.2	Process Drama	67
	4.2.3	Living Through Drama	68
	4.3	Drama, Imagination and Creativity	. 69
	4.4	Drama and Special Educational Needs	70
	4.5	Drama, Theatre and ASD	71
	4.5.1	Theatre Interventions	72
	4.5.2	Drama Interventions	73
	4.6	Social Drama Model	75
	4.6.1	Role	79
	4.6.2	Tantrum Valley	80
	4.6.3	Research on the Social Drama Model	81
	4.7	Generalisability and the Social Drama Model	83
	4.7.1	Social Drama as a Social Motivator	. 84
	4.7.2	Drama Stories as Social Stimuli	86
	4.7.3	Multiple Exemplars and Train Diversely	86
	4.8	Conclusion	. 88
C	hapter l	Five Research Methods	89
	5.1	Introduction	. 89
	5.2	Aim of the Study and Research Questions	. 89
	5.3	Methodological Approach	89
	5.3.1	Ethnographic Case Study	. 89
	5.3.2	Voice	91
	5.4	Sampling Framework and Participants' Profiles	95
	5.5	Study Design	100
	5.5.1	Personalised Symptom Assessment	102
	5.6	Data Collection Methods	103
	5.6.1	Document Analysis	103

5.6.2	Questionnaire	107
5.6.3	Interview	108
5.6.4	Observation	115
5.6.5	Reflective Research Journal	119
5.7	Data Analysis	122
5.8	Validity	125
5.9	Ethics	126
5.10	Pilot Study	128
5.11	Limitations	130
5.12	Conclusion	130
Chapter	Six Case Study One Fred	132
6.1	Introduction	132
6.2	Integrated and ASD Exclusive Settings	132
6.2.1	School Setting: Context	132
6.2.2	The Mainstream Class Setting	133
6.2.3	Relationships with Teachers and Peers	134
6.2.4	Summary	137
6.3	Socially Strategic Behaviours	137
6.3.1	Socially Strategic Behaviours	138
6.3.2	Language	139
6.3.3	Striving for Perfection	143
6.4	Imagination	144
6.4.1	Impact of Being in Role on Fred's Imagination	144
6.4.2	Summary	152
6.5	Anxiety	153
6.5.1	Fear of the Unknown	153
6.5.2	Impact of Anxiety on Fred's Life	154
6.6	Expression of Emotion	155
6.6.1	Emotional Competence	156
6.6.2	Supressing and Regulating Emotions	157
6.6.3	Summary	160
6.7	Competitiveness and Self-Esteem	161
6.7.1	Winning and Losing	161
6.7.2	Competitiveness In-Role	162
6.7.3	Turn Taking	163
6.7.4	Perspectives on Fred's Self-Esteem	164
6.7.5	Summary	165
6.8	Support Strategies	165
6.8.1	Preventative Strategies	166

6.8.2	Strategies to Decrease Anxiety	168
6.9	Conclusion	171
Chapter	Seven Case Study Two Peadar	174
7.1	Introduction	174
7.2	Integrated and Exclusive Settings	174
7.2.1	Integrated Setting: School	174
7.2.2	Facilitation/Support for Meaningful Inclusion	175
7.2.3	Exclusive Settings	176
7.3	Collaborative Activities	176
7.3.1	Perspectives on Peadar's Participation in Pair/Group Work	177
7.3.2	Impact of Peers and Environment	177
7.3.3	Participation in Whole Class Activities	180
7.3.4	Impact of Interest Factor and Duration	180
7.3.5	Working Solo	182
7.4	Problem Solving	183
7.4.1	Perspectives on Peadar's Problem Solving	184
7.4.2	Planning	184
7.4.3	Improvisation	185
7.5	Concentration	187
7.5.1	Oral Tasks	187
7.5.2	Written Tasks	188
7.6	Imagination	191
7.6.1	Differing Perspectives on Peadar's Imagination	191
7.6.2	Lack of Opportunity to use Imagination in School	193
7.6.3	Demonstrating Imagination	194
7.6.4	Conclusion	195
7.7	Social Stimuli	196
7.7.1	Common Interests as Social Stimuli and The Impact of Peers	197
7.7.2	Physical Object / 'Prop' as a Non-Social Stimulus Facilitating Social	
	Interaction	198
7.7.3	Fictional World as Social Stimulus	199
7.7.4	Less Successful Social Stimuli	200
7.8	Humour	201
7.8.1	Humour to Interact and Initiate Interactions	202
7.8.2	Perspectives on Peadar's Use of Humour to Interact	203
7.8.3	Humour as a Bridge with Allistic Peers	204
7.9	Expressing Emotions	205
7.9.1	Expression of Emotions to Peers and Adults	206
7.9.2	Physicality to Express Emotion	207

7.10	Empathy	209
7.10.1	Perspectives on Peadar's Empathy	210
7.10.2	In Role	211
7.10.3	Out-of-Role	212
7.11	Conclusion	212
Chapter 1	Eight Discussion	214
8.1	Introduction	214
8.2	Environment	215
8.2.1	School Environment	215
8.2.2	Home Environment	219
8.3	Social Drama Model	220
8.4	Drama Methods to Elicit Child Voice	226
8.5	Generalisation Theories and the Social Drama Model	227
8.6	Overall Implications	229
8.7	Conclusion	230
Chapter 1	Nine Conclusion	231
9.1	Introduction	231
9.2	Findings	231
9.3	Recommendations	231
9.3.1	Recommended Policy Reform	232
9.3.2	Education for Teachers and Parents	233
9.4	Recommendations for Future Research	234
9.4.1	Implementation of Inclusive Framework in Primary and Secondary Schools.	234
9.4.2	Links between Imagination and Social Skills	234
9.4.3	Further Research on Generalisability of Social Drama Model	235
9.4.4	Environmental Structures to Enhance Social Skill Development	235
9.4.5	PDA in Ireland	235
9.4.6	Assessment	236
9.5	Limitations	236
9.6	Impact of Covid-19 on Social Skills	236
9.7	Significance of the study	237
9.8	Personal Reflections on the Research Journey	238
Appendi	ces	317
App	endix A	318
App	pendix B	323
App	pendix C	326
App	pendix D	328
App	endix E	334
App	endix F	340

Appendix G	348
Appendix H	351
Appendix I	360
Appendix J	365
Appendix K	371
Appendix L	373
Appendix M	385
Appendix N	393
Appendix O	395
Appendix P	396
Appendix Q	398
Appendix R	399
Appendix S	400

List of Tables, Figures & Boxes

Table 4.1:	Relationship between the Social Drama Model and Generalisation Theory	'84
Figure 5.1:	Lundy's Voice Model Check List for Participation	93
Table 5.1:	Framework for Listening to Child Voice (Mosaic Approach)	94
Table: 5.2:	Types of Child Voice	94
Table 5.3:	Inclusion Criteria	95
Table 5.4:	Case Study One Participant Profile	98
Table 5.5:	Case Study Two Participant Profile	99
Table 5.6:	Timeline	101
Table 5.7:	Organisation of Roles and Responsibilities in the Social Drama Model	104
Box 5.1:	Validation of Research Instruments and SDAT Tool	106
Table 5.8:	Adult Interviewees	109
Table 5.9:	Summary of the Interview Methods with Fred	111
Table 5.10:	Summary of the Interview Methods with Peadar	114
Table 5.11:	Observation Schedule	117
Table 5.12:	Building Consistency between Research Questions and Methods	120
Table 5.13:	Data Analysis	122
Table 5.14:	Pilot Study	128
Table 8.1:	Generalisation Theories and the SD Model	228

List of Acronyms

ABA Applied Behaviour Analysis ADD Attention Deficit Disorder ADI-R Autism Diagnostic Interview-Revised ADOS Autism Diagnostic Observation Schedule AS Asperger Syndrome ASD Autism Spectrum Disorder ASSP Autism Social Skills Profile CC Central Coherence CI Circumscribed Interest **CPD** Continuous Professional Development DoH Department of Health Drama teacher 1 DT1 DT2 Drama teacher 2 EF **Executive Function** EMA Ecological Momentary Assessment ER **Emotion Regulation** GSSI **Group Social Skills Intervention** HFA High Functioning Autism **HSE** Health Services Executive INT Interpolation IoU Intolerance of Uncertainty ITE **Initial Teacher Education** JA Joint Attention LUT Look Up Table Learning NAS National Autistic Society

NCSE National Council for Special Education

Neurodivergent

ND

NT Neurotypical

PAT Physical Attribution Task

PDA Pathological Demand Avoidance

PDD Pervasive Developmental Disorders

PDD-NOS Pervasive Developmental Disorder-Not Otherwise Specified

PI Principal Investigator

REC Research Ethics Committee

SAT Social Attribution Task

SD Social Drama

SDARI Socio-Dramatic Affective-Relational Intervention

SDAT Social Drama Assessment Tool

SENSE Social-Emotional Neuroscience Endocrinology

SET Special Education Teacher

SNA Special Needs Assistant

SiR Student in role

SRS Social Responsiveness' Scale - Parent Form

TCD Trinity College Dublin

TD Typically Developing

TiR Teacher in Role

ToM Theory of Mind

WCC Weak Central Coherence

ZPD Zone of Proximal Development

Chapter One Introduction

1.1 Study Overview

Diagnoses of Autism Spectrum Disorder (ASD) are increasingly prevalent in Ireland, with the Dept. of Health (2018) highlighting a rate of between 1-1.5% of school going population with a diagnosis of ASD (NCSE, 2016; Sweeney & Staines, 2017). A common challenge, or difference, for children with ASD is in interacting with peers, demonstrating social skills, and developing and maintaining friendships (Bottema-Beutel, Kim & Crowly, 2019; Brooke et al., 2018). As a result, many interventions focus on teaching and developing social skills through a variety of methods including Cognitive Behavioural Therapy (CBT), Social Stories, computer and artsbased interventions (Acar, Tekin-Iftar & Yikmis, 2017; Koning et al., 2011; Trudel & Nadig, 2019). While generalisability of social skills from these interventions is essential for people with ASD to support them in developing and maintaining friendships, participating in education, gaining meaningful employment and independent living (Nuernberger et al., 2012, 2013), generalisability has long been understood as challenging to achieve (Kent et al., 2020; Mishna & Muskat, 1998; Silver & Oakes, 2001). Indeed, there is a dearth of research focusing on generalisability of social skills interventions to natural environments (Carruthers, Pickles, Slonims, Howlin & Charman, 2020; Green & Garg, 2018). This is believed to result from challenges associated with assessing generalisability, and difficulties identifying the elements which lead to successful generalisation where multiple generalisation techniques are employed (Corbett et al., 2019; Radley, Ford, Battaglia & McHugh 2014a; Yoo et al., 2014).

Against this background, the present study aims to establish the level of generalisability of social skills for two participants of O'Sullivan's Social Drama (SD) programme who have a diagnosis of ASD, to environments outside of the drama space, such as their home and school settings. The literature on generalisability of social skills recommends that it should be considered during the design phase of interventions, and include specific strategies (Stokes & Osnes, 1989), many of which are developed from Stokes & Baer's (1977) theories of generalisation. However, O'Sullivan's SD model did not include generalisation theories in the design of this process drama social skills intervention, but tentative research suggested that participants were demonstrating high levels of social skills in this setting (O'Sullivan, 2015a, 2017). While parental evidence reported that social skills were generalising to other environments (e.g., parent interviews, 2015, 2016), this needed to be explored to objectively verify if and the extent to which this might be occurring. Therefore, the study aims to ascertain levels of generalisability of social skills for two case study participants, identifying what factors enhance and/or inhibit demonstration of these participants' social skills. The study took place in multiple settings including the Social Drama space, home, school, social clubs, parks, homes of extended family members and participants'

extracurricular activities. It is hoped that this research will contribute, in a small way, to the wider field of generalisability of social skills interventions for children and young people with ASD. It is hoped also that it will provide an in-depth insight into the lived realities of two children living with ASD in Ireland at primary and post primary level respectively.

1.2 Policy Background

Children with ASD have a right to meaningful education (Marshall & Goodall, 2015), and in 2018 the Irish Government ratified the Convention on the Rights of Persons with Disabilities (CRPD) Article 24(2) which states that children have the right to 'access an inclusive, quality and free education on an equal basis with others in the communities in which they live' (as cited in NCSE, 2019, 3). While there is debate surrounding the benefits of mainstream education over separate provision for children with ASD (Green, 2018; Waddington & Reed, 2016), currently in Ireland 2% of all children are educated in separate specialist settings (NCSE, 2019). Children with ASD can attend mainstream schools and all mainstream classes, designated classes attached to mainstream schools, or schools which cater solely for those with a diagnosis (DES, 2020). A recent report of special classes for children with ASD attached to mainstream schools carried out by the Department of Education (DES, 2020) claims that while good integration was evidenced, this should be extended to full inclusion. However, the National Council of Special Education (NCSE) (2019) calls for further research into the education and inclusion of those being educated in special schools and classes in Ireland.

The DES (2020) report raised issues surrounding the efficacy of the current model of provision in Ireland, specifically if it allows for full inclusion (see Banks & McCoy, 2017). Issues have been identified in the provision of education for children with ASD in Ireland, and barriers to inclusion include a lack of specific ASD teaching approaches, and appropriate knowledge of ASD, in particular at post primary level (DES, 2020; Kenny, McCoy & Mihut, 2020; Rodden et al., 2019), however, this was not the case in all settings (see Daly et al., 2016). Barriers to inclusion have also been acknowledged internationally (De Vroey, Struyf & Petry, 2016; Roberts & Simpson, 2016). While research carried out by Rose & Shevlin (2021) highlights positive inclusive educational experiences and practices in Irish schools, this is not universally accepted (Grey et al., 2007; Young, Mannix McNamara & Coughlan, 2017). The Inclusive Education Framework (NCSE, 2011) aims to support schools in developing inclusive models of education through whole school planning, seminars, self-reflection, implementation, and reviews. However, the United Nations (UN) state that the parallel systems in place in Ireland (mainstream and separate specialist education) are not considered inclusive (NCSE, 2019). These practices are mirrored internationally, however Portugal and Canada have moved to models of greater inclusion recently. The NCSE (2019) recommend that all students should be educated in mainstream settings, which has been met with both support and concern from some stakeholders. A debate relating to how full inclusion can be achieved in Irish education is ongoing (see INTO, 2020; Shevlin & Banks, 2021; Tiernan, 2021). This is compounded by the NCSE (2019) report which acknowledges that the current Irish education system is not ready for their proposed model and the following structures and supports need to be implemented first: a whole school commitment to inclusive education, reduction in student-teacher ratio, further therapeutic supports and Continuous Professional Development (CPD) for teachers (Howe & Griffin, 2020; NCSE, 2019; Travers, 2017). A belief that exclusive, or specialist separate settings, are more suitable for some students owing to teacher skill set and experience and student experience has been a recurring debate in the literature for over a decade (Grey et al., 2007; NCSE, 2019; Young et al., 2017). Although mixed results surrounding the inclusivity of primary and post primary schools in Ireland were found (see Banks et al., 2016; Rose & Shevlin, 2021), recurring themes emerge as barriers to inclusion across primary and post primary schools such as teacher confidence and competence, resources, ethos and behavioural difficulties (Banks & McCoy, 2017; Day & Prunty, 2015; Howe & Griffin, 2020; McKeon, 2020; Travers, 2017).

While CPD is recommended nationally and internationally for teachers working with children with ASD to facilitate inclusion (see Able et al., 2015; Majoko, 2018), this is not mandatory in Ireland (Kenny et al., 2020). Daly et al. (2016) recommend that Special Needs Assistants (SNAs) would also benefit from CPD, enabling them to further support teachers in ASD specific teaching methods and interventions. However, there is no policy relating to CPD for SNAs in Ireland (Kerins et al., 2017), with Fórsa (2018) reporting poor CPD opportunities for this cohort. Currently, Irish educational policy states that the role of the SNA is to support the care needs of the child, and is not related to teaching or providing interventions, except when done under the guidance of qualified personnel (DES, 2014; NCSE, 2018). However, research carried out by Kerins & McDonagh (2015) found that 80% of SNAs are supporting children with ASD educationally, alongside their care needs. It highlights a discrepancy between the role of the SNA in policy and in practice, with Morrissey (2020) claiming that while inclusive education may have been an objective of the SNA scheme (DES, 1979, 1998, 2002, 2018), the outcome is questionable, despite recommendations to change the title of SNA to 'Inclusion Support Assistant' (NCSE, 2018). In contrast, many international models of paraprofessional support focus on teaching assistant duties, not just care needs (Giangreco, Doyle, & Suter, 2014; Griffin, 2021). Both nationally and internationally eliciting child voice relating to their support services in schools has not occurred frequently (see Giangreco et al., 2014; Griffin, 2021) despite this being outlined in Irish policy (DES, 2014).

Alongside SNA support, children with ASD have the right to the extended school year scheme, transport to school, in some cases assistive technology, and additional services through the Health Services Executive (HSE) such as psychiatric and psychological services, speech and

language therapy, occupational therapy, physiotherapy and respite care (NCSE, 2014). However, research carried out by Roddy & O'Neill (2020) demonstrates that out of 222 children, 74% did not receive any services in the past 12 months (see also Cooke, Smith & Brenner, 2020). This was supported by the NCSE (2019) report, which cited that of 13 schools visited, all had insufficient access to health supports. While policy outlines multiple supports available for children with ASD and their families, these are often not accessible, or there are long waiting lists for services (Finnegan, Trimble & Egan, 2015; Rabbitte, Prendeville & Kinsella, 2017).

Against a background of mixed results pertaining to the efficacy of inclusive education policy in Ireland, the literature highlights the negative experiences of children with ASD and their families, in particular the challenges they face in comparison to peers. In addition, parental stress is elevated for parents of children with ASD (Clauser et al., 2021; Grey, Dallos & Stancer, 2021, Soppitt, 2020), owing to concerns relating to their children's education, life after education, relationships with peers, childcare and ease of access to support services (Bonis, 2016; Marsack-Topolewski & Graves, 2019). It is unfortunate that studies eliciting the voice of children and young people with ASD on aspects that concern their lives are limited (Danker, Strnadová & Cumming, 2019; Fayette & Bond, 2017), however, research which has explored this demonstrates that children report heightened levels of anxiety, difference in perceived friendship quality in peer relationships, and enjoyment of exclusive ASD settings (Kennedy-Killian, 2013; Ozsivadjian, Knott & Magiati, 2012; Petrina et al., 2016). It is against this policy background that my interest in the area of autism was triggered as a classroom practitioner.

1.3 Positionality

My work as a primary school teacher in both mainstream class settings and as a Special Education Teacher (SET), sparked my initial interest in ASD. Having completed a Masters in Education focusing on drama for young people with Attention Deficit Disorder (ADD) my interest in drama for children with differences was ignited, particularly having studied the literature in the field (e.g. Lerner & Levine, 2007; Peter, 1995; 2009) and seeing what could be achieved in the classroom. This interest led to me applying to work as a teacher/researcher on the Social Drama research project in 2014, where I experienced first-hand the positive demonstration of social skills for participants in this setting. As a result and over time, I became interested in the generalisability of these skills to other settings, and whether the social skills I observed and recorded in SD classes were being demonstrated in other settings. Anecdotally, when the children and young people left the drama room after classes, they sometimes appeared to become quite introverted in contrast to their behaviours in the classroom, and typically refused to respond to interested parents' queries (waiting outside to collect them), about what they had done in class. They appeared to almost spontaneously shut down as soon as they left the room, and even their interaction with the drama

teachers outside the drama space were occasionally less forthcoming and socially appropriate than when inside the drama space. This observation was shared by the other teacher/researchers and led to a desire to understand what was occurring for these participants during drama and inside the drama space that might be absent outside it.

As the participants in this study knew me from SD classes, this brought both methodological benefits and challenges, which are outlined in the methodology and limitations sections respectively.

1.4 Research Focus

1.4.1 Research Questions

This study aims to critically examine if social skills demonstrated by participants attending Social Drama classes are generalised to other environments, such as their home and school settings. The research questions guiding the study are:

- 1) What is occurring in the Social Drama classroom to encourage the use of appropriate social skills when working in role/fictional contexts?
- 2) Are participants using the same social skills demonstrated during social drama classes in other settings?
- 3) What factors influence and affect the use of social skills in other settings?

1.4.2 Methodology

This study adopted an embedded ethnographic mixed methods design (Greene & Caracelli, 1997; Creswell & Plano Clark, 2007), specifically employing an ethnographic case study approach (Parker-Jenkins, 2018; Spindler & Spindler, 1982). Ethnography was chosen as it enabled me to be immersed in the field (Hammersley, 2006; Ingold, 2014), in this case the homes, schools and extracurricular activities of the participants. This was deemed necessary to gain an insight into participants' social skills in order to address the research questions. Paradigms of interpretive and disability research informed the study (Owens, 2007; Spindler & Spindler, 1982). The data collection tools included a quantitative component (questionnaire) and qualitative elements using observation, document analysis and interview. Data collection was designed around the operationalisation of generalisability for this study, which focused on the time, setting, individuals present and responses/behaviours of participants when social skills were demonstrated (Cooper, Heron & Heward, 2007; Wahler, Berland & Coe, 1979). The theoretical underpinning of this study, in keeping with disability research, views participants as experts in their own lives (Clark, 2005), and therefore eliciting participant voice was prioritised and achieved using a variety of methods such as child lead, individualised and modification

approaches, alongside SD methods (Goodall, 2020; Kortesluoma, Hentinen & Nikkonen, 2003; Tesfaye et al., 2019). Frameworks were used to ensure accurate interpretation of child voice (Clark & Moss, 2011; Lundy, 2015; Zhang, 2015). As participants were familiar with me from the SD setting, the literature suggests that my impact in other settings should be lessened (Langston, 2011). However there are potential limitations of familiarity, which are explored below.

1.4.3 Limitations

To counteract potential limitations to the study such as insider knowledge owing to my familiarity with the SD project and participants, data and method triangulation were employed (Denzin, 1978; Patton, 1990) and a reflective research journal was used throughout to record and reflect on potential bias (Vaismoradi et al., 2016). Gate keepers in schools posed a particular challenge to the research, which is common in ethnographic research (McAreavey & Das, 2013; Reeves, 2010). The study had three participants, one female and two males, in keeping with the gender representation of ASD (Nichols, 2009; Turkington & Anan, 2007), however a full data set could not be gathered for the female participant following withdrawal from the study by the school's gate keepers. This resulted in having two male case studies only. An unexpected limitation was the Covid-19 Pandemic, which has been recognised as impacting doctoral research nationally and internationally (Alam, Rampes & Ma, 2021; RIA, 2020). While observational data from family homes and schools had been gathered, it impacted on interviews, and accessing school staff to carry out interviews owing to school closures for extended periods of time. Therefore, data collection necessarily had to span over a greater time period than planned. However, it gave an insight into the implications of the pandemic on participants and their social skills, which will be reflected on in the concluding chapters.

1.5 Contribution to Knowledge

This study's contribution to research is significant in a number of areas in the field of ASD and Pathological Demand Avoidance (PDA), generalisability, inclusive education and drama. This research enabled insights to be gained into the lives of two children with ASD and PDA. Many studies examining the life experiences of people with ASD focus on one setting, or eliciting the voice of adult stakeholders only. In contrast, this study gained the perspectives of the child, teachers, SNAs, parents, siblings and other family members. While the length of time spent with participants enabled the researcher to gain an in-depth insight into the generalisation of social skills from the SD model to natural environments, it also enabled me to learn about other life experiences of participants, such as their experience of inclusive education. This study has shown that best practices relating to inclusive education (e.g. NCSE, 2011) were not wide spread in the

participants' schools, which raises the question of the prevalence of these practices in schools with the ASD and PDA population in Ireland. It is believed that this study has contributed to knowledge in the area of the generalisability of social skills in which there is a dearth of research, specifically understanding around the factors which are necessary to support generalisation of social skills for this population, such as the environments teaching methodologies, levels of structure, formality and use of fictional worlds. The findings suggest that if elements of the SD model are used in educational and home settings, this could enhance demonstration of social skills, act as an inclusive pedagogy (Florian & Black-Hawkins, 2011) and support the generalisation of these skills from the SD setting to natural environments.

The successful demonstration of social skills in the SD setting has been established (see O'Sullivan, 2017; 2021; O'Sullivan et al., 2010), and this study successfully built on this research to identify the elements of the SD model which are supporting demonstration of social skills for participants. It identified generalisable elements of the model such as imagination, fictional worlds and role to interact with peers in unfacilitated settings. This research has contributed to the understanding of the positive impact of the SD model on participants. The carefully considered interview techniques incorporating SD methodologies, which demonstrated success with participants highlights the importance of individualised techniques, and the interviewer being known by participants prior to interviews taking place. This contributes to the growing field around eliciting the voice of children in research about them, specifically those with SEN. Importantly, it provides concrete, detailed examples of this process with participants from this study, which has been lacking in the field previously (Fayette & Bond, 2018).

This study hopes to contribute to the field through developing understanding, and awareness of the social experiences of two young people, with ASD and PDA. There is currently only one study exploring the experiences of people with PDA in Ireland, so it is anticipated that this study will contribute further to the knowledge base and understanding this area. It it is believed that the strongest contribution to knowledge is identifying the elements which support demonstration of social skills in the SD setting, and generalisation of these skills. It is hoped that the findings from this research may inform future policy and practice, to support social skill demonstration and generalisability, which can lead to friendships and more successful life outcomes for people with ASD and PDA (Bernier & Gerdts, 2010; Zager et al., 2012).

1.6 Thesis Overview

The study is presented over nine chapters. The literature review is divided into three chapters. The first provides an overview of the pathological and behavioural characteristics of ASD, including Theory of Mind (ToM) encompassing Empathy, Humour and Self-Esteem, Executive

Function (EF), Central Coherence focusing on Problem Solving and Attention. Anxiety, Social Motivation, Social Stimuli, Emotions, Friendship, Collaborative Group Work and Imagination and Creativity. Some of the key features of ASD and Pathological Demand Avoidance (PDA) are briefly examined, as one of the participants has this diagnosis, which can impact on social skill development. The second chapter (Ch Three) focuses on generalisation, examining the characteristics of interventions which evidence generalisability and discussing approaches to assessing generalisability. Attention is paid to didactic and experiential approaches to interventions, exploring drama-based social skills interventions. The final component of the review turns its attention to drama in Chapter Four, presenting key concepts and approaches more generally in the field of drama in education to contextualise the study for non-drama specialist readers. Debates in drama, creativity and imagination are explored, followed by a review of drama in the field of special educational needs (SEN) and drama and theatre interventions focusing specifically on social skills for children and young people with ASD. The chapter concludes with a presentation of O'Sullivan's SD model, examining aspects of the model which are in keeping with generalisation theories.

Chapter Five presents the methodological approach taken in this study. It explores ethnographic case study, focusing on participant voice, sampling framework and participants' profiles. The data collection strategy is discussed considering data gathering, analysis and ethics.

Chapters Six and Seven present the findings. Chapter Six thematically introduces the findings for the first case study participant Fred who attends primary school, while Chapter Seven presents the findings for Peadar, a post primary student. Rich data are presented with descriptive examples to bring the case studies to life for the reader, and the majority of themes discovered relate to the social skills explored in this study, however some unexpected themes also emerge.

The eighth chapter discusses the results, and outlines the significance and implications of the data for participants, their families, teachers and the SD model. Attention is paid to the overarching findings relating to the inhibitors and enablers to demonstration of social skills across settings, and the relevance of lessons learned for these case study participants and the wider autism and education communities.

Finally, Chapter Nine summarises the study's achievements and contribution to knowledge, its limitations, potential implications for policy and practice, and recommendations for future research to both extend, and challenge this study's findings.

Chapter Two Autism Spectrum Disorder and Pathological Demand Avoidance

2.1 Introduction

The literature review is presented across three chapters. The first focuses on Autism Spectrum Disorder (ASD) and Pathological Demand Avoidance (PDA), as these are the diagnoses of the participants in this study. Specifically, this chapter will explore the defining features of these including Theory of Mind (ToM), Executive Function (EF) and Central Coherence (CC), focusing on the potential impact on social skills, empathy, humour, self-esteem, problem solving, attention, anxiety, emotions and friendships. Social motivation, social stimuli, imagination and creativity in this population will be examined.

2.2 Autism Spectrum Disorder and Pathological Demand Avoidance

This section aims to provide a general profile of the ASD and PDA population relating to traits which impact social skills, interaction and development in order to provide a foundation for the later discussion of appropriate methodologies and findings in this study.

2.2.1 Autism Spectrum Disorder

ASD is one of a group of neurodevelopmental disorders, known as Pervasive Developmental Disorders (PDD) (APA, 2013). These disorders are characterised by two core deficits: impaired social communication and restricted, repetitive and stereotyped patterns of behaviours and/or interests (APA, 2013; Frye, 2018; WHO, 2019). Traditionally the conditions that were grouped under PDD were Autistic Disorder, Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) and Asperger Syndrome (AS). However, DSM-5 and ICD-11 no longer recognise AS as a standalone diagnosis and instead it falls along the spectrum of ASD with severity levels proposed (APA, 2013; WHO, 2019).

While the social disability model (Oliver, 1983) has been utilised across other diagnoses, this is not commonly applied to ASD, with the medical model still maintaining prominence (Graby, 2016). It has been posited that, if applied to ASD, the social model could support alleviation of stigma, emancipation and positive self-identity (Aylott, 2003; Woods, 2017). While there is criticism of both social and medical models, it is believed that both models are necessary for full understanding (Blustein, 2012; Marks, 1999). Chown & Beardon (2017) suggest there are few differences between the models, stating 'in each case there are impairments/differences-which may disadvantage-an overlay of disabling societal effects, and

the potential for behaviour change following receipt of a diagnosis' (3). For the purposes of this study, the language used will be of differences (Chown & Beardon, 2017), and the lens of both the medical and social models of disability will be employed to achieve full understanding of the condition (Blustein, 2012; Marks, 1999).

The use of the term 'differences' is in keeping with the neurodiversity movement, with Singer (1999) who proposed the term, wanting to shift language from a deficit to a positive strength based approach (Armstrong, 2017; Lorenz, Reznik, & Heinitz, 2017; Snow, 2015). Neurodiversity is defined as 'a variation in neurocognitive function' (Hughes, 2016, 3), to include those who are neurodivergent (ND) and neurotypical (NT) (Kapp, 2020). In relation to ASD, the movement claims that different behavioural patterns should be viewed as natural variations, not disorders, with unique strengths (Brownlow, Rosqvist & O'Dell, 2015). Issues of ownership and identity relating to diagnoses are outlined in the literature (Connor, 2013; Kapp et al., 2013), and the neurodiversity movement strives for inclusivity, support for those in the community and self-advocacy (DaVanport, 2020; Kapp, 2020). There is debate both externally and from within the ND community about this movement, with some critiquing its politics, claiming the model is only beneficial for those with lower support needs, and therefore under representative and exclusive (Fenton & Krahm, 2007; Jaarsma & Welin, 2012). While elements of the medical model are welcomed by the ND community (Russel, 2020), the majority resist it, and strive for de-medicalisation (Craine, 2020). In the present study, the ND perspective, alongside the social model of disability, will be considered at each stage of the research, in keeping with the emphasis and importance of participant voice. However, the medical model will also be included, owing to the range of evidence in this area. Baron-Cohen (2010) identifies that there are many diverse and behavioural features of the condition, and that cognitive theories such as ToM can complement neurobiological theory to better understand how atypical neural functioning can lead to atypical behaviour.

While differences in underlying mental processes are ascribed to ASD, this chapter will outline some of the key differences and cognitive theories impacting the development of social skills and social interactions, as relevant to this study. Firstly however, Pathological Demand Avoidance (PDA) as a profile of ASD is explored, as one case study participant presented with a diagnosis of PDA.

2.2.2 Pathological Demand Avoidance

PDA is a pervasive developmental disorder variously regarded as a profile of autism (PDA Society, 2006), or as a separate condition but significantly related to the autism spectrum (O'Nions et al., 2016). Originally identified as a subgroup of ASD as the genetic factors are similar (Newson, LeMaréchal & David, 2003), this is disputed by some which is discussed

below. Identified by Elizabeth Newson in 1983, research in the field is at a very early stage and understanding of the condition and its relationship to the autism spectrum is still evolving. Recognising that autism is dimensional, involving overlapping patterns of behaviour, people with PDA avoid demands made by others as a result of heightened anxiety experienced when they feel they are not in control (O'Nions & Eaton, 2020). Prevalence rates of PDA are thought to be 1 in 5 within the autism community, however much further research is needed (Gillberg et al., 2015). Strategies to support children with ASD are not generally deemed as successful for children with PDA, who often experience school exclusion (Newson et al., 2003; O'Nions et al., 2014). Consequently, Kildahl et al. (2021) argue for the design of specific strategies for those with PDA. The profile of children presenting with PDA include use of socially strategic behaviours (often interpreted as manipulation), dominating/bossy towards peers, inexplicable changes in mood, avoidance of ordinary demands, ineffective consequence based strategies, sabotage, surface sociability, respond best to humour and unpredictability, very comfortable in role play and using imagination, and they attempt to control others due to fear and anxiety of the unknown (Cat, 2019; Dundon, 2021; Fidler & Christie, 2019; Newson et al., 2003; O'Nions & Eaton, 2020; O'Nions et al., 2014; O'Nions et al., 2018).

While PDA is widely acknowledged by international organisations such as the National Autistic Society (NAS) (2019), the Autism Education Trust (2017) and the Cooperative Research Centre for Living with Autism (Autism CRC) (2019) it is not currently recognised in DSM-5 or ICD-11 (APA 2013; WHO, 2018). However, the NAS propose that it should fall under the umbrella of ASD (Stuart et al., 2020). While many theorists view PDA as part of the Autism Spectrum (Christie, 2007; Langton & Fredrickson, 2016; O'Nions et al., 2018), Woods (2020) explains this is because ASD is referred to as a progressive developmental disorder. Some theorists dispute that PDA should be classified as an independent syndrome, positing instead that it should be recognised as a co-morbid condition relating to heightened anxiety (Woods, 2019). However, this diverts attention from the needs of individuals with PDA, can restrict child agency and there is insufficient empirical evidence and validity for these claims (Doyle, Kenny & McNally, 2020; Green, 2020; Moore, 2020). Owing to the weight of current empirical evidence, PDA in the present study will be considered as a profile of ASD and standing alongside a diagnosis of ASD (Newson et al., 2003; O'Noins & Eaton, 2020; O'Nions et al., 2018).

Doyle et al.'s (2020) report *Mapping Experiences of Pathological Demand Avoidance* in *Ireland*, is the only research of its kind in Ireland, and outlines issues relating to a lack of awareness amongst professionals about the condition. They identify difficulty receiving a diagnosis or appropriate interventions and supports, and recommend the urgent 'upskilling of professionals and practitioners' (27). This is in keeping with Truman et al.'s (2021) study, which found a lack of understanding amongst teachers for behaviours typically demonstrated in

those with PDA. Newson et al.'s (2003) seminal research quoted a parent who stated 'Autism has never made sense to us; this is the first time a diagnosis has made sense' (596). However, in Doyle et al.'s (2020) research only 25% of participants managed to ascertain a diagnosis, with 98% of these experiencing barriers to support. The lack of professional awareness, and struggle to access services, could also be related to the 'complex reality of neurodevelopmental diversity across the autism spectrum' (Gillberg, 2010; as cited in Doyle et al., 2020, 9).

There is much debate about PDA, and whether it should be categorised as a part of ASD, or as a standalone disorder. Both nationally and internationally, children presenting with characteristics of PDA struggle to receive a diagnosis, and for those who do, accessing supports and interventions pose a challenge. As this study accepts PDA as a diagnosis within ASD (Newson et al., 2013; O'Nions et al., 2018), the literature review will explore the PDA literature alongside ASD, highlighting similarities and differences where relevant. This begins with the next section examining Theory of Mind (ToM) and how impacts social interactions and relationships for children with ASD and PDA.

2.2.3 Theory of Mind

ToM emerged during the 1980s and 1990s as a way of summarising the 'mind blindness' theory which helped to explain the social and communication differences in autism (Baron-Cohen, 2008; Boucher, 2012; McGuire & Michalko, 2011). ToM is widely considered different or delayed in those with ASD, with scientific theories such as activation of neuronal circuit and neuroimaging supporting this (Andreou & Skrimpa, 2020). A difference in ToM is thought to impact people's social skills, interactions and development (Burnette et al., 2005; Mazza et al., 2017; Wellman, 2018), however this is debated in the literature, as explored below. ToM proposes that children with ASD can find other people's behaviour confusing and unpredictable as a consequence of not being able to put themselves into someone else's shoes to see the world from their perspective and imagine their thoughts and feelings (Baron-Cohen, Leslie & Frith, 1985). Being able to mind-read or mentalise helps people make sense of others' behaviours and predict their future behaviour or response to a situation.

Research highlights that children who score highly on ToM tests, such as false belief tasks, tend to have sophisticated relationships with peers (Bishop-Fitzpatrick et al., 2017; Laghi et al., 2016; Slaughter, 2015; Weimer et al., 2020). Children with strong ToM develop positive peer relationships owing to being able to work out what others feel and want, what they might do next, understanding the motivations and emotions of others and understanding their social world (Attwood, 2008; Hamilton, Hoogenhout & Malcolm-Smith, 2016; Slaughter, 2015). Similarly, adaptive social abilities, whereby individuals translate cognitive potential into real life skills (Klin, Volkmar & Sparrow; 1992; Volkmar et al., 1993), have been linked to high

functioning ToM (Rossello et al., 2020). It is claimed that early interventions which specifically target enhancement of adaptive social behaviours with this population can yield positive results (Anderson et al., 2009). However, this is not universally accepted (Bennett et al., 2013).

Despite research linking ToM to social skills and behaviour, it is more recently claimed that ToM cannot be directly linked to social behaviour owing to other variables at play such as intelligence, age, gender, culture, and language (Begeer et al., 2010; Hamilton et al., 2016; Livingston, Carr & Shah, 2019). Research claims that people with ASD can have intact ToM when interacting with others in real world contexts, but may still underperform in assessments, due to inappropriate assessment design and delivery (Gernsbacher & Yergeau, 2019; Begeer et al., 2010). Efficacy is also in question as some ToM tests have an overreliance on language (Gernsbacher & Pripas-Kapit, 2012; Oakley et al., 2016). However, in contrast, Jones et al. (2018) found that good performance levels in ToM tests are not generalising to real world social contexts which merits further study and exploration to understand why.

It has also been claimed that parent and self-reported ratings of ToM can lack validity, owing to double empathy, a lack of understanding by parents, and common misjudgement of our own ToM (Hutchins, Prelock & Bonazinga, 2012; Milton, 2012). There is conflict in the literature surrounding the theory that people with ASD demonstrate differences in ToM, with some claiming it is not a universal characteristic of ASD as many people with ASD pass ToM tasks and assessments (Boucher, 2012; Charman, 2000; Scheeren et al., 2013) which concurs with Baron-Cohen's belief in ToM being developmentally delayed rather than absent or significantly impaired in children with ASD. It has been posited that rather than a lack of ToM, difficulties initiating spontaneous tracking of others' mental states should be in question (Happe, 2003; Senju, 2012).

Claims of differences in ToM can be damaging, with some positing that it can lead to a lack of understanding of ASD more broadly, and harm to individuals with the diagnosis (Nicholson, 2013; Yergeau, 2013). While there are two clear schools of thought relating to ASD and ToM, studies relating to PDA demonstrate there is no clear link between PDA traits and ToM, despite key characteristics appearing to be linked to well-developed ToM (Bishop, 2018) such as socially strategic behaviour, use of humour and positive response to unpredictability, and use of role play and fantasy. It has been posited that other cognitive theories such Executive Functioning (EF) and Central Coherence (CC) could account for PDA features, which is explored later in this chapter, as could their increased engagement in social mimicry (Bishop, 2018; Green et al., 2018).

There is debate in the literature relating to the prevalence of differences surrounding ToM for the ASD population, and the impact this can have on social interactions and everyday life. While issues surrounding appropriacy of assessment are highlighted, participant voice is also noticeably absent from research in this area. The following section will explore the

perceived social differences associated with ASD and ToM through examining empathy, humour and self-esteem, and how they commonly present in the ASD population, whilst acknowledging that each person's experience is unique, varied and different.

2.2.3.1 Empathy

While empathy is widely understood as the ability to identify how another is feeling, or sharing the feelings of another and responding appropriately (Mul et al., 2018; Zee & Derksen, 2021), it is claimed there is no clear definition of empathy in research (Fletcher-Watson & Bird, 2020; Song et al., 2019). Notwithstanding this, empathy is important for social functioning and interactions and is believed to enhance prosocial behaviour (Eisenberg, Eggum & Giunta, 2010; Zee & Derksen, 2021). Traditionally, an empathy difference was recognised as a core feature of ASD (Baron-Cohen & Wheelwright, 2004), however, this has been challenged in the literature, including the links between empathy and ToM (Baron-Cohen, 2008) with Cohen-Rottenburg (2011) claiming this assumption is 'dehumanizing and perpetuates dangerous stereotypes' (as cited in Nicolaidis et al., 2019, 4). Empathy was associated with ToM owing to the social cognitive understanding of other people's mental states and points of view, with ToM interventions resulting in increased cognitive empathy in young people with ASD (Holopainen, de Veld, Hoddenbach & Begeer, 2019; Mul et al., 2018). Accounts infer that people with ASD can experience overwhelming empathy for others, but express it differently from neurotypical (NT) peers (see Sinclair's seminal 1993 colourful communication to parents in Chapter Four, section 4.6 from a neurodiverse standpoint; see also DeThorne, 2020; Higashida, 2013; Robison, 2011).

There is a perceived lack of understanding between allistic people [people without ASD] and those with ASD, who experience the world differently (Bloom, 2017; Milton, 2012; Milton, Heasman & Sheppard, 2018), also known as 'double empathy' (Milton, 2012). This lack of understanding can have a negative impact on people with ASD (Fletcher-Watson & Brid, 2020). While Santiesteban et al. (2021) support the claim that 'individuals with autism are not devoid of empathic abilities' (402), research generally reports that people with ASD demonstrate impaired cognitive empathy and experience difficulty in inferring the emotions of others. But they do not typically experience challenges in the area of affective empathy which is one's emotional response to others (Deschamps, Been, Matthys, 2014; Harmsen, 2019), such as 'I'm sorry to hear your grandmother has died'. A limited number of studies reveal conflicting findings, whereby people with ASD demonstrated deficits in both forms of empathy (Bos & Stokes, 2019; Trimmer, McDonald & Rushby, 2017), however, it is widely accepted that differences in cognitive empathy are present, but less so in affective empathy. A third form of empathy, notably empathetic concern, which encompasses sympathy as a specific emotional

response to someone's suffering, has also been implicated in the recent literature (Ashar et al., 2017; Van der Graaff et al., 2016; Zhao, Swanson et al., 2018), with some claiming all three forms of empathy are impacted in ASD (Song et al., 2019).

Another key area in the literature surrounding empathy is the empathising-systemising (E-S) theory (Baron-Cohen, 2002, 2003, 2006, 2008, 2009, 2010). This posits that those with ASD have low empathising skills, and a heightened urge towards systemising (Baron-Cohen, 2003; Van der Zee & Derksen, 2017, 2021). Systematising 'is the drive to analyse or construct systems' whereby a person is motivated to uncover the rules and structures which govern a system in order to understand and predict how it will behave (Baron-Cohen, 2010, 71). Systems can vary from collectible (e.g. distinguishing between different types of rocks) to numerical (e.g. timetables) or natural (e.g. tidal wave patterns). Studies demonstrate that children with ASD tend to have higher levels of systematising ability than their typically developing peers (Baron-Cohen et al., 2003). While ToM has had some success in explaining social and communication differences, the E-S theory is regarded as being helpful in explaining the nonsocial features of ASD related to narrow interests, repetitive behaviour and local rather than global attention to detail. Research carried out by Barr & Cascia (2018) found that parent and teacher ratings differed in relation to E-S, with parents rating their children's empathetic skills higher than their systemising. This could be attributed to environmental factors, for example, in school systemising skills may be expected and more evident than at home. The reason and underlying mechanism for higher systematising abilities in this population is unclear, however a need to control and children's specific interests could be contributing factors (Caldwell-Harris & Jordan, 2014; Van der Zee & Derksen 2021).

While cognitive empathy (ToM) as noted above is regarded as delayed in ASD, and affective empathy to a lesser degree, children with PDA similarly demonstrate a degree of social empathy. Within the three levels of social empathy: 1) recognising someone else's emotional state, 2) sharing some of the emotion and 3) modifying one's own actions to accommodate someone else's needs, it is believed that most children with PDA fall within the first category (Christie, Duncan, Fidler & Healy, 2012). Empathy in this population has been described as 'skin deep' and lacking depth, with children demonstrating understanding at an intellectual but not emotional level (Christie et al., 2012). This form of surface sociability where they understand the rules but don't feel they apply necessarily to themselves (Fidler & Christe, 2019) can result from an inability to see the bigger picture and their desire to be in control of situations. This is supported by O'Noins et al.'s (2018) research which found that one quarter of participants behaved in a superficially caring manner, but always on their terms. While this supports the theories of Christie et al. (2012) that they recognise emotion, but have not moved to sharing emotion, the same study claimed that two-thirds of children were unaware or

unconcerned when others were in pain or upset, which could in fact suggest a lack of social empathy.

In relation to ASD and PDA, it is agreed that affective empathy is present in both conditions but differences in understanding and cognitive empathy are accepted. Another area in which there are conflicting findings relating to ToM is humour, which is explored next.

2.2.3.2 Humour

While some posit that humour is not easily defined (Silva et al., 2017), Nomura & Maruno (2011) suggest it's 'an emotion of merriment that is elicited by cognitive incongruity' (as cited in Nagase, 2019a, 2283). Theorists agree that humour is necessary for social functioning, enjoying social interactions, forming relationships, coping with stress and enhancing positive interactions (Agius & Levey, 2019; Belanger, Kirkpatrick & Derks, 1998; Fraley & Aron, 2004; Sim, 2015), with Samson (2013) describing humour as 'social glue'. It is claimed that people with ASD have difficulty understanding humour (Samson & Hegenloh, 2010; Wu et al., 2014) and using it appropriately (Asperger, 1991; Nagase & Tanaka, 2015; Werth, Perkins & Boucher, 2001), with many theories lining up to explain why. These include difference in humour appreciation between those with ASD and allistic peers, ignoring the context of information and delays in social language functioning, metalinguistic abilities and cognitive capacities (Agius & Leavey, 2019; Nagase, 2019a; Wu et al., 2014). The main rationale for a perceived lack of humour is linked to a deficit in ToM. It is claimed that understanding the mental state of others and what they are thinking, is essential to understanding humour (Lyons & Fitzgerald, 2004). Happé (1993) found a link between pragmatic understanding and ToM, resulting in a lack of understanding of sarcasm and jokes. Studies supporting this hypothesis posit that people with ASD do not understand a broad range of humour, such as failing to laugh in response to funny faces, not selecting funny endings to stories, low cheerfulness and high seriousness (Emerich et al., 2003; Reddy, Willims & Vaughan, 2002; Samson, Huber & Ruch, 2013; Wu et al., 2014). People with ASD have noted their differences in this area, namely the level of effort they must exert to use humour understood by others, the links between humour and social skills, and the challenges this brings them (Ruggeri, 2010; Sainsbury, 2000). Of interest to the present study is tentative evidence that environments can facilitate humour for individuals with sensory and emotional dysregulation in formal settings (Nagase, 2019b). We experience humour when something in our environment changes in a way we didn't expect (Ito, 2009), and sensory sensitivity in ASD is related to a heightened awareness of such changes and greater emotional responses to them (Liss, Mailloux & Erchull, 2008).

In contrast, other studies highlight that people with ASD demonstrated the same level of humour for visual puns, cartoons, slapstick, short humorous film scenes and nonsense verbal humour as NT control groups (Emerich et al., 2003; Reddy et al., 2002; Samson & Hegenloh, 2010; Weiss et al., 2013). Similarly, autistic people describe in online blogs the humour they use in their daily lives to highlight how they are treated in society. Although the evidence base is inconclusive, it appears there is a link between the severity of ASD characteristics and an ability to appreciate humour. Those who either respond to humour too much or too little for the social situation involved can experience difficulties in forming relationships (Kowalski, 2001), and in switching attention from social stimuli (Silva et al., 2017). Nagase (2019b) claims that those with poor social skills, or limited opportunity to practice social skills, demonstrate difficulties with humour appreciation (see also Cholemkery et al., 2016; Rawlings, 2013). However, there is a reciprocal benefit to facilitating humour appreciation as it can facilitate imagination through the use of humorous stimuli leading to fantasy worlds (Nagase & Tanaka, 2015; Nomura & Maruna, 2011; Belanger et al., 2013) which act as a powerful social motivator to interact. (This will be discussed further in Chapters Three and Four when examining theories of generalisability and Social Drama respectively.) It is claimed that people with ASD respond better to non-social stimuli (e.g. cartoons), owing to the social motivation hypothesis (Chevallier et al., 2012), which is explored later.

In relation to PDA, humour was identified as one of the key differences between PDA and ASD, with children with PDA responding better to humour (Kunce & Mesibov, 1998; Newson et al., 2003). It is identified as a successful strategy when working with children with PDA when they are feeling overwhelmed by demands, or being asked to participate in non-preferred activities, with teachers and clinicians advised to used humour regularly to dissipate anxiety and soften their approach (Newson, 2011; O'Noins et al., 2014; O'Nions, 2016; O'Nions & Eaton, 2020). However, while humour as an effective strategy for children with PDA is well established in the literature, there is a dearth of attention surrounding the levels of humour initiated and demonstrated by this population.

2.2.3.3 Self-Esteem

Self-esteem is defined as an individual's feelings about their own self-worth (McCauley et al., 2019). It can impact how children view themselves, their social abilities and self-perception (Jamison & Schuttler, 2015), as has been found in previous sections, the literature here is also conflicted. Several studies highlight that children with ASD and PDA experience lower levels of self-esteem than allistic peers (McCauley et al., 2019; van der Cruijsen & Boyer, 2021), manifesting as loneliness and anxiety (Magnuson & Constantino, 2011), with children seeking reassurance from others to enhance their self-esteem (Harter, 2012; Mann et al., 2004). However, other studies cite that young people with ASD's self-perception is heightened compared to their TD peers (Furlano, 2018). Interestingly, parents often rate their children's self-esteem lower than

child self-reported ratings, possibly related to children overestimating their levels due to processing difficulties, a lack of ability to read the social cues of others (ToM), and parents' stress and anxiety leading to lower ratings (McCauley et al., 2019; van der Cruijsen & Boyer, 2020). McCauley et al. (2019) highlight that self-esteem in young people with ASD is generally an under-researched area, however data suggest that when people are aware of their diagnosis, it can enhance their self-esteem, possibly owing to collective self-esteem achieved through group membership (Cooper, Smith & Russell, 2017), which is connected to attendance at exclusive settings for peers with a similar diagnosis (Cooper et al., 2020; Crane et al., 2021).

Links have been made between self-esteem and levels of competitiveness which is of interest in the present study, and early research demonstrated a connection between high levels of self-esteem and competitiveness (DeVoe, 1977; Rosenberg, 1965; Rosenburg & Rosenburg, 1978; Vance & Richmond, 1975). While this was studied historically, more recent literature is notably silent on the connection. Of interest here is the directionality between levels of self-esteem on feelings associated with winning and losing (Bardel et al., 2010; Rosenberg, 1965, 1979). However, working as part of a group can positively impact self-esteem, regardless of winning or losing as there is less focus on the individual, with co-operative, rather than competitive environments demonstrating enhanced levels of self-esteem (Coholic, Lougheed & Lebreton, 2009; Foley Meeker, 1990). This highlights the value of group work for children with ASD and PDA. Foley Meeker (1990) points towards the role which self-attribution has to play here, where one's own abilities are not the reason for a poor performance, and thereby reduce the damage to self-evaluation, and in turn self-esteem. This will be discussed further in the findings chapters. The next section explores Executive Function (EF), its links to ToM and how differences in EF can impact people with ASD and PDA.

2.2.4 Executive Function

ASD is widely associated with differences in what is known as Executive Function (EF). EF refers to the collection of higher order cognitive processes such as working memory, inhibition, mental flexibility, planning, goal orientated behaviours and problem solving (Austin, Groppe & Elsner, 2014; Berenguer et al., 2018; Jones et al., 2018). The literature presents strong evidence of a reciprocal relationship between ToM and EF, owing to a sharing of underlying neurological mechanisms (Wade et al., 2018). Both ToM and EF are claimed to be cognitive domains 'central to the behavioural presentation of ASD' (Jones et al., 2018, 102), impacting on social skills, interactions, and competence (Berard et al., 2017). However, the directionality of this is questioned (Lee et al., 2021; Skogli, Andersen & Isaksen, 2020). Specifically, research demonstrates that in younger children, inhibition, attention shifting and working memory

update, all features of EF, are linked to ToM. Unfortunately there is much less attention relating to adolescents (Austin et al., 2014; Lecce et al., 2017).

It is widely agreed that people with ASD demonstrate differences relating to EF, specifically relating to restricted and repetitive behaviour patterns, cognitive flexibility, generativity and working memory (de Vries et al., 2015; Pellicano, 2007; Van Eylen et al., 2015) encompassing both social and non-social features of ASD (Leung et al., 2016). While some claim the role of EF in ASD is not core to the diagnosis (Demetriou et al., 2018; Ratto et al., 2020), others align with Hill's (2004) seminal Executive Dysfunction Theory (EDT), claiming the behavioural manifestations of ASD result from executive dysfunction. Significantly, EF measures are inversely correlated with ASD symptom severity (Kenworthy et al., 2008), whereby executive dysfunction and low ratings of ToM are found (Austin et al., 2014; Di Tella et al., 2020; Joseph & Tager-Flusberg, 2004). In contrast however, some research demonstrates no distinct difference in EF between those with ASD and allistic peers (Kretschmer, Lampmann & Altgassen, 2014).

Inconsistences relating to assessment of EF in this population is again highlighted as an issue (Geurts et al., 2014; Kenworthy et al., 2008). Issues include only examining a subset of EF domains, and a lack of consistency across samples and tasks used in assessments (Van Eylen et al., 2015). The type of assessment used can impact results, as the literature highlights that participants score lower on open-ended tasks and higher on structured assessments (White et al., 2009), which could explain why participants often score well in the assessed environment but this does not generalise to real world contexts (Kenworthy et al., 2008). Most research supports the theory that people with ASD experience differences in some areas of EF such as following rules and making transitions (Vogan et al., 2018; Ratto et al., 2020; Carotenuto et al., 2019), and notably report a degree of success arising from interventions to enhance EF in children with ASD (Kenworthy et al., 2014; Skogli et al., 2020). Other areas of EF such as its impact on social functioning and social problems is much less well studied (MacMullen Freeman et al., 2017; Leung et al., 2016; Vogan et al., 2018). However, research has found links between areas of EF related to metacognitive skills and social functioning (Leung et al., 2016). These include children participating in solitary play owing to poor initiation and working memory, difficulty engaging in conversation, and differences in emotion regulation (ER) (Hutchinson, Muller & Iarocci, 2020; Fernadandez-Prieto et al., 2021; Filipe et al., 2020; MacMullen Freeman et al., 2017). Significantly, research claims that EF difficulties in youth are predictive of later social problems (Vogan et al., 2018). Of particular interest to this study is the research, albeit limited, which demonstrates the positive impact pretence can have on EF, and in turn on social functioning (Carlson, White & Davis-Unger, 2014). Critiques of studies in this area outline a lack of naturalistic observations, however this has been addressed in more recent studies (see Fernadandez-Prieto et al., 2021; Filipe et al., 2020; MacMullen Freeman et al., 2017).

While there is a dearth of literature specifically exploring PDA and EF, it is claimed that some PDA traits could be explained by EF, such as behavioural disinhibition and impulsivity in response to demands (Bishop, 2018; Zelazo et al., 2002). Goodson's (2018) research, the only type of its kind, explored the correlation between EF and PDA traits. Specifically, Goodson (2018) concluded that only 36% of variance in PDA traits were explained through EF; notably, planning, working memory, initiation behaviour, task switching and non-compliance behaviour. However she recognises this is an area in which further research is needed. Specifically, she addresses the impact and importance of other areas such as ToM and Intolerance of Uncertainty (IoU), which will be explored in relation to anxiety later. While further research into the impact of EF on social skills, interactions and everyday life for people with ASD and PDA is ongoing, the next section will explore the third major cognitive theory implicated in ASD, Central Coherence (CC), which encompasses elements of EF also.

2.2.5 Central Coherence

ToM, EF and Central Coherence (CC) are cited as atypical cognitive functions in persons with ASD (Pellicano et al., 2006). CC enables individuals to extract information from the environment, without context relating to the original form (Ferderer, 2012). The Weak Central Coherence (WCC) theory of ASD posits that local details are not integrated into a global entity, that people with ASD process information piece by piece, and as a result can miss the bigger picture (Frith, 1989; Hatfield et al., 2019; Pina, Flavia & Patrizia, 2013; Rutherford et al., 2020). This theory addresses abilities resulting from WCC, such as the level of attention to detail as well as perceived impairments (Happé & Booth, 2008; Hill, 2013). However, it has been contested, with some studies claiming that no differences in relation to global processing or strengths in detailed processing were evidenced when assessing WCC in people with ASD (Mottron, Belleville & Ménard, 1999; Mottron et al., 1997). Burack et al. (2016) found that abilities relating to CC could be accounted for by different styles of processing, rather than actual differences in ability. Notably, Happé & Frith (2006) proposed a revised model of their WCC theory, which considers WCC a characteristic of ASD, rather than a cause of behaviours.

While originally Frith (1989) believed that the social differences arising from WCC such as facial processing, meaning of context dependent language, poor social communication, and anxiety (Burnette et al., 2005; Hill, 2013, Riches et al., 2016; Rutherford et al., 2020) were linked to ToM, this has not been definitively established (Frith, Happé & Siddons, 1994; Happé & Frith, 2006). However recent literature has evidenced links between ToM and WCC in the area of social skills (Bertschy, Skorich & Haslam, 2019; Skorich et al., 2017; Pina et al., 2013), with others claiming that WCC 'may occur simultaneously to deficits in social cognition, rather than explain them' (Pina et al., 2013, 4). Jolliffee & Baron-Cohen (2001) suggest that WCC

causes challenges in processing social information, which can lead to a poor understanding of social stimuli and meaning, and difficulties in problem solving, which is impacted by EF and CC also.

2.2.5.1 Problem Solving

Aristotle highlighted the importance of problem solving, claiming that 'problematising' is essential for scientific inquiry (Quarantotto, 2020). Theorists have concluded that problem solving involves many elements, including coordination of theories, evidence, and reasoning patterns (Hardy et al., 2010; Piekny & Maehler, 2013; Ryu & Sandoval, 2012), some elements of which could arguably appeal to people with ASD who have a heightened urge towards systemising as discussed earlier. Problem solving skills are important owing to people facing non-routine, complex problems in their social worlds, and the centrality of this skill to everyday life (Jonassen & Hung, 2008; Wirth & Klieme, 2003). The literature posits that social cognitive knowledge and collaboration skills are developed through problem solving, and methods for developing problem solving skills and higher levels of understanding have been identified such as through collaborative work, including mixed ability groupings and adult facilitation (Fawcett & Garton, 2005). Researchers (Jonassen & Hung, 2008; Kim & Pegg, 2019) propose several approaches to problem solving, with on the one hand domain specific (i.e. Maths, Science) or domain general problems (where different domains and knowledge are integrated); and on the other hand, well structured (with clearly defined path to the solution) or ill structured (open ended, emergent, multidisciplinary in character without strict boundaries). Researchers are calling for a radical overhaul of how we educate young people, so they have the creative and critical thinking skills to tackle increasingly complex socio-scientific, technological and environmental problems in the future (Kim & Pegg, 2019; Wüstenberg et al., 2016).

For students with ASD, problem solving in both educational and real-world contexts can be challenging (Bogte et al., 2007; Cox & Root, 2021; Hill & Bird, 2006), and lead to difficulties in social interaction (Cote et al., 2014; Friend, 2011). This is claimed owing to differences in EF, which as discussed previously accounts for planning, working memory and monitoring, which are necessary for successful problem solving (Cox & Root, 2021). Somewhat surprisingly, Tsatsanis (2005) has claimed that people with ASD rely on guessing, rather than using a systematic approach, and this has led to some compelling research demonstrating that explicit teaching of problem solving can alleviate challenges associated with EF (Alerdson-Day & McGonigle-Chalmers, 2011; Root & Browder, 2019; Yakubova & Zeleke, 2016). It is reported that specific strategies such as role-play can support problem solving for students with ASD (Cote et al., 2010; Cote et al., 2014; Shure, 1992). While not all people with ASD struggle to problem solve, some claim that individuals with AS can demonstrate superior

abstract reasoning (Hayashi et al., 2008; Soulie'res et al., 2011). Research carried out demonstrates that interventions which focus on problem solving with this population demonstrate positive outcomes relating to social skills (Isbell & Jolivette, 2011; Shure, 2001). This link to social interaction is demonstrated when solving real world problems, which often rely on interpersonal problem solving (Merrill et al., 2017). While numerous problem-solving skill development interventions exist, issues surrounding generalisability to real world contexts have been reported, with visual aids needed to encourage generalisability (Cox & Root, 2021; Williams et al., 2014). However, a small number of studies have shown varying degrees of generalisability to different settings (Root & Browder, 2019; Yakubova & Taber-Doughty, 2017).

In relation to PDA, the literature does not explore problem solving as a key characteristic, however Christie et al. (2012) highlight it as an area in which children need additional support, particularly in relation to emotional problems. As such, it is understood that similar challenges arise for those diagnosed with PDA. The literature demonstrates that problem solving can be a challenge for people with ASD and PDA, particularly in real world contexts, whereby difficulties in comprehension and meaning making impact social interaction and relationships. While interventions have demonstrated varying levels of success, generalisability of these skills is inconsistent. Another identified difference linked to WCC and EF is a difficulty maintaining attention, which is explored in the next section.

2.2.5.2 Attention

The literature posits that people with ASD demonstrate some form of attentional differences (Matson, Rieske & Williams, 2013), with an early study carried out by Mayes & Calhoun (2007) demonstrating that 93% of the ASD sample presented with attention problems. Efforts to concentrate on a task or activity can be accompanied by repeated sounds, phrases or movements and modulating of gaze and facial expression (Doherty-Sneedon, Riby & Whittle, 2012, 2013; Marom, Gilboa & Bodner, 2018). Mutreja, Craig & O'Boyle (2016) claim that this is owing to contrasting patterns of brain activation, particularly in the frontal lobes, and that attentional difficulties can occur in social contexts, presenting as a challenge for people with ASD (Johnson, 2014; Wang et al., 2020). While attention differences have been linked to WCC and EF (Morgan, Maybery & Durkin, 2003) research highlights that not all areas of attention pose a difficulty, with positive results being demonstrated in sustained attention in comparison to set-shifting tasks (Sinzig et al., 2008). In fact, Burack et al. (2016) contend that attentional styles are associated, and influenced by; 'personal bias, relevance, motivation, and previous experience' (554), and interest in the task (Robison, 2011). Environmental factors and impact on attention is widely explored in the literature and includes prior experience of environments, the positive impact of

nature, levels of interest, rewarding outcomes and environmental cues (Burack et al., 2016; Izenstark & Ebata, 2017; Pellicano & Burr, 2012; Szcytko, Carrier & Stevenson, 2018). Dellepiazza et al. (2021) posit that attention differences in children with ASD can be linked to an atypical sensory-seeking profile. In educational settings, attention may be on inanimate objects rather than the activity (Kellman, 2010), and a preference towards local rather than global processing of information can lead to a strong image centre bias over assimilation of the other objects present in a scene (Mazumdar, Arru & Battisti, 2021). Therefore, while TD peers are usually attracted by the presence of a face in a scene, people with ASD more commonly fixate on objects and the centre of a scene, preferring local rather than global processing or what Happe and Frith (2006) refer to as seeing trees not forests. Doherty-Sneddon et al. (2012) report that children with ASD often avert their gaze from a person who questioned them when considering their response, which can present as lacking attention.

Examining the research in the areas of learning styles and concentration has implications for improving the learning environment and learning strategies used with children with ASD (Sapey-Triomphe et al., 2018). For example, research on improving the aesthetic qualities of our environment has shown a positive impact on mood, concentration and behaviour when students' preferences, interests and choices are taken into account (Eversole et al., 2016; Robison, 2011; Szcytko et al., 2018). Greater attention to these features could inform the development of more autism friendly environments and foster inclusivity (Palumbo et al., 2020).

In relation to people with PDA, attentional issues are similar to ASD, but anxiety in particular impacts concentration levels (Cat, 2019). While there is debate around what impacts the attention of young people with ASD and PDA, there is a shared understanding of the importance of being able to maintain attention, in particular Joint Attention (JA).

JA is characterised by connecting and communicating, as it is socially co-ordinating one's attention with that of another, to share an experience such as observing an event or object and is crucial for social cognition (Gulsrud et al., 2014; Scholtens, 2019). The importance of JA for social development, playing, learning and life skills has been identified (Eschenfelder & Gavalas, 2017). While differences in JA is associated with this population such as initiated join attention (IJA) and responded joint attention (RJA) (Mundy, 2018), interventions focusing on developing JA skills have demonstrated enhanced social participation and play engagement (Althoff et al., 2019; Tanner, Hand, O'Toole & Lane, 2015). While the use of social robots have been successful in enhancing JA (So et al., 2020), a recent literature review demonstrated mixed results (Sani-Bozkurt & Bokus-Genc, 2021). However, arts based interventions involving music have reported positive outcomes (Kim, Wilgram & Gold, 2008). While, like all aspects of the literature surrounding the proposed differences associated with ASD and PDA, there is debate relating to attention difficulties, and what impacts this, there is a shared understanding that JA is

important in the development of social skills, but with interventions demonstrating mixed results.

The triad of higher order cognitive theories implicated in ASD and PDA as discussed above, can support differences in areas such as anxiety, emotion, social motivation and the development of friendships for children and young people with ASD and PDA. These and other common characteristics are examined in the sections below.

2.2.6 Anxiety

The literature variously reports that between 50% - 84% of the ASD population experience anxiety (Jenkinson, Milne & Thompsoon, 2020; South et al., 2017; White et al, 2009), demonstrating significantly higher levels of anxiety than their allistic peers (van Steensel & Heeman, 2017; Kalvin et al., 2019). For those with PDA, anxiety levels are understood to be significantly higher, and it is understood to be a core feature of PDA (Langton & Frederickson, 2016; Newson et al., 2003; O'Nions et al., 2014; Truman, 2021). In the Irish context, a study carried out with children with PDA found that 78% of participants experienced anxiety (Doyle et al., 2020). People with PDA report it as a part of their daily life, ever present, describing it as 'a primary emotion' (Cat, 2019, 57). However, there are issues surrounding the assessment and identification of anxiety such as the use of assessments designed for NT people. These are unsuitable for the ASD population owing to a reliance on retrospective description which makes it challenging for those with ASD to articulate their anxious thoughts, and because of similarities between ASD behavioural symptoms and anxiety, in part due to heightened alexithymia in people with ASD (Bird & Cook, 2013; Hare et al., 2015; South et al., 2017; Spain et al., 2018). While parent ratings are often incorporated, these can lack accuracy owing to behaviours being interpreted as anxiety, such as restrictive and repetitive behaviours (Kalvin et al., 2019). This area is generally recognised as being under researched (Lau et al., 2020). Other factors which may influence levels of anxiety in people with ASD include levels of IQ. A meta-analysis carried out by Mingins et al. (2021) found that children with ASD with a higher IQ scored higher on measures of anxiety than peers. This could be due to an increased ability to reflect and plan, increasing their worries about the past and future (Kerns & Kendall, 2012; Salazar et al., 2015). Acker, Knight & Knott (2018) posit that children with ASD and high IQ may be more aware of the difference between themselves and their peers, which could increase anxiety.

It is understood that issues surrounding anxiety are closely linked to social interactions, with research carried out by Lau et al. (2020) claiming that social worries were most frequently reported. Anxiety can impact social communication, and lower levels of social ability are linked with heightened anxiety (Duvekot et al., 2018: Simon & Corbett, 2013). Research indicates that

social situations with new peers can increase anxiety, in comparison to interacting with familiar peers (Corbett, et al., 2014; Lopata et al., 2006). Decreased social motivation, which is explored later, has been linked with heightened social anxiety in the ASD population, potentially leading to greater social impairment (Swain et al., 2015). In contrast, Maddox & White (2015) claim that an increased desire for social interaction could account for social anxiety, while common social worries such as how others perceive them, are identified by young people with ASD as a significant trigger of anxiety (Magiati, Ozsivadjian & Kerns, 2017).

The literature outlines three types of anxiety specific to ASD; idiosyncratic specific phobias, sensory-related anxieties and anxiety surrounding uncertainty (Lau et al., 2020). The latter is a common theme in the ASD and PDA literatures, with intolerance of uncertainty (IoU) being understood as becoming overwhelmed by the unknown (Carleton, 2016; Stuart et al., 2020). The literature demonstrates that IOU is elevated in young people with ASD (Conner et al., 2020; Jenkinson et al., 2020; Rodgers et al., 2017) and plays a substantial role in social anxiety (Boelen & Reijntjes, 2009; Teale Sapach et al., 2015). While research surrounding IoU, ASD and anxiety is at an early stage (Jenkinson et al., 2020), it is better established in the PDA literature. Buhr & Dugus (2009) describe it as a tendency to 'react negatively on an emotional level to uncertain situations and events' (as cited in Stuart et al., 2020, 60). It is not the potential outcome of the situation that causes anxiety, but the not knowing, the 'limbo' (Meares & Freeston, 2015). However, this contrasts somewhat with the findings of Fidler & Christie (2019) who caution that too much preparation can be also negative because it places pressure on the person who may use the information strategically to avoid situations. Some PDA theorists strongly align with IoU theories, with Stuart et al. (2020) stating that 'demand avoidant behaviours seen in PDA result from an underlying IoU that is both aversive in its own right and heightens the child's anxiety' (60). Others however, do not agree. Woods (2020) for example, credits monotropism, or doing one thing at a time, to IoU, and in turn heightened anxiety. As noted previously, there are several schools of thought relating to PDA, and the area of anxiety is no different.

It is generally understood that anxiety in PDA is linked to the desire to control situations, to ease fear of the unknown and avoid demands (Christie et al., 2012; Fidler & Christie, 2019; O'Nions et al., 2018). The literature explores methods to support people to manage their anxiety, as it can lead to anger, aggression, threats of harm, poor school attendance and social isolation (Fidler & Christie, 2019; O'Nions & Eaton, 2020). Strategies include avoiding situations that may cause anxiety, carers being more accommodating and less pressurising, increased time for activities, access to resources/activities that the individual finds calming, relationship building, choice and ownership of tasks and a low demand approach (Doyle et al., 2020; Fidler & Christie, 2019). Humour and imagination have also been identified as successful strategies (Christie et al., 2012). While theories surrounding fear of the unknown,

IoU and anxiety are prominent in the PDA literature, Green (2020) acknowledges that more research is required to understand the relationships better.

To conclude, anxiety is an issue which affects many young people with ASD and PDA, in particular relating to social situations and encounters where IoU plays a large part in this anxiety. Social motivation has been identified as an anxiety trigger, however there are conflicting views relating to social interactions, which is explored below.

2.2.7 Social Motivation and Stimuli

2.2.7.1 Social Motivation

Social motivation enhances attention to social information, rewards social interactions, promotes social bonds and relationships, and enhances the development of neurobiological systems in social information processing and cognition (Kaplan, Hooper & Gurven, 2009; Neuhaus, Webb & Bernier, 2019). It is posited that for NTs, social motivation is key to social success (Neuhaus et al., 2019). In relation to ASD, a social motivation theory is proposed, which claims to be a credible framework for social differences in ASD, using evidence from behavioural, biological, and evolutionary domains (Chevallier et al., 2012; Kaiser, Byrka & Hartig, 2010). Comparisons have been made between ToM and social motivation theory, highlighting similarities: both are social accounts, claim reduced interest in social interactions and do not explain the non-social deficits of ASD and comorbidities (Bottini, 2018; Chevallier et al., 2012). As discussed previously, ToM has been challenged, and the social motivation theory has been proposed as an alternative (Chevallier et al., 2012; Kaiser et al., 2010; Klin et al., 2009). This framework has received much support in the literature, with findings claiming that it explains diminished social approaches and engagement (Burnside, Wright & Poulin-Dubois, 2016; Clements et al., 2018; Dubey, Ropar & Hamilton, 2016; Scheeren et al., 2016; Su et al., 2021). However, others claim that the assumption that people with ASD are not socially motivated can be detrimental, and that behavioural differences can be explained by not knowing how to connect with others in the way in which society expects, such as a lack of eye context or repetitive hand movements (Jaswal & Akhtar, 2019; Sukind, 2014). It is also understood that repetitive behaviours and restricted interests are not accounted for in the social motivation theory, nor are strengths and comorbidities, with some believing that this theory cannot account for the full range of social differences associated with ASD (Watson et al., 2015). While there are mixed views relating to the relevance of social motivation theory, it is evident that a broader view of this hypothesis is needed, one which considers social and nonsocial stimuli and reward implications for those with ASD, owing to orientation to stimuli potentially reflecting social intentions (Clements et al., 2018; Elias & White, 2020; Watson et

al., 2015). Safra et al. (2019) state that 'the effect of social motivation uncovered in non-clinical populations cannot always be applied to ASD' (3), highlighting a recurring issue for this population relating to assessments not being designed for them specifically. The orientation towards and selection of social stimuli can impact levels of social motivation, which is explored next.

2.2.7.2 Social Stimuli

Much research demonstrates that people with ASD place reward value on non-social stimuli (such as objects) over social stimuli (human faces, voices etc.) (Gale, Eikeseth & Klintwall, 2019; Burnside et al., 2016; Dubey et al., 2016; Tillmann, Toumainen & Swettenham, 2021; Wang et al., 2020). Non-social stimuli such as physical objects typically attract their attention, which increase in importance as the impact of social stimuli comparatively decrease, owing to impairments extracting the value of social stimuli (Hanley, Riby & McCormack, 2014; Koterba, Leezenbaum & Iverson, 2014). Children with ASD can become pre-occupied with non-social stimuli relating to their circumscribed interest (CI), which can distract them from engaging with social stimuli, as it can be challenging to shift their attention from one stimulus to another (Falck-Ytter, Bolte & Gredeback, 2013; Klin et al., 2009; Mo et al., 2019; Sasson & Touchstone, 2014).

It is claimed that the orientation towards non-social stimuli is due to differences in neurobiological makeup, as research shows that for certain non-social stimuli hyperresponsivity rather than hypoactivation is present (Bottini, 2018). Conflicting research challenges this view, claiming that people with ASD can show interest in social stimuli and deny findings relating to deficits in brain response to social rewards in people with ASD (Goldberg et al., 2017; Pankert et al., 2014). While there are contrasting findings, several common variables have been identified as impacting the perceived reward value of social and non-social stimuli. Recent literature has raised awareness of the impact of social attention, and attentional control and processing issues when engaging with social and non-social stimuli (Arora et al, 2021; Benning et al., 2016; Mo et al., 2019; Wang et al., 2020; Watson et al., 2015). It has been claimed that environmental elements can impact social attention, and decrease engagement with social stimuli (Wang et al., 2020). Elements that have been identified as affecting engagement include the impact of interest levels in the stimuli present, a potential reward processing deficit, and the impact of circumscribed interests (CI) (Arora et al., 2021; Bennig et al., 2016; Wang et al., 2020; Watson et al., 2015). Studies using non-social stimuli often include children's CI, which take precedence over social stimuli, based on their keen interest in the area (DiCriscio et al., 2016; Watson, 2105). Kohls et al. (2013) suggest that a generalised reward-processing deficit may be present in ASD, which explains inconstancy in research relating to the reward value of social and non-social stimuli. While the reward value of social interactions for this population

has been largely disputed (Dawson et al., 2002; Knott, Dunlop & Mackay, 2006; Stephens, 2008), research demonstrates that there are factors that can be implemented, to support and enhance demonstration of social motivation for young people with ASD.

The literature outlines how intervention settings can attempt to enhance the social motivation of participants including; ensuring that the environment is fun and nurturing, using positive reinforcement, role play to teach social skills, incorporating child voice and choice, and creating a connection between pre-existing interests and the social world of the intervention space (Kim et al., 2009; Koegel & Koegel, 2006; Koegel, Vernon & Koegel, 2009; Siller & Sigman, 2002; Vernon et al., 2012; White, Koening & Scahill, 2007, 2010). The literature places the onus of responsibility on those designing and implementing social skills interventions to develop participants' social motivation. Examples of where this was achieved include arts interventions to develop social skills of young people with ASD. These studies incorporated child choice, age-appropriate motivators and child interest, and not only was social motivation increased, but generalisability was suggested, which will be discussed later in this review (Finnigan & Starr, 2010; Learner & Levine, 2007; Learner, Mikami, Levine, 2011). This is in-keeping with theories that the social value of the stimulus used in interventions must be increased to engage participants (Vernon et al., 2016; Yoder & McDuffie, 2006). Interestingly, while the literature highlights that experiential interventions are more likely to enhance social motivation than their didactic counterparts (Vernon et al., 2016; Yoder & McDuffe, 2006), studies reviewed which demonstrated increased levels of social motivation to settings outside the treatment setting were didactic in approach, the reasons for which will be explored in the generalisability section of this review. Some studies reviewed demonstrate that a positive effect, or by-product of some social skills interventions was an increase in social motivation outside of the intervention setting (Corbett et al., 2014a; DeRosier et al., 2011; Minihan, Kinsella & Honan, 2011; Laugeson et al., 2012). However, assessing the impact of social stimuli often relies on eye tracking which de-contextualises the experience (Hanley et al., 2014). The literature is not consistent with the use of strategies outlined above leading to generalisation of social motivation (Bauminger-Zviely et al., 2013; Cheng, Huang & Yang, 2015; Fletcher-Watson et al., 2016). The PDA literature does not refer directly to social motivation or social stimuli, but does observe that the novelty of new people in their environment appeals to their apparent sociability (Fidler & Christie, 2019; Newson et al., 2003). The next section will explore emotion, and perceived differences in understanding, regulation, processing and expression of emotion, and how these factors impact on the development and enactment of social skills.

2.2.8 Emotions

2.2.8.1 Perceived Differences

It is claimed that people with ASD have differences surrounding emotions including emotional understanding, competence, recognition, regulation, processing, and expression of a wide range of emotions (Reyes, Factor & Scarpa, 2020; Salomone et al., 2019). Differences with emotions have been linked to poor social skills and relationships, increased anxiety, and lack of inclusion in mainstream school settings (Chu et al., 2020; Fage et al., 2019; Swain et al., 2015). Other claimed differences include impaired cognitive flexibility which can lead to increased frustration and emotional outbursts when tackling new and difficult problems (Kriete & Noelle, 2015), and experiencing negative or overexciting emotions which can lead to maladaptive behaviours such as aggression (Maskey et al., 2013). While people with ASD can correctly identify facial expression of emotions, it is suggested they may be slower than TD peers in making a correct decision owing to a decreased processing speed in ASD (Helfer et al., 2021). It is claimed that people with ASD display more intense, frequent and varied emotional responses than TD peers when they are "unencumbered by social pressure" (Zane et al., 2018, 1111). Differences in how they interpret the social setting and their understanding of emotional display rules in those settings contribute to differences in emotional behaviours with TD peers (Barbaro & Dissanayake, 2007; Begeer et al., 2010). People with ASD can express their feelings in specific environments in which they are comfortable, known as their 'comfort zone' (Attwood, 2008; Banks et al., 2016), however they may still find it difficult to identify and describe feelings (Berthoz & Hill, 2005).

While brain-imaging and neurophysiological studies focusing on brain activity during emotion related tasks demonstrate aberrations, including facial recognition (Greimel et al., 2010; Pelphrey et al., 2007; Wang et al., 2004), others claim that children with ASD can express their emotions, and can be emotionally engaged, just differently to allistic peers (Misailidi & Papoudi, 2009; Nuske, Vivanti & Dissanayake, 2013).

Children with PDA can find understanding their own emotions challenging and can be emotionally exhausted by always waiting for the next demand (Fidler & Christie, 2019). They can demonstrate extreme emotions, and extreme changes in emotion, which are often unexpected even for the child (Langton & Frederickson, 2016; O'Nions et al., 2016). They may recognise emotions more easily than their ASD peers, however, this is often superficial, and they struggle to connect with the emotions of others (Christie et al., 2012). Nevertheless, some literature posits that children with ASD demonstrate positive awareness and expression of emotion (van Osch, Zeelenberg & Breugelmans, 2017; Rieffe et al., 2011). Again, while there are a range of thoughts surrounding the emotional abilities of people with ASD and PDA, the literature demonstrates that environmental variables can impact expression of emotions. An area

which is widely researched with this population is Emotion Regulation (ER), which will be explored next.

2.2.8.2 Emotion Regulation (ER)

While there are a wide range of models, definitions, and methods of assessing emotional dysregulation in the ASD population (Goodson, 2018), for the purpose of this review, ER is understood as a change of emotional responses, and efforts to modify the intensity of the emotional reaction to achieve a goal in response to environmental demands (Aldao, Nolen-Hoeksema & Schweizer, 2010; Gross & Thompson, 2007; Mazefsky, Herrington & Seigel, 2013). Emotional dysregulation commonly occurs in people with ASD (Eack, Mazesfsky & Minshew, 2015; Cai et al., 2018; Swain et al., 2015) and it is understood that children with PDA have poor ER, even more so than their ASD peers (Christie et al., 2012; Stuart et al., 2020). Difficulties in ER can adversely affect students' daily activities, such as learning, communication, interacting with teachers and peers, and behaviour (Beck et al., 2021; Chu et al., 2020). Mazefsky et al. (2013) highlight long term effects of ER in people with ASD including depression, anxiety, impulsivity and irritability. Expressive suppression is a strategy of ER, with some research claiming it is more common in people with ASD than their TD peers (Samson et al., 2014), however, the data are inconsistent in this regard (Samson et al. 2014b; Samson et al., 2015). As a voluntary suppression of outward emotional expression, it is universally agreed that expressive suppression in this population can have a negative impact on mental health, leading to depressive symptoms (Cai et al., 2018; Cai et al., 2019). While suppressing emotions can be appropriate in different social situations, it can pose additional challenges to people with ASD and PDA who may have trouble in determining when it is appropriate and when it is unhealthy to suppress their emotional response to a situation.

ER is widely connected to the domain of social skills, with studies demonstrating that students with enhanced ER skills have increased social skills (Berkovits, Eisenhower & Blacher, 2017; Jahromi, Meek & Ober-Reynolds, 2012; Reyes et al., 2020). The importance of socioemotional cues, and the ability to respond to them is linked to ER's role in social communication (Berggren et al., 2018). Impaired ER has been linked to anxiety, in particular social anxiety in people with ASD (Cai et al., 2018; Conner et al., 2020). It has also been claimed to lead to social isolation, exclusion and peer rejection (Hill & Frith, 2003; Howlin, 2002; Jahromi et al., 2012). It has been hypothesised that emotion dysregulation and anxiety are enhanced when social motivation is high (Swain et al., 2015; White et al., 2014). There are clear links between ER and social development, and interventions specially focusing on enhancing ER have demonstrated positive results (Cai et al., 2018; Scarpa & Reyes, 2011; Thomson, Burnham Riosa, & Weiss, 2015). Emotional memory can lead children with ASD to

recall precise details of previous experiences, and where these are negative or stressful, they are likely to have a meltdown, and unable to regulate their emotions (Prizant & Field-Meyers, 2015). While much literature focuses on emotion dysregulation, Mazefsy et al. (2012) argue for a broader approach which seeks to understand children's emotional responses to situations and how they can be facilitated to shift from negative emotions. It is posited that self-regulation enhances independence in people with ASD, owing to minimising their emotional outbursts and dysregulation (Myers & Johnson, 2007), which can in turn support their overall mental health and wellbeing (Torrado, Gomez & Montoro, 2017). Ashburner, Ziviani & Rodger (2008, 2010) argue that to achieve self-regulation with this population, they should receive support in recognising and managing their emotions. Another area in which differences are commonly identified is processing emotions, which is discussed in the next subsection.

2.2.8.3 Emotion Processing

The social motivation theory claims that emotion processing differences in ASD are linked to atypical social reward mechanisms (Dawson et al., 2002; Kleinhans et al., 2010). There is a conflict in the literature relating to the commonality and frequency of a deficit in processing emotions in the ASD population. One the one hand, it is claimed that decreased processing speed is evidenced (Helfer et al., 2021), however Kotroni, Bonoti & Mavropoulou (2019) claim that processing emotions is challenging for allistic children as well as those with ASD. Nuske et al. (2013) claim that these differences are not present in all children with ASD, however the specific emotion-processing profile may be unique to ASD. This is relevant to those with PDA also who experience confusion and challenge in accurately processing their own emotions and those of others, and who may feel overwhelmed by their emotions. Emotion processing encompasses recognition of emotion, such as facial expressions and understanding the emotions of others. The links between ToM and this area has been widely discussed, with studies demonstrating a range of findings. On the one hand it is claimed that there is no link between ToM and emotion recognition (Baron-Cohen et al., 2015; Fitzpatrick et al., 2018; Pino et al., 2016), but in contrast, other studies exploring emotion understanding and ToM in allistic peers found a strong correlation (Grazzani et al., 2018; Kuhnert et al., 2017). Again, there is a debate surrounding assessment of emotion processing and regulation in the literature. This area is considered complicated to assess, owing to a lack of appropriate assessments for this population, which is in keeping with earlier findings relating to assessing ToM and attention. For example, it is understood that visual information processing in allistic peers is different to those with ASD which can impact assessment results (Black et al., 2017; Vandewouw et al., 2020).

While IQ levels can impact emotional understanding (Salomone et al., 2019), others state that IQ has no part to play in recognising emotions for this population (Chaidi & Drigas, 2020) and it has been posited that alexithymia, rather than ASD severity, is associated with inaccurate facial recognition (Ola & Gullon-Scott, 2020). The presence of alexithymia as an explanation for characteristics commonly associated with ASD is a recurring theme. While there are many aspects of emotion considered in the literature for this population, reflecting a variety of perspectives and understandings, there is a dearth of research which includes participant voice relating to their own emotions. An area which can be impacted by expression of emotion is developing and maintaining friendships, which will be examined in the next section, but first Jessica Matthews' (2020) articulation as an autistic writer and clinical therapist, shaped by her lived experience about how people talk about ASD and PDA, summarises how narratives about emotions impact her identity, sense of self and well being.

Don't Tell Me How I Feel!





Statements such as; "I can see that you're feeling upset / worried / angry" do not land well in our house.

They are quickly returned defensively with "I'm not upset/ worried / angry".

And whilst interoception challenges / alexithymia are factors we also juggle, what I am referring to here is not about 'not knowing', it's about 'don't tell me!'

If instead, we offer an acknowledgement of how tough something is; "I know and understand that x is really difficult, or it's really hard or upsetting when x happens", it can feel much more supportive and validating.

I make sense of this in terms of how threatening it can feel to have your inner world commented on. Our feelings are intimate and when they are big feelings, they can make us feel exposed and vulnerable.

Having our feelings named for us, can trigger a neuroception of threat and lead to an understandable defensive response.

When we talk instead about how difficult x or y feels (the external event or stimuli) and name the emotion that stems from experiencing the stimuli, it can feel much safer to receive and actually considerably more validating.

The former example might feel like an accusation or a sense of blaming the self, whereas the latter is much more about acknowledging how the thing outside of oneself; has understandably given rise to some difficult emotions.

Ultimately, when we respect and honour the person's experience and validate how absolutely challenging an external stimuli is, we establish a much safer and empathic narrative.

We live in a world, supported by diagnostic manuals, that all too often position 'the problem' inside of a person. In some ways the experience of being told that you are anxious, or angry or upset can feel akin to this and therefore feel very threatening to hear.

There are many instances where it may be much more helpful (and accurate) to identify and validate the source/origin of a person's distress. This will more often than not be within their environment or relationships.

Emotional literacy and supporting children to name emotions is so important, but in the context of the Autistic experience, PDA and anxiety, textbook approaches need to be considerably revised.

2.2.9 Friendship

It has been posited that young people with ASD struggle to create and maintain friendships with their peers, both allistic and with a similar diagnosis (Bauminger et al., 2008; Brooke et al., 2018; Zeedyk et al., 2016). A lack of these relationships can lead to feelings of isolation, social exclusion, lack of participation in educational settings and loneliness (Bottema-Beutel et al., 2019; Petrina, Carter & Stephenson, 2014; Zeedyk et al., 2016). While some research claims that children with ASD have less meaningful relationships than their allistic peers, they often have a desire to make and maintain friendships and take an interest in peers they consider friends (Bauminger-Zviely et al., 2013), and when people with ASD share CI with their peers, friendships are more likely to succeed (Harrop et al., 2019; South, Ozonoff & McMahon, 2005). When these friendships are formed, peers with ASD can show interest in their friends and negotiate with them (Bossaert et al., 2015; Boyd et al., 2015).

Research demonstrates that children with ASD have a fewer number of friends and the quality of these friendships has been questioned by parents and teachers (Mendelson, Gates & Lerner, 2016; O'Hagan & Hebron, 2017). It is proposed that friendships of young people with ASD have less intimacy and are of poorer quality than that of their TD peers, which has been self-reported in some cases (Bossaert et al., 2015; Calder, Hill & Pellicano, 2013; Mendelson et al., 2016). While friendships for children with ASD are often defined as lower in quality than that of their TD peers, research indicates that children with ASD are often satisfied with their friendships (Bossaert et al., 2015; Calder, et al., 2013; Petrina et al., 2017). This could be due to levels of expectations, with friendship expectation and quality being significantly linked (Bottema-Beutel et al., 2019; Hall, 2021). It is important to consider that expectations of friendship for a child with ASD may be different to that of a TD peer, and while quality measures assessed by others may not meet a particular standard, it cannot be assumed that these friendships are not meeting individual children's needs (Calder et al., 2013; Petrina et al., 2014; Petrina et al., 2017). Literature also suggests that children with ASD can be aware of what they need from friendships, and select peers to fulfil these needs, which can lead to better quality relationships (Bottema-Beutel et al., 2019; Williams, Gleeson & Jones, 2017). Another feature identified as important for successful friendships in this population is levels of reciprocation. The literature claims that individuals with ASD do not form reciprocal friendships (Calder et al., 2013; Mitchell & Locke, 2015), however this again can be questioned in line with how these friendships are being assessed for reciprocity, with Winchell, Sreckovic & Schultz (2018) claiming that while it is considered important in traditional understandings of friendship, children with ASD may place a different meaning on it. Petrina et al.'s (2016) study found high levels of reciprocation in friendships generally for children with ASD, however this is still significantly lower than studies carried out with TD peers.

Literature demonstrates that TD peers are less likely to reciprocate friendships with children with ASD (Rotheram-Fuller et al., 2010), which can be problematic in inclusive settings. Children with ASD are more likely to form friendships with peers with the same diagnosis or peers with a disability (Petrina et al., 2016, 2017; Winchell et al., 2018). These findings highlight that children with ASD may be fulfilled by friendships of those with a similar diagnosis, and this is an area which should be further researched. However, research posits that ASD peers befriending TD peers can lead to more co-ordinated play, lower levels of conflict and higher friendship quality (Bauminger et al., 2008). Importantly, no significant differences in levels of satisfaction were evidenced in mixed and non-mixed dyads in multiple studies (Petrina et al., 2016; 2017). While the literature surmises what children with ASD may seek in friendships, including less emotionally demanding relationships or friendships with those who appear to be socially mature (Calder et al., 2013; Chamberlain, Kasari & Rotheram-Fuller, 2007), it is clear that this is individual to each child. Opportunities to make friends with TD peers has arguably increased, with increased levels of physical inclusion taking place in schools, however, Grey et al. (2007) claim that while in Ireland this is on the increase, 'mere placement in a mainstream classroom does not automatically facilitate children with ASD engaging socially or academically with their peers' (318). It has been identified that facilitation is needed for meaningful social inclusion, with the role of teachers being of paramount importance here (Boavida & da Ponte, 2011; Hart & Whalon, 2011; Hoffmann et al., 2020; Winchell et al., 2018). One example of facilitating inclusion is through the use of collaborative group work, which is explored next.

2.2.10 Collaborative Group Work

Collaborative group work has many benefits, such as perseverance with tasks (Jahromi et al., 2012). This can pose challenging for children with ASD owing to difficulties compromising (Hui Min & Lay Wah, 2011; Rucklidge, 2009), however, collaborative group work and cooperation have been identified as successful methods of social integration for children with ASD (Boavida & da Ponte, 2011; Lozano, Alcaraz & Colas, 2010; Scott, 2019), once the child plays a key role in the project/activity and is not physically on the periphery of the group (Gross, 1996; Murphy et al., 2004). It is important that these activities are facilitated by an adult and have a clear structure (Lewis, Trushell & Woods, 2005; Mo et al., 2019; Wegerif & Dawes, 2004). However, Rotheram-Fuller et al. (2010) claim that in mainstream classrooms where

children with ASD are present, they are only involved in peer social relationships approximately 50% of the time. Research which focused on the use of group, collaborative, and cooperative learning with an ASD population have shown positive results relating to social interactions and inclusion (Grey et al., 2007; Hart & Whalon, 2011; MacKay, Knott & Dunlop, 2007). This includes research on collaboration in computer games and technology which demonstrates the importance of support when completing these games, and the social motivation that occurs in virtual worlds (Zhao et al., 2018; Silva-Calpa et al., 2018). These provide 'a third party focus which may alleviate pressure on the child with ASD to interact directly with peers' (Lewis et al., 2005, 740). Studies also support the use of screen based interactive media as a tool for socialisation and developing friendships (Gallup et al., 2016; Sundberg, 2018). Young people with ASD may form friendships through this medium owing to the CI of the game being played, which has been identified as an important theme for friendship building for young people with ASD (Petrina et al., 2017).

While children with PDA can be very sociable, they find social relationships 'confusing and exhausting' (Fidler & Christie, 2019, 102), and their socially strategic behaviour can lead to difficulties in forming and maintaining friendships (Christie et al., 2012; O'Nions et al., 2014). Research carried out by O'Nions et al. (2018) highlights that three-quarters of parents reported their children demonstrated controlling and bossy behaviours towards peers, with one third of these resulting in social isolation. It could be claimed that when children with PDA form friendships, they do so with peers who will 'oblige them', and can be easily convinced to do what the child with PDA wants. While the longevity of these friendships is discussed, with friendships frequently being sabotaged by the need to control (PDA Society, 2006), reciprocity is not discussed in the PDA literature. However, it could be argued that these friendships are not reciprocal in nature owing to children with PDA needing their peers to meet their needs, to help supress anxiety around fear of the unknown. Non-compliant and explosive behaviour has been identified as damaging relationships with peers (Christie et al., 2012; Kalb & Loeber, 2003; Langton & Frederickson, 2016). As highlighted in this review so far, there is a growing body of evidence that physical inclusion alone is not sufficient to enhance interaction and social relations of children with ASD and PDA with their peers, with adult facilitation of collaborative group work being seen as essential.

An area of particular interest in the literature for this study is imagination, and the large discrepancy between perceptions of imagination in children with ASD and PDA which will be explored in the next section.

2.2.11 Imagination

2.2.11.1 Imagination and ASD

Imagination is identified as an essential and defining characteristic of human thought, a thinking skill, mode of philosophical enquiry and feature of emotional intelligence which can be intrinsically rewarding and satisfying (Csikszentmihalyi & Whalen, 1993; Root-Bernstein, 2014; Singer & Singer, 2013; Taylor et al., 2020). Much literature claims that children with ASD have an impairment in creativity and imagination (Crespi et al., 2016), with a deficit in imagination being one of the criteria for a diagnosis (Craig & Baron-Cohen, 1999; Ten Eycke & Muller, 2015a). It is asserted that lack of imagination is demonstrated through social and communication difficulties, repetitive play, absence of invented games and difficulty developing creative imaginative content in writing (Asaro-Sadler, 2016; Bourke et al., 2020; Low, Goddard & Melser, 2010; Ivan, Ciolcâ & Dreve, 2020). Where imagination is present, it is posited that it is dominated by the fantastical, and people with ASD can struggle to differentiate between fiction and reality (Ferguson, Black & Williams, 2019). EF and imagination in the ASD population have been linked, such as in relation to the inhibition of representations of reality and thinking flexibly about ideas based in fantasy (Carlson & White, 2013; Ten Eycke & Muller, 2015b). EF has also been noted as important for novel responses, which in turn allows for generativity (Craig & Baron-Cohen, 1999). Generativity has been defined as 'the capacity to spontaneously generate novel ideas and behaviours and it is thought to be the cause of a lack of spontaneity and initiative in autism...apparent failure to engage in pretence' (Hill, 2004, 207). Generativity relates to the imagining of 'unreal things', such as abstract concepts, and conceptualisation of novel ideas (Harris & Leevers, 2000; Low et al., 2010; Turner, 1999). Generativity is claimed to be a barrier for children with ASD engaging their imagination and creativity, and associations between ToM and creativity have been posited, claiming links between social communication and imagination deficits (Craig & Baron-Cohen, 1999). Recent research does not regard imagination as a totally original entity (Richard et al., 2020; Vong et al., 2020), which was seeded in earlier research such as Weisberg's (1986) and Vygotskian (1967) theories which purported a focus on imagination and the generation of novelty through combining past experiences, therefore not always generating novel or original thought (see also Grandin, 2007). This has caused a lack of understanding among some teachers, who assume imagination must be comprised of original thought (Cremin, 1998; Gallas, 2003; Toivanen, Halkilahti & Ruismaki, 2013).

Recent research on the impact of massive multi-player online role-playing games with secondary school students points to higher levels of imagination, originality of thought and creativity amongst players than non-players, with positive impact on players' sense of leadership, intuition, and sense of humour (Mikhailova, 2019). Similarly, imagination, motivation and

concentration were reported in computer mediated imaginative storytelling with children with ASD (Dillon & Underwood, 2012). Online games, video games and mediated activities in virtual worlds which are commonly favoured by people with ASD are associated with satisfying basic human psychological needs (Sublette & Mullan, 2012), and in addition, for people with a disability who experience social isolation, these friendships, communication and interaction in the virtual world developed through shared interests can be highly effective (Graham, 2013; Koles & Nagy, 2014; Voiskunsky, 2015), and as important as the excitement of the game itself (Mikhailova, 2019).

While theorists claim differences in imagination for this population, others dispute such claims, with Visuri (2019) summarising that 'some scholars argue that imaginary worlds are important platforms for autistic individuals' (104). Roth (2007) claims that autism can promote and facilitate imagination, and research has been carried out identifying exceptional creativity of people with ASD (Scott, 2013; Snow, 2015). It is acknowledged that there is a dearth of research surrounding ASD and creativity, particularly relating to everyday imaginative and creative experiences and a range of imaginative capacities (Craig & Baron-Cohen, 1999; Karim, 2017; Scott, 2013). It is hypothesised that this is owing to lack of conformation to clinical descriptions of ASD (Quirici, 2015). People with ASD who have spoken about their experience with imagination have demonstrated an understanding of how to engage their imagination, such as Higashida (2013), when writing about patience and concentration. He commented that he liked reading picture books as 'they are easy to follow and stimulate my imagination and I never get bored with them' (38). Similarly, it has been highlighted that individuals with ASD can have high levels of social imagination which mediates risk (Crespi et al., 2016; Kaufman, 2017). The term social imagination refers to the ability to understand the behaviour and intentions of others, and adapt accordingly (AsIAm, 2019). Social imagination is different to creative imagination (Steward, 2014), however it has direct correlations to improvisation, which will be explored in the drama section of this review.

Another issue regarding imagination, which is not unique to the ASD population, is the interpretation of imagination in the education system. Recognising that there is not a universalising concept of imagination but rather it incorporates a multidimensional perspective, Trotman (2008) asserts that current educational and school practices only lay claim to a partial understanding of imagination, through such recognition of imagination as a thinking skill, a philosophical enquiry, an empathetic feature of emotional intelligence. In Trotman's (2008) study, children and adolescents ascribe to imagination ideas around freedom and choice, free will, 'switching off', space for personal interpretation and expression, enjoyment to explore the 'fun things' in their mind. However, they report that prescriptive framing by teachers and curricula result in static, pre-determined pedagogic experiences in classrooms to the exclusion of being able to bring their own 'fanciful' imaginings to transcend the division between the 'otherness' of

the real world dominated by parental and school preoccupations. There is a large discrepancy in the prevalence of imagination and creativity in the ASD population, and this could be due to the way in which it is assessed, which is explored below.

2.2.11.2 Assessing Imagination

Traditionally studies exploring imagination in this population did not give context or background for imaginative assessments, such as viewing pictures of toys and thinking about how to make the toy more interesting to play with, receiving a 3D foam shape and sharing what it could be, and drawing tasks (Craig, Baron-Cohen & Scott, 2001; Tegano & Moran, 1989; Ten Eycke & Muller, 2015a). In relation to object-based assessments, it was concluded that children with ASD made fewer changes to the objects, and where these were present they were reality based, rather than imaginative (Tegano & Moran, 1989). Findings from drawing tasks were similar, with the 'draw an impossible man' assessment demonstrating that 92% of participants drew realistic looking people' (Ten Eycke & Muller, 2015a, 214). Theories surrounding results have been linked to the social content of drawing people, and social differences, rather than imagination, with a study carried out by Lim & Slaughter (2008) demonstrating that children with AS achieved lower imaginative scores than their TD peers when drawing a person, however this was not the case when drawing a house or tree. These findings were replicated in multiple studies, and the literature suggests that children with ASD 'hold different types of internal representations for social and non-social content' (Ten Eycke & Muller, 2015a, 218). The decoding of instructions in drawing based assessments can also be a challenge for young people with ASD, which may lead to an inconsistency in results (Visuri, 2019), as children may simply be following instructions, rather than understanding that there is an element of pretence necessary which is being assessed (Scott, 2013). This could explain why parents whose children score poorly on imagination tests report engaging in imaginative play in the home setting (Visuri, 2019). The environment of assessments could also be a contributing factor, with certain environments not revealing 'the possibility of their imaginations' (Wannenburg & VanNiekerk, 2019, 141). While a majority of studies carried out involving drawing tasks, pretence and pretend play demonstrate a discrepancy in results between ASD children and their TD peers, when these tasks were structured this was not the case. In some contexts no differences were evidenced in relation to imagination in drawing tasks, pretence and pretend play (Charman & Baron-Cohen, 1997; Leevers & Harris, 1998; Scott, 2013). The key factors were prompts being used such as specific instructions including; 'Show me how..' (Jarrold, Boucher & Smith, 1996) and 'Let's pretend' (Charman et al., 1997), so that instructions do not have to be extracted and generalised (Sapey-Triomphe et al., 2018; Van der Hallen et al., 2016). Scott (2013) outlines pretend play as falling into two categories; re-enactment and role-play, and contends that more research is needed in this area with this population. Re-enactment and role-play will be explored in the drama section of this review.

The literature highlights methodological flaws in research on imagination and creativity with this population, with a focus on a product oriented rather than the creative process involved (Ten Eycke & Muller, 2015b). Ten Eycke & Muller (2015b), raise the issue of motivation within these assessments, stating 'Imagination deficits that are reported based on measures of spontaneous imagination likely represent a *preference* to produce non-imaginative content, rather than a difficulty imagining' (219) [emphasis added].

2.2.11.3 PDA and Imagination

Imagination, specifically the use of role-play and fantasy worlds have been identified as a key characteristic of PDA (Christie et al., 2012; O'Nions et al., 2014) and it has been claimed that these features are often the reason an ASD diagnosis is not received (Newson et al., 2003). In Newson et al.'s (2003) seminal study on PDA, 90% of participants had general symbolic play, with 86% using role play. Similarly, in recent research carried out by O'Nions et al. (2018) two thirds of participants engaged in fantasy activities. Children with PDA also engaged family members in role play, asking them to take on specific roles, and engaged in re-enactment of events they had seen previously (Christie et al., 2012; O'Nions et al., 2018). While the reasons for this ability in comparison to children with ASD has not been explored, it has been widely claimed that use of role play and fantasy worlds enables children to assert control over their environment, to supress their fear of the unknown and to avoid demands (Christie et al., 2012). The use of fantasy and role play has been found to be used in adulthood by those with PDA (Newson et al., 2003). Adults with PDA support this hypothesis, commenting that they use role play to control situations and their environments, and fantasy worlds to 'escape the unpleasantness of the world' (Cat, 2019, 195).

Narrating or adopting a style of directing are common for children with PDA when interacting with peers (Fidler & Christie, 2019), which can impact friendships, as discussed previously. Children can also withdraw into a fantasy world to avoid engaging in uncertain situations (Stuart et al., 2020), with studies demonstrating that up to half of children can become confused between fantasy world and reality (O'Nions et al., 2018; Christie et al., 2012). The use of role and fantasy is also a suggested strategy for parents and teachers when working with children with PDA (Christie et al., 2012).

While there is a conflict in the literature surrounding ASD and imagination, many claim that people with ASD have differences in imagination, however Scott (2013) states; 'we cannot, and should not, necessarily assume that a difference in the way imagination works in autism is therefore a deficit' (512). The theme of difference, rather than deficit, relating to well-known

characteristics of ASD is common, and has been addressed in many sections of this review. There has been a call for perspectives on imagination to be readdressed in diagnostic manuals (Mills, 2008), however to date this has not occurred. While assessment methods of imagination with this population have been questioned, alongside theories for heightened and decreased imagination in ASD, it is widely agreed that those with PDA demonstrate very strong imagination, with it being the most notable difference from ASD counterparts (Newson et al., 2003).

2.2.12 Conclusion

This chapter explored the defining features of ASD and PDA, locating PDA within the profile of ASD for the purposes of this study. Several recurring themes emerged, and the first relates to the assessment of perceived differences. In most categories explored, questions around the reliability and suitability of assessment methods were raised, and the potential impact of the accuracy of findings. Specifically, assessments used for NT children in the areas of ToM, attention, emotion and imagination were deemed unsuitable for ASD, despite these being the main tools employed. They fail to take account of the impact of the environment, linguistic differences, or of individual preferences. The theme of difference was highlighted, whereby a perceived difference in humour or expression of emotion for example, was attributed to a failure in communication or being understood by allistic peers and non-autistic adults rather than to a deficit in these constructs. The largely uncontested notion that inclusion unilaterally benefits people with ASD despite a preference to interact and engage with people who share their diagnosis [their own tribe as Becher (1989) might call it or 'neuro tribe' following Silberman (2016) in Chapter Four], appears to reflect a one-dimensional approach to inclusion where a call for diversity seems to be dominated by reported benefits to the person with autism rather than reciprocally to society overall. The extent to which conflicting views were evident in the literature when discussing the key characteristics of ASD and PDA, suggests that the multiple languages through which people present themselves and interpret their world are inadequately understood or regarded in studies in the area. What Becher (1989) variously refers to, albeit in a different context, as people's 'tribes and territories' can be applied here to highlight a lack of research and understanding from people with ASD and PDA's perspective. The review so far highlights the necessity of incorporating the voice of those with ASD and PDA in all future research. This may help reconcile divergences in the literature, leading to a more holistic understanding of ASD, PDA and inclusive society, and what approaches and interventions support people in being comfortable and fully at home in the world. The next chapter will explore and critically analyse the concept of generalisability in terms of existing interventions available.

Chapter Three Generalisation

3.1 Introduction

This chapter examines theories of generalisability, including its definition in this study. Social skills interventions which include generalisability are examined, including the prevalence of didactic and experiential approaches. Categories of generalisation which the literature have deemed successful under the headings Multiple Exemplars, Homework, Parental Involvement, Typically Developing Peers, and Self-Monitoring and Self-Regulation are explored. The review then examines social skills interventions which are drama based, and the prevalence of generalisability in these studies, followed by methods of assessing generalisability within the ASD population. As Chapter Two presents PDA as a diagnosis within ASD (Newson et al., 2013; O'Nions et al., 2018), the term ASD representing a spectrum of difference incorporating PDA will be used in this chapter and the next.

3.2 Generalisability Theories and Implictions

Traditionally generalisability was defined as 'a term which describes the fact that the control acquired by a stimulus is shared by other stimuli with common properties' (Skinner, 1953, 153). Later Stokes & Baer (1977) defined it as 'the occurrence of relevant behaviour under different non-training conditions (across subjects, settings, behaviours, and/or time) without the scheduling of the same events in those conditions as had been scheduled in the training conditions' (350). Essentially, generalisability is understood to be the demonstration of specific target behaviours in an environment which is different to the intervention setting (Gunning et al., 2019). It is broadly categorised under; (i) situation, referring to the extent to which the participant demonstrates target behaviours in other settings, and (ii) response generalisation, whereby the participant demonstrates untrained behaviours that are equivalent to the trained target behaviour (Cooper et al., 2007; Phelps, 2011). The literature highlights four types of generalised treatment effects across (i) time, (ii) setting, (iii) subjects/individuals and (iv) responses/behaviours (Cooper et al., 2007; Wahler et al., 1979). While none of the social skills interventions examined in this review offered a definition of generalisability, it is evident that there is an agreed understanding of the term in relation to ASD. Many studies explore generalisability within the intervention (e.g. to another space in the intervention setting), however, for the purposes of this study generalisability to natural environments beyond the intervention setting will be explored, in keeping with the research questions. Relevant studies reference the ability of participants to use social skills in another natural setting, most commonly with a different set of physical and/or social stimuli. Therefore,

building on Stokes & Baer's (1977) definition, and incorporating the importance of generalisability to the natural environment (Beidel, Turner & Morris, 2000; Kransy et al., 2003), generalisability in this study is understood as the demonstration of social skills developed and demonstrated in the social drama setting to participants' natural settings. This will encompass all four types of generalised treatment effects, operating across (i) time, (ii) setting, (iii) subjects/individuals and (iv) responses/behaviours. This study will explore both situation and response generalisation (Cooper et al., 2007; Phelps, 2011) drawing from the Social Drama Assessment Tool (SDAT) criteria.

Generalising learned skills from an intervention setting to other environments is difficult for people with ASD (Kent, 2020; Mishna & Muskat, 1998; Silver & Oakes, 2001). There are numerous hypotheses as to why this is the case, including differences in EF and WCC, instructional challenges for teachers and intervention strategies not being child specific (Gunning et al., 2019; Happé & Frith, 2006). From a neurobiological perspective, it has been posited that people with ASD have a deficit in cortical plasticity, which can account for atypical generalisation (Church et al., 2015). Others claim that it could be owing to cognitive issues such as a deficit in focusing attention, how information is processed, organised and retrieved (Baez & Ibanez, 2014; Church et al., 2015). Mehiling (2017) claims that difficulties generalising social skills learnt and demonstrated in interventions to real life contexts is due to an inability of these interventions to change 'brain pathways that mediate those important social abilities' (24). She also argues that when generalisability is claimed, it cannot be guaranteed, as the child may not be able to implement the skills fluidly. While there are a variety of theories relating to why a lack of generalisation occurs for people with ASD, there is a shared understanding that there is a lack of research in this area overall (Carruthers et al., 2020; Green & Garg, 2018). Carruthers et al. (2020) challenge the validity of theories of generalisation in ASD suggesting that some studies are 'characterised by very disparate methodologies and inconsistent findings' (507). Barry et al. (2003) claim that lack of skill generalisation is the most challenging aspect of social skills interventions for young people with high functioning autism (HFA), with limited success reported of generalisability of skills learned in the intervention setting to natural settings in the real world (Fletcher-Watson et al., 2016; Silver & Oakes, 2001).

The literature highlights the importance of generalisation of social skills for developing and maintaining friendships, participating in post second level education, employment, and independent living (Nuenberger et al., 2013; Zager, Wehmeyer & Simpson, 2012). The field of Applied Behaviour Analysis (ABA) has long engaged with generalisation promotion techniques however, generalisability was considered a passive phenomenon whereby it was viewed as a natural outcome of an intervention that simply happened, and was not produced or influenced by specific procedures, except the use of varying stimuli (Keller &

Schoenfeld, 1950; Skinner, 1953). Stokes and Baer (1977) challenged this theory by claiming that generalisation has to be actively 'programmed', and they created categories of techniques designed to assess or programme generalisability, including Train and Hope, Sequential Modification, Program Common Stimuli and Train to Generalize. Many were evident in the studies examined, particularly Train and Hope, whereby the potential for and importance of generalisability was acknowledged, but was not built in methodologically (Gantman et al., 2012). Other techniques were rarely evidenced, such as Program Common Stimuli, as the majority of more recent interventions do not use the same stimuli in the intervention and generalisation setting. Stokes & Osnes (1989) further developed Stokes & Baer's (1977) categories, focusing on programming tactics to achieve generalisability such as training diversely and exploiting current functional contingencies. Stokes & Osnes (1989) emphasise reinforcing behaviours, multiple stimulus exemplars and making antecedents less discriminable, allowing for a variety of conditions in training. Stokes & Baer (1977) and Stokes & Osnes (1989) focus on generalisability as a concept across a variety of needs and skills, and highlight its importance as a long-established concept in the field. Generalisability continues to be indisputably acknowledged in the literature as being essential for positive life outcomes (Bernier & Gerdts, 2010; Zager et al., 2012).

3.3 Social Skills Interventions and Generalisability

The literature demonstrates a wide variety of social skills interventions for young people with ASD. These studies adopt a range of methods to enhance social skills and interactions including the use of Cognitive Behavioural Therapy (CBT) (Koning et al., 2011), Social Stories (Acar et al., 2017; Delano & Snell, 2006), arts-based interventions (Mehiling, 2017; Trudel & Nadig, 2019) and role-play (DeRosier et al., 2011; Radley et al., 2014b). While many are deemed successful within the intervention setting, the purpose of this review is to examine interventions that have assessed generalisability to a setting outside of the intervention, analyse their success, and the specific elements which supported generalisability such as generalisation homework (Chan et al., 2018; Madelberg et al., 2014; Yoo et al., 2014), parental involvement (Kyllianinen et al., 2020; Radley et al., 2020), typically developing (TD) peers (Corbett et al., 2015; Owen-DeSchryver et al., 2008; Walker, Barry & Bader, 2010) and multiple exemplars (Ferguson et al., 2020; Hood, Luczynski & Mitteer, 2007; Olcay-Gul & Tekin-Iftar, 2016). The literature demonstrates that these studies are in keeping with the seminal generalisation theories of Stokes and Baer (1977) and Stokes and Osnes (1989), and their levels of success are explored here.

Interventions which focus on social skill development and generalisability are varied in their methodologies. 106 papers were reviewed for this chapter on generalisability and the

majority included a group component or were classified as Group Social Skills Intervention (GSSI), with few studies involving the young person being trained individually. Studies which involved individual social skills training included the use of social stories (Adams et al., 2004; Scattone, Tingstrom & Wilczynski, 2006) and interventions carried out with/by parents/caregivers (Acar et al., 2017; Einfeld et al., 2018; Kylliainen et al., 2020). Many interventions adopt a didactic approach, whereby instructions relating to the target social skill are given, that skill is specifically taught, modelled and rehearsed, often using role play as a teaching strategy (DeRosier et al., 2011; Laugeson et al., 2012; Minihan, Kinsella & Honan, 2011; Tse et al., 2007), with research highlighting that didactics is the most commonly implemented approach (Killmeyer & Kaczmare, 2017; Lopata et al., 2006; McMahon, Vismara & Solomon, 2012). Some interventions, in particular those which are arts focused, adopt a more experiential approach (Lerneret al., 2011; Mehling, 2017; Vernon et al., 2016), understood in this study as reflecting on learning through doing and experience. Didactic and experiential approaches, and their success rates are explored later.

As mentioned, there is a lack of data relating to generalisability of social skills to natural environments outside of the treatment setting (Carruthers et al., 2020; Fergueson et al., 2021; Hutchins et al., 2020; Kent et al., 2020). The settings in which interventions take place are limited, with many carried out in clinical settings, and those carried out in preschool/schools are often in a withdrawal setting despite documented benefits of interventions taking place in inclusive school settings (Hundert, Rowe & Harrison, 2014). The literature highlights the positive impact of natural environments for social skills interventions to enhance generalisability (Rosenburg et al., 2015), which is discussed later in this chapter.

The studies examined claim varying degrees of generalisability ranging from unsuccessful, limited, moderate, successful for some, to 100% generalisability of social skills to other settings. In the studies reviewed, generalisability was claimed based on assessments carried out by (i) parents (Radley et al., 2020; Radley et al., 2014a; Walker et al., 2010), (ii) researchers involved in the intervention (Barry et al., 2003; Delano & Snell, 2006) and (iii) researchers blind to the treatment conditions (Koning et al., 2011). These assessments include data from observations, scales, and questionnaires, and were conducted in a variety of settings including homes, playgrounds, and in different rooms in the building in which the intervention was carried out, such as a different classroom or office (Mason et al., 2013; Radley, 2014a; Wood et al., 2009). The review demonstrates the range of methods used and the challenges associated with assessing generalisability with this population, such as sample size, lack of longitudinal studies exploring generalisability, and the challenges of identifying the elements which lead to successful generalisation where multiple generalisation techniques are used (Corbett et al., 2015; Radley et al., 2014a; Yoo et al., 2014). In the majority of studies, it is parents who carry out generalisation assessments to the home and other natural environments,

with the literature highlighting a lack of studies which allow 'outsiders' to assess generalisability to the home setting. The benefit of a researcher involved in the social skills intervention, or blind to treatment conditions, assessing generalisability to the home setting could be significant in gaining an insider-outsider perspective (Beadle-Brown, 2018).

It is agreed that there is a lack of research in the area, which could be attributed to generalisability being challenging to define, develop and assess, and that a successful model of generalisation of social skills for people with ASD has not yet been developed. Other limitations include potential bias, measurement error and logistical practicalities (Gao & Harris, 2014; Kukull & Ganguli, 2012). Future studies should explicitly examine what factors lead to the generalisability of social skills for this population (Fergueson et al., 2021; Hutchins et al., 2020). Therefore, the purpose of this review is to identify social skills interventions with young people with ASD, which methodologically built generalisability into their study design, and assessed generalisability, to some degree, outside of the treatment setting, identifying successful strategies, and we'll begin with didactic and experiential approaches.

3.4 Didactic and Experiential Approaches

Many interventions adopt a didactic approach, incorporating direct instruction, role play and rehearsal (Bambara et al., 2016; DeRosier & Gilliom, 2007; Laugeson et al., 2014). While didactic are the most commonly used interventions, the literature posits that they pose barriers to generalisation (Mehling, 2017; Tseng et al., 2020). Vernon et al. (2016) claim that focusing on developing social skills through these methods alone is 'unlikely to benefit those with low motivation to engage with others and/or those who only have access to non-reciprocal social partners' (1819). Similarly, Yoder & McDuffie (2006) highlight that rote teaching of social skills is a misguided approach to establishing generalisable changes. They suggest instead that by increasing the social value of the stimulus to elicit the desired social behaviour, participants may be motivated to a point where they naturally engage in target social skills, such as making eye contact with a partner. This is in-keeping with Dawson et al. (2002) who claim that children with ASD have difficulty perceiving the reward value of social interactions. Despite this, the research demonstrates a degree of success for the generalisability of didactic social skills interventions (Zheng et al., 2021). Some adopt a combined approach, incorporating didactic and experiential methodologies (e.g. Masse et al., 2016), such as Vernon et al.'s (2016) Social Tools And Rules for Teens (The START Programme) in which adults acted as facilitators, and participants actively engaged in unstructured, participant led, socialisation time. Group activities such as team building and individual sessions focused on the didactic element. Other activities adopt an experiential approach (Vernon et al., 2017; Mehiling, 2017), with Tseng et al. (2020) outlining the benefits of this approach in enabling participants

to 'practice their adaptive responses to socially-relevant stimuli in simulated situations that may be less threatening than real-world interactions' (202). An example is Lerner & Levine's (2007) social pragmatic intervention, which involved participating in drama games tailored specifically for the level of the group, in which the adults acted as facilitators, rather than leaders. This could be classified as experiential as participants are actively involved, and the focus is on learning through participation, rather than didactic instruction.

While Vernon et al. (2012) recommend a more experiential approach, Vernon et al. (2016) later clarify that an experiential social context is only beneficial for those who are 'relatively sophisticated' (1820) socially, and not those who lack knowledge of basic socialisation strategies. They do not provide evidence to support these claims, but their reasoning underpins the use of a hybrid model, involving experiential and didactic approaches in their START programme. Vernon et al.'s (2016) claims that experiential approaches are not suitable for all levels of social functioning could explain why there is greater evidence of didactic approaches in use with this population. It highlights the need for research surrounding suitability of different approaches for different levels of social functioning, with Mehling (2017) identifying a dearth of research relating to the impact of didactic versus experiential approaches on skill acquisition and generalisation. The literature demonstrates that experiential interventions are theoretically more favourable to positive generalisation outcomes, however, the majority of studies which claim generalisability are didactic in approach. This could be due to there being less experiential approaches available and adopted. The next section will outline common strategies identified in social skills interventions which are used to enhance generalisability.

3.5 Characteristics of Social Skills Interventions which Evidence Generalisability

The review highlighted a number of factors and approaches which have been shown to impact positively on social skill generalisation for children and young people with ASD when incorporated into social skills interventions. The most common approaches used were multiple exemplars, homework, parental involvement and TD peers. These will be discussed in the following sub-sections, considering success rates and frequency of use.

3.5.1 Multiple Exemplars

Lovaas (1981) claims that generalisation of skills is a critical aspect of successful teaching but recognises that it can be challenging to achieve for a single teacher. It has long been accepted that it is not possible for young people to be able to generalise based on one example (Baer, 1981). The literature highlights the benefits of using multiple exemplars to enhance

generalisation of learned skills across settings (Simpson et al., 1997; Stokes & Osnes, 1989; Waddington et al., 2017) with Koegel et al. (1995) claiming that the success of multiple exemplars could be due to their stimulus over sensitivity. Multiple exemplar teaching includes the use of multiple people, settings and stimuli with the aim of including diversity in the intervention, equipping participants to generalise learned skills to other settings, using diverse stimuli (Marzullo-Kerth, et al., 2011).

Studies which use multiple exemplars and explore generalisability have recorded varying levels of success. Minihan et al. (2011) used multiple peers, whereby participants rotated in their interactions with TD peers and had to initiate conversation, allowing them to be exposed to 'multiple exemplars of appropriate social behaviour' (59). In this study moderate generalisation was found in the home setting as a result, with the use of multiple TD peers in the intervention setting being recommended to achieve generalisation. An intervention which explored the generalisation of sharing skills used multiple exemplar training, incorporating multiple stimuli and settings. Findings demonstrated that generalisation occurred across novel stimuli and settings (Marzullo-Kerth et al., 2011). The Superheroes Social Skills Intervention also claims the use of multiple exemplars of target skills including video modelling, selfmonitoring and behavioural rehearsal led to success of generalisability (Murphy, Radley & Helbid, 2018; Radley et al., 2020). Similar levels of success were demonstrated when using multiple exemplars in particular settings with peers (Ben-Itzchack & Zachor, 2021; Hood et al., 2017; Kent et al., 2020; Olcay-Gul & Tekin-Iftar, 2016; Waddington et al., 2017; Watkins et al., 2019). Achieving success when employing multiple exemplars was recommended originally by Stokes & Osnes (1989), who promote the use of multiple exemplars in the form of stimulus, trainers and settings.

While some studies claim success, many others do not, despite using multiple exemplar methods. Few (n=11) studies examined explicitly linked the use of multiple exemplars to achieving generalisability. Whereas in contrast, many studies employed multiple exemplars, but did not specifically identify it as a strategy used to enhance generalisability. This lack of acknowledgment may be due to a lack of awareness of multiple exemplars as a strategy to enhance generalisability, in comparison to some of the more commonly used strategies such as homework (discussed below). For example, many studies incorporated TD peers, giving participants the opportunity to practice skills learnt with a variety of peers and witness social skills being modelled (Minihan et al., 2011; Owen-DeSchryver et al., 2008; Watkins et al., 2019). Other interventions incorporated multiple stimuli such as social and non-social pictures (Radley et al., 2015; Rice et al., 2015) and multiple settings such as the classroom (Acar et al., 2017; Waddington et al., 2017), enabling participants to practice learned skills in a different environment.

While there is some evidence to support the benefits of using multiple exemplars to

achieve generalisation of social skills, Holth (2017) claims that 'the use of multiple exemplars may not by itself suffice to produce generalized performance' (230). Similarly, Stokes and Osnes (1989) highlight that the use of multiple stimulus exemplars may have limitations 'if the examples are not chosen carefully' (725). There is a reported degree of success associated with using multiple exemplars for generalisability, however, there appears to be a lack of knowledge surrounding its efficacy by interventionists, and it is often used alongside other strategies to enhance success rates. Therefore success for multiple exemplars alone cannot be claimed. A strategy which is commonly used for generalisability is homework, which is explored below.

3.5.2 Homework

Homework has been identified as a promising strategy (White et al., 2007) to promote generalisation of social skills for young people with ASD, from the intervention to the home setting, with almost a third of studies examined incorporating homework. Homework is presented as enabling participants to practiceskills between sessions and encourage generalisability (Chan et al., 2018). Interventions range from individualised tasks with each participant's needs in mind such as watching videos in the home setting which focus on the participant's target behaviours (Radley et al., 2014a; Corbett et al., 2015), to tasks assigned to all members of the group such as socialization activities (e.g. phoning a classmate or participating in a social gathering with peers who are not associated with the intervention) (Laugeson et al., 2012; Mandelberg et al., 2014; Sim et al., 2006). Other forms of homework include reading social scripts, writing a short report about a situation which occurred during the week and practicing skills learnt during the intervention at home (Barry et al., 2003; DeRosier et al., 2011; Minne & Semrud-Clikeman, 2011; Radley et al., 2020). Generalisation homework is generally assigned during a weekly intervention session (Mandelberg et al., 2014; Yoo et al., 2014). While some do not specify how long should be spent on generalisation homework, others allocated tasks which must be completed daily, weekly, or before the next session (Corbett et al., 2015; Herbrecht et al., 2009; Laugeson et al., 2012).

The prominence in the literature of homework is in keeping with the theories of Parsonson & Baer (1978), who highlight that feedback and reinforcement of skills learnt in a variety of settings is an effective way to promote generalisation. Similarly, Odom & Watts (1991) testify to the importance of prompting and reinforcement of social interactions in natural settings. The use of generalisation homework and theories of reinforcement in naturalistic settings are underpinned by Stoke & Baer's (1977) Train to Generalize approach, whereby occurrences of generalisability are followed by consequences that are likely to function as reinforcers. While the studies examined do not specify reinforcers which should be used on

successful completion of a homework task in the home setting (Stokes & Osnes, 1989), tasks are often reflected on, both with the participants and their parents, during the following session (Koning et al., 2011; Minihan et al., 2011). For example, in Yoo et al.'s (2014) study, homework was reviewed at the beginning of each session, with both parents and participants, and the facilitators of the intervention recorded the homework compliance and quality. Similarly, some interventions explain, and provide instructions for homework tasks to parents in the intervention setting at the end of the session (Schohl et al., 2013; Vernon et al., 2016).

The reported success rates for homework range from 100% generalisation of target social skills for all participants (Acar et al., 2017; Radley et al., 2014a), to moderate evidence of generalisability (Minihan, et al., 2011), to 'some' evidence of generalisation (Barry et al., 2003; Corbett et al., 2015; Herbrecht et al., 2009), and preliminary evidence of generalisability to other settings (Radley et al., 2014b). While Radley et al. (2014a) claim that all target skills were generalised for all participants, multiple strategies were used. This poses a challenge, as stated previously, as it is not possible to distinguish which components are successful in achieving generalisability. Most studies which employ homework as a generalisation strategy also use otherstrategies such as TD peers (Barry et al., 2003; Radley et al., 2014a; Walker et al., 2010) and/or parental involvement (Herbrecht et al., 2009; Laugeson et al., 2012; Mandelberg et al., 2014). Therefore, while the literature appears to favour the use of homework, it cannot definitively be claimed as the most significant contributing factor when other factors are also involved. Many homework tasks used in social skills interventions rely on parental involvement, such as participants practising with parents who serve as coaches (DeRosier et al., 2011) and organising playdates for them (Mandelberg et al., 2014). These were deemed moderately successful. Parental involvement is explored next.

3.5.3 Parental Involvement

The literature highlights the importance of parental involvement in social skills interventions for generalisability (Beaumont, Rotolone & Sofronoff, 2015; Green & Garg, 2018; Masse et al., 2016). It has been posited that parents facilitating interventions can lead to high levels of generalisability (Dogan et al., 2017), with Green & Garg (2018) identifying it as one of the main contributing factors to success. Parents are often involved in the home setting, facilitating homework tasks and reinforcing and practicing social skills learned in the intervention (Kylliainen et al., 2021; Mandelberg et al., 2014). Inviting parents to participate in training themselves has yielded positive outcomes, however this level of involvement is not common. Where it does occur, parents attend concurrent sessions or join their child's session at the end for a review and explanation of homework (Schohl et al., 2014; Vernon et al., 2016).

A small number of interventions rely more on direct parental involvement, such as Acar

et al. (2017), where mothers were trained in selecting target behaviours and delivering intervention sessions to their children, including the use of social stories and video modelling. In total, five social skills interventions were found where parents were trained to deliver the session themselves, with the support of professionals, in keeping with DeRosier et al. (2011) who claim that 'including active parent involvement in their child's SST intervention may yield greater generalization of treatment benefits for children' (1039). In three of these interventions a direct approach elicited successful generalisability for some or all participants (Acar et al., 2017, Siller, Hutman & Sigman, 2013; Vernon et al., 2012). Despite the positive impact that parents can have on the generalisability of their child's social skills, the literature revealed that parents were rarely invited to join their children's sessions. Where this occurred, generalisation probes were 'weak' owing to them being carried out in unfamiliar and different environments (Vismara, Colombi & Rogers, 2009). While interventions which invited parents to attend a number of sessions demonstrated some positive results of generalisation to the home setting, it was noted that greater parental involvement may have further enhanced generalisability (DeRosier et al., 2011; Webb et al., 2004).

Despite parents not typically being involved in intervention sessions, they were often kept informed of what was taking place through daily schedules, regular meetings and reports, communication sheets and reviews (Barry et al., 2003; Corbett et al., 2019; Herbrecht et al., 2009; Lerner & Levine, 2007; Radley et al., 2020). It appears that communication with, and involvement of parents is important, however, it does not occur as frequently as other generalisation strategies, such as the incorporation of typically developing peers (TD), which is explored next.

3.5.4 Typically Developing Peers

Almost a third of studies reviewed incorporated typically developing (TD) peers to promote and assess generalisation of social skills. The literature demonstrates that the incorporation of TD peers enhances generalisability across home and community settings (Birnschein, Paisley & Tomeny, 2021; Kent et al., 2020; Watkins et al., 2015). This strategy aligns with Stokes & Baer's (1977) theories on multiple exemplars, as studies in this group use multiple peers in this way.

A number of studies assess the impact of peer interventions on young people with ASD (Dolan et al., 2016; Sallows & Graupner, 2005), however, as this review is focusing on the *generalisability* of social skills to natural environments, the interventions discussed have assessed generalisability in at least one other setting and use TD peers either in the intervention or generalisation setting, or both. They also built generalisability methodologically into their designs.

TD peers, both trained and untrained, are incorporated into social skills interventions in the following ways: (i) to support participants during the intervention, such as trained peers working on roles and helping participants learn lines in a theatre based intervention (e.g. Corbett et al., 2015) and untrained peers being asked to participate in the intervention through group discussions, modelling skills where required and role playing target social skills with participants (e.g. Minihan et al., 2011). (ii) Assessing the generalisability of social skills, and (iii) in both the intervention and assessment phase, such as three untrained TD peers participating in the intervention as play partners, and three untrained novel peers [who were not present in the intervention setting a cting as play partners during the assessment phase (e.g. Jung, Sainato & Davis, 2008). More studies incorporated trained than untrained peers, however, in contrast untrained peers are included more frequently in the generalisation assessments than their trained counterparts. Only two studies incorporated peers in both phases (Delano & Snell, 2006; Radley et al., 2014b). Often in studies where trained TD peers are involved in the intervention settings, novel TD peers are involved in the generalisation setting (Watkins et al., 2019). This is moving away from Stokes & Baer's (1977) model of peer tutoring, whereby the trained peer would be the stimulus in both the training and generalisation setting, and from Stokes & Osnes' (1989) incorporation of common salient social stimuli, of a person being present in both settings. Of the studies which incorporate TD peers, many classify themselves as 'peer meditated' or using 'peer tutors', where peers are seen as an integral part of the social skills training (Kent et al., 2020). Many configurations of TD peers are evidenced in social skills interventions to enhance generalisability, and their success rates will be explored later.

The type of training TD peers receive varies from information regarding the objectives of the intervention and behavioural intervention techniques, rationale for developing friendships with students with disabilities, strategies to use to befriend a student with ASD, and how to help children with ASD (e.g. Barry et al., 2003; Corbett et al., 2019; Owen-DeSchryver et al., 2008). Specific instructions are often given to trained TD peers when participating in generalisation assessments, such as the role they should adopt, or the length of time they should wait before initiating an interaction (e.g. Jung et al., 2008). Didactic strategies such as instruction, video modelling and role play are often used when training TD peers, with Owen-DeSchryver et al., (2008) adopting some exploratory methods such as discussing the strengths and preferences of a classmate with ASD. Peer training sessions range from several days to three 30-45 minute sessions (Corbett et al., 2015; Owen-DeSchryver et al., 2008). Corbett et al. (2019) used both trained and untrained peers in preand post-intervention assessments in their Social-Emotional Neuroscience Endocrinology (SENSE) Theatre intervention. SENSE used theatrical games, role play, improvisation and devising theatre to improve social competence, involving peers in the intervention as 'peer

models and co-actors' (7). In the interventions which incorporated TD peers, generalisability was assessed both by facilitators of the intervention in a playground/another room in the intervention setting, and/or by parents in the home setting. Findings across these 33 studies generally highlight limited generalisability to the home setting, with some and none being the most frequent outcomes.

Lee & Odom (1996) claim that a goal of socialisation for children with ASD is interacting with allistic peers in naturalistic settings, and therefore the inclusion of trained peers can enhance interactions, with Owen-DeSchryver et al., (2008) commenting that 'peer training is a viable strategy for increasing interactions between typical peers and students with ASD' (16). However, the findings from this review reveal that outcomes were not always successful. Less than half of the studies (n=14) using trained TD peers demonstrated successful generalisation to natural settings. What did emerge was a greater degree of interaction by trained TD peers with their ASD peers, rather than increasing interactions of children with ASD amongst themselves (see Barry et al., 2003). This highlights the importance of including TD peers in interventions for young people with ASD, as the literature posits that a barrier to generalisability can be negative attitudes and lack of acceptance from TD peers (Birnschein et al., 2021; Hundert et al., 2014). However, the literature is relatively silent on whether the interactions were meaningful and sustained rather than cursory, and whether children and young people with ASD initiated the interaction with their TD peers.

Where TD peers were not trained, they participated in the social skills intervention alongside participants. The facilitator often invited such peers to model specific social skills, for example, participating in role-plays and programming tasks, and reading play scripts to practice new skills alongside the target participants (Hundert et al., 2014; Kaboski, 2015; Kent et al., 2020; Minihan et al., 2011; Radley et al., 2020; Radley et al., 2014a). This is in keeping with White et al.'s (2007) recommendation to use role play to support generalisability with this population. Interventions involving untrained TD peers often allowed them to take on a more equal, experiential role even within a didactic framework, with all participants completing activities such as brainstorming activities and playing and working with target participants (Delano & Snell, 2006; Kaboski et al., 2015). In Zhang & Wheeler's (2011) meta-analysis of peer mediated interventions for children with ASD, they claim that incorporating TD peers is successful in fostering acquisition and generalisation of social behaviours. However, mixed success rates were evidenced, and where elements of success were present, often other generalisation techniques were employed.

3.5.5 Self-Monitoring and Self-Regulation

Other features which appear significant in the generalisability of social skills is the area of self-regulation and self-monitoring. While self-regulation in a general sense has been deemed a challenge for some with ASD, for example, when completing written tasks (Graham & Harris, 2003; Myles, 2005), the focus of this review will be in relation to social skills, with Vink et al. (2020) claiming that self-regulation is a social skill in itself.

The literature highlights the role of self-monitoring/regulation in enhancing the generalisability of skills from one environment to another (Lee, Simpson & Shogen, 2007; Loftin, Odom & Lantz, 2008). Self-monitoring enables young people with ASD to generalise skills independently, without the support of another (Stahmer, Ingersoll & Carter, 2003; Strain et al., 1994), as it removes the stimulus control from the adults or TD peers and transfers it to the young person themselves (Scattone et al., 2006). This potentially enables the young person to socially interact independently without prompting. Stokes & Osnes (1989) incorporate self-monitoring in their generalisation techniques under 'Engaging functional mediators of behaviour'.

Self-monitoring was not commonly included in the studies reviewed, with only 11 featuring self-monitoring as a component of the intervention. An example is The Superheroes Social Skills intervention (Murphy et al., 2018; Radely et al., 2020; Radley et al., 2015), which incorporates self-monitoring cards, used both in the intervention and generalised contexts. These self-monitoring cards are marked when the correct steps of the target social skill are reached, and participants are 'encouraged to utilize the self-monitoring card upon accurate demonstration of the target skill' during rehearsal role-play (Radley et al., 2015, 3050). The use of self-monitoring cards is in keeping with Stokes & Osnes' (1989) theory on the use of a self-mediated stimulus. It is the common stimuli between the intervention and generalisation setting, and Stokes & Osnes (1989) claim that regardless of the social skills intervention 'if the common salient stimuli are not produced in the generalization settings, they are not going to facilitate performance' (728). Generalisation of social skills were assessed in all Superheroes interventions, including parent and teacher completion of Autism Social Skills Profile (ASSP)(Bellini & Hopf, 2007) and across settings and individuals (Radley et al., 2015; Radley et al., 2014a; Radley et al., 2014b). All demonstrated successful generalisation, with Radley et al. (2015) attributing the incorporation of Stokes & Osnes' (1989) generalisation categories including engaging functional mediators of behaviour, to this success.

Interventions which incorporated self-monitoring and demonstrated successful generalisation included those which focused on social skills, communication, life skills and playing (Koegel & Frea, 1993; Koegel et al., 1995; Pierce & Schriebman, 1994; Stahmer &

Schreibman, 1992). In an intervention focused on increasing peer initiation, participants were taught to self-monitor when playing games with TD peers, but only two out of 44 students generalised their social skills to a different setting (Morrison et al., 2001). This reveals that while some successful generalisation of social skills is evidenced through self-management strategies, the numbers involved are so strikingly low, that it cannot be regarded as a successful outcome overall. This is an area in which further research is needed if claims of generalisability are to be meaningful.

To conclude, most of the strategies that feature commonly in social skills interventions to enhance generalisability, include multiple exemplars. The literature demonstrates the importance of incorporating these strategies during the design of the study, and most interventions which reported a degree of success contributed it to using more than one generalisation strategy, in keeping with the advice of Stokes & Baer (1977) and Stokes & Osnes (1989). Many arts-based interventions focus on enhancing the social and communication skills of young people with ASD using multiple exemplars. The next section will focus on drama and theatre interventions specifically, which were designed for this purpose, and which incorporated generalisability, either methodologically, post intervention, or both.

3.6 Drama and Social Skills Interventions and Generalisability

The literature posits that theatre interventions are beneficial for enhancing social skills owing to the claim that acting requires the same skills as social interactions, such as expressing emotions, listening abilities and social pragmatics (Corbett et al., 2016; Cote, Getty & Gaulin, 2011; Gabriel et al., 2016). The environment in which theatre interventions take place is also claimed to support the development of social skills, as participants are enabled to try new activities in a supportive no-penalty environment, without the potential consequences faced in the real world. This is in-keeping with White et al. (2007) who advocate creating an environment that supports social motivation. Ritchie (2021) also describes the theatre as akin to a natural environment, in comparison to more contrived intervention settings. Shaughnessy (2013) claims that imagination, communication and interactions in drama and theatre, directly map onto Wing & Gould's (1979) triad of impairments in ASD, and some theorists propose that the goals of social skills interventions are the same as organically occur in theatre programmes (Guli et al., 2013; Semrud-Clikeman, Bennett & Guli, 2013). It has also been claimed that drama and theatre interventions could be effective from a neuroscientific perspective, however future research is needed in this area (McDonald, Goldstein & Kanske, 2020). Despite a belief that theoretically, theatre interventions should enhance social skills, Walters (2017) cautions that 'the connection between theatre and communication disorders specifically has yet to be firmly established' (1) in the ASD population. Kempe & Tissot (2012)

support this, claiming that the structure of theatrical events, which many interventions work towards, may not support goals of improving social skills.

While the majority of drama based social skills interventions for the ASD population focus on the use of theatre, interventions which use process drama and role play have also been explored. Drama in a general sense has long been considered beneficial for rehearing social skills in the ASD population (Attwood, 2008), with positive results demonstrated within intervention and other naturalistic settings, where role play is incorporated. Mehling (2016) claims that drama interventions which are play-based and naturalistic, could 'be comparable in capacity to improve behavioral expression of social skills' (7). As discussed, the natural environment is of paramount importance to enhancing the likelihood of generalisability (Rosenburg et al., 2015). The real world comparison is in keeping with drama practices more broadly where participants can explore real world contexts in a safe environment, and be afforded opportunities to try out social skills in a variety of fictional contexts (O'Sullivan, 2015a). While Beadle-Brown (2018) suggests much current evidence surrounding drama-based interventions is anecdotal, and reliant on parent and teacher data, it is claimed that thus far, results are promising (Mehiling, 2017; Walters, 2017). For example, Corbett et al. (2019) claim that the performative element of their theatre-based intervention could enhance generalisation of social skills to other settings, as the positive reinforcement from the audience encourages participants to engage in future social interactions with peers. Similarly, Shaughnessy & Trimingham (2016) report increased use of improvised language in new situations, however both studies rely on anecdotal evidence only. While many drama and theatre interventions claim to be successful in the intervention setting, reporting cognitive benefits, imaginative development and general improvements in social skills (Beadle-Brown, 2018; Kempe & Tissot, 2012; Trudel & Nadig, 2019), future research should focus on the generalisability of drama interventions for social skills, and in particular exploring the efficacy of drama strategies such as role-play and improvisation in this relationship (Goldstein et al., 2019; Mass, 2021).

Some drama and theatre based interventions feature a methodological focus on achieving generalisability such as using peer mediation, video modelling, homework, teaching in natural contexts, social reinforcements, rehearsal, focus on social motivation, trained TD peers and multiple exemplars (Corbett et al., 2016; Hunter, 2014; Lerner et al., 2011; Trudel & Nadig, 2019). Of the interventions which did this, a small number demonstrated successful generalisation to other settings such as home, school, playground and with other peers. Measures of generalisability were assessed in a variety of ways such as through parent surveys and blind external raters, with some of these occurring directly/soon after completion of the intervention (Corbett et al., 2016; Lerner et al., 2011; Trudel & Nadig, 2019). Carruthers et al. (2021) highlight issues of assessing generalisability too soon after an intervention has occurred, which risks not depicting a fair sense of generalisability of social skills, with Mehiling (2017)

noting that parents assessing in this way can impact the accuracy of findings, owing to their expectations. To ensure accuracy when reporting generalisability of social skills to the home setting, Beadle-Brown (2018) suggests that capturing behaviours in the home setting, by those who are not parents, should be considered in future research. This informed the present study. Guli et al.'s (2013) creative drama intervention did not methodologically incorporate generalisability, however, children and parents were encouraged to complete home challenges each week, and participants showed increased social interaction in the naturalistic setting. In fact, the study claims that it could be the first creative drama intervention for this population which suggests that 'treatment effects may have generalized to the natural setting' (42). It is clear that while some generalisability has been claimed in studies such as the SENSE Theatre Programme and Socio-Dramatic Affective-Relational Intervention (SDARI) (Corbett et al., 2016, 2019; Lerner et al., 2011), this is often owing to generalisability being considered methodologically at the design stage rather than significant gains being evidenced.

While this is an area in which further research is needed, it is important to identify that in contrast to other types of social skills interventions, drama and theatre may be unique, owing to the natural elements which enhance social skills as noted above, and also the opportunity to practice social skills in a safe environment. The next section will explore the methods of assessment used to gauge measures of generalisability to home and school settings.

3.7 Assessing Generalisability

The evidence suggests that studies which assess generalisability are extremely limited when compared with the enormous amount of research in the field of social skills interventions more generally. In addition, there is wide variance in how generalisability is understood and demonstrated, and in the success rates reported. This section aims to explore what is taking place during the generalisation probes, who is assessing generalisability and the methods and instruments employed.

3.7.1 Parents

Interventions reviewed for this study demonstrate that parents were the sole assessors when assessing generalisability to the home setting (Radley et al., 2014a; Radley et al., 2015; Walker et al., 2010), with one study more broadly stating family members (Olcay-Gul & Tekin-Iftar, 2016). Parents were also often involved in gathering pre-and post-test treatment data (Minihan et al., 2011; Sticher, O'Connor et al., 2012; Tse et al., 2007). Data were gathered by parents through specifically designed questionnaires and scales (e.g. SRS and ASSP), unstructured observations, and pre- and post-intervention interviews (Acar et al., 2017; Minne & Semrud-Clikeman, 2011; Minihan et al., 2011; Radley, 2015; Tse et al.,

2007). The literature highlights that where generalisability is claimed to the home setting, it is based solely on parents' observations or a comparative analysis of parent pre-and postintervention data (DeRosier et al., 2011; Lerner & Levine, 2007). While Minihan et al. (2011) provided opportunities for participants to practice skills learnt in naturalistic settings (such as their classroom), generalisability was only assessed by parents in the home. Acar et al. (2017) claimed full generalisation to environments outside of the home setting, as their intervention took place in the home, and mothers were trained in selecting target behaviours and implementing the social skills training with their children. This positive outcome could be due to mothers acting as the social stimulus (Stokes & Osnes, 1989). Parents who assessed generalisability to the home setting (e.g. Minihan et al., 2011; Tse et al., 2007) were aware of treatment conditions, and therefore potential bias relating to observations of generalisability could have occurred. This however, can be said of all interventions where assessors are not blind to the treatment/intervention and/or who may have a vested interest in its success (Abrantowitz & Whiteside, 2008; Beaumont et al., 2015; Cleary et al., 2008). It has also been claimed that generalisability to the home setting may appear more successful than in the school setting, owing to research being carried out in natural environments generalising with more ease to the home than other settings (Levy, 2020). An area which is greatly under explored with this population is the participant's perspective on the generalisation of their social skills, and this is explored below.

3.7.2 Participant Voice

While many studies explore the generalisability of social skills with young people with ASD, very few incorporated their perspectives. As stated previously, interventions frequently involve parent voice, and focus on parental satisfaction with the intervention. However, while some interventions elicit participant levels of satisfaction and views on the development of their social skills (Minne & Semrud-Clikeman, 2011; Tse et al., 2007; Webb et al., 2004), participant voice is not gathered with the purpose of determining their perspective on generalisability of their social skills. When participant voice was elicited traditional methods such as surveys and rating scales were used (e.g. Lerner et al., 2011; Tse et al., 2007).

Tse et al. (2007) emphasise the importance of eliciting participant perspective, as findings demonstrate that adolescents perceived more improvements in their social skills than their parents. This highlights the importance of eliciting participant voice regarding generalisability of their social skills owing to their own perspectives differing from others. The literature explored for this review did not identify any research which incorporated participant voice for the purpose of exploring the generalisability of social skills to settings outside of intervention settings. This highlights the lack of emphasis placed on participant

voice when assessing generalisability of social skills, despite its importance in disability research (Flynn, 2014; Pazey, 2021). The next section will explore the role of teachers in assessing generalisability in educational settings.

3.7.3 Teachers

Teachers teaching social skills interventions can be complex (Mpella et al., 2019), however, teachers' involvement in interventions can considerably enhance generalisability (Locke et al., 2019). While teachers are incorporated more in recent interventions, it is still not common practice (Lense & Camarata, 2020). Studies reviewed used parent measures alongside that of teachers and professionals, some of whom were involved in the facilitation of the social skills interventions and others who were blind to the treatment conditions to assess generalisability (Koning et al., 2011; Radley et al., 2020; Walker et al., 2010). These studies yielded mixed results, from 'preliminary evidence of increases in social engagement in a generalized setting' (Radley et al., 2014b, 226) to social skills only generalising where a physical social motivator was present (Koning et al., 2011). Herbrecht et al. (2009) similarly used parent and teacher ratings to assess generalisability, and findings showed generalisability to the school but not the home setting. Herbrecht et al. (2009) claim that this could be due to the fact that 'teachers are, probably easier than parents, able to observe children interacting with peers' (334). However, as above, the literature demonstrates that teacher voice is rarely considered when assessing the generalisability of social skills, as attempting generalisation to the home setting is more frequent. This could be due to difficulty accessing teachers and inviting their participation in the research process, or due to time pressures and stress that teachers face (Galton & MacBeth, 2008; Cooper & Cooper, 1996). While generalisability to school settings is of paramount importance, as it is where children have the opportunity to interact with multiple peers in structured and unstructured settings, teachers are rarely included in this process. Conversely, as discussed previously, TD peers are more commonly incorporated in the assessment of generalisation to a variety of settings, which will be explored below.

3.7.4 Peers

As mentioned previously, studies routinely incorporate untrained novel TD peers to assist in assessing generalisation of socialskills (Watkins et al., 2019; Delano & Snell, 2006; Pierce & Schreibman, 1997). For example, the Superheroes Social Skills Intervention assessed generalisability during schoollunch break, which comprised of approximately 40 untrained TD peers (Radley et al., 2014b). Other studies used untrained peers who were known to participants to assess generalisability and some incorporated trained peers as generalisation probes who were not known to participants (Murphy et al., 2018). Generalisation probes act

as assessment procedures to assess whether the person can use the social skill outside of the training context. While generalisation probes with trained peers often replicate the training environment (Barry et al., 2003), Delano & Snell (2006) assessed generalisability in a different format, allowing children and TD peers to play together in an unstructured manner, whereas the intervention had used structured social stories. The findings highlight that the majority of participants generalised social skills to the classroom setting. TD peers are commonly incorporated to assess generalisability, particularly in the school setting, for example, the playground. This naturalistic setting demonstrated mixed results across several studies, with variables including the peers present, if they had been involved in the intervention, and the stimuli present, which will be explored next.

3.8 Stimuli

Naturalistic stimuli are often incorporated in interventions and when assessing generalisability, such as in schools and playgrounds, as outlined above. Recent studies tend not to use direct generalisation stimuli, such as physical stimuli (e.g., an object that is present in both the training and generalisation setting), or social stimuli (e.g., the presence of the same person in both settings). However, some interventions do, for example, using self-monitoring cards and visual cues (Einfeld, 2018; Radley et al., 2014b) which could be classified as the use of self-mediated physical stimuli, as self-monitoring cards move between the training and the generalisation setting (Stokes & Onses, 1989).

Generalisation settings often involve 'toys that promote social interaction' (Barry et al., 2003, 690), but are not generalisation stimuli. The Superheroes Social Skills Training Programme when assessing generalisability use communication partners who are known to the participants for example, parents (Radley et al., 2015) and incorporate the use of probes of skill accuracy, which are different to those used in training, such as one assessor giving the child a cue for a specific target skill by asking a question, and a second observer recording the child's response. While this is not a direct stimulus, it could be considered one, as these questions are connected to the intervention which occurred. In interventions where stimuli are not used, generalisation probes consist of the children playing, uninterrupted by the observer or greeting an unfamiliar adult (Liu, Li & Yi, 2016; Barry et al., 2003; Delano & Snell, 2006; Radley et al., 2014b). The use of stimuli has changed from Stokes & Baer (1977) and Stoke & Osnes' (1989) recommendations, with many interventions now incorporating more natural stimuli or items which promote generalisability. The environment in which generalisability of social skills is assessed is of paramount importance, and is explored below.

3.9 Natural Environment

The literature emphasises the importance of teaching social skills in natural environments to promote generalisability (Olcay-Gul & Tekin-Iftar, 2016; Schreibman et al., 2015) with Levy (2020) citing this as a reason for success. Early research in this area criticized the often 'artificial nature of settings, tasks, materials, teaching formats, and curriculum content' (Donnellan, Mesaros & Anderson, 1984, 505) when teaching students with ASD. In contrast, Natural Environment Teaching (NET) references 'real world' type situations which resemble natural environments while being highly structured, capturing the individual's interests and motivation through 'errorless learning' (Coastal Autism Therapy, 2021). This reflects a similar approach to drama and theatre interventions discussed earlier. NET or NEI (natural environment intervention) purports to assist people with autism in learning skills in one environment and generalising them to other environments to better support independent and fulfilled lives. Leach (2012) points towards the potential to maximise learning and teaching opportunities by embedding interventions into children's naturally occurring routines and activities throughout the day. Pivotal Response Treatment (PRT) similarly targets areas which underpin the core symptoms of autism, and is best achieved in the child's natural environment such as family outings, general education classes and after school activities where motivation is often higher and social and academic gains can be generalized more easily (Vernon et al., 2012).

Assessment of generalizability in the studies reviewed varied from graduate students who were trained by the Principal Investigator to researchers who were blind to the treatment process and anticipated outcomes (Barry et al., 2003; Koning et al., 2011, Radley et al., 2014b). As mentioned previously, teachers were rarely invited to assume this role. The findings demonstrate that observation is the most commonly used method of assessing generalisability to naturalistic settings (Guli et al., 2013; Murphy et al., 2018; Radley et al., 2020), employing a variety of observation techniques such as the Playground Observation of Peer Engagement (POPE) schedule and the use of secondary observers and coders (Delano & Snell, 2006; Radley et al., 2014b). Using observation as a strategy for assessing generalisability demonstrated mixed results, but the method positively allowed for levels of interaction and communication to be observed (Radley et al., 2015) and for this reason will be employed in the present study.

Carruthers et al. (2020) highlight that often studies which claim generalisability assess it within a short time frame after the intervention, thereby limiting findings. The most common methods are ratings/surveys completed by parents, and observation by researchers and TD peers who are engaged in the process. Stimuli do not feature often and issues surrounding a lack of participant voice was apparent. To enhance accuracy of assessments of generalisability, researchers who are unaware of treatment conditions, and outside the home

setting, teachers and participants themselves could be involved. The next section will explore the concept of social motivation, and its impact on generalisability of social skills.

3.10 Social Motivation

As discussed previously, social motivation is important in interventions to engage young people with ASD (Yoder & McDuffie, 2006). While many social skills interventions discuss motivation, not many explore social motivation, which is motivation for social experiences (Bottini, 2018; Neuhaus et al., 2019), and very few assess if this generalises to other settings.

There is evidence, albeit limited, to suggest that arts-based and technology-based interventions prioritise the social motivation of participants, and have demonstrated levels of success within the intervention over other types of social skills interventions. For example, Finnigan & Starr (2010) incorporated Koegel, Dyer & Bell's (1987) theory on child-preferred activities and found increased social responses from participants during the music condition, and no incidents of avoidant behaviour, concluding that participants were more socially motivated during the musiccondition. Similarly, Stephens' (2008) found that the use of musical instruments increased children's social motivation, with Learner & Levine's (2007) SDARI reporting success when they incorporated strategies to encourage social motivation such as the use of age-appropriate motivators (White et al., 2007). It is also claimed that the nature of the SDARI intervention which uses dramatic improvisation-based games, provides opportunities for participants to 'use their individual interests pro-socially, which both motivates participation and replicates the complexities of "real" social interaction without being overwhelming' (Lerner et al., 2011, 24).

Social skills interventions which use technology also focus on motivating young people with ASD (see Cheng et al., 2015; Farr, Yuill & Raffle, 2010, Wass & Porayska-Pomsta, 2014), which is in keeping with findings relating to collaboration during computer games leading to social motivation in virtual worlds (Zhao et al., 2018; Silva-Calpa et al., 2018). Kaboski et al. (2015) claim that a Robotics Summer Camp created a 'natural motivation' for ASD participants (and TD peers) to socially collaborate, a position which Farr et et al. (2010) support when they highlight that 'many technologies have been designed to motivate and support social interaction in children with ASD' (283), such as Transporters CD-Rom (Baron-Cohen, 2007) which superimposes human faces on trains and cable cars to teach emotional responses. Commonly, generalization of social motivation is assessed by parents in the home setting through instruments like the Social Responsiveness Scale - Parent Form (SRS) (Constantino & Gruber, 2005). While studies which claimed successful generalisability specified improvements and increases in the area of social motivation in the home and school setting (Laugeson et al., 2014; Sticher et al., 2012; White et al., 2010), and arts and

technology based social skills interventions have established good levels of motivation and participation within the intervention setting, there is no strong evidence however to suggest that these skills generalise to other settings (see Bauminger-Zviely et al., 2013; Cheng et al., 2015; Fletcher-Watson et al., 2016).

While some social skills interventions focus on developing children's levels of engagement with peers and adults (Radley et al., 2014b; Radley et al., 2015; Radley et al., 2016), no interventions were found which focused specifically on increasing social motivation and generalising this to another setting. This naturally occurred in some studies as a positive by-product, and could be claimed asgeneralisation of social behaviours. The literature highlights the importance of social motivation for this population and how it is emphasised in experiential interventions. However, all studies reviewed which demonstrate an increase in social motivation in the home setting were didactic rather than experiential in approach (n=19). This is in contrast with the theories of Yoder & McDuffie (2006) and Vernon et al. (2016) who believe that experiential approaches encourage social motivation. Further research is needed to specifically assess social motivation as a result of social skills intervention, in particular experiential or blended approaches and their generalisability to other settings.

3.11 Conclusion

This chapter outlined the main theories underpinning generalisability, including types of social skills interventions, common strategies employed, and the success rates of studies in the area. Interventions which used more than one generalisability strategy were found to be more likely to demonstrate success. However, this makes it almost impossible to cite one strategy as successful over others. Many studies were informed by Stokes & Baer's (1977) Train and Hope method of generalisability, which reported success in the 1970s, but has not been replicated in more recent literature. The chapter found that although there are extensive examples of social skills interventions in the literature, very few attend explicitly and methodologically to the important issue of determining generalisability. This suggests either a lack of awareness about how to build-in generalisability to the study design, or of its importance. Additionally, a dominance of didactic strategies is found in the literature with few examples of experiential approaches to achieving generalisability being noted. While some experiential interventions exist, and didactic approaches often incorporate an experiential element, they do not appear to have embraced or engaged with the literature on generalisability. Other issues of pertinence for the present study were the omission of participant voice relating to generalisability of their own social skills, a lack of outsiders assessing generalisability to the home setting, and an under exploration of the generalizability of social skills interventions which have a drama-based methodology. The final section of the

literature review will be presented in Chapter Four which explores drama in education, the social drama model which is the focus of the present study, and the generalisability of this model.

Chapter Four Drama, Theatre and Autism

4.1 Introduction

To support the non-drama specialist reader, the final chapter of the literature review will begin by briefly exploring pioneering figures in the field of drama education, and their contribution to specific areas, such as the emergence of an emphasis on process over performance, play, improvisation and the concept of 'living through drama'. The review will focus on the significance of role, imagination and creativity in drama. Drama for people with Special Educational Needs (SEN) will be examined broadly before focusing on drama for persons with ASD. The review will examine the elements of drama and theatre which have proven beneficial for this population, and critically explore interventions which focus on developing social skills. O'Sullivan's Social Drama (SD) model, which is the focus of this study will then be presented, including a discussion of its theoretical underpinnings, practical examples of the work, and research carried out to date. The final section will align theories of generalisability with the SD model, to analyse what aspects of generalisation theories, if any, are present.

4.2 Drama in Education

This section presents the work of seminal theorists and practitioners in the field of drama education and the development of concepts which constitute core components of current drama praxis. Specifically, the continuum from performance to process drama, the role of the teacher, play and improvisation, role and collective identity, distancing and metaxis will be discussed.

4.2.1 The Emergence of Process over Performance

Finlay-Johnson's (1912) early work disregarded the traditional performative view of drama, and focused instead on drama as a process to explore and experience knowledge (Bolton, 1985, 1998), which was a relatively new concept in drama at that time but was coming to the fore in education more generally through the work of Dewey (1932). Slade (1954) and Way (1967) built on this concept, by encouraging mainstream class teachers to incorporate more imaginative, embodied, and playful pedagogies into their daily routines with children and young people, which intrinsically motivated the learners and led to more meaningful and active engagement with the subject matter and skills being studied. Way (1967) embedded this in his practice, advising teachers to work with their pupils to create stories, inviting children's input and 'beginning where you are' (28). This child-centred practice was supported and developed by Heathcote (1978,

1984, 1994), and subsequently O'Neill (1995, 2015) to create a form of drama in education commonly referred to as process drama, which is explored later in this review.

A particularly innovative aspect of Finlay-Johnson's (1912) work was her belief that children were the teacher's companion in drama, balancing power dynamics, which was later developed by Heathcote. She (Heathcote, 1984) devised an approach called Teacher in Role (TiR) which enables the teacher or facilitator to participate in role, inside the drama event, alongside their students (Morgan & Saxton, 1987). TiR enables the teacher to share power and control over the direction of the drama with her class (O'Neill, 2015), whilst retaining an ability to deepen the learning by challenging, questioning, encouraging, motivating and if necessary, gently guiding, from within role (Bolton, 1998; Wagner, 1999; Heathcote, 2000). While teachers report that TiR helps to create an active, playful environment, stimulating creative and critical thought and building reciprocal relationships between teacher and students (McDonagh, 2014), it is not widely practised by mainstream teachers who report they do not have adequate skills to work in role and improvise in 'real time' situations as they naturally unfold in the classroom. Additionally, concerns are expressed about a potential lack of authority whilst in role (Aitken, Fraser & Price, 2007; Balaisis, 2002).

A contemporary of Finlay-Johnson's, Caldwell-Cook (1917) similarly saw the potential of drama to create an active engagement with English in the secondary school. Denouncing the schooling system at that time as impeding 'true education', he explored drama as a democratic and creative learning approach achieved through play, which he regarded as the basis of education. An early pioneer of playful pedagogy and the instinctive 'let's pretend', he suggested 'it would not be wise to send a child innocent into the big world. But it is possible to hold rehearsals, to try our strength in a make-believe big world. And that is play' (Caldwell-Cook, 1917, 15). Slade (1954) and Way (1967) later emphasised the importance of a child's natural play, focusing on children expressing themselves spontaneously, and emphasising the importance of life skills over acting skills. Way (1967) describes improvisation as 'play without a script' (183), however it was Heathcote's practice, termed 'improvised play-making' (Allen, 1979), which highlighted that 'the end product of improvisation is the experience of it' (Heathcote, 1984, 44). The value of experiential learning has been mentioned in Chapter Three in reference to social skills interventions and autism. This emphasis on child play and experience carries through to contemporary views on educational drama (Ewing & Saunders, 2019; Østern, 2021), with O'Toole & Dunn (2002) highlighting the importance of play for drama, as it gives children insight into how and why people, themselves included, behave the way they do. Comparisons drawn between process drama and sociodramatic play posit that the skills developed in process drama transfer to, and enhance, sociodramatic play (McCabe, 2017). Such play is seen as social when used in a reciprocal manner (Howes & Matheson, 1992) and Smilansky & Shefatya's (1990) criteria for sociodramatic play overlap with the core elements of process drama. Of particular interest in the present study is the attention on social motivation as encapsulated by Caldwell-Cook (1917) when he introduced the idea of pupils adopting a 'collective identity', proposing the drama class as a 'body of workers' who collaborated and learnt best by 'doing'. Heathcote also consciously referred to 'we' in her practice to consolidate the group collective (Bolton, 1998). Group role reduces anxiety, develops collective responsibility and a sense of community, and helps students achieve a common goal (Heyward, 2010; Toivanen & Pyykko, 2012). Specifically in a collective role 'all participants must co-operate because it is exactly the joint decision making that pushes the course of the drama forward' (Juirnovic, 2016, 242). This aligns with the notion of joint attention in ASD which was discussed previously.

4.2.2 Process Drama

Like her predecessors, Heathcote emphasised the value of process and engaging in drama for its own sake rather than working towards a performance for an external audience. This lay the foundations for what is now known as process drama. O'Neill (1995) defines process drama as giving participants access to 'dramatic elsewhere, imagined worlds in which students may experience new roles, novel perspectives and fresh relationships' (117). Participants are invested in a fictional world where they, in conjunction with the teacher/facilitator, work together as a group, responding to dilemmas as they arise (Bowell & Heap, 2013; O'Neill, 1995). In Heathcote's praxis, 'participants engage with making meanings and those meanings relate to a human struggle' (Bolton, 1998, 178). At the core of process drama is participants being facilitated to explore different courses of action often mirroring real life issues, and test them out in a safe space without the usual consequence of action (Bowell & Heap, 2013; O'Connor, 2010; O'Sullivan, 2021). This is reflective of the natural environment interventions (NEI) discussed in Chapter Three. Process drama does not have a pre-determined ending as 'the pupils themselves must choose the outcome' (Bolton, 1998, 179).

At its heart is human interaction and relationship (Bowell & Heap, 2005). Links between Brecht's epic theatre and process drama have been claimed owing to the emphasis in both on real world exploration (Ustuk, 2015). This emphasis is not contained to process drama, but more broadly reflected in drama in education, as O'Connor (2010) states 'students learn how to be actors in and for the real world' (xxiii). The aesthetic quality in process drama where the art form enhances the quality of learning, provides the foundation for its appeal and efficacy (Bolton, 1998; Neelands, 1984; O'Neill, 1995; O'Toole, 1992; O'Connor, 2003), something which will be explored later in the section on drama with students with special educational needs.

4.2.3 Living Through Drama

Heathcote's view of education was based around meaning making, drama for learning and the belief that the curriculum should be rooted in 'human action, interaction, commitment and responsibility' (Davis, 1997, 48), enabling participants to feel 'as if' they are in a situation, thinking and being in that role (Heathcote, 1984). Her work emphasised decision making by pupils and taking on board the ideas of the children when in role (Bolton, 1998). As alluded to above, Brecht's (1964) 'distancing effect' became a key component of her work, with Bolton (1984) highlighting the importance of protective dramatic fiction to enable issues be experienced as less threatening, 'by keeping the action removed from real-life situations' (Eriksson, 2011, 66). However Davis (2014) and Dunn (2016) highlight that too much distancing can lead participants to disengage, so facilitators must strike a balance. Boal's (1992) adoption of the notion of metaxis, of 'being in two worlds at once' (11), where working in the fictional world informs our understanding of the real world with participants maintaining a foothold in both simultaneously; learning in one informing the other (Bolton, 1984; Boal, 1992; 2001) is a key characteristic of drama in education. Dramatic tension is central to Heathcote's practice, and she believed that tension was created when participants are 'confronted with a problematic experience' (Peterson, 1991, 92). In her early work, she used the 'man in a mess' (Wagner, 1974) method to construct learning and enhance understanding, both aesthetically and of the social world (Haseman, 2014). This experiential approach invited participants to 'live through' the drama, and experience 'the world in terms of social interaction' (Anderson, 2011, 34). Heathcote's early work involved emotion, thought, reason and planning (O'Neill, 2015), and paved the way for the development of Bolton's (1976) and later Davis' (2014) conception of 'living through drama' which places participants socially, emotionally, cognitively and physically into experiences which allow for an exploration of the self in society. For many writers in the field, the attraction of drama in education (in all its various forms) is the potential it offers to 'live through', experience and reflexively respond to the question of "who am I as a social being in this world" (O'Sullivan, Davis & Colleary, 2021). Bolton's (1992) development of Slade's (1954) child play maintained the immediacy and value of 'being another' rather than merely 'pretending'. 'Being in role' places participants in situations where they can recognise their world and their relationship to it, and is of particular interest to the present study which assesses the impact of O'Sullivan's Social Drama model. The latter adopts a balanced approach between Stanislavski and Brecht, avoiding total immersion in an experience while maintaining the strength, immediacy and reflective capabilities of 'being' in role. This will be returned to later.

4.3 Drama, Imagination and Creativity

This section explores the bidirectional relationship between drama, imagination and creativity, exploring the impact of the drama environment and group roles on imagination and creativity, and the necessity of imagination and creativity to develop drama processes. Theories in both fields of drama and imagination relating to the importance of the social context will be examined. As imagination is such a contested construct in the literature on ASD (see Chapter Two, section 2.11), it is important to locate it in the literature on drama as the present study aims to understand what, if any, defining features of the Social Drama model appealed to participants and why.

Understanding the role of imagination in modern drama in education dates to Vygotsky (1930), and Heathcote (Heathcote & Bolton, 1994) drawing on his social constructivism developed a theory of dramatic imagination encapsulated in her Mantle of the Expert (MoE) approach, which focuses on imagination for planning, social interactions, reflection, and realisation. However, despite recognition of the centrality of imagination to drama practice, there is a lack of research in this area, perhaps owing to difficulty assessing imagination in drama (Cremin, 1998; Gallagher, 2007). Those studies which have assessed the impact of drama on imagination demonstrate a degree of success (Gundogan, Ari & Gonen, 2003; Hui Min & Lai Wai, 2006; Lin, 2010). However, what is more commonly reported in the literature is the impact of the drama environment on imagination, highlighting how a positive, non-threatening atmosphere, created in a drama space can enable participants to express themselves freely, without fear of failure (Gallagher, 2007; Mages, 2018; Toivanen et al., 2013). The role of the teacher is acknowledged here as a factor in shifting the power dynamics in classrooms (Tam, 2016; Toivanen et al., 2013; Winston, 2015), something Finlay-Johnson (1912) advocated a century earlier. The value of a 'risk-free learning environment' (Tsai, 2012, 18) has been mentioned already in Chapter Three as significant in supporting students with ASD to generalise social skills to other parts of their lives.

The benefits of collective identity in group creativity is highlighted in the literature, emphasising social processes and interactions, with participants themselves reporting that group roles were important for their creative and imaginative development, and for the development of the drama (Cooper, 2013; Gallagher, 2007; Toivanen et al., 2013). Theories relating to imagination and creativity highlight they are rooted in the social context (Cooper, 2013; Pinciotti, 1993; Wheeler-Brownlee, 1985), as noted earlier in relation to process drama. The spontaneity and creativity of process drama is akin to the concept of paracosms (Silvey & MacKeith, 1988), which is the spontaneous creation of imaginary and fictional worlds, which appeals greatly to children and young people with ASD and PDA. Advanced social understanding is necessary for this (Lillard & Kavanaugh, 2014; Taylor & Carlson, 1997), with research carried out by Taylor et al. (2020) outlining that for some children paracosms are central to their social interactions.

While the imaginative world in the drama setting is co-created, paracosms are spontaneous and can occur as a social process or alone (Silvey & MacKeith, 1988; Taylor et al., 2020). Creating a bridge between children's paracosms and their participation in drama is of interest to the present study in terms of enhancing social interaction. Kearney (1994) outlines the importance of developing a fictional society through drama, locating imagination at the helm. He (Kearney, 1994) examines three functions of artistic imagination; (1) vision, which emphasises the 'way things ought to be', and occurs during reflection in drama; (2) recalling/re-expressing events, of particular relevance when exploring social issues/events, and; (3) power of the imaginative projection into the 'being' of other people, with a focus on empathy, the capacity to 'create people in another time and place', of which improvisation is essential.

In-keeping with the philosophy underpinning drama in education, the Canadian pioneer Richard Courtney (1971) highlights that 'imagining implies the ability to see both sides of the question, which includes the logical and rational on the one hand and the irrational and the illogical on the other' (452). This is particularly relevant in the context of working with students with ASD and PDA many of whom tend towards the logical and rational on the one hand (Lai et al., 2020; Scott & Baron-Cohen, 1996), but also enjoy a predilection towards paracosms and the imagination (Craig & Baron-Cohen, 1999, 2000; Baron-Cohen, 2007). Drama by its social, imaginative and collaborative form and nature, as proposed in Chapter Three, enables participants to 'step into the shoes of another' and gain a variety of perspectives and understanding from being in role (Heathcote 1984; O'Neill & Lambert, 1982). It is principally for these reasons that it has often been used with students with special educational needs which is explored below.

4.4 Drama and Special Educational Needs

Drama provides children and young people with SEN with a range of human experiences, offering them the possibility of considering ideas from different angles and perspectives, expanding their conceptual horizons, deepening their understanding of human behaviour and in so doing appropriately educating their emotions (O'Sullivan, 2017). The use of drama for people with SEN is generally thought to date from Peter Slade (1954), who outlined the relevance of Piaget's developmental psychology in drama. While it's debated if Slade's work is more educational than therapeutic (Foukara, 2020), he is believed to be the founder of drama therapy (Jones, 1996) and the first person to coin that term (Slade, 1954). His predecessor Jacob Moreno (1947) had earlier developed the practice of psychodrama which grew into dramatherapy in the 1960s, achieving greater psychological distance through improvisational activities than traditionally psychodrama had encouraged. Sue Jennings (1978), a pioneering figure in dramatherapy, developed the area of drama and SEN further, continuing to emphasise the importance of play, improving communication, and building relationships (Jennings & Holmwood, 2020). While Jennings, and

Slade more latterly, aligned with drama therapy, Heathcote worked with people with special and additional needs also, however her work was located firmly in the arena of education. Irrespective of the orientation towards drama education or drama therapy, or tensions between drama for personal/social change and/or aesthetic experience (O'Connor, 2000), the principles of developing communication and human relationships underscore practice on both sides of the continuum. This was also advocated by Way (1967), who explored the notion of 'social drama', focusing on social awareness and behaviours, in particular being able to experience a social situation without the 'possible reproductions of failure to behave correctly' (287). Opportunities for enjoyable, experiential learning using multimodal communication systems in a safe, nopenalty environment are defining characteristics of much drama practice with children and adults with SEN (Bailey, 2021; Conroy et al., 2021; Corbett et al., 2016; Grove, 2021; Kempe, 2018; Vickers, 2017; Kempe & Tissott, 2012; O'Sullivan et al., 2002). As the present study is concerned specifically with people with ASD, the next section focuses on this population.

4.5 Drama, Theatre and ASD

While several drama and theatre interventions with a focus on generalisability were presented in Chapter Three, attention here is placed on those approaches which do not reference generalisability but whose focus is similarly on communication, social skills and developing and maintaining relationships. Drama and theatre have been identified as beneficial interventions for people with ASD in the areas of perspective taking, making and interpreting inferences, formulating language, communication, socialisation, group dynamics, empathy and emotional expression (Schneider, 2009; Scott-Danter, 2006; Smithner, 2011). Such interventions enable the practicing of social skills in a safe, protected environment, and gives voice to participants, facilitating their creative expression (Lerner & Levine, 2007; O'Sullivan, 2015a; Wannenburg & Van Niekerk, 2019). Attwood (2008) and Schneider (2009) adopt somewhat of a Jungian perspective (2008) whereby participants are encouraged to dialogue and engage with different parts of themselves as if they were interacting with people in the real world. They recognise the complexity of social rules for young people with ASD, and describe drama and acting practices as inspiring influences where participants with Asperger Syndrome for example, 'may apply the knowledge acquired in drama classes to everyday situations, determining who would be successful in this situation and adopting the persona of that person'. (Attwood, 2008, 27).

What is acting all about? It is about reading and portraying emotions by using your voice as well as nonverbal communication. It is about acting and reacting. It is about developing a relationship with other actors onstage. It is about interpreting the language of the script. (Schneider, 2009, 13)

Skills required for participation in theatre and acting have been compared to the DSM criteria for autism, which are actively explored during sessions (Mendez-Martinex & Fernandez-Rio, 2021; Ramamoorthi & Nelson, 2011). Chasen's (2011) Process Reflective Enactment approach immerses children with ASD into a mix of drama and theatre activities such as the Director's Chair technique to assist well-being and social interaction. Increasingly however, inclusive theatre practices for young audiences is seen as contributing to greater empathy and understanding of difference in society, benefitting participants with and without ASD equally (Braverman, 2012).

4.5.1 Theatre Interventions

The literature presents a variety of theatre-based interventions including sensory, immersive, improvisational, and inclusive theatre. Improvisational theatre allows participants to generate scenes 'in the moment' with minimal or no pre planning or preparation (Holdhus et al., 2016; Johnstone, 2012). Interventions of this type maintain a collaborative and cooperative group focus (Mendez-Martinex & Fernandez-Rio, 2021). Positive results have been reported relating to increases in imagination, spontaneous expression of emotion, group work and overall social skills in the intervention setting (Kehl, 2021; Mendez-Martinex & Fernandez-Rio, 2021; Reading, Reading et al., 2015), with Maas (2019) claiming that 'Improvisation is emerging as an evidencebased intervention for children with ASD' (14). Successful findings were also demonstrated in inclusive and sensory theatre (Braverman, 2012; Hammouni et al., 2021; Kim et al., 2015) where participants with ASD experience theatre performances in spaces designed to mirror the concept of 'autistic space' featuring soft transitions, audience engagement, and audience centric dramaturgy (Mattaini, 2020). For example, SENSE, an immersive theatre programme, demonstrated reduced anxiety in participants (Corbett et al., 2017; Giserman-Kis, 2020; Ioannou et al., 2020), and several other interventions presented successful outcomes which were discussed in the generalisability section of this review (e.g. Cote et al., 2014; Gabriel et al., 2015; Shaughnessy & Trimingham, 2016). Kempe (2018) recognises both the artistic rights of people with ASD but also the co-occurring financial demand for theatres to offer so-called 'relaxed' performances which often draw on the visual aspects of Carol Gray's social story format (see Gray, 2015). Ireland's National Theatre, The Abbey, presented its first ever relaxed performance in 2019 where the house lights remained on, visual aids and prompts were highlighted throughout the show, sound and light effects were highlighted in advance, and there was a relaxed approach to noise during the performance, all designed to make a more inclusive and enjoyable theatre experience for people with ASD or neurological/sensory differences. Other recent developments in Ireland include the development of a handbook for youth theatre facilitators to support people

with ASD being included in youth theatre activities and performances throughout the country with non-autistic peers (Creative Ireland, 2020). While most interventions adopt a theatre-based approach, a smaller number which used a drama approach, also yielded positive results (e.g. Beadle-Brown et al., 2018; Guli et al., 2013) and are discussed below.

4.5.2 Drama Interventions

Cerbo & Rabi (2019) explored a creative drama approach, whereby improvisation was used alongside process drama. Positive results relating to social skills were reported, however it is important to note that this study was more structured than would be typical of process drama, with didactic elements present. Kempe & Tissot (2012) adopted a process drama approach with results signifying success in demonstrating social skills during sessions. Similarly, O'Sullivan's SD Model, which is the focus of the present study, adopts a process drama approach, and has evidenced successful social skills being developed and demonstrated in the drama setting (O'Sullivan, 2015a; 2017; 2021). While a number of recent books and resources in this area have been published featuring drama games, improvisation exercises and story drama (Amador, 2018; Conn, 2019; Crimmens, 2006; Kramer & Ploesch, 2021; Perich Charleton, 2012), there are very few published research studies of process drama type interventions with this population focusing on social skills. The dearth of research could be due to a lack of assessments to measure social skills through drama, and difficulties for practitioners connecting research, impact and evidence (Jones, 2012; O'Sullivan, 2015a).

One of the key features of theatre and drama interventions for this population as cited most frequently in the literature, is role-play and role-based work. Originating from the field of psychodrama, role-play is a 'spontaneous, dramatic, creative teaching strategy in which individuals overtly and consciously assume the roles of others' (Sellers, 2002, 498), and it can also be employed as a research technique (O'Sullivan, 2017), which will be discussed in more detail in the following chapter on methods. Role-play involves 'multi-level communication' (Sellers, 2002, 498), and aspects of social communication that most people have in their everyday lives (O'Sullivan, 2017). It is an effective strategy for learning because it encourages participants to think about the person whose role is being assumed. This increases its relevance and appeal when working with people with ASD (Bozikis, 2012). Connected to real-life situations, and promoting active, personal involvement in learning (Billings & Halstead, 2009; O'Sullivan, 2017), role-play enables participants to 'glean information in the area of emotional experience without having the actual experience' (Heathcote, 1984, 49).

Its link to social communication makes it particularly relevant in social skills education for children and young people with ASD. Of particular relevance is the need in role to 'read the situation, to harness relevant information from previous experience and to realign this information

so that new understanding becomes possible' (O'Neill, 1995, 79-80). Acknowledging this may be challenging for people with ASD due to differences in ToM and working memory (Baron-Cohen, 2008), working in role and through role facilitates enjoyable and incremental engagement with fictional characters which gently supports and motivates people in reading and interpreting body language, tone of voice, and subtle social and communication signifiers.

Nelson (2010), who uses role-play to develop social skills in children with ASD, demonstrates how this strategy leads to generalisability, referring to Stoke & Baer's (1977) multiple exemplars and stimuli, and defining role-play in this regard as 'repeated practice' (13). While being in role is at the heart of process drama, Nelson's (2010) method of role-play is more in keeping with didactic approaches where participants rehearse a specific situation repeatedly, in contrast to process drama, where participants behave 'as if' they are in that situation now, thinking and being in that role in what Heathcote (1984) calls 'drama time'. While role-play is used extensively in interventions, such as family interventions, medicine and paediatrics, and social skills programmes (Arias et al., 2021; DeRosier et al., 2011; Duncan, Liddle & Stark, 2021; Minihan et al., 2011; Tripathi et al., 2021) to improve participants' 'social skills knowledge, social responsiveness, and overall social skills in the areas of social communication, social cognition, social awareness, social motivation, assertion, cooperation, and responsibility, while decreasing autistic mannerisms and increasing the frequency of peer interactions' (Laugeson et al., 2012, 1025), the approach adopted is didactic. This is not in keeping with more improvisational theatre or drama-based approaches which afford equal weight and value to the artistic, aesthetic and enjoyment value as to the development of social skills such as SDARI (Lerner, 2007) SCORE Skills Strategy (Webb et al., 2004), SENSE Theatre (Corbett et al., 2016) and R-PASS multi-modal tool (Role-Play Assessment of Social Skills, Trudel & Nadig, 2019) (see also Kempe & Tissot, 2012; O'Connor, 2000; Shaughnessy, 2013; Sherratt & Peter, 2002).

Other drama-based interventions for this population include puppets (Hartley & Fisher, 2018; Salmon, 2005; Torrance, 2018) and dramatherapy (discussed below). Puppets are often employed as social communication partners, and recent research from Yale reports that both TD peers and children with ASD were drawn towards expressive and verbal puppets which can facilitate reciprocal interactions through being in role (Macari et al., 2021). Twomey et al. (2021) reported success in the use of hand and child sized puppets to support children's agency in a process designed to hear children's voices in nuanced presentations of voice and embodied learning. However, there has been controversy over the use of a puppet to play the part of a child with ASD at the Southwark Playhouse in London where human actors played the other parts in the play *All in a Row* (Ryan, 2019). It was denounced by the National Autistic Society and contrasts with the approach adopted by Sesame Street when they introduced a dynamic Muppet with ASD called Julia in 2017 who interacts with other puppets in a more equitable manner through her friendship with Elmo (Autism Speaks, 2018).

As an evidence based affective approach, dramatherapy has demonstrated success in enhancing social skills and interactions (Landy, 2007; Porter, 2014; Wilmer-Barbrook, 2013) which Galligan (2009) claims can occur through the stimulation of mirror neurons generating understanding of self and others through neurological imitation and re-enactment (see also Iacoboni, 2008). Chasen (2011) refers to the value of 'witnessing role' or what is arguably referred to in drama in education as the 'self-spectator', whereby:

my mirror neurons will fire, just as if I were actively involved in those same activities, providing me with a visceral sense of what it is like to perform those actions. This embodied simulation of others' experiences ... comprises the neurological foundation for developing a sense of self, other, social connection and empathy, enrolling us in the same moment as participant and observer. (p. 57)

A form of psychological therapy, dramatherapy uses drama, theatre, storytelling, role, play and movement to help participants understand themselves in a safe and boundaried way, with an expectation that these improved relationships can be transferred to participants' everyday lives. O'Sullivan (2015b) differentiates between the treatment procedures typically involved in drama, theatre, and dramatherapy, the latter operating on a referral basis to a specialist therapist often working as part of a multi-disciplinary team, who assesses the individual's needs and 'establishes treatment goals and objectives as part of an overall treatment plan' (6). Dramatherapy is a widely researched area and beyond the scope of the present study, but it has reported similar challenges in terms of achieving generalisability. In this regard, studies cite difficulties in sample sizes and geographic locations (Andersen-Warren, 2013), but there is a dearth of evidence relating to the notion of generalisability as understood in the present study. A review of all issues of the preeminent journal *Dramatherapy* (1977-to date), revealed no studies referencing the concept of generalisability of outcomes from one setting to another.

Having reviewed the literature on drama, theatre and ASD, the final section of this review introduces the Social Drama Model which is the focus of this study.

4.6 Social Drama Model

Developed by Carmel O'Sullivan, the Social Drama model (SD) is a process drama approach which originally arose from a collaboration between the School of Education, Trinity College Dublin (TCD) and Aspire (the Asperger Syndrome Association of Ireland) in 2004. The funded research project was established with the aim of exploring if the use of drama in education could lead to a more successful social, personal, emotional, and cognitive education of young people with ASD. Specifically it sought to:

explore the full use of educational dramatic conventions for the benefit of individuals with the disorder, and to determine its efficacy as a constructive medium to help other people with ASD make sense of the world and interact more effectively with others, adapting to different situations as the need arises. (Kennedy-Killian, 2013, 1)

This section will explore the theoretical underpinnings of this model, drama conventions used, and if/how the model aligns with the generalisability literature.

While Way (1967) first coined the term 'social drama', focusing his work on social awareness and experiencing social situations through drama, the SD model is heavily influenced by the pioneering work of Dorothy Heathcote (1978, 1984, 1995) and Gavin Bolton (1979, 1984, 1986, 1992, 2003), with additional guidance from Cecily O'Neill (1982, 1995, 2006) and David Davis (1997, 2014). Drawing from their work, concepts such as distancing, metaxis, being in role, dramatic framing, protection into role, protection into emotion, and self-spectator feature heavily in the model. Bolton's concept of internal coherence (Davis, 2014) is also of paramount importance, as it ensures that each step 'builds coherently for the student' (84) which O'Sullivan (2021) connects to Baron-Cohen's (2020) theories of 'autistic talent', referencing their ability to recognise patterns and systemise. The model was designed to appeal to a preference for a certain type of logic favoured by children with ASD (Sofronoff et al., 2011). Best's (1993) philosophy, which links drama in education practices successfully with his 'education of the emotions' approach, further underpins the model (O'Sullivan, 2006). SD aligns with the interpolation (INT) learning style in autism, which encourages participants to draw on experience, in this case gained through participation in fictional worlds and being in role, and adapt them to real life scenarios, which can be deemed challenging for those with ASD (Qian & Lipkin, 2011; Sapey-Triomphe et al., 2018).

Accompanying the drama theory underpinning the SD model is the belief and understanding that 'normalising' autistic people, 'pushing them into behaving in a way that is alien to their true nature is not only ineffective but wrong' (O'Neill, 1998 as cited in O'Sullivan, 2017). This is in keeping with the beliefs of the neurodivergent community (Armstrong, 2012, 2017; Silberman, 2016; Singer, 1999), which increasingly challenges historic 'about us, without us' practices through self-advocacy organisations such as AsIAm in Ireland and ASAN (The Autistic Self-Advocacy Network) in the US. Neurodivergence favours an approach where autistic people [their preferred term] take pride in their identities and are encouraged to find their place in the world rather than conform to it. The SD intervention is exclusively for participants with a diagnosis of ASD, and therefore it is not an inclusive model. In its first year, siblings and peers without ASD were invited to co-participate, and while relatively few did, those who participated were found to have dominated sessions, and this practice was concluded the following year (O'Sullivan, 2005). While inclusivity is promoted Ireland and internationally, research posits that

children with ASD have the right to be educated alongside those with the same diagnosis, and that inclusive learning environments do not have to be the only option (Norwich, 2008; Sainsbury, 2009). The NCSE (2018) reports that parents are seeking more autism specific schools, in keeping with literature which believes that parents have the right to choose exclusive educational settings for their children (O'Dowd, 2016). In 2012-13, research was carried out to elicit stakeholders' perspectives, including participants and parents, on the exclusivity of the SD model. The study found that the exclusive nature of the SD classes facilitated a safe environment, a sense of community and belonging, a sense of ownership, enjoyable classes and the right to choose an ASD-specific learning environment (Kennedy-Killian, 2013).

Nine SD classes took place once a week for children and young people aged five to mid twenties, and were grouped by age. The case study participants in the present study attended Saturday classes and each session lasted between 60-75 minutes, running from September to June. There were approximately 9-11 children in each class, with one lead (master) teacher and up to three teacher/research assistants, representing a highly favourable student-teacher ratio. The content of classes was designed with the children's specific interests and needs in mind. Each drama lasted between 8-10 weeks, with participants exploring multiple fictional worlds, roles and dilemmas during the academic year. Themes varied from real world issues to science fiction scenarios, and participants were invited to collaboratively agree and negotiate what they wanted the next drama to be about, following Bolton's (1984) approach to story building in drama (O'Sullivan, 2015b; 2021).

The SD model employs a process drama approach, in particular favouring role, improvisation and dramatic narration, to engage participants in an exploration of a fictional world, working collaboratively with peers and supporting teachers/facilitators to resolve exciting and challenging situations as they are encountered (O'Sullivan, Boran & Delaney, 2010). Emphasis is placed on entering into role and stepping into 'someone else's shoes' (O'Neill & Lambert, 1982, 13), enabling the participants to view the world through a different lens, develop empathy, and see things from the perspectives of others, which the literature surmises can be challenging for young people with ASD (Baron-Cohen & Wheelwright, 2004). By 'living through' and experiencing challenges in role, participants are enabled to explore the cognitive, emotional, and affective components of their behaviour which elicit empathetic responses from peers and teachers (Goleman, 1995). SD encompasses Heathcote's (1984) 'as-if' mode of thinking, which O'Sullivan claims (2015b) is 'necessary for spontaneous make-believe play'. O'Sullivan (2021) describes this in the SD model as participants being facilitated to experience 'new situations, interacting with a range of fictional characters, whilst remaining themselves' (15). This is in keeping with Boal's (1992) metaxis, as discussed previously, which O'Sullivan (2021) suggests can 'facilitate reflection and action' and allow for 'experiences whereby learning in the fictional world can inform the real world' (15) when used in conjunction with Heathcote's and later

Bolton's models of 'living through' drama. The SD model focuses on effective communication (Peter, 1995) to experience and 'live through' language in a wider range of social situations than might otherwise be encountered in daily life (O'Sullivan, 2006; O'Sullivan, 2017). Communication, teamwork and working in role are central to the approach, as O'Neill & Lambert (1982) state; 'Drama is essentially social and involves contact, communication and the negotiation of meaning' (13). Role-based work and fictional framing facilitate alternative modes of communication which support participants in using their voices and asserting their human rights in a neurodiverse society: a society which Jim Sinclair seminally described in 1993 when talking with parents and which is worth repeating here:

Autism is a way of being. It is pervasive; it colors every experience, every sensation, perception, thought, emotion, and encounter, every aspect of existence. It is not possible to separate the autism from the person-and if it were possible, the person you'd have left would not be the same person you started with. ... You try to relate as parent to child, using your own understanding of normal children, your own feelings about parenthood, your own experiences and intuitions about relationships. And the child doesn't respond in any way you can recognize as being part of that system.

That does not mean the child is incapable of relating *at all*. It only means you're assuming a shared system, a shared understanding of signals and meanings, that the child in fact does not share. It's as if you tried to have an intimate conversation with someone who has no comprehension of your language. Of course the person won't understand what you're talking about, won't respond in the way you expect, and may well find the whole interaction confusing and unpleasant.

It takes more work to communicate with someone whose native language isn't the same as yours. And autism goes deeper than language and culture; autistic people are "foreigners" in any society. You're going to have to give up your assumptions about shared meanings. You're going to have to learn to back up to levels more basic than you've probably thought about before, to translate, and to check to make sure your translations are understood. You're going to have to give up the certainty that comes of being on your own familiar territory, of knowing you're in charge, and let your child teach you a little of her language, guide you a little way into his world. (Emphases and colour coding in original)

4.6.1 Role

The SD model encompasses Bolton's (2010) view of role-play; that the benefits of simulation or mimesis are limited in drama (O'Sullivan, 1997). This chimes somewhat with the neurodiverse philosophy informing the model, which criticises decontextualised didactic approaches such as mimetic emotion training ("show me a happy face, a sad face"). Jillian Parramore, an autistic person herself who experienced many therapies from a young age, describes teaching people to mimic neurotypical behaviours that are not natural to them as stigmatising and traumatising (Bever, 2019). Similarly, where role-play is understood as imitation or simulation only, it can significantly reduce its aesthetic power and potential, and the variety of drama forms engaged with. Rasmussen (2008) expressed concern about the impact of imitation practices in drama, weakening its cultural value and recognition more widely in education. Bolton (1998) delineates drama in education from the pure imitative act, stating that the aim of drama is always to achieve understanding through the art form, which is at the core of SD. In working to keep the art process open, experimental and not confined to closed or predetermined meanings, participants in SD follow what Rasmussen (2008) refers to as a 'sensuous state of presence and alertness' (316) which Barrault (1951) strove for as a form of 'theatrical presence' (73) or arguably 'a lived through' experience in Bolton's (1992) and Davis' (2014) understanding. While the term roleplay is used in this study, it is used in tandem with being in role and working through role, therefore, the definition of role-play for the purposes of this study is 'playing whilst being in role', affording children the opportunity to problem solve and to improvise (Ladousse & Malay, 2004; Phillips, 2013). There are no right or wrong answers, and collaboration, creativity and imagination are encouraged to tackle fictional problems posed. It enables participants to step into someone else's shoes (Heathcote, 1984), and vicariously experience what life might be like for that person in that situation. The SD model emphasises taking on a role to 'understand a social situation more thoroughly' (Heathcote, 1984, 49). Participants, through working and playing in role are enabled to respond to situations that arise in the fictional context (O'Neill, 1984) while being appropriately distanced from the raw or first emotion of the situation, employing a level of metaxis, as discussed previously (Bolton, 2010; Davis, 2014; Walls et al., 2016).

The episodic, almost soap-opera like nature of SD where the same drama story is explored over 8-10 sessions allows participants to build and deepen their investment in role, and aligns with the focus and commitment associated with ASD where children and young people are capable of great attention when motivated and interested. This ability transfers well to the SD model which by design and nature capitalises on participants' interests in a character's story and their role in actively engaging with the character(s). It facilitates social interaction, communication and negotiation in role in a natural environment. When in role, participants experience fictional stories lived at life's pace through being in collective (whole group) or

individual roles (Bolton, 1998). They interact with other participants and teachers in role to explore and experience fictional scenarios which develop episodically, incorporating a variety of drama strategies (O'Sullivan, 2021). New information is discovered or revealed in each session, and participants remain in role for most of the session, interacting with peers to solve mysteries, dilemmas, and problems relating to the fictional characters, in keeping with Heathcote's emphasis on the importance of problem solving from within; 'children shall think from within a dilemma instead of talking about the dilemma' (Heathcote, 1984, 119). An example of one of the dramas explored in SD is presented below.

4.6.2 Tantrum Valley

This drama unit was designed in response to a number of parent requests that children in the group were demonstrating extreme reactive behaviours when teased by peers. This was reported as occurring in schools and had also been recorded in the SD fieldnotes to a lesser degree (see Methods Chapter for more information). The unit aimed to experientially explore with participants a range of strategies to assist them if/when this occurred both during and outside the drama setting. The story devised for 7-10 year olds ran for eight weeks, and featured a Queen who lost her voice because she misused it and was unkind to people. A cousin of the evil Queen Grimhilde in the story of Snow White, this Queen inherited the magic mirror and became obsessed by asking it questions every day, and shouting at it if she didn't like the answers. During the unit, participants meet teachers in role (TiR) as the unkind Queen shouting at her servants and assistants, and hear the mirror issue a stern warning that if she cannot learn to use her voice better, it will be taken from her and placed in the Vale of Tears until she does learn to use it appropriately. Participants analyse the vocal, facial, bodily expressions of the characters to critically understand the situation, and later are invited to consider joining a campaign as experienced adventurers to find the Queen's voice and restore it to her. They interact with a remorseful Queen who has fallen silent for several weeks and promises a reward to whichever team survives the dangerous journey and returns her voice to her.

During the unit participants travelled through Tantrum Valley to find the Queen's voice. On their journey they faced many challenges and met diverse characters and fantastical creatures who stretched their patience at every stage. They were challenged to keep calm and gather information from the characters they interacted with to gather clues and information which would lead them to the Vale of Tears and the Queen's voice. When they found her voice they were faced with a decision of whether to return it to the Queen and claim the reward, or leave it where it was. This drama, as with all dramas in the SD model, incorporates choice in every session, such as deciding if they wanted to be interviewed for the job of finding the Queen's voice, if they should travel through the silent forest and Tantrum Valley, what roles they would like to adopt (e.g. the

fairy, imp or traveller), how they should travel (e.g. by land or sea), who they should talk to (e.g. is it safe to talk to the Nolphins?) and if they should return the Queen's voice to her. This level of choice is in keeping with theorists in the field of drama and ASD who highlight its value (Lough, Rice & Lough, 2012). While some choice is offered on an individual level, most decisions must be made as a group, in a collective role, such as when deciding what methods of communication (e.g. hand or head signals) they will use when they pass through the silent forest, as they cannot speak for fear of waking the imps. Group discussions are incorporated regularly, both in and out of role to make and review decisions, plan and reflect. Improvisation features throughout the unit, to develop the drama and enable participants to test out ideas and respond to interactions in role (Heathcote, 1984). Examples of improvisation in this unit included when they met Gregor, the gatekeeper to the valleys they must pass through to get the Queen's voice. He warned them about the dangers they could face, including the water fairies, asking them 'What do you think they look like?' Similarly when the Queen's assistant does not want the group to return the Queen's voice to her, they must explore if it is the right decision or not. O'Sullivan (2021) refers to this as 'real time improvisation' (13). Tension is also essential for dramatic action, as it motivates participants to engage (Bowell & Heap, 2010; Dunn, 2016). For example, the dangers of the imps who reside in Tantrum Valley and tease the adventurers to try and make them react and have a tantrum so that they can never leave the Valley. Other drama strategies used in the SD model include creating the spaces, which 'helps to establish the fictional landscape' (O'Sullivan, 2021, 9) using paper placement and objects such as upturned chairs, bed linen, masking tape and old clothing. TiR and student in role (SiR) are core components of SD and used to share information, for example, when the Nolphins (SiR) tell the group that the wizard has the Queen's voice. TiR helps participants to prepare and practice for in-role interactions, and 'as one of their group on a mission, supporting the work from within' (O'Sullivan, 2015b, 2). This concept of working within the group enables a horizontal and shared power between the teachers and the group (Morgan & Saxton, 1987; O'Neill, 2015), which in turn creates an engaging and enabling environment.

4.6.3 Research on the Social Drama Model

Research carried out on the Social Drama (SD) model, based on the first phase of the study (2004-2010), highlights the impact of the intervention on participants' social skills within the drama environment as 'effective in developing participants' drama skills and improving core impairments associated with ASD' (O'Sullivan et al., 2010a). O'Sullivan (2021) notes that Chown et al.'s (2017) principles of supportive inclusive autism research were employed in SD, adhering to the social model of disability. Data for both studies in this phase were gathered though a mixed methods approach, including pre and post-test measures for all participants, a weekly

data tool to record participant progress, annual recording of participants' progress, video recordings of all intervention sessions, interviews with participants and parents, and numeric and qualitative data from participants' schools (O'Sullivan et al., 2010a, 2010b, 2012a; O'Sullivan & McKernan, 2011a).

The first study aimed to assess the effects of the intervention on social functioning, language and communication, imagination and ToM. Base line scores were compared with end of intervention scores, and Wilcoxon Signed Rank tests were used to compare ratings of the participants' skills at each time point. Results demonstrate that participants improved on each social skill, with large improvements reported in general anxiety, body contact, imagination, selfconfidence, creativity and problem solving (O'Sullivan & McKernan, 2011b; O'Sullivan, 2017). The second study explored if there were any differences in the number of Social versus Physical attributions in this sample (Boran, Delaney & O'Sullivan, 2011; Delany & Boran, 2011; O'Sullivan et al., 2010b, 2012a, 2012b). Two social cognition tasks were carried out with participants; Social Attribution Task (SAT) and Physical Attribution Task (PAT). The findings demonstrate that students performed significantly better on the SAT, comparted to the PAT, which is contrary to literature in the area (Klin & Jones, 2006). Alongside these positive findings were low dropout rates of participants, the cost effectiveness of the model and the ability of the intervention to address the full spectrum of impairments associated with ASD. The research also demonstrated the strong imagination of participants which is not in keeping with literature in the field (Craig & Baron-Cohen, 1999; Ten Eycke & Muller, 2015a). Imagination is engaged through the unique design of the intervention, as discussed previously. Shared interests enabled friendships to develop, and for participants to have fun, which was reported by all stakeholders (O'Sullivan, 2021). Limitations included poor response rates from teachers, time and labourintensive research, the need for efficacy testing with a larger sample size and a long term follow up (O'Sullivan, 2021). O'Sullivan (2021) highlighted the lack of assessing generalisability as a limitation of the research, specifically 'how to support generalisability beyond the drama classroom in order to inform the development of arts-based interventions tailored for ASD' (25).

Two further studies reported differing perspectives on O'Sullivan's SD model. Kennedy-Killian (2013) found that a majority (70%) of SD participants and their parent/caregivers wanted the classes to remain ASD exclusive where participants felt comfortable to relax and be themselves. Previous negative experiences of inclusion and mixed settings were reported, as was uncertainty about who would benefit if NT learners were included in classes. Citing a 'safe environment', 'a sense of ownership', 'a sense of community and belonging', 'support for specific needs', 'the right to choose an ASD-specific learning environment', and 'an enjoyable extra-curricular class for children and young people with ASD' (127-128) were reported as advantages of the SD exclusive model. However, Kennedy-Killian (2013) acknowledges that apart from the external experts in the field and a limited response from classroom teachers, all

respondents (parents, participants and drama teachers) may be biased towards the programme as they were directly or indirectly involved in SD classes. In contrast, Keane (2019) who was working in a mixed ability setting reported that her primary school participants responded well to the Social Drama intervention, particularly enjoying the reflective phases of the model (72). She found an improved ability in participating children with social communication (SC) difficulties to cope with feelings of fear within the drama, 'and a significant improvement in their ability to recognise fear from body language, facial expression, and vocal tone between the pre-intervention and post-intervention assessments' (71). Keane reported that her findings were in line with O'Sullivan et al.'s (2010a) earlier finding that 'participants' anxiety around social experiences decreased as their control over those experiences increased' (71). This points towards its relevance with children and young people with PDA in particular who can experience high levels of anxiety and a desire to control their environment. The favourable teacher-student ratio in SD was identified as a limitation in Keane's study where one only SNA was available, requiring the class teacher to play multiple roles as well as observing the action.

The next section will examine the SD model against theories of generalisability, outlining areas which support generalisability of social skills to environments outside of the drama space.

4.7 Generalisability and the Social Drama Model

While generalisability was not considered in the design of SD, there are elements of the model, and of process drama more widely, that align with generalisation theories. A review of the literature in this area concluded that the generalisability of social skills from drama/theatre-based interventions to real world settings needs to be further examined, however some research identified that theatre/drama methodologies may enhance generalisability (Corbett et al., 2016). As discussed in Chapter Three, only a small number of drama/theatre interventions which focus on social skills have explored the concept. These interventions have generally demonstrated positive success rates, claiming success due to the environment, incorporation of peer mediation, video modelling, homework, teaching in natural contexts, social reinforcements, rehearsal, focus on social motivation, trained TD peers and multiple exemplars (Corbett et al., 2016; Hunter, 2014; Lerner et al., 2011; Trudel & Nadig, 2019). Generalisability, with a particular focus on the SD model will be explored in this section and Table 4.1 provides a summary below.

Table 4.1: Relationship between the Social Drama Model and Generalisation Theory

Generalisation Theory	Social Drama Model	
Social motivators: Fun, nurturing environment with	Structure of SD model	
positive social reinforcement, role-play and age-	 Content of the drama 	
appropriate motivators (White et al., 2007).		
Social motivators: Child voice and child preferred	Child voice and choice in	
activities (Koegel & Koegel, 2006; Siller & Sigman,	shaping the story	
2002).	• Selection of roles (Bolton,	
	1992; Heathcote, 1984)	
Social motivators: Forging a connection between their	 Content of SD and the specific 	
pre-existing interests and their social worlds;	aims designed for each class.	
experiential learning (Koegel, Vernon & Koegel, 2009;		
Lerner et al., 2011).	• 'Living through' and process	
	drama approach	
Social value of the stimulus (Yoder & McDuffie, 2006)	■ Drama acts as the social	
Stokes & Osnes (1989)	stimulus.	
Multiple exemplars (Stokes & Osnes 1989)	Multiple TiR	
Stimuli, trainers and settings	Students in role	
	Students in Tole	
	 Variety of fictional contexts 	
Train diversely (Stokes & Osnes, 1989)	Variety of fictional worlds	
Making antecedents and consequences less		
discriminable, owing to variety in conditions of training.	 Multiple TiR and SiR 	

4.7.1 Social Drama as a Social Motivator

As outlined previously, there is some research suggesting that arts-based interventions recognise the importance of social motivation for this population over interventions employing other methodologies (Lerner et al., 2011; Lerner & Levine, 2007; Stephens, 2008). Social motivation has been identified as a factor for potentially contributing to successful generalisability, owing to levels of initial participation in interventions and as a result, the positive engagement motivates participants to use these skills in other settings (Lerner & Levine, 2007). However findings in this area are extremely limited.

White et al. (2007) underline the importance of the intervention environment for social motivation, which is essential for skill development and in turn generalisation. The literature suggests that experiential interventions theoretically encourage social motivation (Vernon et al., 2016; Yoder & McDuffie, 2006), and the SD model is experiential by design with arguably few didactic elements. The focus of generalisability is to use skills developed and practiced in an intervention setting in natural environments (Beidel et al., 2000, Kransy et al., 2003), with the importance of using natural environments in interventions highlighted (Olcay-Gul & Tekin-Iftar, 2016; Rosenburg et al., 2015; Schreibman et al., 2015). It is claimed that drama/theatre is akin to the natural environment in comparison to other intervention settings owing to the use of character and exploring real world scenarios (Ritchie, 2021), which supports the use of SD as an intervention with the potential to achieve generalisability.

It is understood that drama interventions generally create a fun, supportive environment, and a 'safe space' for participants (Heathcote, 1984; O'Connor & O'Connor, 2018; Walls, Deane & O'Connor, 2016) in keeping with the social motivation theories of White et al. (2007). This is true of the SD model as reported by Keane (2019), and when participants enter the drama space, they engage in free play, led by the children themselves, with the teachers joining in. This creates a relaxed setting and encourages playful engagement between children, their peers and adults. It could be hypothesised that this environment leads to higher levels of social motivation, which in turn enhances the probability of generalisation.

The play which occurs when participants enter the drama space is out of role and spontaneous, which demonstrates to the children that this is their space, shifting the typical classroom dynamics, and enhancing opportunities for child-led collaboration through drama (Finlay-Johnson, 1912; Heathcote, 1984; O'Neill, 2015). The content of the SD classes are arguably motivating for participants, as they are specifically designed with participants' expressed interests in mind, which enables them to forge a connection between their pre-existing interests and the social world of the drama class (Koegel et al., 2009; Lerner et al., 2011). Roleplay has been identified as enhancing social motivation, contributing to generalisation of social skills (Nelson, 2010; White et al., 2007). As discussed, being in role is a key methodology in SD, and participants stay in role for the majority of each session. Not only are participants in role, but they are free to choose, create and develop the role they wish to take on. Choice is a key element of drama, as discussed previously, not only relating to role but also when shaping the drama story. Choice is also identified as essential for enhancing social motivation in this population (Koegel & Koegel, 2006; Siller & Sigman, 2002). As the SD model incorporates choice by design, it could be posited that this would support the generalisability of skills demonstrated to other environments.

The importance of positive social reinforcement, which White et al. (2007) identify as a contributing factor to social motivation is evidenced both in and out of role in SD classes. Out of

role examples include during news time, where participants share their weekly news and views. Participants are praised for asking appropriate questions, making sympathetic or empathetic comments and responding appropriately to others. In role, participants are praised for their interactions with TiR and student in role (SiR), and this praise is specific, identifying the positive social behaviour which occurred, for reinforcement.

As shown, the SD model incorporates many of the elements which promote social motivation as outlined in the literature, which in turn may enhance participants' desire to use these skills in other environments, increasing generalisability of social skills, however research in the area is extremely limited and helps explains why the present study was undertaken.

4.7.2 Drama Stories as Social Stimuli

Yoder & McDuffie (2006) emphasise the importance of social stimuli in social skills interventions, claiming that this must be exciting for participants so that they are motivated to participate and engage. Research carried out to date on the SD model demonstrates participants' levels of enjoyment and motivation to participate in the drama each week (Keane, 2019; Kennedy-Killian, 2013; O'Sullivan et al., 2010; O'Sullivan, 2015a; 2021). It appears the drama stories (the content and storyline) act as the social stimulus, as through the drama stories participants are motivated to socially interact and communicate to analyse and review the situation, solve problems, make plans and work together to develop the drama. While Stokes & Osnes (1989) define social stimulus as 'the characteristics of a person, such as certain gesture, or presence of the person' (728), more recent psychological literature define it as 'a stimulus that will elicit a response relevant to interpersonal relationships' (Pam, 2013, 4). Therefore, it is hypothesised that the SD fictional stories act as social stimuli (see O'Sullivan, 2015b), as participants must engage and interact to develop the drama, which as cited previously they are motivated to engage with. It could additionally be argued that it is in keeping with Stokes & Osnes' (1989) theories of social stimuli, as the same people (teachers and peers) are present each week, which further encourage generalisation of skill sets across weekly sessions.

4.7.3 Multiple Exemplars and Train Diversely

This section explores SD's incorporation of multiple exemplars, and fulfilment of Stokes & Osnes' (1989) Train Diversely criteria. As mentioned in Chapter Three, while a small number of drama and theatre interventions methodologically incorporate generalisation strategies such as multiple exemplars, most do not, and instead employ what Stokes & Baer (1977) referred to as the 'Train and Hope' strategy. However, drama, in particular process drama, incorporate multiple exemplars naturally or implicitly as Stokes & Baer (1977) referred to it (i.e. multiple peers in role and multiple settings are encountered in fictional worlds). In relation to the SD model, multiple

exemplars are present in every session, allowing participants to rehearse social skills learned and developed in a meaningful and natural way. For example, when in role, participants meet peers and teachers, in a variety of scenarios which they must navigate. Multiple settings are also evidenced, owing to different fictional worlds explored as a new story line is explored, on average, every two months. This enables the children to experience multiple exemplars, in keeping with the theories of Baer (1981) who claims that children cannot generalise learned skills based on one example, and Stokes & Osnes (1989) who claim that multiple stimuli, and a variety of trainers (e.g. teachers/researchers) and training conditions are necessary for generalisation. In the SD model the children are learning new skills through drama, when they are immersed in the drama story, and practicing these in other stories throughout the year (and subsequent years as drop-out rates were less than 15%, O'Sullivan, 2019). This is in contrast to many other drama interventions, which have didactic elements imbedded to initially teach the social skills, before using drama to rehearse them (Cerbo & Rabi, 2019). The literature review demonstrated levels of success associated with the use of multiple exemplars, but it is claimed that they must be used alongside other generalisation strategies to be successful (Holt, 2017). However, Stoke & Osnes (1989) highlight the importance of selecting examples carefully, claiming that this alone can lead to success. As discussed previously, the content of SD sessions is tailored to the needs and interests of participants in each class, often incorporating their circumscribed interests (CIs) in social and non-social stimuli, in contrast to the literature in this area (see Chapter Two, section 2.2.7.2). Therefore selecting examples is carefully done during both the pre-planning phase and spontaneous in-class planning when decisions regarding the direction of the drama have to be taken by the group. So multiple exemplars alone may be enough to demonstrate some level of generalisability to environments outside of the drama setting, however, currently no research to date has been carried out in this area.

The SD model adopted a Train and Hope strategy of generalisability (Stokes & Baer, 1977), however, it naturally encompasses multiple exemplars and features of training diversely (Stokes & Osnes, 1989). Other elements which could support generalisation include the experiential approach employed, participant choice, multiple and engaging roles, the social stimulus and motivator of the drama story, and relaxed environment. Adversely, the SD model does not incorporate other strategies which have been deemed successful such as homework, parental involvement and the use of TD peers, and the literature outlines the importance of planning methodologically for generalisability, as well as using multiple strategies to achieve this (Stokes & Osnes, 1989). However, this is an under-researched area with this population, and no studies to date, to the author's knowledge, have adopted the methodology employed in the present study (which will be explored in the next chapter). While theoretically, the SD model should not generalise to settings outside the drama space as it does feature explicit methodological planning for generalisability, the use of multiple exemplars in this way, with multiple characters and

settings involving the same peers and teachers in role as different characters, combined with the social stimulus and motivation theories outlined above, has never been explored, and is therefore worthy of investigation.

4.8 Conclusion

This chapter explored the background to process approaches in drama, focusing on drama and ASD, and presenting the Social Drama model. Despite extensive research in social skills interventions which employ a role-play component, there is a lack of research relating to process drama for people with ASD. The chapter concludes that while some literature could theoretically support the generalisability of the SD model, this cannot be hypothesised, owing to a complete absence of research in the area.

The literature review more broadly as presented across three chapters explored the key concepts underpinning this study, notably ASD, PDA, Generalisability, Drama, and the SD Model. All three chapters evidenced a dearth of research in generalisability of social skills interventions for the ASD population. Interventions which assess generalisability were shown to employ limited methods, and there is an absence of participant voice. The Social Drama model was mapped to theories of generalisability, of which it met multiple stimuli, social and motivation stimuli and training diversely, despite generalisability strategies not being incorporated in the design of the model. The next chapter will outline the methodology employed, which involved the researcher assessing generalisability to natural environments, and eliciting participant voice relating to their social skills, which as outlined is currently lacking in research in the field.

Chapter Five Research Methods

5.1 Introduction

This chapter presents the research design, describing how data were gathered to address the research questions through a mixed methods, ethnographic case study approach. Specifically, this study employed document analysis, questionnaires, interviews and observations, and emphasis was placed throughout on the importance of child participant voice, which is currently under used when researching the experiences of people with ASD. This chapter also explores the sampling framework and pilot study, alongside validity, ethics and the limitations of the study. Summary tables and figures are provided for ease of access.

5.2 Aim of the Study and Research Questions

This study aims to critically examine if social skills demonstrated by participants attending Social Drama (SD) classes are generalised to other environments, such as their home and school settings. The research questions guiding the study are:

- 1) What is occurring in the Social Drama classroom to encourage the use of appropriate social skills when working in role/fictional contexts?
- 2) Are participants using the same social skills demonstrated during social drama classes in other settings?
- 3) What factors influence and affect the use of social skills in other settings?

5.3 Methodological Approach

This research was conducted using an embedded ethnographic design involving two case studies (Greene & Greene, 1997; Creswell & Plano Clark, 2007). Participant and non-participant observation, document analysis, interviews, and questionnaires provided qualitative data with modest quantitative components. The methodology enabled triangulation of data, counteracting potential Hawthorne effect by my presence when observing participants (Bryman, 2006; Greene, Caraceo & Graham, 1989).

5.3.1 Ethnographic Case Study

The study employed an ethnographic multiple case study approach (Parker-Jenkins, 2018; Spindler & Spindler, 1982) to explore the generalisability of the SD model through the cases of two participants in the programme. While ethnography and case study employ similar data

collection methods, the length of time, and level of immersion in the field are key defining factors (Hammersley, 2006; Ingold, 2014). Saturation was achieved by including two participants from the SD programme, one in primary and one in secondary school, counteracting the shorter immersion in the field than typically associated with traditional ethnographic research (Bernard, 2000; Jeffrey & Troman, 2004; Mills & Morton, 2013). Although data from only two participants are included, the rich detail elicited through the diversity of data collection methods used enabled saturation (Agee, 2018). Data included participants' experiences in school, home, drama and social settings, examining the curricula, activities and practices offered to them to achieve their full potential personally, socially and developmentally. The design facilitated the distinct voices of the participants (discussed below), and as Yin (2014) proposed, case study method allowed for the exploration of factors enabling and/or inhibiting the demonstration of social skills within participants' actual life settings. In the present study, case study method was selected as it allowed for an extensive and in-depth description of social phenomena (Yin, 2014). The incorporation of a multiple case study design, situated within an ethnographic approach also enabled me to explore potential links between cases (Fusch, Fusch & Ness, 2017). However, there were some limitations relating to its use, such as restricting the level of control over the study and its inability to seek and define causal relationships (Agee, 2018). But the corollary to this was it elicited a rich data set which benefitted the participants as their lived realities from multiple perspectives were depicted, thereby enhancing the quality of the data provided and the value of this study. Using multiple case study allowed for my biases and subjectivity to emerge and be counter-weighted more effectively during the interpretation process (Agee, 2018).

As the research was interested in discerning and observing the sensory, social and educational experiences of two school going students with ASD (one with a diagnosis of PDA), and how social communication skills were enacted and enabled in different settings, the research deign required the observation and engagement of participants and key stakeholders in their lives, such as family members, friends and teachers. Ethnography was therefore selected as it aims to understand the social meaning of people, studying first-hand what people do and say in particular contexts to gain a holistic account of their actions and behaviours in different settings (Arnout et al., 2020; Mannay & Morgan, 2015; Walford, 2009). Ethnography was deemed appropriate to use in conjunction with case study as both approaches emphasise collaboration between participants and researcher, and the importance of allowing participants to represent and explore their own understanding. Interpretive and disability ethnography were specifically chosen, as interpretive ethnography is grounded in observation and enquiry (Spindler & Spindler, 1982) which underpins this research, and disability ethnography aligns with both the population and theoretical basis of the study. Participants were viewed as experts in their own lives, and facilitated to play an active part in the research process (Clark, 2005) such as during interviews and respondent validation, where appropriate. I was aware of the sensitivities and pressures of the research setting, and used reflexivity when responding to the children and the role of the ethnographer (Davis, Watson & Cunningham-Burley, 2017). My cultural knowledge, experiences and understanding of ASD, PDA and SD were explored reflexively throughout the data gathering process and subsequent analysis through routine engagement with my supervisor and maintaining a research diary (King, Williams & Gleeson, 2019). I was aware of my impact on the research process and outcomes, and explored this during the research design and implementation (Ortlipp, 2008). Reciprocity, flexibility and continuous reflection allowed me to assess, monitor and manage my impact as an insider/outsider, stepping in and out of participants' worlds as they intersected with my role as an ethnographic researcher (Aabe et al., 2019). While active, passive and complete participant observation were considered (De Walt & DeWalt, 2002; Spradley, 1980), the stance of moderate participant observer was adopted, as it allowed me to 'sample the role of the insider while still being able to step back and observe the larger picture' (Lynch, 1996, 122). Aabe et al. (2019) refer to the processes of 'inside, outside and in-between' when discussing a community engagement approach to research with people with ASD and their families. This study was informed by a similar design. Although a full co-research participatory approach was excluded on the basis of the participants' ages and the time they had available to participate in all aspects of knowledge generation and co-production, important features were incorporated such as the principles of active engagement and empowerment, mutual respect and co-learning, and a commitment to using any knowledge gained for improvements in social and educational provision for persons with ASD and PDA (Facer & Enright, 2016). A significant element of participatory research incorporated in this study was participant voice and the understanding that child participants can 'reliably produce knowledge about themselves' (Dennis & Huf, 2020, 446). This is discussed below.

5.3.2 Voice

Elements of Chown et al.'s (2017) Framework for Inclusive Research in ASD were drawn on, including the social model of disability being at the heart of this research, which emphasises the importance of participant voice. Ethnographic research can be presented as a way of representing real experiences and giving voice to participants but such an approach assumes that the participants are incapable of representing themselves and have no voice (Dennis & Huf, 2021; O'Kane, 2008). This research fundamentally challenges such an assumption and devised novel and creative strategies to give primacy to the participants' voice, particularly the children with ASD and PDA in this study.

Research which includes first person perspectives of children with ASD on issues relating to their own lives is limited (Goodall, 2020; Tesfaye et al., 2019). This is despite a move within disability research for voices to be included, where participatory research actively includes people

with ASD, not carrying out research 'on' them, and the necessity for their perspective to be included to gain a full understanding (Goodall, 2020; Milton & Bracher, 2013; Rosqvist et al., 2019). Many studies eliciting voice of children with ASD and PDA employ semi-structured interviews, however, these can pose challenges for some children who may experience difficulty expressing themselves, understanding abstract concepts, or who need additional time to process information to avoid the 'I don't know' as a default response (Lewis, 2009; Preece & Jordan, 2010; Simpson, Immus & Keen, 2021). Some interviews employ stimuli such as observational videos of participants, photo elicitation techniques, drawing or children filming their experiences (Bradley & Male, 2017; Coussens, 2020; Simpson et al., 2021). However, many studies don't provide detail about their methods or success rates, which limits replicability (Fayette & Bond, 2018). Recognising participants' atypical sensory and communication processes, this study employed creative methods from the Social Drama (SD) model to elicit voice which is explored later in the interview section. Within the use of these methodologies, elements were individualised based on participants' interests and specific language styles favoured by them and, where they wished, family members (e.g. siblings) were included during the interview processes, to enable participants express themselves comfortably (Harrington et al., 2014; Stafford, 2017; Teachman & Gibson, 2013). Other aspects considered in this study when eliciting participant voice included; (1) the relationship with participants prior to interviewing (Fayette & Bond, 2018; Loyd, 2013), which had been established through working together in the SD model, and time spent together in the field, (2) taking the lead from the children being interviewed (Goodall, 2020), and (3) combining best practice from disability inclusive research practices with knowledge of the participants and individualising the techniques to ensure effective communication whilst remaining flexible during the data collection phases (Rosqvist et al., 2019; Steinbrenner et al., 2020; Tesfaye et al., 2019).

Where voice is elicited, challenges arise such as minimising interpretation based on researcher assumptions (McLaughlin & Rafferty, 2014; Milton, 2012) and accurately listening to the views and authenticity of experience (Cotnam-Kappel, 2014; James, 2007; Randall, 2012; Zhang, 2015). To counteract such issues, this research employed Lundy's (2015) *Voice Model Checklist for Participation*, Zhang's (2015) *Types of Child Voice* and Clark & Moss' (2011) *Framework for listening to child voice* (Mosaic Approach). These are presented below.



Figure 5.1: Lundy's Voice Model Check List for Participation (Department of Children and Youth Affairs, 2015, 21)

Highlighting the importance of creating a facilitative and supportive environment. Lundy's (2015) checklist aligns with the mosaic approach developed by Clark & Moss (2011) which prioritises treating children as experts in their own lives (see Table 5.1). The drama-based research methods employed in this study were designed to do just that. Using enacted scenarios and familiar characters which were proposed and led by the participants, their different voices and 'languages' were heard and seen which contributed to a rich reflexive approach during data gathering and informed subsequent interpretation. My researcher notes recorded thick descriptions of the many languages through which the two participants and their siblings/friends chose to communicate, including capturing vocal, facial, and physical expression and the use of space and objects.

Table 5.1: Framework for Listening to Child Voice (Mosaic Approach) (Clark & Moss, 2011)

Multi-Method	• Recognises the different 'voices' or languages of children
Participatory	Treats children as experts and agents in their own lives
Reflexive	 Includes: children, practitioners and parents in reflecting on meanings Addresses the question of interpretation
Focused on children's lived experiences	Looking at lives lived rather than only knowledge gained

When eliciting voice of children and young people with ASD, power imbalances between the researcher and participants must be considered. For example, the participant may feel there is a correct answer that the researcher wants to hear or may be uncomfortable expressing their true feelings (Winstone et al., 2014). False assumptions that there is coherence between matter and meaning and notions of empowerment can allow power imbalances to remain unchallenged and intact (Dennis & Huf, 2020). Following Zhang's (2015) three types of voice (see Table 5.2) I involved the participants in a multimodal approach to the interview process (which is explored later) to facilitate co-engagement which Dennis & Huf (2020) suggest diminishes power imbalances. Twomey (2020) advocates for similar approaches when accessing the voice of children with ASD and their parents and family members.

Table: 5.2: Types of Child Voice (Zhang, 2015)

Type of Voice	Method of Deduction
Inferred Voice	Observations of child behaviours
	Interpreting meaning
Survey Voice	• Interviews

Co-constructed Voice	Combination of observation and sustained interactions in
	the form of informal conversations and interviews
	• Frequently used in ethnographic research (Due & Riggs,
	2011; Hedges, 2008)
	•

5.4 Sampling Framework and Participants' Profiles

The sampling method employed in this study was purposive, employing maximum variation (Palinkas et al., 2015). Purposeful sampling in a qualitative study of this nature allows for the identification and selection of individuals who are 'especially knowledgeable about or experienced with a phenomenon of interest' (Creswell & Plano Clark, 2011, cited by Palinkas et al., 2015, 2), in this case factors impacting the demonstration of social skills in different settings and contexts. Patton (1990) identified that placing emphasis on maximum variation can facilitate the documentation of unique or diverse behaviours which emerge when adapting to different situations. This is useful in the present study to allow the identification of shared patterns that may cut across cases (Palinkas et al., 2015). Table 5.3 below outlines the inclusion criteria developed for this study.

Table 5.3: Inclusion Criteria

Inclusion	Justification for Inclusion	Methods	
Criteria			
1. Diagnosis of	• All participants in SD classes	Diagnosis given by recognised	
ASD	have a diagnosis of ASD or	psychologist as determined by	
	AS.	Aspire who organised the classes.	
	 Necessary to answer research questions. 		
2. Currently	• To ensure availability of	Purposive and maximum variation	
attending SD	sufficient data.	sampling (Patton, 1990)	
classes, and			
have been			
attending for a			
min of 2 years			

3. Variety of ages and levels of social functioning	 Ensure variation in sample Compare commonalities or patterns emerging across cases 	 Purposive and maximum variation sampling (Patton, 1990) 1 primary school (8-12years) and 2 secondary school participants (13-18years) Levels of social functioning determined by observation notes and the S-DAT instrument (O'Sullivan, 2004)
4. 2 male and 1 female participants	• To represent the male:female bias (Turkington & Anan, 2007; Nichols, 2009)	Purposive and maximum variation sampling (Patton, 1990)
5. Parent consenting to observation in the home and school settings and to interviews	 Ensure full understanding of what study entails, and their involvement Fully informed consent necessary (Atkinson, 2014; Hammett, Twyman & Graham, 2015; Anderson, 2012) Process or rolling informed consent model (Sacco et al., 2021) 	 Group and individual information meetings discussing research aims, nature and extent of participation in this study, and letters of information. Follow up meetings to respond to queries and concerns Discussion of approaches to gaining assent from young person, including rolling consent model which requires repeating information on an iterative basis, asking for assent at various stages, listening to their speech and nuances of communication to ensure the participants remains consenting to the study over time, and re-stating the possibility of

		 opting out from the research any stage. Written consent received from all participants being interviewed and observed.
6. School's consent to inclass and extracurricular observation and to interviews with	 Ensure full understanding of what study entails, and their involvement Fully informed consent necessary (Atkinson, 2014; Hammett, Twyman & Graham, 2015; Anderson, 2012) 	 Parents initially contacted schools (principal, class teacher & SNAs) providing letters of information about the study prepared by the researcher Researcher followed up with in person meeting and/or phone call to answer questions
personnel	• Rolling informed consent model (Piper & Simons, 2005)	Received written consent from all participants being interviewed and observed.
7. Child assent	 Full understanding relating to what their role would be in the research (Ellis & Beauchamp, 2012) Rolling informed consent model (Piper & Simons, 2005) 	 Conversations, age-appropriate letters of information, in keeping with advice from parents Children have opportunity to ask questions pertaining to any aspect of the research, at all stages of the study Received written assent via assent
		forms (Appendix A)

Seven families were invited to an information meeting and expressed interest in being involved, however owing to the sampling framework, only three families finally met the inclusion criteria fully. While the primary/secondary school criterion was met, the spectrum of social functioning could not. Parents of potential participants who were identified as demonstrating

lower social functioning were enthusiastic for their children to be involved, however, their children's schools did not wish to participate, principally citing their discomfort with observation taking place in their setting. Three families began the study but during data collection, one participant's school withdrew from the study, and therefore their data could not be used. This was the female participant's school, and as a result, the study has no female representation. Full data sets were available from the two male participants, and their profiles are presented in Tables 5.4 and 5.5. below. Pseudonyms are used throughout the study for both child and adult participants.

Table 5.4: Case Study One Participant Profile

	Fred
Age	Eight years and five months old (at start of study)
Diagnosis	ASD & PDA
No. of years	Two
attending SD	
at start of	
study	
Family	Fred lives with his Mum, Dad and younger sister, who is referred to as Claire
	throughout the study. Claire attends a different school to Fred.
Location	Urban area, in a house with a garden, which he enjoys spending time in.
School	• Location: Urban area 20 minutes from his home. He travels via bus, with
	SNAs present.
	 Started September 2017. Previously excluded from a mainstream school, and was home schooled by his Mum while awaiting a place in another school. Type: Mainstream primary school for boys, with two autism classes. He attends an ASD class for the majority of the school day, referred to as 'Fred's class', and the mainstream class is referred to as such. In Fred's class, there are four other boys, one younger and three older. The class has one teacher, and two SNA's. Mainstream class (Senior Infants): 28 students and one teacher. He attended for Aistear, (a play based curriculum framework which emphasises children learning through play, participating in group activities such as sand, water

	such as preparing for the Christmas play and assemblies. An SNA does not				
	accompany him to the mainstream class				
Extra-	At the time of the study, Fred attended drama classes, but no other				
curricular	extracurricular activities. He had previously attended activities such as rock				
activities	climbing for children with ASD, and while he enjoyed aspects of it, it did not				
	focus on social development (Mum PC, 1st February, 2019).				
Hobbies and	Fred enjoyed playing with his sister and engaging in role play with her (e.g.				
interests	schools, beanie boo and pets). He liked playing in the garden, on the trampoline				
	and his special topic of interest at the start of the study was dinosaurs, however				
	this changed to zombies before completion of the study.				

Table 5.5: Case Study Two Participant Profile

Pseudonym	Peadar
Age	15 years and three months old (at start of study)
Diagnosis	AS
No. of years	Six
attending SD	
at start of	
study	
Family	Peadar lives with his Mum, Dad and two older brothers aged 21 and 17, one of
	whom was still in secondary school but attending a different school to Peadar.
	His eldest sibling has a diagnosis of AS.
Location	Peadar lives in an urban area, in a house with a garden.
School	• Location: Urban, 5 minutes from his home. He travels via taxi, with two 2
	other boys from his school.
	Secretary and an advantage of the Control of 2017 having a great of the animals.
	• Started secondary school in September 2017, having attended the primary
	school on the same site since September 2015.
	Type: Mainstream, all boys secondary school. One ASD class and one
	resource room. Peadar attends the resource room and mainstream classes.
	• Resource room: Peadar attends when Irish class is taking place (as he is
	exempt), to access his locker, if there is a 'free' period, for morning break,

	and a portion of lunchtime when gathering his books etc. Seven other
	students use this space also.
	 Mainstream setting: Peadar is in mainstream for all classes (except Irish) spending the majority of the structured learning time in the mainstream class. Each subject class is comprised of different peers, and some classes have peers from the resource room, while others do not. SNAs: Peadar worked with Colm for his first 3 years in secondary school, however during the course of this study, Colm left the school and Anna took over as his SNA.
Extra-	Social Drama
	Social Diama
curricular activities	• Social Club: an exclusive group for teenagers with ASD. Supervised setting, with access to pool table and a variety of games, but no structured activities for 1.5 hours a week. Peadar stopped attending during the study, reporting he was not enjoying it.
Hobbies and	• Online gaming with friends. The majority of his time in the home setting is
interests	spent doing this, before and after school and at weekends.

Both participants were known to me, with Peadar attending the class in which I was a support teacher, and I occasionally worked with Fred in his class when providing substitute teaching and support. At the start of the study, Fred was described by his parents, teachers and drama teachers as a very pleasant child who experienced anxiety and frustration when things didn't go as planned. He had a quiet disposition and tended to hold on to his emotions until they overflowed resulting in occasional meltdowns. Peadar was described as a fun loving, quietly confident young person who enjoyed banter and joking. His ability to manage his emotions was noted as having developed resulting in far fewer meltdowns. Both participants sought friendship with peers with whom they shared interests. Peadar and Fred gave informed assent to participate in this study (discussed later), and the data collection methods employed are presented below.

5.5 Study Design

The study had three phases. Phase one used document analysis to identify levels of social skills demonstrated in the SD setting by the two case study participants, and to identify what elements and characteristics of the SD model support and/or inhibit the demonstration of social skills in

that environment. This was followed by two phases employing observation, interviews, questionnaires and a reflective researcher journal to gather data at two different time intervals in the home and school settings (see Tables 5.6, 5.8, 5.9, 5.10, 5.11).

Table 5.6: Timeline

Phase	Case Study One: Fred	Case Study Two: Peadar
Phase One	Document analysis (July 2016 to Dec.	Document analysis (Jan. 2017 to
	2016)	June 2017)
Phase Two	Home and school observation (18 th &	Home and school observation (21st &
	20 th April 2018)	24 th May 2018; 8 th & 9 th & 10 th April
	• Interviews with Fred (1st February	2019)
	2019 & 4 th March 2019)	Note: Gap between observation days
	• Interviews with parents (13th August	owing to change in school
	2018; 1 st & 15 th February 2019, 4 th	management
	March 2019)	• Interviews with Peadar (1st October
	• Interviews with teachers (6 th	2019)
	November 2018)	• Interviews with parents (24th May
	• Interviews with SNAs (18th April	2018; 1st October 2019)
	2018)	• Interviews with SNAs (20th April
	Informal Interviews with family	2021)
	members and friends(Aunt, Emily	Informal Interviews with family
	20 th April & 13 th August)	(Granny: 24 th May 2018)
	• Interviews with drama teachers (10 th	• Interviews with drama teachers (10 th
	December, 2016; 11 th May, 2019; 10 th	December, 2016; 11 th May, 2019;
	August 2021)	10 th August 2021)
	Questionnaires to parents (March	Questionnaires to parents (May
	2018)	2018)
	Questionnaires to teachers (March	Questionnaires to teachers (May
	2018)	2018)
	Questionnaires to SNAs (April 2018)	Questionnaires to SNAs (May 2018)
	Questionnaire to Aunt (May 2019)	
Phase Three	• Home observation (11th & 13th	Home observation (1 st October 2019)
	August 2018)	

Data were gathered to respond to the research questions, specifically focusing on the social interactions of both Fred and Peadar in settings other than SD. In order to counteract claims

of attributional bias in parent and teacher reporting (Carneiro et al., 2021; Dahl et al., 2020) and disagreements between their respective ratings (Levinson et al., 2021; Thompson & Winsler, 2018), the study was designed as an ethnographic multiple case study, whereby I lived with the participants for short periods of time. Phase two involved me living with the participants and their families from early morning to evening time during a school period (returning home to sleep). This included participating in daily life such as meal times, shopping, visits to the park, experiencing visits to and from friends and family, and accompanying the participants to school. I attended all in-class sessions and activities whilst at school and drove home in the car with the case study participants. Phase three was designed to spend time with the participants and their family/friends at weekends and/or during the holiday periods. This was to observe Fred and Peadar in contexts beyond the school environment, encompassing different routines. Table 5.11 summarises the observation schedule for both participants in section 5.6.4. Personalised assessment is emerging in contemporary intervention science and informed the design of the present study (Ashworth, Guerra & Kordowicz, 2019; Connors et al., 2021).

5.5.1 Personalised Symptom Assessment

Precise personalised assessment focuses on the individual's most prominent social, emotional or behavioural challenges and has several advantages over standardised checklists, even the most sensitive scales such as the Autism Diagnostic Observation Schedule [ADOS] (Gotham et al., 2006) and the Autism Diagnostic Interview-Revised [ADI-R] (Rutter, LeCouteur & Lord 2003) (Wood et al., 2021). In 2011, *Autism Speaks* commissioned extensive research to review existing outcome measures and concluded that no measure met the criteria without conditions (Anagnostou et al., 2015; Lecavalier et al., 2014; Scahill et al., 2015). Concerns were raised about construct validity, a narrow range of focus on a small number of items, an inability to detect changes over time, and scales which measure problems characteristic of multiple conditions and not just ASD.

Research is emerging to support personalised assessment approaches which increase the precision of measurement by focusing on the individual's actual difficulties in authentic contexts. Wood et al. (2021) claim that the typical approach to scoring symptom checklists can fail to reflect the importance of a child's tangible difficulties in an area and similarly the extent to which these problems can abate over time, or in different settings. Using a respondent's own words can assist in identifying symptoms and reduce the risk of error associated with misunderstanding certain checklist items (Weisz et al., 2011). Wood et al. (2021) suggest that adopting a personalised assessment approach can result in greater precision, with minimal time burden for both participants and the researcher allowing for more frequent repeated measurement 'which may heighten statistical power' (3). Their research found that approaches

where parent and child's point of view, 'stated in their own words, which are rated repeatedly throughout treatment using a Likert-type scale' (3) compared well with scores on much longer standardised checklists.

One such personalised assessment method is ecological momentary assessment (EMA) which informed the present study (Trull & Ebner-Priemer, 2009). 'EMA entails real-time collection of psychological/behavioral data in daily life, with repeated assessments facilitating contextually relevant assessment of current emotions, attitudes, and activities' (Wood et al., 2021, 4). EMA has proven effective in assessing the impact of different contexts on an individual's emotional responses, which is relevant in this study, and more particularly because of its ability to gather multiple observations of a person in real time over a short period of time (e.g. a day or a week). Trull & Ebner-Priemer (2009) found it minimised respondent bias associated with retrospective reporting common in most standardised measures, and the use of observation in EMA held several advantages such as its immediacy and contextual relevance, and reduction of social desirability bias. 'Observational methods implemented within the home environment offer the opportunity for a potentially less biased window onto a child's daily functioning and behavior in a key life context' (Wood et al., 2021, 4). Similar advantages were reported for classroom observations and the sensitivity of an EMA approach when combined with parent and teacher reports as complementary methods for assessing the same observational data (Ashworth et al., 2019). These successes and what Ashworth et al. (2019) call 'cohabitation' between individualised and more standard outcome measures were instrumental in guiding the data collection strategy in this study which is presented below.

5.6 Data Collection Methods

5.6.1 Document Analysis

In this study, document analysis was extensively used for two purposes. The first was to identify what elements and characteristics of the model support and/or inhibit the demonstration of social skills in the SD environment. The aim was to understand if discernible features of the model could be identified through a critical analysis of the research notes, transcribed audio recordings of parent feedback sessions, lesson plans, teacher guidelines and weekly sessional notes from planning meetings with the PI. Braun & Clarke's (2006) thematic analysis approach was used to identify recurring themes in the data analysed in order to respond to the first research question in this study: (1) What is occurring in the Social Drama classroom to encourage the use of appropriate social skills when working in role/fictional contexts? Data from this part of the study are reported in section 8.3 of the discussion chapter and seeded throughout the presentation of case study data in Chapters Six and Seven.

Document analysis during Phase One was also used to ascertain the level of social skills demonstrated in SD for each participant. Criterion based and narrative observation notes recorded by researchers during SD classes based on the Social Drama Assessment Tool (SDAT) criteria (discussed below) were analysed, dating back to 2 years prior to commencement of the study. Therefore, approximately 62 documents were analysed per participant, and the collated data for each year which Peadar attended prior to this were also analysed (e.g. Student Annual Profiles created by the Principal Investigator (PI) and two master teachers in July each year – these recorded the summative assessment of participants' SDAT ratings for the preceding year). In addition, annual audio recordings of parent meetings and feedback sessions with the PI and master teachers were accessed and relevant data transcribed for inclusion in the study. The focus of the analysis was on identifying what social skills were demonstrated in the SD classes and the context surrounding the demonstration of these skills. The findings from this identified the social skills to be focused on for Fred and Peadar in other settings, which enabled assessment of generalisability. These documents were analysed using thematic and content analysis, employing an analysis framework modelled on Braun & Clark (2006), LeCompte & Schensul (2013) and Schreier (2012).

The documents analysed were created by several researchers over a number of years, which may mean there were differences in what was recorded, the level of detail and context given. However, all researchers used the SDAT criteria to guide narrative observation notes, therefore there should be consistency across documents. Inter-rater reliability was achieved as the recorded notes were checked by two people, both of whom observed the same sessions. A further element to consider is that the researchers were participant observers, and therefore not everything may have been recorded, due to the participatory nature of the work. While some video, audio and still photographs were recorded in many sessions, these were deemed beyond the scope of the present study and not included, apart from the audio recordings of the parent meetings between the case study participants, the PI and master teachers. Ethics permission was not available to include data featuring other students in the present study. The SD research process was organised as follows (see Table 5.7).

Table 5.7: Organisation of Roles and Responsibilities in the Social Drama Model (O'Sullivan & McKernan, 2011)

Role	Responsibility		lity	Research
Principal	Planned	the	weekly	Received the research notes on a monthly basis
Investigator	classes;			from the master teachers. Led annual reviews of
(PI) (n=1)				the data with the master teachers to record
				changes in students' personal, social, emotional

	Developed the S-DAT and behavioural skills. Met individually		
	criteria and research	parents/caregivers of each student at an annual	
	template;	feedback session which was recorded by both	
	Led classes	parties.	
Master	Experienced teachers led	Collected and collated the teacher-researcher	
teachers	the classes – there were	notes in their classes on a weekly basis. Each	
(n=2)*	two parallel sets of classes	master teacher had responsibility to monitor and	
	running simultaneously.	track the progress of 2 children over the course of	
		the academic year, often remaining with them for	
		several years. Notes were recorded on a	
		participant observation basis during classes, and	
		completed shortly after classes.	
Assistant	Supported the master	Each teacher-researcher had responsibility to	
teacher-	teachers by taking on roles	monitor and track the progress of 2 children over	
researchers	when requested, and	the course of the academic year, often remaining	
(n=12)*	working with the students	with them for several years. Notes were recorded	
	in/out of role.	on a participant observation basis during classes,	
		and completed shortly after classes.	
Interns	Supported the master	Each intern had responsibility to monitor and	
(n=11)*	teachers by taking on	track the progress of 1-2 children over the course	
	roles, and working with	of an academic year. Notes were recorded on a	
	the participants in and out	participant observation basis during classes, and	
	of role.	completed shortly after classes.	

Notes*: There was one master teacher, typically two assistant teacher-researchers (depending on class numbers), and one intern in each class.

Data were voluntarily offered and provided by case study one's parents (Fred) in the form of short audio and video recordings of the child playing and interacting with his parents and sibling at different time periods of his life extending back four years. These were viewed in the participant's home on his mother's mobile phone and in her presence, and notes were taken insitu according to the same assessment criteria being employed to assess and evaluate that participant's social skills in other parts of the study.

Data from the Social Drama Assessment Tool (SDAT) (See Appendix B) formed a significant part of the document analysis undertaken in this study. Developed in 2004 by the PI to assess SD students' social skills as no one suitable instrument was available at that time, and revised in 2011, it is drawn from the diagnostic criteria in DSM-IV-TR (2000) and ICD-10 (2010)

(see Appendix C). It extends the established clinical categories to include advanced theory of mind and false belief, cognitive complexity and control, and reading the mind in the voice/body/eyes (Baron-Cohen, 1995; Kleinman, Marciana & Ault, 2001; Zelazo et al., 2002). It also features criteria specifically relating to drama skills, and an ability to differentiate between fiction and reality. For the purposes of this study, as the SDAT has not been validated as an assessment measure of autism related symptoms, it was sent to Prof Rita Jordan, emeritus professor in autism studies at the University of Birmingham. An eminent international expert in autism research, Prof Jordan is not known to the Social Drama research team and has no links with this study, apart from being invited in Feb 2018 to review the SDAT instrument and other data collection tools. Her invaluable feedback was incorporated into the final design of the instruments used. Box 5.1 summarises her feedback.

Box 5.1: Validation of Research Instruments and SDAT Tool (Jordan, 2018, personal communication)

'It seems to be a worthwhile study but here are a few points to consider.

- 1. The sample observation sheets did not seem to distinguish between context, actual observation and interpretation. This should be clearer.
- 2. The family interview form seemed too reliant on the school-based one. It is odd to talk of 'class' in the home context and perhaps the distinction could be in different sizes of groups or the familiarity of the group participants.
- 3. The questions in the questionnaire are heavily reliant on 'impressions'. This is OK but is limited if you are trying to get at actual changes in behaviour and tie them into the content of the drama classes. They also depend on assumptions about what is 'appropriate' in different situations.
- 4. Once more, the observation sheets still include much interpretation of behaviour. It would strengthen the work if it were possible to video some observations and then use more than one observer to score the observation and so obtain measures of observer reliability for the scales. This might not be possible, but could be done with a small sample outside of the research sample just to illustrate that the observation scales are reliable.'

Phase two of the research employed questionnaires as both a qualitative and quantitative component, which is explored below.

5.6.2 Questionnaire

In this study, questionnaires were used to provide a basic scaffolding for formal and informal interviews and conversations with adult participants such as parents and teachers (Murchison, 2010; Olsen, 2012; Schensul & LeCompte, 2013). They were also used to gather information from those it was not possible to interview, such as teachers in secondary school. They served to triangulate data gathered through observation (Flick, 2009; Sharp, 2012).

The questionnaire used the Autism Social Skill Profile (ASSP) (Bellini & Hopf, 2007) format, where participants rate social skills as specified in the SDAT criteria on a 4-point Likert scale based on the frequency of the social skill demonstrated, ranging from 'Never or almost never' to 'Very often or always'. While open ended questions are not a feature of the ASSP, for the purposes of this study they were included as the context in which these skills were demonstrated, and who was present are important for comparative analysis. This was elicited through the use of a check box, allowing more than one answer to be selected (Nardi, 2015). To allow participants to respond in their own words and describe their interpretations and experiences (Dixon, Singleton & Straits, 2016; Johnson & Christensen, 2013; McBurney & White, 2010) participants were invited to write a brief description relating to when the behaviour was exhibited and where. The sample was selected based on their relationship to participants. The questionnaire for school staff (see Appendix D) working with participants (e.g. SNA, teachers) was distributed via Fred's class teacher and the SEN co-ordinator in Peadar's school, both of whom received an email with a link to the questionnaire. Prior to this, they also received letters of information and consent forms to complete by all participating staff (see Appendix E). In the home setting parents received an email link to the home questionnaire (see Appendix F) after completing consent forms (Appendix G), with Fred's parents requesting to complete this via hard copy, which was posted to their home. Other family members who completed the home questionnaire (e.g. Fred's Aunt) were emailed the link by parents, along with the letter of information and consent form which was completed and returned to me.

A 21 item questionnaire was administered via Survey Monkey to three people in case study one's educational setting (class teacher, mainstream teacher and one SNA) and six people in case study two (four teachers and two SNAs). Some participants requested a hard copy, so questionnaires were completed online and in hard copy format. The questionnaire took approximately 30 mins to complete. An 18 item questionnaire (online and paper based in accordance with requests from participants) was administered to two people in case study one's home setting (Fred's Mum and Aunt) and two people in case study two (Peadar's Mum and Dad), taking approximately 30 mins to complete. The disadvantages of an online questionnaire such as low response rate due to lack of motivation and lack of personal contact (Bryman, 2016; Wallace & Van Fleet, 2012) were not issues here owing to the relationship developed with participants

prior to receiving the link for the instrument. Only one distributed questionnaire was not completed (Fred's mainstream class teacher), demonstrating positive response rates for both questionnaires in both case studies. Follow up semi-structured interviews post-questionnaire occurred with participants who accepted the invitation to participate, to enable further probing of responses (Menter et al., 2011), which is described below.

5.6.3 Interview

Qualitative, in-depth semi-structured interviews were used to gather rich data from both child and adult participants (Henn, Weinstein & Foard, 2006; Hesse-Biber & Leavy, 2011). An iPad (5th generation) was used to record all interviews, and for familiarity, children were initially invited to record themselves and listen back to their voice. I explained to them that we were using this recording device because I would not be able to write quickly enough to capture everything that was said. For adult interviews, which were seated and did not involve movement, two recording devices were used, the iPad (5th generation) and a Sony ICD-PX370 Voice Recorder, one placed near the researcher and one near the participant.

This section outlines the methodologies employed when interviewing adult and child participants in this study.

5.6.3.1 Adult Participants

Adult interviewees in both case studies included parents, teachers, drama teachers and Special Needs Assistants (SNAs) (see Table 5.8), with less formal conversations taking place with extended family members, such as grandparents, aunts and family friends who were keen to contribute but did not wish to be formally interviewed (notes from the latter were recorded in my research journal). In addition, informal conversations routinely took place with adult participants in the field such as teachers, SNAs, parents and siblings, based on observations made during phases two and three, and notes from these were similarly recorded in my research journal. Less formal conversations built a rapport with participants and made them comfortable with me (Madden, 2010; Spradley, 2016). The content of the formal semi-structured interviews included rating the social skills of the participant (using the SDAT) on a Likert scale of 1-5, answering closed and open-ended questions relating to the participant's social skills, and discussing social skills observed with probes and prompts from the researcher (Drever, 2013; Morris, 2015). Interviews were carried out in the respondent's preferred space (e.g. home for parents, and school for teachers) and at a time convenient to them, however owing to the Covd-19 pandemic, some interviews took place on the telephone and zoom. All formal interviews were audio recorded using an iPad (5th generation) and Sony ICD-PX370 Voice Recorder. Interviews lasted from between 15-80 mins, and were guided by the questions in Appendices H, I, J & K. Fred's father did not wish to be interviewed formally but contributed to informal conversations during field visits, and reported being satisfied that his views were represented by his wife. Despite requests to Peadar's school, no teacher was available for interview but two SNAs did participate. In total, 15 separate formal interviews were conducted with adult respondents (see Table 5.8) and over 50 informal conversations.

Table 5.8: Adult Interviewees

Case Stu	dy One: Fred	Case Study Two: Peadar	
Respondent	Date and Duration	Respondent	Date and Duration
Mum	1/2/19 (29 mins) and	Mum and Dad	24/5/18 (86 mins) and
	4/3/19 (38 mins)		1/10/19 (84 mins)
	4/3/19 (32 mins)		
		SNA Colm	21/5/18 (14 mins)
Teacher	6/11/18 (72 mins)	SNA Anna	20/4/20 (31 mins)
SNA	18/4/18 (17 mins)		
		Drama Teacher 1	10/12/16 (56 mins) and
Drama Teacher 1	10/12/16 (56 mins) and	(DT1)	11/5/19 (75 mins)
(DT1)	11/5/19 (75 mins)		
		Drama Teacher 2	10/8/21(38 mins)
Drama Teacher 2	10/8/21 (38 mins)	(DT1)	
(DT2)			

Formal interviews were transcribed from oral to written mode to allow for thematic analysis (Bernard, 1988; Brinkmann & Kvale, 2015; Jovchelovitch & Bauer, 2000), which is discussed later in the chapter. While adult interviews followed a similar structure, with the researcher following the lead of the participants while following the semi-structured interview guide, the child interviews were specifically tailored to each participant, which is explored next.

5.6.3.2 Child Participants

Within this study, eliciting and listening to child voice was of the utmost importance. Therefore, this section specifically focuses on the creative methods used when interviewing the 2 child participants, Fred and Peadar. The purpose of these interviews was to educe their perspectives around the demonstration of their social skills, in line with the SDAT criteria. However, due to

concerns about consciousness raising (Patai, 1991) not all social skills were explored (e.g. anxiety levels in social situations). While methods from drama, specifically the SD model, were used in the design of each interview, these took very different forms owing to age, stage of development, areas of interest and interactions observed. In addition to routine informal conversations during field work, the child participant interviews took place once all data had been gathered in phases two and three, and I returned to their home on a day approved by their parents and agreed with participants. Choice and information were very important elements in the interview process, and participants were afforded the opportunity to select where they would like the interview to take place, who they would like present (and/or to participate with them), and they knew they could stop the interview at any stage (Stafford, 2017; Teachman & Gibson, 2013). This level of choice was offered to ensure participants felt comfortable, and to increase their feelings of control and decrease feelings of power imbalance (Coad et al., 2015). A modification approach was employed (Kortesluoma et al., 2003), to enable the researcher to follow the child's lead in the interview (Goodall, 2020). The individualised methods (Tesfaye et al., 2019) used for each participant is outlined below, however before interviews commenced it was explained, using age-appropriate language, that we would be using drama techniques to help me further understand their perspectives on life at school and in drama, and their interactions with peers and adults. In both interviews I adopted the 'drama voice' which involved me lowering my tone and using vocal and physical expression to communicate and engage participants. Participants were familiar with this from SD classes. The other method used in both case studies was 'thumbs up, thumbs middle, thumbs down' when eliciting their perspectives on their demonstration of social skills, and to allow them time to think about their answers before responding orally.

Fred

Interviews took place with Fred over 2 days (1st & 15th February 2019), owing to his energy levels, and on both days took place in his garden, mainly on the trampoline, at his request. On the first day, interviews lasted 75 minutes, the first lasting 45 minutes and the second 30 minutes. On the second day, 157 minutes of interview took place, which occurred throughout the day with many breaks incorporated (5 separate interviews were recorded with the longest being 62 minutes and the shortest 11 minutes). Along with the methods outlined in Table 5.9, Fred being able to direct and lead the interview was important to him, and his participation was greatly influenced by his mood, energy levels and desire to engage which fluctuated based on hunger levels or if he had been in school that day (as he was on the first day). The areas covered included friends, imagination, being in role, emotions, play, accepting others' opinions, games he likes to play, things he likes about school/drama and things he finds challenging in these environments (see Appendix L). The drama-based interview strategy was successful in putting Fred at his ease and

eliciting rich data, and was an enjoyable and playful interaction for Fred, his sister Claire who participated at Fred's request, and myself.

Table 5.9: Summary of the Interview Methods with Fred

Interview	Justification for Selection of	Example	
Strategy	Strategy		
Incorporation	• Fred frequently played with	Being in Role	
of Fred's sister	his sister and requested she	When exploring concentration in	
Claire	join us (parental permission	school, Claire and Fred entered into role	
	received)	as students in school. I took on the role	
	• Benefits: (1) gain her	of teacher (who Fred and Claire	
	perspective on the	named), and asked some silly, funny	
	participant's social skills	questions (e.g. What day is it today?	
	(natural and non-invasive)	Has anyone seen my sausages?) with	
	(2) 'modelling' when	Claire's eagerness to respond	
	participant was tired. Fred	encouraging Fred.	
	engaged as a result e.g. 'My	I asked them what subject in school they	
	turn now' Limitations:	didn't like, and asked some questions	
	Claire sometimes answered	around those topics.	
	first, and Fred sometimes	The 'freeze' convention was then used	
	agreed rather than form his	to chat about how easy/hard it was to	
	own opinion.	concentrate during the fictional lesson	
Role Play:	• Role play and story were	Competitiveness: A race	
• as stimulus	regularly used by Fred to	Race scene recreated that occurred in	
for	engage with peers	the park with the researcher, the	
discussion	Being in role enabled Fred	participant and Claire.	
• pause,	to reflect on events that had	Fred won, as planned.	
rewind and	occurred previously, and	Researcher used the rewind convention	
fast	protected him into emotion	and explained that this time in our	
forward	(Heathcote, 1984).	drama we would let someone else win,	
convention	Physical embodiment: Fred	and we decided on who that would be.	
• followed	was very comfortable using	• Fred went into role pretending to be	
by probing	role play	somewhat disappointed.	
questions	• Second order emotions	• I followed up with questioning to	
	experienced through fiction	clarify if he liked predicting who would	

- to protect him into emotion (O'Sullivan, 2017).
- Using the pause-rewind strategy was familiar to him from SD classes and allowed him to exert control comfortably during the interview while reflecting on the questions and scenarios posed.
- win, and how he feels when he does not win.
- Use of slow down 'real time' enabled the emotions of letting someone else take the lead to be safely explored.

Games

- Fred expressed a desire to play his own game instead of doing the role-plays
- This was facilitated; child led interview and modification approach was adopted (Goodall, 2020; Kortesluoma et al., 2003)
- Games (led by Fred) were incorporated into the interview process.
- Researcher posed the question 'Do you like knowing what happens in the story?' A conversation involving the participant, the researcher and his sister ensued where the participant shared the reasons why he liked knowing what happens at the end of each story.
- This explored Fred's perspective on why he likes knowing what happens next and leading/controlling the games

Dominating games

- Games followed the same format as games played during each phase of data collection, with researcher framing research questions through/ based on games, as described below.
- Fred's area of interest at time of interview was zombies. Each game followed the same formula, Fred would leave the trampoline, and direct Claire and I (e.g. pretend it is night time and you are sleeping or pretend you are at school, Elaine is the teacher and Claire is a little girl). Claire and I would take on our roles and enact the scene, which Fred would interrupt in role as a zombie. A battle would follow (no physical contact) narrated by Fred, where the zombie would be defeated. Where possible, I used these games to incorporate questions or as a point of reflection.
- For example, at the end of one game, I explored with Fred why he liked being the zombie, to which he responded he likes knowing what happens at the end

of the story because 'its always happy, the bad guys have always been defeated' (Fred PC, 15th February 2019). Co-created Think Aloud Protocol: Self-Esteem • Fred needed a break from improvised role play as he was showing • I gave a concrete example of myself as storytelling a lack of interest (second a drama teacher; 'I sometimes wonder, Embodied day of interviewing) do people think I a good teacher? And think aloud • Fred is familiar with this you know what, I think they think I am protocols method from the SD model pretty good' (embodied think aloud) • Fred then reflected on what people To reduce attention on the might think of him in drama classes and participant, I incorporated in other settings. improvised stories placing myself as the focus, using think aloud protocols (Bai, Co-created Story telling: Expressing **Emotions** 2018). • I explained to Claire and Fred that we were going to make a pretend school. They selected the name of the school, what class they were in and the name of the teacher. • We discussed what might happen in this school that might make all the boys and girls really happy. • They suggested a trip to the cinema and an ice cream van, so we enacted this. • We discussed what might make the boys and girls sad, and they suggested their friends not being in school and the teacher being cross. • The freeze convention was used to discuss what the boys and girls could do when they were feeling sad, and then play was pressed to enact this (Note:

	This was a reflection with which Fred
	struggled).

Peadar

The interview with Peadar took place one evening after school in his kitchen (1st October 2019). Before the interview, Peadar made himself a snack, and offered me some before we began. The interview lasted for 65 minutess and drew from Peadar's interests in drama and improvisation. Areas covered included drama and being in role, humour, interactions with peers and adults, impact of social stimulus/motivator, structured and unstructured activities, expressing emotions, tolerating others, self-regulation and avoidance strategies, concentration, willingness to participate in activities in school, drama and other settings, imagination, and friends (see Appendix M).

Table 5.10: Summary of the Interview Methods with Peadar

Interview	Justification for selection of	Example	
Technique	technique		
Creation of a	When Peadar is interested he	Peadar framed the interview as a podcast	
Fictional	engages and participates	with him in role as a host, changing his	
World	more (Field Notes May 2018	voice and commenting 'Welcome to our	
	& April 2019)	podcast' as I was setting up the recording	
	• Gives him feeling of	device.	
	ownership and control (Chan	• The moment the interview started he	
	et al., 2014)	introduced it as The I hate writing Podcast,	
		creating theme music by humming and	
		methods of communication that the	
		'listener' could not see (e.g. banging his	
		first on the table once for yes and twice for	
		no, nodding and shaking his head and facial	
		expressions such as smiling and frowning).	
		These were used throughout the interview.	
		When ascertaining which people Peadar	
		enjoys spending time with, I asked Peadar,	
		using my podcast host voice, if we could do	
		a 'quick fire' round to which he responded	
		by humming the theme tune he created for	
		the podcast, before participating.	

Co-created	• Peadar is familiar with this	Interacting with peers	
improvised	technique from SD model	Co-creation of a fictional world set in 2034,	
storytelling	and reported that he enjoys	where technology had advanced and	
	it.	jokes/humour were not present.	
		Peadar gave advice to a fictional character	
		who was having trouble getting to know	
		people in a new workplace, where Peadar	
		also worked.	
		• Peadar selected the elements of this	
		fictional world.	
		His responses were clear and allowed the	
		researcher to gain insight into what he	
		prioritises when getting to know peers and	
		interacting with them.	

As outlined above, the novel drama-based interview methods devised in this study were unique to each participant. The importance of knowing the participant, their interests, strengths and limitations was essential to eliciting their perspective. The value of having control over the direction and format of the interview, for example, leading it through the fictional lens of a podcast for Peadar and the games for Fred cannot be underestimated, highlighting the importance of a personalised approach as discussed in section 5.5.1 where researchers modify methods as necessary and allow participants to lead (Goodall, 2020; Kortesluoma et al., 2003; Tesfaye et al., 2019). These methods enabled participants to maintain concentration and express themselves with apparent ease. The next section discusses the use of observation which was pivotal in this study.

5.6.4 Observation

Observation is deemed beneficial within disability research (Angrosino, 2004; Gavrielidou-Tstelepi, 2013), and in this study, overt participant and non-participant observation were selected as they allowed me to gather data that could not be collected through other methods to gain an insider perspective (Berger, 2011; Jorgensen, 1989). The stance of moderate observer was adopted, and I moved between participant observation (e.g. when accompanying the child and their family to the shops), and non-participant observation (e.g. during school time). The use of participant and non-participant observation enabled me to gain a balance between being an insider and an outsider (Spradely, 1980), as I observed most situations, while being involved in the activities on a secondary basis (Mayan, 2016), which allowed time for the recording of data.

The importance of participation in ethnographic research is highlighted in the literature, with Dennis & Huf (2020) positing that ethnographic researchers should aim for 'withness' and entanglement (Fine, 1994), which was the aim of the researcher in this study. However, this acknowledges that as an ethnographic researcher, I was unable to gain a 'bird's eye view' or overview of the participants' social skills and interactions, and instead acknowledged my presence in the middle of the research which gave me instead a 'frog's eye view' by living in the 'thick of it' (Ethnographic Research Inc, 2021; Taylor & Ivinson, 2013). By spending time with the participants in their daily lives, I was able to develop a better understanding of the social and cultural environment which surrounded them and how they responded to or were affected by different rituals, practices, contexts and environments. As the researcher, I carefully considered how to conduct myself in the field. Following Earl (2020), I used the 'hang around' method when appropriate, aiming to leave the usual child-adult relationship to one side, adopting the concept of an 'immature adult' when appropriate (Corsaro & Molinari, 2008; Gallacher & Gallagher, 2008). I was aware that the participants may want to show me their social world by taking me under their wing (Corsaro & Molinari, 2008), and allowed it to happen when it occurred organically and was appropriate to do so. I did not enter the field with pre-determined notions or fixed questions but having identified categories and topics from the literature and phase one of the study, used these as a reference point to allow participants to lead the way and both tell and show me through their words and actions what is important and what matters to them.

Bias may have been present owing to potential observer and Hawthorne effects (Angrosino, 2004), but the participants were familiar with me observing them in the SD setting over a prolonged period of time, which should lessen the impact in other settings (Langston, 2011), as should the length of time I have been known to them (ranging from two to four years) (Adair, 1984). While a pre-established relationship is beneficial, the development of this relationship in the field can be complex. My pre-established relationship with participants and my work within the SD project could lead to bias of findings and lack of objectivity (Abrantowitz & Whiteside, 2008; Cleary et al., 2008). These were addressed using method and data triangulation (discussed later). Chapter Three highlighted the importance of generalisability of social skills being assessed in the home by those who are not parents (Beadle-Brown et al., 2018), as occurred in the present study. But while I avoided over rapport which can lead to loss of distance (Ballinger, 2008; Miller, 2017), this was complicated owing to the time spent with participants and their families in their home setting, and pre-established relationships. I used a reflective research journal on a daily basis to document thoughts and feelings in this regard when working in the field. Table 5.11 indicates the length of time spent in the field with each participant, and the types of observation which occurred in each setting.

Table 5.11: Observation Schedule

1 able 5.11.	Observation Schedule		
Participant	Home	School	
Fred	2 days (during school week) (Phase 2):	2 days (Phase 2): 18 th & 20 th April 2018	
	18 th & 20 th April 2018	• Fred's class (all subjects)	
	• Family home	Fred's mainstream class	
	 Playing with sister 	Trip to the park	
	• Other children visiting (18th &	Yard area (with peers from his class,	
	20 th April 2018)	and on other occasions with peers	
	• Meal times	from his mainstream class)	
	2 days (summer holidays) (Phase 3):	Non-participant observation employed most	
	(11 th & 13 th August 2018)	of the time	
	Family home		
	 Park visits twice 		
	• Visit to Aunt's house		
	 Playing with sister 		
	Baking		
	Meal times		
	Treat times		
	Participant and non-participant		
	observation employed (Fred included		
	me in games that he was playing with		
	his sister and peers and in conversations		
	and interactions at home).		
Peadar	Note: Owing to Peadar's age, he was not	3 days (Phase 2): 21st May 2018; 8th & 9th	
	observed at all times in the home setting	April 2019	
	due to his need for privacy.	Classes: Art, English, Geography,	
		History, Maths.	
	2 days (Phase 2): 21st & 24th May 2018	Physical Education: local park	
	 Meal times 	Free classes: resource room	
	 Playing video games 	Lunch: lunch room	
	 After school routine (e.g. snack, 	Other spaces: school bus (travelling to	
	conversations with parents,	and from school), corridor, moving	
	playing with his dog, etc.)	from class to class, lunch room	
		110111 11000 10 11000 1011011 100111	

Social Club

Majority of observation in the home setting was non-participant; participant observation occurred e.g. during meal times when Peadar would include me in the conversation, or ask me direct questions.

Non-participant observation employed most of the time, however Peadar conversed with me (e.g. in corridor waiting for the next class and in the resource room during free classes)

2 days (Phase 3) 8th & 9th April 2019

- Meal times
- Playing video games
- Communicating with peers online
- Interactions with family
- After school routine

A specifically designed tool was used to record observations and field notes, which is discussed below.

5.6.4.1 Observation Schedule and Field Notes

An instrument designed for this study was used which incorporated field notes to record observational data and allow for structured observation (Hammersley & Atkinson, 2007). A comprehensive note taking strategy was adopted, as it allowed me to 'systematically and comprehensively describe everything that happened during a particular period of time' (Wolfinger, 2002, 87). The observation tool was designed to assess social skills being demonstrated (correlating directly with the SDAT), the people present, the language used, who initiated the contact, the extent of the skill demonstrated, and the context, in keeping with the four types of generalised treatment effects, as identified in Chapter Three: (i) time, (ii) setting, (iii) individuals and (iv) responses/behaviours (Cooper et al., 2007; Wahler et al., 1979). The observation instrument was created using Microsoft Excel 2016 Spreadsheet Software on an iPad (5th generation), and the time, setting and people present were selected from a drop-down menu, specifically designed for each participant (see Appendix N). The context of each demonstrated social skill was recorded in field notes, in the same document, in the form of open (overt)

extensive jottings. These jottings were specific, focusing on capturing all details such as body language, what took place before/after the social skill demonstrated and dialogue used by participants (DeWalt & DeWalt, 2010; Murchison, 2010). A challenge associated with recording field notes includes the labour intensity of making the notes (Johnson & Johnson, 1990), however, the drop-down options in the observation tool alleviated some of this pressure. I was aware of the impact of open notetaking, where jottings made in front of participants could be considered uncomfortable and objectifying (Emerson, Fretz & Shaw, 1995; Jackson, 1990). Therefore, to ensure the participants felt at ease, the process and purpose of jottings was explained beforehand, in accessible language, and I encouraged them to use the iPad (5th generation) to record their own notes, to familiarise themselves with the research tool and alleviate any mystery (O'Reilly & Dogra, 2017). The participants are used to me writing notes based on what happens in the SD setting. It is acknowledged that field notes can be subjective and I am aware of the impact that my background knowledge and beliefs could have on the subjectivity of the data collected (Hopkins, 2014; Wolfinger, 2002). Therefore, throughout this research process, a reflective research journal was used, as it provided the opportunity for the subjective and objective aspects to be acknowledged, challenged and combined (Newbury, 2001). I developed objective note taking skills due to several years' experience recording narrative observation notes based on specified criteria in the social drama setting, which supported the writing of field notes and use of the observation tool. Interviews with participants were also used to triangulate data gathered through observation, reduce potential bias and enhance objectivity.

5.6.5 Reflective Research Journal

While some reflective research journals are intertwined with other data collection tools and used in the analysis and write up process to encourage awareness of bias (Newbury, 2001; Ortlipp, 2008), in this study, the research journal was a private tool for the researcher to foster self-evaluation and critical perceptions on my research methods/practices, promoting review and adjustment (Hojeij, Meda & Kaviani, 2021). It was used to self-reflect at every stage of the process including reflecting on research questions, research design, data collection and analysis, clarifying concepts, bias, structuring thoughts, and relating links between theory and practice (Borg, 2001; Oliver et al., 2021; Ortlipp et al., 2008). It was prioritised when working in the field owing to the need for reflection on data gathered, emerging themes, my own personal thoughts and feelings, and reflecting on action to gain perspective (Jasper, 2005; Mortari, 2015). The reflective research journal was written in the first person, kept on my laptop, password encrypted, only accessed by me and pseudonyms were used. It was embedded into the study, evidence based and supported deep consideration of what I was observing and experiencing at every stage of the journey. It proved an invaluable tool and I discussed many of the comments and notes with my

supervisor in order to support data-driven informed decisions about what I was observing and learning (Farrell, 2019). See Appendix O.

Having presented the data collection tools, Table 5.12 summarises the relationship and consistency between these and the research questions in the present study (Newman & Covrig, 2013).

Table 5.12: Building Consistency between Research Questions and Methods

Research	Data	Description	Phase
Question	Collection		
	Tool		
	R	esearch Question One	
1) What is	Document	Narrative observation records for	One
occurring in the	analysis	each participant using S-DAT	
Social Drama		criteria	
classroom to		Recorded by researchers in SD	
encourage the		class	
use of		Records from when participant	
appropriate		first started social drama and	
social skills		annual collated profile data	
when working		Audio recordings of feedback	
in role/fictional		meetings with parents	
contexts?		Provide a baseline and inform the	
		social skills which will be	
		assessed in this study	
	Reflective	• Critical reflection on my	One,
	research	observations of the participants	Two
	journal	during SD classes.	and
			Three
		• Self-evaluation and analytical	
		reflection on data gathered,	
		personal thoughts, feelings,	
		experiences and learning	
	Interview	Master teachers from SD for each	One,
		participant	Two

			and
			Three
	Researc	h Questions Two and Three	
2) Are	Participant and	Overt, moderate stance	Two
participants	non-participant	• Home, school & extra-	and
using the same	observation	curricular/community settings	Three
social skills		Weekend: home, family and	
demonstrated		social outings	
during social	Observation	Based on S-DAT criteria, adapted	Two
drama classes in	schedule and	to focus on the social skills being	and
other settings?	field notes	explored in this study,	Three
		incorporating field notes	
AND			
		• Focus on time, setting, context,	
3) What		people present and other	
factors/variables		environmental factors affecting	
influence and		the demonstration of social skills	
affect the use of	Questionnaire	• Structured, based on Autism	Two
social skills in		Social Skill Profile (ASSP) and	
other settings?		S-DAT criteria	
	Interview	Semi-structured	Two
		• End of each observation period	and
		• Child participants: Use of SD	Three
		methodologies, child led and	
		modification approach	
		Adult participants: Informal	
		conversations and semi-	
		structured formal interviews	
		• End of each observation period	
		Informed by questionnaire and	
		observations	

5.7 Data Analysis

Content and thematic analyses were employed in this study. Content analysis was used during the baseline phase (one) of the research, when carrying out document analysis, analysing narrative and criterion-based observation records for each participant, identifying what social skills were present and the factors surrounding their use. I adopted Schreier's (2012) steps in qualitative content analysis including; (1) building a coding frame, (2) segmentation, (3) trial coding, (4) evaluating, (5) modifying the coding frame and (6) main analysis. Trial coding and analysis took place as part of the pilot study. NVivo software was used for coding, with Microsoft Excel used for the final stages of analysis to provide further clarity for the researcher. Schrerier's (2012) framework was used as it emphasises context, which is crucial in this study. I was aware that a challenge of this method was its reliance on the researcher to read and interpret the text, so bias could be present (McNamara & Roever, 2006). However, as the categories of social skills are predetermined by the SDAT, interpretation was less than if open categories were used. Thematic analysis was used at this stage also to identify context surrounding demonstration of social skills, which is explored below.

Thematic analysis was employed in phases two and three, following the guidelines of Braun & Clarke (2006) and LeCompte & Schensul (2013). A recursive approach of moving between deductive and inductive thematic analysis was used (LeCompte & Schensul, 2013). The deductive approach allowed me to search the data collected for the pre-determined social skills, identified through content analysis in the baseline, and the inductive element was used to identify emerging themes relating to the demonstration of social skills such as context and interactions with others. The deductive approach also enabled me to identify the pre-determined categories and test a previous theory in a different situation (Vaismoradi, Turunen & Bondas, 2013), which alongside elements of Glaser & Strauss' (1967) comparative method supported me in answering the research questions as outlined in Table 5.13. The cognitive process of emergence including noticing, comparing, contrasting, and establishing links was followed during the data analysis process (LeCompte & Schensul, 2013).

The table below outlines the specific steps of data analysis, and it is important to note that data from observation schedules and questionnaires, were used to inform the interview process.

Table 5.13: Data Analysis

Stage	Theoretical	Practical Application
	Underpinning	
Baseline	Content Analysis	Document Analysis: Observation Records

	(Schreier, 2012) 1) building a coding frame, (2) segmentation, (3) trial coding, (4) evaluating, (5) modifying the coding frame and (6) main analysis	 Coding frame created in NVivo (using nodes based on SDAT criteria and emerging themes) Segmentation of data occurred through nodes in NVivo Trial coding occurred in NVivo, followed by evaluating and modifying coding frame based on emerging themes (e.g. environmental factors and mood) Main analysis occurred in NVivo and Microsoft Excel, to allow me to view data holistically
		 Drama Teacher Interview Transcribed Steps followed as above, using SDAT criteria but also identifying emerging themes Data transferred from NVivo to Microsoft Excel to compare findings from document analysis and teacher interview to gain a holistic picture of each participant
Stage 1	Familiarisation with observational and	Observation Schedule • Tidied up after time in field (e. g. typos, things written in
	questionnaire data (Braun & Clarke, 2006) • Immersion in the data • Production of codes from the data	 shorthand due to time constraints amended) Data set actively read multiple times before coding. Notes made during this stage including potential codes, emerging themes etc. Questionnaire Data transferred from survey monkey to excel document Likert scales tallied in excel Data for questionnaires read, notes to identify potential emerging themes
Stage 2	Generating initial codes (Braun & Clark, 2006) and General and Specific Coding (LeCompte & Schensul, 2013	 Observation Schedule Deductive: Case by case data coded, codes generated in base line study for each participant (SDAT), to identify if participants were demonstrating the same social skills across settings. Observation schedule-colour coded Data transferred in NVivo, nodes created for each category

	Production of codes	Inductive:
	from the data	Codes identified surrounding demonstration of social skills
		(e.g. people present, context environment etc.)
		Codes for other social behaviours not specified in the SDAT
		identified, codes for absence of social skills and context
		surrounding these
		Method as outlined for deductive codes followed
		Specific coding allowed data to be quantified, to demonstrate the frequency of social skills demonstrated in different settings.
		Questionnaire
		• Questionnaires coded using the same methods as the
		observation schedule.
Stage 3	Interviews	• Data compared across the two data sets, to inform interview
	Design based on data	design for child and adult participants.
	coded thus far	• Interviews transcribed and analysed in line with stages 1 and
	• Transcription of	2 above
	verbal data (Braun &	
	Clark, 2006)	
Stage 4	Searching for themes	All data
	(Braun & Clark, 2006)	
		• Codes from all data gathered into potential themes using excel
		to identify overlaps and commonality between emerging themes in each case study
		Themes and sub themes identified across all data sets
		• All data codes had been created individually in Nvivo; data
		was moved into an excel spread sheet for thorough analysis
		(See Appendix P)
		Separate excel sheet created for each participant
		• Emerging themes for participants placed at top of excel, under
		each theme, evidence recorded from the following data:
		observational schedule, child interview, parent questionnaire
		and interview, teacher(s)/SNA questionnaire & interview and
		informal conversations.

Stage 5	Reviewing themes	All data
	(Braun & Clark, 2006)	
		 Similar themes collapsed, some themes further broken down to identify contexts surrounding behaviours across settings. Further analysis of themes to assess if they reflect the data set as a whole based on frequency of skills demonstrated, triangulation through all forms of data gathered. Themes named and considered individually, and comparatively
Stage 6	Comparative analysis, adopting elements of	All data
	'constant comparative method' (Glaser & Strauss, 1967; Vaismoradi et al., 2013)	 Themes comparatively mapped onto data gathered in the baseline phase to establish the generalisability of social skills from drama to other settings At times, initial nodes and codes revisited, on other occasions the final themes were used.

Immersion and distancing were used at every stage of the analysis process (Vaismoradi et al., 2016), as is typical of ethnographic research. As I was immersed in the research, the strategies I employed to distance myself at the data analysis stage were: (1) allowing time away from the data, (2) several rounds of analysis, and (3) use of research journal to record, reflect upon and challenge potential bias (Vaismoradi et al., 2016). Once data had been analysed, the researcher is presented with rich thematic descriptions, which reflect the entire data set rather than adopting a theoretical semantic or latent approach (Clarke & Braun, 2017). At every stage of the research, validity and ethics were considered, which are discussed next.

5.8 Validity

The relevance of validity in qualitative research, in particular ethnography has been questioned owing to lack of distance from participants, lack of replication of studies, the social location as a source of bias and observer effect (Schensul & LeCompte, 2013; Hammersley & Atkinson, 2007). Consequently, alternative criteria such as trustworthiness, authenticity, dependability, and plausibility were considered and reflected in the present study's design (Creswell & Miller, 2000; Lincon & Guba, 1985; Morse et al., 2002). Specifically, in ethnographic contexts, the accuracy of data and how it represents those being studied is of paramount importance (Brewer, 2000; Newman & Chin, 2003). Therefore, in this study validity was addressed through an interpretive and theoretical lens including prolonged engagement in the field, rich descriptions, triangulation,

and audit trail (Angrosino, 2007; Creswell & Miller, 2000; Newman & Chin, 2003; Walsh, 2012). Adopting Halpern's (1983) original idea of an audit trail to certify 'that data exist in support of every interpretation and that the interpretations have been made in ways consistent with the available data' (Akkerman et al., 2006, 6), challenged me to be purposeful and careful about record keeping throughout. It involved highlighting 'thick descriptions' and examples of raw data in the findings chapters so that assessments on the value of the study can be made by others (Carcary, 2020).

Both method and data triangulation were employed (Denzin, 1978; Patton, 1990). In relation to data triangulation, multiple perspectives were gained to validate the data, for example, the young person's perceptions of their own social skills alongside the perspective of their parents and teachers. Threats to validity of the data included participant mood which might impact interview responses, therefore, all responses were checked against observational and questionnaire data. While my pre-existing knowledge of and relationship with participants could be considered a threat to validity, the mutual trust present could also increase validity, owing to participants being more open and honest (Kim et al., 2021). The SDAT is the instrument which the observation schedule was based on, alongside generalisability theory. The SDAT was created based on multiple ASD assessments and validated for use in the present study by a renowned autism scholar as noted previously.

Reliability in ethnography is questioned in the literature, with dependability being offered as an alternative (Lincoln & Guba, 1985; Thomas & Magilvy, 2011). Replication is not being claimed in this study, however the following methods were used to enhance external reliability: (i) the researcher's relationships with participants was acknowledged and described, (ii) details of sampling techniques and data collection instruments were given, (iii) the social context was identified and (iv) methods for analysing data were explained (Meynert, 2014; Schensul & LeCompte, 2013). The credibility of the information given by participants was assessed against observations made in different social contexts (Newman & Chin, 2003). Data member checking was also used where appropriate when observations were checked with participants during informal conversations and formal interviews.

5.9 Ethics

Beauchamp & Childress' (2013) guiding principles of non-maleficence, beneficence, autonomy, and justice underpinned this study, with respect to participants at the helm of this research (Brewer, 2000). The Trinity College Dublin School of Education Ethics guidelines were followed, and approval was granted by the Research Ethics Committee (REC) to conduct this study on 16th December 2016 (see Appendix Q).

In relation to consenting/assenting procedures and data confidentiality protocols (Kianersi et al., 2021), participants were informed that their data was accessible only to me and my supervisor. They were assured that all information provided, and all data collected based on observations was private and confidential. Appropriate data safety and privacy measures were taken to preserve the anonymity of data including the removal of direct identifiers, the use of pseudonyms and the use of technology to break the link between data and identifiable individuals. Participants were also informed that hard copy data (e.g. interview notes and questionnaires) would be stored securely in a locked filing cabinet that can be accessed only by the researcher. Electronic data (such as audio recorded interviews and observation instruments) are held on a secure computer and in encrypted protected files in approved systems controlled, secured and managed by Trinity College for a period of seven years. Following completion of the study, data will be safely destroyed in keeping with Trinity College guidelines. Secure shredding will be used to destroy hard copy data, and electronic erasing software will be used for electronic data. Data will not be stored on a USB drive.

In ethnographic case study research, harm can be caused through consciousness raising and publication (Manning & Kunkel, 2014; Patai, 1991; Pink, 2013). Therefore, when interviewing I was sensitive to avoid consciousness raising (e.g. not asking child participants about certain social skills). Participant validation will be used to protect participants' interests and rights during the dissemination and publication stage and a STAY was granted from Trinity College Dublin relating to the findings and discussion chapters, to ensure the completed dissertation is not available online, or in hardcopy, to anyone either internally in TCD or externally for a period of two years which can be extended (see Appendix R).

Providing comprehensible and comprehensive study details in consent forms and information letters about the study's aims, risks, benefits and procedures is a core part of the ethical design of any study (Kianersi et al., 2021). Informed consent and assent was sought whereby parents were communicated with in the first instance through group and individual meetings, letters of information and follow up meetings. Assent was then sought from child participants using appropriate language and information. Schools, teachers and SNAs also received information letters, and had the opportunity to ask questions. All participants signed consent and assent forms as appropriate (Anderson, 2012). As discussed previously, the issue of power imbalance in ethnographic research, and any research involving children, was addressed. While I was not in a position of power in relation to the participants such as that of a school teacher (Cobb, 2016; Kvale & Brinkmann, 2009), I understood that in research children generally adopt a lower status than adults (Eder & Fingerson, 2001), and did the following to attempt to ease the power imbalance: (1) participants chose if they wished to participate in the study through a fully informed assent process, (2) participants had control over aspects of the interview such as location, people present and methods used, (3) a framework for eliciting and listening to child

voice was employed. When I was observing participants, there was always a responsible adult present, who had responsibility for the participant. Before commencing data collection for the case studies, a pilot study was carried out to inform the research design and assess the efficacy of the instruments. The learning from this is presented below.

5.10 Pilot Study

The pilot study was initially planned to replicate the research environment and therefore the participant would have met the inclusion criteria for this study. However, this proved impossible owing to gatekeepers, which is discussed in the limitations below. As it was essential for research instruments to be piloted, and adjustments made (Yin, 2014), the pilot study took place with a variety of people in different settings, as outlined in the table below. Letters of information were distributed, and permissions sought from all participants (see Appendix S). Table 5.14 summarises the processes undertaken and the outcomes from the pilot study which were incorporated into the final instruments.

Table 5.14: Pilot Study

Data	Setting/Participants
Collection	
Method	
Document	> SD notes of children not participating in the study
Analysis	(Permissions sought from parents to analyse notes for this purpose)
	➤ Interviewed a drama teacher after notes had been analysed, to ensure accuracy
	of document analysis and ask follow up questions
Questionnaire	Teacher Questionnaire
	➤ 3 teachers (2 primary, 1 secondary) completed this, based on a child they taught
	with ASD who was not known to the researcher
	On completion, each teacher gave oral feedback to the researcher around clarity of questions, understanding etc.
	Parent Questionnaire ➤ 1 parent (child not known to me)

	Oral feedback received re. accessibility of terms used
Observation	 School Observation Primary school, observing a child with a diagnosis with ASD Observation schedule used and reflections included; positionality in classroom (being able to capture childs interactions without obstructing the child and others), level of interactions with child and their peers and issues with observation schedule (e.g. being able to record notes quickly enough-changes made to drop down menu as a result)
	 Home Observation Family home with 2 children (1 primary school, 1 secondary school). Nether had a diagnosis of ASD Feedback received from children about how they felt having the researcher in their space, the way of the research instrument and advise about they felt about
	their space, the use of the research instrument and advice about they felt about being observed (e.g. use of ipad (5 th generation) vs notebook.
Interview	 Teacher Interview Teacher (primary) who had completed questionnaire and in whose class the pilot observation had taken place Feedback received relating to clarity of S-DAT ratings and wording of questions.
	 Parent Interview ➤ 1 parent who had completed questionnaire ➤ Feedback received relating to clarity of S-DAT ratings and wording of questions.
Reflective Research Journal	 Kept at every stage of the pilot study Informed its use in the field

While the pilot study did not fully match the research environment, all instruments were piloted, feedback received, and changes were made to instruments in response. The coding

frameworks and analysis, as outlined in section 5.7 were trialled in the pilot study. Limitations identified in the pilot study such as gatekeepers, are discussed below.

5.11 Limitations

There are many limitations of ethnographic case studies, which were considered in this study. Firstly, while disability ethnography is an established research approach, the use of ethnographical methods with an ASD/PDA population is not prominent in the literature, and therefore, this research is embarking on relatively uncharted territory. While the literature informed the design of the study, I was aware that due to the specific nature of this disorder, new challenges may be faced. One limitation was the sample, owing to its method of selection and size. As outlined in section 5.4, while purposive, maximum variation and convenience sampling were employed, participants self-selected from an invited group, which meant the researcher could not ultimately control who participated. While there may be commonalities across both cases, owing to the small sample size findings will not be generalisable to other participants in SD classes, or to a wider ASD/PDA population. The small sample size was in part owing to issues with gatekeepers, in particular schools, which is common in ethnographic research (McAreavey & Das, 2013; Reeves, 2010). Another limitation was the lack of female representation. As discussed earlier this was due to a school withdrawing from the study mid-way through, and therefore their full data set could not be completed.

Another potential limitation of this study was bias. As I have worked in the SD classes, and know participants and their families, I was aware that this could influence the study at each stage, in particular during data collection and data analysis (DeWalt & DeWalt, 2010; Grigsby, 2001) and was aware of the potential impact on validity and accuracy of findings (Hammersley & Atkinson, 2007; Schensul & LeCompte, 2013). To attempt to counteract this bias, I acknowledged it throughout the research process, reflected on it in my research journal, and incorporated data and method triangulation as discussed previously (Bryman, 2006; Greene et al., 1989; Vaismordai et al., 2016). This study acknowledges its limitations, and aims to present the findings from two cases, addressing the research questions for these two participants only. While commonalities across cases will be explored in the discussion chapter, generalisability to other participants in the SD model cannot be claimed.

5.12 Conclusion

This chapter outlined the ethnographic multiple case study methodology employed, acknowledging its limitations. The importance of voice was emphasised, and methods used to elicit child participant voice, as well as listening frameworks were outlined. The complex sampling framework was presented, including gatekeeper challenges resulting in only 2 full case

studies being available. However, the novel and unique approach adopted in the case studies provided a rich, fluid paradigm which it is hoped will benefit the participants (Yin, 2014) and the wider field of research in ASD and PDA. The findings from both cases are presented in the following chapters, beginning with Fred.

Chapter Six Case Study One Fred

6.1 Introduction

Data from Fred's case study are presented and examined thematically, focusing on his social skills, identifying where possible the factors which facilitate or inhibit their demonstration in different settings, and exploring the generalisability of his social skills. Data were gathered in three settings: school, home and drama. School is further divided into two components: time spent in the exclusively ASD classroom and time spent in the mainstream classroom. Data are presented and discussed under the following themes: inclusive and exclusive settings in school, socially strategic behaviours, imagination and sociodramatic play, anxiety across settings, expression of emotion, levels of competitiveness and self-esteem, and strategies which support Fred. Comparisons across settings are interwoven throughout the data, particularly in relation to drawing distinctions/similarities between Fred's behaviour and interactions in the drama setting with the school and home settings. Using descriptive statistics, lower case n is used to denote the number of instances an event occurred or a specific skill set was evidenced, for example, n=5. In this chapter and the next, common acronyms from drama in education are used to denote when a teacher (TiR) or a student (SiR) was in role, and the following are employed when referring to a data source: PC = Personal Conversation; M teacher = mainstream teacher; Quest = questionnaire; LP = lesson plan. Where appropriate, reference is made to the relevant literature to contextualise the findings.

6.2 Integrated and ASD Exclusive Settings

6.2.1 School Setting: Context

Fred attends a mainstream primary school for boys, which has two autism classes. He attends one of these for the majority of the school day. He joined in September 2017, after being excluded from a mainstream school, and subsequently home schooled by his mother while awaiting a place in another school. Throughout the chapter, the autism specific class will be referred to as 'Fred's class' and 'Fred's teacher', and the mainstream class and teacher will be referred to as such. In Fred's class, there were four other boys, one younger and three older, with one teacher and two SNAs. Fred's mainstream class (Senior Infants) had 28 students and one teacher. He attended the mainstream class daily for Aistear for 40 minutes (see Chapter Five, Table 5.4), and once a week for Physical Education (PE) and occasionally for special events such as preparing for the Christmas play/assemblies. Fred's limited time in the mainstream setting reflect the findings of Banks et al. (2016) that there are few opportunities for children in ASD classes 'to integrate into mainstream during the school week' (90). I interviewed Fred's teacher at the start of a new

academic year, and she hoped to co-ordinate with the mainstream teacher so that he would attend the mainstream class more frequently. Her hope was that he would be fully integrated by 6th class, noting that she would be 'heartbroken' if this was not the case. However, she identified challenges mitigating against further 'integration' such as co-ordinating with the mainstream class teacher and Fred's pace of work in Maths for example (Teacher PC, 6th November 2018). Placing the focus of inclusion on academic rather than social domains goes against claims that social development, specifically developing relationships with peers should be the focus of inclusive education (Banks et al., 2018; Ferguson, 2014). The data highlight that Fred's experience in school is one of integration or 'physical inclusion' with his mainstream class where meaningful social participation was not evidenced (Humphrey & Symes, 2010). This section explores Fred's experience of integration with the mainstream class setting focusing on his level of social interactions with peers in mainstream and ASD exclusive settings.

6.2.2 The Mainstream Class Setting

When it was time for Aistear, Fred went to the mainstream class willingly, and his SNA who escorted him noted improvements in this area. Initially he refused to enter the mainstream classroom, then started to go to the door, then sit beside the door and gradually moved further into the classroom over time (SNA PC, 18th April 2018). Fred's teacher also spoke about his reluctance to attend, noting when it is time he will say 'Do I have to go?' or if asked if he wants to go he says he doesn't. However, based on her observations she felt he likes it when he's there. For example, on one occasion when passing the classroom she looked in, and Fred was 'working away, brilliant, just at the table with the others from that group and there wasn't a bother' (Teacher PC, 6th November 2018). She didn't comment on what level of interaction, if any, was occurring but noted that if Fred saw her, he would want to come back to the class, referring to it as his comfort zone (Banks et al., 2016). I observed this first-hand when Fred's SNA came to collect him, he jumped up immediately and went to stand beside her (Field notes, 18th April 2018). Her assessment of success appears related more to physically being in the room rather than examining the degree of inclusion occurring. It is important to note his SNA does not remain with Fred in the mainstream classroom which might have been comforting to him as he navigates a new space.

6.2.2.1 Interaction with Peers

During observations of Fred during Aistear, children chose what and with whom they wished to play, while the teacher heard individual children reading at her desk (Field notes, 18th & 20th April 2018). This is not in keeping with the Aistear Framework (NCCA, 2009a). Fred typically found a spot on the floor, close to the mainstream class teacher's desk, and on one occasion played with three toy dinosaurs by himself, which he got from the toy shelf. During the 40-minute session he

made no attempt to interact with other children, and neither they nor the teacher interacted with him. He was not engaged in parallel play or similar (Field notes, 18th & 20th April 2018). The mainstream teacher mentioned this is very common for Fred, and he 'often plays by himself' (Teacher PC, 18th April 2018). Occasionally he looked up from his play, and looked around the room, particularly if a group of children were making noise. He appeared interested in them for a moment, before returning to his solo play (Field notes, 18th April 2018). There was no attempt to facilitate collaborative play, and no meaningful social participation was observed (Bottema-Beutel et al., 2019; Humphry & Symes, 2010). Peers from Fred's mainstream class were the peers he shared a yard space with during outside break time. However, during break times, he interacted with the SNA, wandered by himself, and occasionally engaged with a 6th class boy who was helping with yard duty. He didn't engage with peers but stood and waited his turn on the slide (Field notes, 18th & 20th April 2018). His SNA noted that he had played with peers previously but doesn't now and didn't know why (SNA PC, 18th April 2018). This suggests an interest in interacting with peers but doing so in unstructured and unpredictable environments may cause anxiety resulting in his decision to stop. Interactions with peers in the mainstream setting were not facilitated or supported by staff, which goes against the findings of Williams et al. (2017) who highlight the need for structure and facilitation to support meaningful inclusion. Children with PDA have a desire for friendship (Christie et al., 2012), and Fred himself confirmed this (see section 6.2.3.1). However, efforts to achieve social inclusion were not observed on any level or reported by teachers or SNAs in the mainstream setting (class or playground).

6.2.3 Relationships with Teachers and Peers

The importance of student-teacher relationships for inclusion is well documented (Rose & Shevlin, 2021), and while Fred interacted with the mainstream class teacher, data indicate that he did not have a close relationship with her, which may have been a factor impeding social interaction. He didn't know the teacher's name, and when asked if he ever worked with the other boys he responded no (Fred PC, 15th February 2019). Developing a relationship with the teacher is deemed essential for a sense of belonging (Rose & Shevlin, 2017). During one session, the mainstream teacher initiated interaction with Fred twice, asking him if he had any jokes today, later explaining to me that 'he often tells jokes' (M Teacher PC, 18th April 2018), and telling him how to access the toys. He responded to these questions with a 'Yes' or 'No'. Fred's teacher commented that he does not express emotion in the mainstream class as 'he doesn't really know the teacher that well' and 'there is a load of other kids there' (Teacher PC, 6th November 2018). His experiences suggest that physical integration was not leading to meaningful social inclusion (Humphrey & Symes, 2012). The large class size and lack of facilitated support or relationship

with the mainstream teacher, deemed important for successful social inclusion, may have been factors here (Cullinan, 2017).

While Fred did not interact with peers in the mainstream setting, this was not the case in the exclusive settings. In drama and his ASD class, he demonstrated a motivation to interact, and a desire for friendship (Christie et al., 2012). A need to control social situations to dissipate fear of the unknown can cause conflict when trying to develop and maintain relationships (O'Nions et al., 2018), and while this was not an issue in the mainstream class where he was more physically than socially included, tensions did arise in other settings. The following sub-sections explore Fred's desire for friendship and his interactions with peers in exclusive settings.

6.2.3.1 Desire for Friendship

When talking about two boys (in drama) who he had a disagreement with he sighed and pondered 'why can't they just be friends with me?' (Fred PC, 15th February 2019). This longing for friendship is triangulated by comments made by his mum noting 'he has told me before that he would love to have friends, he says we could have a crowd of boys over here and we could do this and that, there is that kind of wanting there as well' (Mum PC, 1st February 2019) (Christie et al., 2012). However, she noted that during play dates with boys from his class over the summer, something would happen (either a real or perceived issue) that would 'make it all blow up' (Mum PC, 13th August 2018). This concurs with Fred's teacher's comment that 'he wants friends who will do everything he wants them to do' and if they do not do as he says, he claims 'he was mean to me, he is bullying me' (Teacher PC, 6th November 2018). Similarly, when discussing Fred's interactions with peers, his mum commented that if he was to initiate a conversation it would be about 'something very specific that he was interested in' (Mum PC, 1st February 2019) (Petrina et al., 2017) or something that he wanted to show a peer, but it wouldn't invite a two-way interaction such as 'What do you want to do?' (Mum PC, 1st February 2019). When observed initiating interactions at home, it was around his areas of interest such as inviting his younger sister to play on the trampoline 'Claire are you going to come and play?' (Field notes, 11th August 2018) or leading and narrating games. Fred's family and peers in the home setting make allowances for this, as Mum stated that if his sister and peers play his game for a while, it is easier for him to accept than being told they don't want to play (see section 6.8.1.3). This was not the case in exclusive settings such as his ASD class where he played with his friends Edward and John, or in the drama setting, where he participated in all games and drama activities, and accepted when his ideas were not incorporated. Fred's desire to interact with peers was evidenced in the drama setting from the outset. He engaged in conversations with others about dinosaurs or video game characters, played chasing and physical games before the start of class, commented

and questioned peers and teachers on what they contributed during news time, and always participated in the development and enactment of the drama (SD notes, 2016-2018).

6.2.3.2 Compromising with Friends

In the ASD class, Fred gravitated towards certain children, notably Edward and John, and his social interactions differed from his interactions with other peers. These two boys were in Fred's class last year, and he expressed sadness when talking about them being in another class, saying 'Edward isn't in my class anymore, and I don't play with him anymore' (Fred PC, 1st February 2019). His teacher commented that 'he found it really hard this year at the start' that the two boys were in a different class (Teacher PC, 6th November 2018) owing to classes now being divided based on age, and as these peers were older that Fred they were in a different class group. Fred considered these peers as friends as he was observed saying 'Bye best pal' to Edward at the end of the school day (Field notes, 18th April 2018) and demonstrated a genuine interest in what they were doing which Bossaert et al. (2015) support in relation to children's genuine friends. He was observed making compromises for the two boys, such as playing games that were not in his area of interest and empathising when a car got broken (Field notes, 18th & 20th April). When Fred's teacher was asked if he had a particular friend, she said he would identify the 'two boys in the class next door' [Edward and John] as his best friends (Teacher PC, 6th November 2018), noting that this year he sometimes plays with Paul and Seán, enacting monster games derived from drama class (Fred PC, 15th February 2019). An example of him showing interest in Edward and John was when he was on the climbing frame and they were on the swings in the playground, he commented 'I need to check how Edward and John are getting on' and went to talk with them (Field notes, 20th April 2018). He was also observed accepting apologies from both boys on separate occasions, and when he became upset with them, he came around quickly in comparison to incidents observed with others in the home and school setting. This is significant as it shows that Fred was capable of negotiating and giving way to others with whom he had a friendship/relationship (Boyd et al., 2015). He was capable of apologising to his friends, and demonstrated appropriate social skills, including empathy, which is discussed later. In drama Fred was able to compromise with peers, even those he did not particularly like, owing to his investment in the drama which acted as a social stimulus and motivator for him. While Fred chose to interact with certain peers, in particular two slightly older boys who shared a similar interest in dinosaurs, the structure of the drama meant that he was routinely placed in pairs/small groups according to decisions made about what role he wanted to play, and he was able to interact successfully and negotiate with all partners to achieve a shared desired outcome (SD, 2016-2018).

Fred demonstrated appropriate social skills, which enabled him to create meaningful friendships in exclusive settings, which did not occur in the mainstream setting. This is perhaps

unsurprising as developing friendships in settings with peers with the same diagnosis is well documented (Petrina et al., 2017, 2016; Winchell et al., 2018). There is no evidence however of interactions with peers generalising from the exclusive to mainstream setting, specifically relating to developing friendships. Adults in Fred's life such as his parents and teacher, questioned how significant his friendships were. His teacher believes that his friendships are not 'meaningful peer interactions', reporting that if they do not go according to Fred's plan, he is unhappy (Teacher PC, 6th November 2018). It is important to consider different expectations of friendship (Petrina et al., 2017), as Fred openly speaks about his friendships holding meaning and value for him (Calder et al., 2013; Petrina et al., 2017). The disparity in understanding what is important to Fred and what others think is important to him is a theme which emerges throughout the study. When conversing about asking people to play with him, he commented that it was 'quite easy', mentioning Edward, John and Paul as his friends (Fred PC, 15th February 2019). The literature supports Fred's awareness of what he needs and expects from friendships and the value he places on them (Bottema-Beutel et al., 2019), but it does not seem to be equally understood, shared or acknowledged by many adults in his life.

6.2.4 Summary

The findings support Fred's desire for interaction, but demonstration of social skills was minimally observed in the integrated mainstream classroom. During observation periods and from his SNA's data, interaction was not facilitated, either socially or academically, which the literature highlights as necessary for successful inclusion (Bottema-Beutel et al., 2019; Humphrey & Symes, 2012). Findings point towards a one-dimensional academic focus in Fred's experience of mainstream education, with no evidence of social skill development or inclusive practices found during the research period. While interactions in the exclusive ASD settings were challenging at times, his social skills were improving. Where a tightly controlled academic environment like his mainstream class may have been seen as a safe space for Fred, and a form of progress if viewed from different perspectives, the lack of flexibility in facilitating and/or understanding his needs failed to capitalise on the opportunity it presented. Fred did not like the experience, and the study found no evidence that he was learning to build relationships or make connections with others, which he desired. His approach to managing social interactions is discussed below.

6.3 Socially Strategic Behaviours

A recurring theme in the data was Fred's need for things to play out as he imagined them in his head. This manifested as controlling and manipulative behaviour and striving for perfection. When things did not unfold as he imagined them, Fred presented as anxious, stressed and

frustrated (O'Nions et al., 2018). However, this perceived manipulation may be better described as 'socially strategic' behaviour (O'Nions & Eaton, 2020), and this section explores how he ensured that desired outcomes were achieved and why. Findings reveal that Fred demonstrated a need to control his environment in the home and school settings, which was not evidenced in drama.

6.3.1 Socially Strategic Behaviours

Newson et al. (2003) describe 'socially manipulative' behaviours of people with PDA, but recent research redefines this as 'socially strategic' behaviour, whereby the child has a level of social understanding and can adapt strategies to ensure their desired outcome (Fidler & Christie, 2019; O'Nions & Eaton, 2020; O'Nions et al., 2018). Fred was observed being socially strategic to ensure he was able to play his preferred games with peers in both the school and home settings. For example, at home when Fred wanted David to do a dinosaur quiz and David said he didn't want to do this every time he came to visit but expressed interest in a fishing rod game, Fred gave the excuse: 'We can't find that toy' (Field notes, 18th April 2018) (Christie et al., 2012). Similarly, in school when he wanted to play with a scooter another child was using he tried to swap the one he had for the one he wanted. Commenting on his persistence his teacher said 'even if the child does not want to swap, he will try and make him swap' and if he does not get his way 'he will stand waiting with a big frown and looking like thunder at the other kid' (Teacher PC, 6th November 2018). Fred was observed using sociodramatic play at home and in school to ensure people took on the roles he prescribed (Newson et al., 2003). He adapted the rules to meet his needs, for example, when playing ball or 'hide the thimble' in the garden, 'the game would go well for a while but he would often change the rules and want to play it his way, regardless of what other people wanted' (Aunt Quest, May 2019). Fred's mum noted that 'if he could dictate what happens he would be more likely to succeed' (Mum PC, 15th February 2019). This was apparent in group interactions with peers in the home and school settings, where even when he engaged with peers in areas that were not of interest to him, he still narrated and led the play (Field notes, 18th & 20th April 2018). His teacher commented that when he plays he 'manipulates the whole thing to suit what he wants to do and who he wants to play with' (Teacher PC, 6th November 2018), with his SNA describing him as 'bossy' (SNA PC, 18th April 2018). Fred's teacher did not mention his diagnosis, and identified his behaviours as manipulative, rather than socially strategic. This suggests a lack of understanding underpinning Fred's behaviour, which is common amongst teachers (Truman et al., 2021).

When exploring Fred's perspective on this, two methods were used: storytelling and drama. These elicited conflicting responses. When I used a social story of trying to convince someone to play a game we like and they don't want to play, he responded 'Just you know...leave

them alone' (Fred PC, 1st February 2019). This could indicate that Fred does not have an awareness of what he does, owing to a reduced ability in 'subtle manipulation' (O'Nions et al., 2018). However, when using drama, and a scenario with which Fred was already familiar, he crafted a sophisticated response. He tried to figure out a way to allow me make an announcement on the airplane going to Jollywood (a fictional location we had encountered previously in drama), even though I was not the captain, and the teacher said that only the captain could make the announcements. In this context, he built on Claire's initial idea which was to wait until the teacher left the room, making it more elaborate by suggesting that one of the children would pretend they needed to talk to the teacher outside, and the announcement could then be made (Fred PC, 15th February 2019). Fred engaged more easily when a drama story with which he was familiar was used. This could be because the focus was on him as the respected leader (O'Nions et al., 2018) who has been invited to help solve a problem. In addition, the enacted and embodied drama experience was explicit and concrete, involving physicalising and role in contrast to the social story.

In drama, Fred was not observed using social strategies to achieve a desired outcome. When he first started and if his ideas were not taken on board, he would move to the door and threaten to leave, but always remained and re-engaged momentarily (SD notes, 2016-2018). This could be due to the strong social stimulus and motivator of the drama story for him (White et al., 2007). Over time, this appears to have improved as Fred understood the drama structure, figures of authority (Baron-Cohen, 2008) and environment, and that he could not control the collaborative unfolding narrative (DT1, 11th May 2019). Significantly, the drama data record no evidence of manipulative behaviours but refer to an understanding of Fred as trying to control his environment so he does not have to face his fear of what might happen ('will the bad guys win'), a perspective which aligns more closely with O'Nions & Eaton's (2020) socially strategic behaviours. His socially strategic behaviour in school and home appears linked to his need to control his environment to supress a fear of the unknown (Christie et al., 2012; O'Nions et al., 2018). This impacts on his social interactions with peers, selecting peers he feels will meet his expectations and follow his lead (Bottema-Beutel et al., 2019). When peers do something which is not in keeping with his plans, he moves away and does not re-join them. While socially strategic behaviour was not evidenced in drama, the data demonstrate that for most the time Fred was able to compromise both in and out-of-role, which was not generalised to other settings. Several factors were identified as being significant here and are discussed below.

6.3.2 Language

The language Fred used when trying to achieve a desired outcome could be categorised as threatening, narrating events to direct others and dominating conversations (O'Nions et al., 2018).

This section explores Fred's language for these purposes across all settings, however it is important to note that data demonstrate examples of Fred regularly using language for other purposes such as humorous exchanges and asking questions without attempting to dominate. The major factor at play appears to be Fred's expectation for the interaction, which is explored later in the section.

6.3.2.1 Threatening Language

Data suggest the use of threatening language was linked to Fred wanting to achieve a desired outcome (Christie et al., 2012). At home, he was observed using threatening language, for example, 'I'm going to get evil again' (Field notes, 18th April 2018) to achieve a desired outcome on four occasions, and negative language such as 'I hate you' on eight occasions (Field notes, April & August 2018). For example, when playing with David on the trampoline and discussing tigers and their ability to camouflage. David disagreed with Fred, and the second time he disagreed Fred said 'I'm going to get evil again' (Field notes, 18th April 2018). Other language observed included 'stop or I'll hit you' and 'be quiet or I'll kill you' (Field notes, April & August 2018), which was directed at peers, Claire and his mother. When discussing this with Fred's mum, she commented that she would usually pre-empt when he is starting to feel frustrated as she would 'get the warning vibes' and try to 'steer things in a different direction' (Mum PC, 1st February 2019), in keeping with accommodations made by others to appease him (O'Nions & Eaton, 2020) which is explored in section 8.8.1.3. In drama, threatening language was observed on four occasions towards adults, and included language such as 'Don't make me pull your hair' and 'Shut up' (SD notes, 18th March 2017). This occurred when Fred wanted the leadership role another child had, and he struggled to accept it. Negative or threatening language was not observed towards peers or adults in the school setting, however, Fred's teacher commented that 'he used to try to "walk over" the "softer" SNAs, you know be horrible to them until he was told not to be, and then he stopped' (Teacher PC, 6th November 2018). Being asked to stop by his teacher, a figure of authority in his eyes, could explain why he complied. However, this concept of authority is not in keeping with the profile of PDA (O'Noins & Eaton, 2020), but it demonstrates his ability to systemize, in particular his understanding of social systems of hierarchy (Baron-Cohen, 2008). It also signals that he was aware of different boundaries and could adhere to them when they were clearly communicated and reinforced (O'Nions & Eaton, 2020). Other variables could be the emotional regulation Fred demonstrates in school which is discussed later, and his understanding of authority and not wanting to get in trouble (Baron-Cohen, 2008).

6.3.2.2 Monopolising Conversation

Monopolising conversations with adults and peers was identified by respondents in both the home and school settings, in keeping with the profile of children with PDA (O'Nions et al., 2016; Woods, 2020), but was rarely observed in drama. This was particularly pertinent when the topic was of interest to him (Mum Quest, March 2018; Teacher PC, 6th November 2018; Field notes April & August 2018). His aunt commented that if Fred is with people he is familiar with, and the conversation comes around to something he wanted to talk about, he would 'sometimes "take over" the discussion'. He does this with topics he is very knowledgeable about and will 'engage with the people in the room' to keep the conversation on this topic (Aunt Quest, May 2019). This is supported by his mother, who commented that if Fred is 'familiar with the topic or activity' he monopolises it (Mum PC, 4th March 2019). This was observed in the home setting on five occasions. For example, when Fred's Dad arrived home from work, and Fred wanted to tell him a story. Once he had finished and his sister started speaking, he continued his story, and this pattern was present whenever Claire tried to speak. Even when she asked Fred questions about his story he said, 'Enough questions from you Claire' (Field notes, 18th April 2018). In the school setting, his teacher commented that he 'loves to be in charge of the conversation', noting that he gets fixated on certain topics, however if he is told 'Ah no, we are not talking about that now', he will stop (Teacher PC, 6th November 2018). She added that he gets 'quite agitated if others don't listen to, or react "correctly" to what he is saying' (Teacher PC, 6th November 2018). While this was not directly observed by the researcher in the school setting, it is in keeping with Fred finding it difficult to cope when things do not play out as he imagined them, and his fear of the unknown causing anxiety. When Fred monopolises a conversation, he can control the direction of it, enabling him to feel in control. This was rarely recorded in drama, with drama teachers acknowledging that he has a propensity and a preference to lead and control, but it appears related to his self-esteem and a desire to receive respect, acknowledgement and positive feedback on his knowledge and ideas (SD notes, 2016-2018). The challenge one drama teacher identified was how to mediate that need so that Fred remains engaged and open to learning and grows in understanding of the 'give and take of social interaction' (DT1, 11th May 2019). The data report that where this is balanced by a teacher intervention or another child he respects, he can accept it quite easily and give way to others (SD notes, 2016-2018). A drama unit was designed to experientially explore this issue as Fred was not alone in demonstrating socially strategic behaviours (see Tantrum Valley, Chapter 4, section 4.6.2). One drama teacher commented that:

The key is in how we use our voices and body language when responding to Fred. We need to show him that his contribution is valid, and we appreciate and like his idea, and then ask the others what they think of his idea. That has worked to get others involved and make sure it's a conversation, and it also makes sure that Fred feels valued and recognised. If the

others don't see things the way he does, that can be even better, as it brings the real world of discussion and argument into the conversation and meaningfully fosters social interaction. (DT1, 11th May 2019)

This is an area in which Fred has made improvements in the previous 6 months, with his mother stating he is 'more accepting and receptive to hearing new ideas' (Mum PC, 4th March 2019) and a family friend commenting 'In the last six months I am far less afraid of what I could say around Fred, as he doesn't get as upset as he used to' (Emily PC, 20th April 2018). This could be accounted for by Fred's overall development, but his mother attributed this improvement to his participation in drama, noting that 'This [drama] has changed everything for Fred. Nothing else we've tried has ever worked. He never wants to go back, but he'd go mad if he missed drama. If I'm busy and I can't bring him, he will go with his aunt or anyone so he doesn't miss it. It'd ruin his week you know, he loves it that much. His Dad and me see huge changes in him since he started. ...' (Audio recording, parents' PC, 18th April 2016).

6.3.2.3 Commanding Style to Assert Control

In the home setting, Fred narrated situations to assert control, in both play and non-play contexts. The language used when Fred was narrating was a 'commanding style', for example, when the family and I were in the park looking for somewhere to have a picnic. Fred came across some tree stumps and said 'I sit here, Claire here and Elaine here'. When Claire challenged why she couldn't sit on the stump chosen for me, he authoritatively announced 'just because you can't' (Field notes, 11th August 2018). When I intervened, Fred did not verbally object, however, he sighed and his facial expression communicated that he was not happy. Another example was Fred placing a toy spider on me when I was 'doing her work' as he called it [recording field notes]. When I noticed and responded he said 'I wanted you not to notice', and left the room in frustration. When he returned a moment later, he gave me the instruction of 'Do not look' before placing the spider on my hand (Field notes, 13th August 2018). These examples support the hypothesis that Fred feels more at ease and comfortable when he knows what will happen next and when I followed his instructions acting surprised and frightened of the spider, he laughed and was happy. Narrating to assert control outside of play contexts was not witnessed in school, however the teacher did observe that Fred is 'quite domineering, it's strange, like he is such a pleasant child' (Teacher PC, 6th November 2018), and spoke about his need to control games and interactions with his peers. This supports the hypothesis that Fred is not manipulative but using strategies to help counteract a fear of the unknown.

6.3.3 Striving for Perfection

In the home and school settings, Fred appeared to strive for perfection, however this was not identified in drama. According to respondents, this mainly occurred when completing written tasks and answering questions. During observations, when Fred was completing an art task for example, he sought approval from his teacher after she had praised another child's work, saying, 'mine is terrible' and asking her, 'What about mine?' After the teacher had praised Fred, he commented that his work was 'very scribbly' (Field notes, 18th April 2018). Seeking approval when other peers were praised was recorded on three occasions, and conflicts with the literature on PDA which claims that praise can be a trigger for anxiety (O'Nions et al., 2018). However, in Fred's case he sought approval to reassure himself and enhance his self-esteem (Harter, 2012; Mann et al., 2004), something also identified by his drama teachers. His teacher commented that 'he used to be really annoyed if he drew something and he would rub it out continuously because it didn't look perfect and he would get quite annoyed' (Teacher PC, 6th November 2018). Similarly, his mother commented on the same need for perfection, for example when his homework involving drawing and 'because they weren't perfect', he became annoyed (Mum PC, 1st February 2019). In contrast, in the drama setting, the research notes referred to drawing tasks on three occasions, with no reference to frustration or a desire for perceived perfection (SD Notes, 2016-2018). When probed, the drama teachers felt that a non-competitive environment was consciously fostered, and effusive or 'over the top' praise kept to a minimum so that a more collaborative team spirit was established: 'In the kind of non-competitive environment we try to create, everyone's effort is considered and valued as contributing to our overall storyline, and we go for consensus usually' (DT1, 10th December 2019). Fred's teacher feels that he has improved in this area in the past year, and that now 'he will draw whatever you ask him to draw and he is happy enough with what he has done' (Teacher PC, 6th November 2018).

This perceived striving for perfection was also observed during oral tasks, with his Mum noting that he doesn't like not knowing how to do something. She referred to his language development stating 'he never mispronounced a word, and I think that's how he learns, I think he has to get it right in here first [pointing at her head] and then he will attempt it' (Mum PC, 1st February 2019). The only instance of this observed in drama was when Fred asked an adult for support when creating a character profile. It was noted that Fred 'asked for help writing his character's name but became very aggravated when I could not pronounce it correctly' (SD notes, 11th November 2017).

Fred's perceived need for perfection is in keeping with the hypothesis that when things do not occur as he imagined them in his head, he can become anxious. However, the data suggest that his socially strategic behaviours are not evident uniformly in all settings. There was less evidence of them in drama which may relate to an understanding of his condition, and subsequent

pedagogical responses using language and nurturing a non-competitive environment: 'I guess in Fred's words, we all work together to defeat the bad guys and not against one another' (DT1, 11th May 2019).

To conclude, while Fred's behaviours were often perceived as manipulative, they may best be described as socially strategic, as he attempts to control social situations, including play and conversations, to ease his anxieties around the unknown. The next section explores Fred's imagination, and how he asserts control in sociodramatic play, and when working in role.

6.4 Imagination

Fred used imagination frequently and with ease in all settings, using role and sociodramatic play to engage peers. When asked to rate his imagination he placed his thumb in the middle, saying 'it's almost a thumbs up but not' (Fred PC, 1st February 2019). Similarly, Fred's mum rated him a three out of five, claiming 'he has always had a good imagination' (Mum PC, 15th February 2019). This was supported by recordings she shared with me from 2016, 2017, 2018 and 2019 of Fred discussing fictional worlds and stories he created, such as Rainbow Planet and engaging in small world play, such as 'Pets' (Home Audio Recordings, 2016-2018). Fred's aunt stated that she sees him using his imagination 'sometimes' (Aunt Quest, May 2019). His teacher gave him the lowest rating of two out of five, commenting that he only uses his imagination 'a little bit' and 'sometimes' (Teacher PC, 6th November 2018; Teacher Quest March 2018), as did his SNA (SNA Quest, March 2018). In contrast, the drama teachers reported that Fred exhibited excellent imagination, recording on his third session that 'He has a good imagination' (SD notes, 24th September 2016). He was rated as three out of five when he started, rising to four out of five by 2018 (SDAT records). Fred's teacher giving him the lowest rating could be due to the environment she seems him playing in, but also be due to her understanding of imagination as relating to levels of original thought present in his play, which is common amongst teachers (Cremin, 1998; Gallas, 2003; Toivanen et al., 2013).

This section focuses on the impact of drama on Fred's imagination, and how he uses reenactment and elements of re-enactment, when playing alone, with others, and in the drama context. It also explores Fred's enhanced ability to compromise in role in drama and his interest in adopting villain roles.

6.4.1 Impact of Being in Role on Fred's Imagination

The drama sessions engaged and developed Fred's imagination, which was already active according to his mother, however the drama 'taps into something for him that he just really benefits from' (Mum PC, 1st February 2018).

Data suggest that from the outset, Fred relived the drama stories and content outside of the drama space (there are four references to this in the notes in the first six months). He brought pictures he drew at home based on the drama story to class, sketching out 'the villains' in The Peacemakers drama (SD notes, 14th January 2017). On another occasion he 'came in with a notebook in his hand, which turned out to contain ideas he had for the drama' (SD notes, 10th December 2016) which he discussed enthusiastically with peers. The notes record Fred's mum commenting that drama provided a positive outlet for his imagination and 'he loves the drama and counts the sleeps until it's drama day' (SD notes, 8th October 2016).

The phenomenon of bringing in characters from TV programmes and others crafted entirely from his imagination, particularly during the first six months, suggests Fred may have used this opportunity as a way of grappling and coping with the unknown fictional world, processing and developing what took place, and asserting control by bringing in characters he created at home. The fact that there is little evidence of this occurring later could be indicative of greater understanding, reduced anxiety and increased comfort levels in the drama environment.

While the use of role and fantasy is common for children with PDA (Newson et al., 2003; Fidler & Christie, 2019), the data report that Fred does not have issues differentiating fiction from reality (rated 4 and 5 on SDAT by teachers and parents), nor does he appear to have lost his sense of identity through the use of role play (Cat, 2019; Newson et al., 2003). While re-enactment is common for children with PDA (Christie et al., 2012; O'Nions et al., 2018), and Fred's use of this will be explored later, he also appeared to improvise, using original characters and stories, which were not pre-scripted (Field notes, April & August 2018, SD notes, 2016-2018). In other settings, the data demonstrate that Fred used role within fictional worlds, predominantly in sociodramatic play, in unfacilitated contexts as a way of engaging with peers, while maintaining control of the situation by leading the narrative and directing others. While Fred used some fictional scenarios repeatedly, he created a number of different worlds during observation days, demonstrating his ability to engage his imagination and move away from his specific area of interest.

6.4.1.1 Fred in Role in Social Drama

Engaging in role is essential to social drama sessions (see Chapter Four), and the data demonstrate that Fred did this with ease, commitment and enjoyment, from the beginning. When in role, he demonstrated higher levels of commitment, belief, interest and engaged more easily with peers than out-of-role (such as news time) (Peter, 2009). He demonstrated an increased ability to compromise when in role in drama, in comparison to in or out-of-role interactions in home or school settings. His commitment to role was noted frequently, with one example highlighting his level of belief and engagement when the students were working in role as 'undercover cops' and

were told they had to keep their roles a secret. After the session Fred said to his mother 'he couldn't tell her what we had done in the drama because it was top secret' (SD notes, 8th October 2016).

Fred enjoyed taking on roles and interacting with both TiR (teacher in role) and SiR (students in role). He improvised in these interactions appropriately demonstrating good social skills (SD Notes, 2016-18). The data demonstrate that he took on roles with ease, adapting his voice appropriately to each situation, for example, 'when going through security he put on a different voice' (SD notes, 18th March 2017), and giving his characters a name, such as 'Captain Fudge' (SD notes, 17th December 2016). He embodied roles physically, demonstrated belief in, and commitment to role, with his ability to stay in role and to suspend disbelief being described as 'unquestionable' (LP, 7th January 2017).

Fred expressed his enjoyment of being in role in all settings. When asked if he thought he was good at pretending to be someone else and being in character he emphatically responded, 'yes' and when asked what his favourite thing about being in character is, he said 'I think it might be, I like what I am' (Fred, PC, 1st February 2019). This supports the literature surrounding child choice in relation to enjoyment and participation for children with ASD (Eversole et al., 2016). His ability to be who he wants, and interact in role was supported by his sister, as when we discussed being characters, she said 'character "anything" you could call Fred', observing he is so good at taking on roles he could be any character (Claire PC, 1st February 2018). Fred's love of, and commitment to role, was evidenced in both facilitated and unfacilitated environments which is discussed below.

6.4.1.2 Facilitated Interactions with Peers in Role

The social drama model (SD) focuses on development and use of social skills, with multiple exemplars (Stokes & Baer, 1977; Stokes & Osnes, 1989), focusing on peer interactions and developing social skills (O'Sullivan, 2015a). In comparison to home and school settings, in drama, Fred did not attempt to monopolise the story, and interacted with all peers. The power of the drama story as a social motivator was apparent, and the environment may also be a factor at play here (Fidler & Christie, 2019; White et al., 2007).

Fred demonstrated enhanced levels of interactions with his peers when in role, in comparison to when out-of-role, with a 2:1 ratio of positive interactions noted when in role in comparison to interacting with his peers out-of-role (SD notes, 2016-2018), and this is an area in which Fred made improvements over his time attending drama (DT2, 10th August 2021). The data indicate high levels of participation and interaction from Fred when working in role (n=68), regardless of the theme or story being explored. Examples include Fred in role as an elf in Santa's workshop, where he 'interacted well with Paul as Santa and Sophie as another elf' (SD notes, 19th

November 2016). He initiated interaction with other children in role, for example, when he wanted to 'share his contribution with Andrew "Andrew! I kidnap children!" (SD notes, 28th January 2017). He worked well with others in role when completing tasks such as creating a hideout as part of a pair activity (SD Notes, 27th January 2018) and building a spaceship in small groups (SD notes, 16th June 2018). As noted, in the school setting Fred only interacted in role with two peers of his choosing, however this was not the case in drama, where in role Fred did not refuse to engage with any peers, regardless of the type of interactions he demonstrated with them out-of-role, such as during news time. This demonstrates that being in role is a strong social motivator for him. The environment could also be a variable, as White et al. (2007) propose that role play and a fun, supportive environment can encourage engagement. This may account for why Fred did not attempt to exert control in drama, as being in an environment which is sensitive and responsive reduces anxiety, and as a result the need for control (Fidler & Christie, 2019). The evidence supports that Fred understood someone else was leading the narrative, but it built on his and his peers' ideas, and in relinquishing control, he did not appear to experience anxiety about it being different to how he may have imagined it. In addition, he respects authority as identified by all respondents, and his understanding of the lead teacher's role in narrating the collaboratively unfolding story, could also be a factor here (Baron-Cohen, 2008). However, this doesn't fully concur with the PDA literature (Newson et al., 2003). The degree and impact of facilitation in the drama sessions emerged as significant in his social interactions in and out-of-role.

6.4.1.3 Un-facilitated Interactions in Role

Fred used role and sociodramatic play to engage with peers in both school and home settings, but it was not facilitated by adults. In both he led the direction of play, and assumed the role of leader (O'Nions et al., 2018). One noted difference was in the selection of peers and topics explored through play. In school, Fred only interacted in role with John and Edward, however he engaged in topics that were not his in areas of interest. His SNA, Aoife, shared that he used to always play with dinosaurs, but was surprised that 'he plays cars with Edward now' (SNA PC, 18th April 2018). In contrast, at home he engaged with all peers, but only if the topic was selected by him, or of interest to him. This suggests in the school setting his peers were the social motivator, however the topic of play was the motivator at home.

In school, 11 occasions were observed where unfacilitated socio-dramatic and role-play were initiated and led by Fred. During one example, as the children were running and jumping in the 'soft play' area, Fred found a blanket and declared it his 'cape' giving himself a fictional name and powers. He then explained to Edward that certain equipment was their armour, and the boys ran up to each other, bumping into each other as if they had armour protecting them. From this, Fred developed a fictional game, where the cape got buried in the 'caves' [hidden in the

equipment] and had to be saved. Edward followed Fred's lead engaging in a 'battle' (running and bumping into each other with their 'armours') (Field notes, 18th April 2018). This socio-dramatic play demonstrated him engaging with Smilansky & Shefatya's (1990) six criteria for socio dramatic play. This in-role interaction continued when the boys were putting their shoes back on, with Fred describing an evil character who had 'pointy ears and green eyes', and then claiming 'I am Infinity Fred' (Field notes, 18th April 2018). This reveals his strong imagination in an unfacilitated setting, and his ability to use sociodramatic play in a social context in a reciprocal manner (Howes & Matheson, 1992).

The desire to interact with peers through play, specifically in-role, was evidenced when Edward was playing alone, making cars race with no role or character element that could be identified. Fred joined him and introduced the car he chose to play with to the other cars, using 'lots of character voices' saying 'My name is Golden Car, nice to meet you'. He then developed this story further by asking the other car 'Are you fast?' and asking Edward 'to pretend he' [referring to the car] had no idea that there is 'a monster truck around them' (Field notes, 18th April 2018). In this instance, Fred incorporated role through small world sociodramatic play to engage with Edward, leading the direction of play (Smilansky & Shefatya, 1990). The question of re-enactment is raised, as in the Disney film 'Cars' where cars have personalities and interact with each other, however on this occasion Fred commented 'It's an imaginary car that I made up', and invented characteristics about the car e.g. how fast it can go, and 'the car can kill you' (Field notes, 18th April 2018), suggesting original thought was also present (Mikhailova, 2019). In both examples, he controlled the interactions, affirming his teacher's observation that when he is playing he 'would want to tell who was who and what was what and what they had to say and what they had to do' (Teacher PC, 6th November 2018). This was also evident in the home setting, for example, when Claire and two girls were playing. He went upstairs to find them, and they asked if he would like to play spies, which he did and proceeded to lead the activity. Throughout he was very animated and excited, making jokes, running and hiding. He took on the role of the leader of the spies, keeping watch on the 'adults' [downstairs] and advising the others on what they should do, and narrating such as 'they are coming, I heard them' (Field notes, 20th April 2018). The game which was similar to many played in SD enabled Fred to interact with the girls in a way he enjoyed and felt in control of, in keeping with Mum's comments that Fred usually takes on the authoritarian role in sociodramatic play with his peers (Mum PC, 4th March 2019).

Fred was observed engaging in sociodramatic play with his sister on the trampoline (n=18) about his area of interest, dinosaurs. These interactions were always led, directed, and narrated by Fred who would consistently take on the role of the 'bad guy'. Each game followed the same pattern, with slight variations in the actual events. He was sometimes challenged by his sister for example, when she asked to be the bad guy. Fred initially responded, 'Ok yes, Claire's the bad guy', however, when discussing what he could be in the game, he became visibly upset

stating 'I don't know, I don't know' and 'all I am used to being is the bad guy'. Claire continued to make suggestions, but at the end of the interaction Fred said 'No, ah listen, I want to be the bad guy, ok?' (Field Notes, 11th August 2018), to which Claire duly acquiesced, in keeping with routine accommodations made to appease Fred (Mum PC, 4th March 2019). His awareness of wanting the authoritarian role was observed, as he used language such as 'I'm the boss' and 'I am the leader' in the home setting (Field Notes, April & August 2018). Fred taking on the leader, was only evidenced on one occasion in the drama setting when he presented as anxious 'pulling a chair beside ... [lead teacher] and tried to sit on her lap. He told her that he wished "we'd stop making scary stories". He then took on a role alongside TiR as one of the aliens, who were unknown and somewhat menacing characters' (SD notes, 4th March 2017). This level of authority appeared to give him comfort and reassurance, as he was in the villain role and did not have to react to these characters, but instead could control the narrative. This is further discussed below.

Observational data demonstrate that the majority of Fred's interactions with peers was through the use of role in both home and school settings (n=33), with out-of-role interactions being functional (asking/answering questions) or involving fleeting humorous comments. While the use of role is in keeping with characteristics of PDA, Fred's ability to use a variety of fictional worlds demonstrates his active imagination and flexibility. He engaged with sociodramatic play with ease, using the drama elements of role, character and tension to create fictional worlds, which reflected appropriate social skills according to the contexts. Fred appeared to generalise these skills from the drama setting to other environments, as many of the approaches and scenarios he repeated such as the monster truck game and animated props, had been experienced in drama. The data suggest that sociodramatic play and role are vital components of Fred's social and communication skill set, and central to initiating and supporting interactions with peers, highlighting his desire for engagement and friendship (Mendelson et al., 2016).

6.4.1.4 Compromising in Role

In drama Fred demonstrated an ability to negotiate and compromise in role, however these skills did not generalise to in-role interactions at home or school, perhaps owing to the structure, environment, or the level of facilitation of the fictional world in the drama setting. In drama, he regularly shared ideas for the drama story and 'added his own input to the narrative' (SD notes, 3rd December 2016): 'I think my imagination told me that the bad guys are called Chuckle and Cheese. They are bad people. They trick on people' (SD notes, 19th November 2016). The data indicate that sometimes Fred's ideas were incorporated into the drama story (n=4), such as Captain Fudge (SD notes, 14th January 2017), however when they were not, he adapted well to this (n=6). This is in contrast to the home setting where on multiple occasions whilst playing on the trampoline Fred was narrating the story, and when Claire and I attempted to adapt it or change

the course of the narrative he would respond firmly: 'No that's not what happened' (Field notes, 11th August 2018), allowing only minor changes to characters such as our character's name. The contrast with the drama setting could be due to the extended 'living through' (Davis, 2014) experience of SD stories which develop over weeks and months, acting as a potential safety valve whereby actions are not a direct reflection of ourselves and our achievements in the moment due to taking on a role (Foley Meeker, 1990). Fred's competitiveness is explored later.

As well as accepting when his ideas were not explicitly incorporated, Fred also compromised well when working in role and collaboratively developing the drama. On another occasion, a peer wanted to be Chicken Underwear, Fred's character, and 'instead of protesting and getting angry Fred said that there could be two Chicken Underwears in the story' (SD notes, 14th January 2017). These behaviours were evident from Fred's first term attending SD so it appears he was able to compromise when working in-role from the outset when the conditions supported it. This is in contrast to parent and teacher comments, and observations made in the school and home settings, where Fred struggled to compromise in-role during sociodramatic play, needing to exert control to ease his anxieties (Stuart et al., 2020). In school, John and Edward were not observed questioning the direction of Fred's play, so he never needed to compromise in this regard, however when a disagreement occurred, in or out-of-role, Fred would move away, tell an adult and would not re-join them in play (Teacher PC, 6th November 2018; Field notes, 18th April 2018). Similarly, at home, Claire was observed relinquishing her ideas to enable Fred to do as he wished on 10 occasions, with his Mum commenting 'he persists until he gets his way' (Mum PC, 13th August 2018).

While some structures are in place which should support generalisability of in-role compromise to other settings, such as multiple exemplars, the supportive environment, working with similar peers, and child voice and choice (Koegel & Koegel, 2006; Siller & Sigman, 2002; Stokes & Baer, 1977; White et al., 2010), Fred's ability to compromise in-role did not generalise from the drama to other settings. The main variable at play here appears to be the structured facilitation of the session. The development of the drama story relies on group work, negotiation and compromise. The safe space of being in-role, and 'in the shoes of another' (Heathcote & Bolton, 1999), where the *character* is compromising, and not Fred himself, could also be factors, as there is no pressure on him (Foley Meeker, 1990). Negotiation and compromise is expected in drama and its internal logic demands it (see section 6.6.1) if the drama is to succeed, which the children come to understand by viscerally 'living through' the experiences (a form of embodied cognition), and when issues arise, they are discussed and worked through. In comparison, at home allowances are made to ensure that Fred does not have to negotiate or compromise (O'Nions & Eaton, 2020), and in school the focus is to 'move on' from the situation as quickly as possible which removes any possibility of learning to deal with challenging social situations. Fred's mother commented on this aspect of drama in reference to a falling out Fred had with peers,

identifying that in drama they would 'work through it', to learn that 'when you have a fight or disagreement you can move on from it' (Mum PC, 4th March 2019). The literature highlights the importance of working through issues for young people with PDA (Dundon, 2021) which seems only to have occurred in drama.

6.4.1.5 Villain Roles

Data indicate that Fred's preferred role was that of villain or 'bad guy' (Fred PC, 15th February 2019). It is hypothesised that this was to alleviate a fear of the unknown and assert a level of control. In the home setting this was observed during trampoline games, where he took on the role of the destructive dinosaur or evil zombie, and in school as the 'monster' when chasing Paul (Field notes, April & August 2018). While this was not as apparent in drama, he did introduce characters and change their characteristics to enable him to feel a level of control, without taking over the drama story.

A distinguishing feature when Fred took on a role was the change in his voice. Audio recordings demonstrate a distinct change in tone and pitch when taking on a role (Audio Recording 2017 & 2019). This was observed in all villain roles Fred took on, across all settings. His mum shared that when Fred was four, he dressed up as the Emperor from Star Wars in a dressing gown, and sat in role, using a deep voice, over a significant period of time for a child of this age. When in-role he spoke to members of his family in character voice (Mum PC, 18th April 2018). This was two years prior to Fred starting drama, highlighting that roles, in particular villain roles, were a prominent feature of his play before starting SD. Fred in role as the 'baddie' was frequently noted: 'he loves playing a villain part' (SD notes, 7th January 2017). Data demonstrate that he not only took on villain roles but gave good characters dark or evil characteristics. An example was Clown Underwear and Chicken Underwear [seemingly based on the well-known character Captain Underpants], who initially were not dark characters, however they developed into dark roles with Fred stating 'Clown Underwear escaped from jail and was a children kidnapper' and 'Captain Underwear is the enemy-he is funny and powerful' (SD notes, 28th January 2017). In contrast however, he also turned evil characters good, for example, 'further into the drama Fred turned Izzy Wizzy into a goodie' (SD notes, 25th February 2017). Introducing villains based on characters known to Fred may appear contradictory to self-regulating anxiety, however, the notes state; 'Fred came up with his own character "Twirly Woo". He does this a lot, and it seems to be a way of managing any nervousness he has with the fictional world' (SD notes, 1st April 2017). Fred often chose to 'work with TiR as a baddie' (SD notes, 20th January 2018, and it could be hypothesised that by introducing villains into the story he was diminishing the element/fear of the unknown, allowing him to feel more in control, and dispelling potential anxiety (O'Nions & Eaton, 2020). Fred actively worked towards ensuring the ending is 'always

happy, and the bad guys have been defeated' (Fred PC, 1st February 2019). Playing with archetypal good and evil characters in a structured facilitated environment appealed to Fred and appeared to satisfy his need to explore dimensions of good and evil where there are no absolutes. After a Jungian fashion (2008), this appears to be an empowering experience for Fred, and he is willing to forego his controlling impulses in what he experiences as a creative and safe space to explore life and nature. The evidence appears to suggest that while drama and sociodramatic play offered him this possibility in all settings, the facilitated structure of the SD model lent itself in particular to this form of experiential learning.

6.4.2 Summary

When exploring the impact of the social drama on Fred's imagination, his mum commented 'I think he has always had a good imagination, I think it is probably more focused now' and having 'seen how you guys interact [referring to outdoor games and the interviews using drama] I can see where he would have gotten a lot from that kind of interaction' (Mum PC, 15th February 2019). Observational data demonstrate that Fred used structural elements (e.g. characters, plot, and resolving tension) from the drama classes when interacting with peers, highlighting how he generalised elements from the drama experience, and applied them to play and social interactions in other parts of life. This was a theme that emerged in both case studies and is explored in the discussion chapter.

The data demonstrate that when in-role, the quantity and quality of Fred's interactions increased and improved across settings, however, the same cannot be said for his ability to compromise in role, which did not generalise from the drama setting to other environments. This could be due to the fact that in-role interactions were facilitated in drama, but not in other settings. In the home and school settings Fred was in control of events, whereas in drama he was a participant, potentially allowing him more energy to focus on interactions and social skills without the pressure of needing to be in control as discussed.

It is important to note that imagination does not only pertain to original ideas, but derivative ones also, in the manner in which Fred takes pre-existing storylines of interest to him and builds and develops them (Vygotsky, 1967; Weisberg, 1986). The fact that he was able to do this in drama, and not fixate on his ideas being replicated and incorporated exactly, suggested an ability to be flexible and open to new ideas and possibilities: a hall mark of the imagination. This development and growth in his imaginative capacity was also evidenced in discontinuing to bring his ideas to class and his willingness to go with the flow and direction of the drama with peers. This contrasts with his use of pre-existing characters and story lines in the home setting, where he used enactment, refusing to allow any deviation from his plan. His use of pre-existing characters could be linked to anxiety, which is considered next.

6.5 Anxiety

Prevalence rates of anxiety in people with ASD are between 40% to 50% (Jenkinson et al., 2020; South et al., 2017), and in those with PDA it is understood to be significantly higher (O'Nions et al., 2013). As discussed, Fred's anxiety is implicated in his controlling behaviours (Christie et al., 2012; Filder & Christie, 2019; Langton & Frederickson, 2016; O'Nions & Eaton, 2020; O'Nions et al., 2018; O'Nions et al., 2016; Stuart et al., 2020).

Anxiety was identified as an issue for Fred in both the home and school settings, with his teacher commenting that she would rate him as four out of five for levels of anxiety. She noted that anxiety has a large impact on his academic attainment in the school setting (Teacher PC, 6th November 2018). Also rating him as four out of five, his mother felt that his anxiety was largely around 'people and interacting' (Mum PC, 18th April 2018). Anxiety was rated at three or four out of five in the drama setting (DT2, 10th August 2021) however, Fred's perspective on his anxiety was not addressed explicitly, due to risk of consciousness raising (Patai, 1991).

Fred's mum commented when he is anxious, he will ask a lot more questions, and that generally he is 'a higher level of himself....he's just much more restless' than usual. He physically moves more, and uses 'stimming' to calm himself down (Mum PC, 15th February 2019). Stimming when anxious was only evidenced at home, for example, when the battery on his mum's phone died whilst watching a dinosaur video which appeared to calm him down while she got the charger (Field notes PC, 18th April 2018). Stimming when anxious was not observed in other settings, however he did appear to stim to self-regulate when experiencing other heightened emotions such as excitement in school (Field notes, April 2018). This evidences a level of self-awareness of his emotions and what helps him in anxious moments, which is identified as challenging for those with PDA (O'Nions et al., 2016).

6.5.1 Fear of the Unknown

'Fear of the unknown' was identified as a trigger for Fred's anxiety in all settings, in keeping with literature in the area (Christie et al., 2012; Stuart et al., 2020). However, this requires some qualification as in Fred's case, it was events that he knew were upcoming which caused anxiety. He appeared to cope well when plans changed which is not uncommon for children with PDA (Fisher et al., 2019), such as when a substitute teacher was in his class, going to the park instead of their usual activities, and when a new Speech and Language Therapist (SLT) came to his home. He coped well, with his mother commenting that 'he likes the novelty of new people' (Field notes, 18th April 2018). She commented that often 'it wouldn't phase him' rating him as a positive four out of five (Mum PC, 18th April 2018), the same rating as his drama teachers with a similar rationale. His teacher rated him as five out of five in terms of being able to cope with change

(Teacher PC, 6th November 2018), but Fred rated himself as three out of five when assessing how he felt when a plan changed suddenly.

His teacher identified birthdays and other events, such as Halloween and Christmas, as anxiety triggers. She believed that these impending events 'rock his confidence' (Teacher PC, 6th November 2018). When asked why his birthday for example, may cause anxiety, she felt that 'he thought when he was eight everything was going to change like the whole life he lived was completely different 'cos he would be eight' (Teacher PC, 6th November 2018). Fear of the unknown, or things not playing out as he imagined them led to anxiety both at home and in school. His mum gave an example of a trip to the zoo to see a dinosaur exhibit, his area of special interest. He was very excited about attending, but before they went in, he decided he didn't want to go and had a 'meltdown' (Mum PC, 15th February 2019). She was surprised at his reaction, but upon reflection felt it was the 'fear of the unknown', as there was a level of expectation, pressure and anxiety about whether the experience would live up to his high standards and the expectations he built up around it. A fear of being disappointed may be connected to the perfection he strives for (as discussed in section 6.3.3). Mum felt that if he had had the opportunity to view what it looked like beforehand it may have prevented this anxiety related meltdown (Mum PC, 1st February 2018) (Truman, 2021). While advance warning may be a supportive strategy for people who fear the unknown, in Fred's case the data suggest that if he has time to consider the situation and imagine what it might be like, it can be more stressful for him worrying that it may not play out as he imagined it. This trigger was pronounced in both home and school settings and identified albeit infrequently (n=5) in drama in relation to some drama stories and TiR interactions.

6.5.2 Impact of Anxiety on Fred's Life

In school Fred's levels of anxiety impacted his ability to achieve academically. Specifically, in relation to problem solving, concentration and levels of engagement. Problem solving demonstrated large discrepancies depending on levels of anxiety, with his teacher noting 'sometimes he's very good at it and then sometimes it's like "I don't know where to sit now 'cos ... [another child] sat in my chair" (Teacher PC, 6th November 2018). Similarly, his skills for processing information and answering questions depend on both his mood and concentration levels (Teacher PC, 6th November 2018), and his anxiety impacts these the most. Levels of participation and engagement were also affected, with his teacher concluding: 'it's mad...it effects his entire way' (Teacher PC, 6th November 2018). While stakeholders in the home setting did not specifically mention anxiety as impacting on cognitive functioning or concentration, his mum spoke about levels of distraction, which could be aligned to concentration. She gave the examples of Fred getting ready for school in the mornings and when completing homework, as she needs to remind him to keep going (Mum PC, 1st February 2019). In both examples, she noted

that Fred always apologises and is 'nearly annoyed at himself' and can get anxious and defensive. This points towards his 'striving for perfection' possibly feeling disappointed that he let his standards down by allowing himself to become distracted, which induces further anxiety.

Expressions of anxiety were much less evident in drama, possibly owing to an ability to comfortably relinquish a degree of control in this space as hypothesised earlier. No evidence was found that this ability however generalised to settings outside of drama. As discussed, the evidence suggests that the facilitated structure and explicitly collaborative environment may have contributed to Fred relaxing and being comfortable in that space with drama teachers and peers. He appears to manage his anxiety internally, unless he is in what he considers a safe space with a trusting adult. He demonstrated an ability to talk through what is worrying him with those with whom he had built a trusting relationship, and this is explored below.

6.6 Expression of Emotion

This section explores how Fred expressed, regulated, and supressed emotions in different environments. The literature theorises that young people with ASD have difficulty in the areas of emotional competence and expressing emotion (Goodson, 2018; Reyes et al., 2020), claiming that children with PDA particularly struggle with emotion regulation (O'Nions et al., 2014). Christie et al. (2012) claim that children with PDA are often 'emotionally exhausted from always being on watch for the next demand' (39). The link between emotion regulation, anxiety and social skills is widely recognised (Conner et al., 2020; Stuart et al., 2020) and will be explored for Fred in all settings. The section focuses particularly on expressing emotions and feelings such as frustration and upset as these evoked the biggest response and reaction according to respondents in the home and school settings. It's important to note that Fred was also observed expressing other feelings and emotions in these settings including affection, excitement, pride, and enjoyment. For example, hugging his mum, watching dinosaur videos: 'I am really enjoying this', and playing in the park with his Dad and sister: 'This is so fun, I love this' (Field notes, April & August 2018). His facial expressions changed when he smiled, and he loved slapstick humour, making jokes and laughing. Fred demonstrated pride when he completed school work and showed it to his teacher (Field notes, April & August 2018). This supports both a selfconscious expression of emotion relating to a positive perception of self, but also pride as a social emotion, in terms of social comparisons of how his mainstream teacher and peers perceived him (van Osch et al., 2017). While Fred was observed expressing a range of joyful emotions, respondents focused mainly on his expression of frustration and upset, possibly due to the fact that he struggled with these most as has been reported for children with PDA (Reyes et al., 2020).

6.6.1 Emotional Competence

Fred's struggle with anger, frustration and upset often manifested through use of threatening language (Christie et al., 2012) or physically removing himself from peers. Immediately after such outbursts in the home and drama settings, Fred would typically re-join his peers. However this was not the case in school, where Fred would rarely re-join the group (Teacher Quest, March 2018; Teacher PC 6th November 2018). In the drama setting his ability to re-join the group may be owing to the impact of the social stimulus of the drama and in the home setting it could be due to peers making adaptations to follow his lead, therefore when he re-joined the group at home, he could assert control and peers would do as he wished.

An example of Fred struggling to express his emotions was when playing football in the park, and Claire saved a goal to which Fred said 'I hate you'. His frustration was further depicted in his facial expression showing a deep scowl, with folded arms, however he continued to play (Field notes, 11th August 2018). At home, his frustration often presented as confrontational, such as when playing on an electronic device with a visiting peer. When issues arose, such as David wanting to go twice in a row, Fred used language such as 'You are not my friend' and 'I hate you' (Field notes, 18th April 2018). Notably, in both examples Fred continued to engage in the activity.

Confrontation was evidenced in the drama setting on occasion, such as during news time: 'frowning at peers' (SD notes, 22nd October 2017), 'thumbs down and growled' (SD notes, 15th October 2016) and name calling: 'Fred laughed at Felix and said "You're a baby Felix"' (SD notes, 18th February 2017). Only two instances were noted during a drama story, when a peer was given the role Fred wanted. Liam had been given the role of Air Steward on the plane making announcements, and Fred shouted 'Liam is a silly captain. He's not as good as me' (SD notes, 25th March 2017). His body language and facial expression depicted that he was unhappy but he remained seated on the 'plane' and quickly overcame his dissatisfaction of not being chosen, immersing himself in the unfolding storyline. As discussed previously, if Fred was unhappy with a decision made in drama, he would move to the door and threaten to leave, but always remain and re-join the group quickly (SD notes, 2016-2018). Continuing to engage with peers could be owing to the strong social stimulus/motivator of the drama for him (Stokes & Baer, 1977), and his interest in the stories. Emotional memory may be implicated here, as children with ASD have an ability to recall precise details of previous experiences, and where these are negative or stressful, they are likely to 'bolt' or have a meltdown (Prizant, 2015). But where they are positive, they are likely to re-engage. Similarly, as the drama notes record, the accepting and nonjudgemental nature of the environment where children routinely expressed themselves in different ways, including venting frustration, and the pedagogical focus on collaborative group work, could be enabling factors (SD notes, 2016-2018). In drama Fred and his peers worked collaboratively

to develop the story and were able to see and feel that success in the mission depended on cooperation from all team members: a successful strategy for children with PDA (Fidler & Christie, 2019). The pedagogical 'logic' or internal coherence of the drama experience appeared to prove successful as a strategy to support Fred's emotional competence and regulation as 'he could see for himself that his participation was needed to progress the mission as everyone played a valued role' (DT1, 11th May 2019). Fred himself commented that drama 'is more fun to do with other people' (Fred PC, 15th February 2019). In comparison, different methodologies were observed in school, and when explored with Fred, he commented about pair work that 'I just work on my own and sometimes I have a little help by the teachers...I never work with the other boys, only teachers' (Fred PC, 15th February 2019). Emotional competence and regulation is associated with optimal learning and engagement across the life span and is extremely significant for the lives of children with autism (Prizant, 2015). However, children are most likely to give up when they work alone (Jahromi et al., 2012). Fred's teacher noted that he would never be confrontational with peers, stating 'he wouldn't fight with them or anything, he will confront them to a point, but if they are not giving in, he will stand a few feet away from them with the arms folded and staring at them with this look of thunder, but he won't verbally fight with them or argue with them' (Teacher PC, 6th November 2018). This physical removal was observed in the public playground when a disagreement arose and he moved away from the group to tell the teacher (Field notes, 20th April 2018), supporting his mother's comment that he is more likely to express how he is feeling to adults than his peers (Mum Quest, March 2018). His teacher observed that he would only re-join his peers after an incident 'once in a blue moon' (Teacher PC, 6th November 2018). This resistance to re-join could be attributed to his inability to assert control over the situation/peers in these occurrences. His teacher remarked that often there would be 'nothing to tell 'cos it's him not getting his way' (Teacher PC, 6th November 2018), and his peers continue playing as they were. In contrast, at home accommodations were consistently made by peers and family members to ensure that Fred did not become frustrated. The inconsistency of approach to emotional competencies and regulation in the home, drama and school settings may have been challenging for Fred and appears to have mitigated against generalisability of skills and strategies evidenced in the drama setting to the home and school settings.

6.6.2 Supressing and Regulating Emotions

Emotional regulation is understood as effectively managing or controlling one's own emotions in response to environmental demands (Aldao et al., 2010). Strategies such as re-evaluating a difficult situation to reduce anger, frustration or anxiety, and opportunities to focus on perspective taking and attending to and discriminating emotions (Samson et al., 2014a) are identified as effective approaches in ASD to improve emotion reactivity and regulation. Children with PDA

demonstrate decreased emotional regulation (Christie et al., 2012). This section examines Fred's level of emotion regulation and suppression across settings.

In school, observational data suggest that Fred suppressed his emotions when feeling angry or sad, in comparison to the home setting. During informal conversations, his mum mentioned that recently they had been to the playground and a younger child wanted to go on the equipment that Fred was playing on, but he wouldn't let him. He had a 'complete meltdown' and found it very hard to calm down. While he re-entered the playground after a while, they had to leave again, and he screamed the whole way home. When she asked him why this didn't happen in school he responded, 'I am so afraid that this will happen in school and I don't know what to do' (Mum PC, 18th April 2018) (Samson et al., 2014a).

Fred's concerns around expressing emotion in school appears linked to his anxiety about getting into trouble. His mum commented that Fred would hate to get into trouble in school and spoke about a worksheet he received for homework where he was asked to rate scenarios based on how worried he would be. One of the scenarios was getting disciplined by a teacher and he responded, 'very worried', with Mum reinforcing that 'he doesn't like to put a foot out of line in there' (Mum PC, 18th April 2018). While Fred's teacher commented that 'he never gives us any trouble' (Teacher PC, 6th November 2018), it appears that he may equate expressing heightened emotions with upsetting teachers. This theory was supported by an incident on the school bus, where Fred was annoyed because an SNA, who was a temporary stand in, commented on his 'toy dinosaur' but actually it was a crocodile. When Fred came home he told his mum about this. When she asked Fred why he didn't tell the SNA, he responded 'I didn't want to say anything to her 'cos I was angry and I didn't want to speak loudly to her, so I just didn't say anything' (Mum PC, 18th April 2018). As Mum noted, he was aware that if he said something it could 'come out as cross', so he decided to say nothing. This demonstrates his social awareness of how his reaction might be perceived by others and his desire not to let himself down or present himself in a way that he might be unhappy about. This was evident in earlier discussions about striving for perfection. However, the incident suggests difficulties in social competence in that environment to be able to represent his internal state of frustration without getting angry (Rieffe et al., 2012). Other examples of him physically holding back from expressing emotions to peers and teachers in school were evidenced, such as when Edward broke a car he and Fred were playing with. Fred's facial expression and body position depicted his anger, but he moved away from Edward, repeatedly saying to himself 'how could he break that?' with his body shaking. However to Edward he said 'Don't worry, it's an accident' (Field notes, 18th April 2018). It showed Fred's levels of empathy and understanding that his peer did not mean for this to happen and that he did not want to upset his friend. While he suppressed his emotions in school, the home setting was 'kind of the release valve' for Fred emotionally (Mum PC, 4th March 2019) (Attwood, 2008). His teacher plays a similar role and he waits until he 'returns to his special class' to discuss issues with her (Teacher PC, 6th November 2018; SNA Quest, March 2018). She felt it was a 'comfort zone thing' and that he is not as familiar with the mainstream class teacher or peers, and 'doesn't know if he says something is he going to be in trouble or what' (Teacher PC, 6th November 2018), again highlighting the impact of the unknown on him (Rieffe et al., 2012).

In drama, Fred did not regulate or supress his emotions as he did in school. The environment was less restrictive in that regard, and the research notes report children having outbursts which are 'not out of the ordinary' and are managed in a no fuss, non-judgemental way. Therefore, Fred may have been less worried about how his emotions would be perceived, and consequently may not have been exerting the same levels of control as he did in school. This is in keeping with findings that exclusive settings can be a safe place for children with ASD (Banks et al., 2016), and underpins the aims of the social drama model: to facilitate the navigation of difficult and tense situations which arise, and allow participants to experience a full range of emotions in a safe and fictional environment (Kennedy-Killian, 2013; DT1, 11th May 2019). Adopting a 'protection *into* emotion' rather than 'protection *from* emotion' approach (Ackroyd, 2007), and a positive staff-student ratio could be additional contributing factors here. This may account for his comfort and tolerance in the drama setting where for example, expression of emotion is facilitated and planned for during the character development stage:

So when we are introducing new characters like Butch, the bull dog leader of the animal army who re-claimed the world and placed humans in the zoo, and the children have sketched out what he looks like etc., they spend a lot of time deciding what kind of character they want Butch to be before meeting him (usually a teacher would play this role unless a child wants to). We ask things like "Do we expect Butch to be kind, polite, friendly? Or is he ruthless, cruel, sneaky, moody, etc." They agree on the characteristics, practising what each would look and sound like, and then they are ready to meet Butch and experience a range of emotions according to their interactions with him. (DT1, 11th May 2019)

This highlights the 'education of the emotions' approach following Best (1993) which underpins the social drama model (O'Sullivan, 2007). In 'living through' and responding to a wide range of situations as presented by a character such as Butch, Fred and his peers explored the cognitive, emotional, and affective components of his behaviour which elicit an empathetic response (Goleman, 1995).

The literature outlines that people with ASD find it difficult to demonstrate empathy for others (Mul et al., 2018; Shaughnessy, 2013), however those with PDA can demonstrate a degree of social empathy (Christie et al., 2012). Experiencing affective empathy (Baron-Cohen, 2008; Harmsen, 2019) can be more challenging (See Chapter Two, section 2.2.3.1). Fred displayed cognitive, affective and social empathy, however his level of preparedness for interactions and the environment they occurred in appeared to impact this. For example, his mum and aunt

commented that he demonstrates empathy 'sometimes' (Aunt Quest, May 2019), and 'sometimes or often' at home (Mum Quest, March 2018). As revealed earlier, he had an understanding of not wanting to hurt other people's feelings, such as at home when Claire was playing the violin, and he was trying to watch a video which he couldn't hear, so he politely said: 'Claire, that makes a beautiful sound but I can't hear my video' (Mum PC, 4th March 2019), using learned 'social niceties' (Christie et al., 2012). Similarly, when Edward broke the toy car in school, despite being visibly annoyed and upset, he protected his friend when telling the teacher, stating 'Edward made a mistake, but don't worry it's accidental' (Field notes, 18th April 2018). While several positive demonstrations of social, cognitive and affective empathy were observed (Baron-Cohen 2008; Christie et al., 2012), this was not always the case, particularly when others expressed emotions which Fred may not have been expecting. For example, his teacher noted that he will tell her if someone fell but 'he won't want to go over and actually comfort him or anything like that' (Teacher PC, 6th November 2018). Physically removing himself from the situation when something happens unexpectedly, could be in anticipation of an emotional response which the data suggest Fred finds challenging to navigate. When Claire gets hurt Fred 'gets a fright' and his mum feels this is why he leaves the room or doesn't engage: 'there is always that unexpected side of emotion that I think still catches him out' (Mum PC, 4th March 2019).

In relation to the drama setting, while empathy was not recorded frequently in the research notes, one example was reported when the group were helping a shy hyena called Helly learn to stand up for herself. Fred demonstrated empathy and understanding of this role: 'When he was lining up in the scene for the canteen, he went to stand in front of me, then looked at me and stood behind me (I was in role as Helly who the group had been helping not to get pushed around)' (SD notes, 7th October 2017).

6.6.3 Summary

The data do not support generalisability of Fred's emotional competence, regulation, and empathy across settings, but do point towards the importance of facilitated engagement in environments where he feels safe and at ease (Banks et al., 2016), and has established stable relationships. It is evident that there is little or no consistency across the three environments included in this study in terms of approaches and forms of engagement with Fred, and this heightens the risk factors which may make Fred more vulnerable to emotional dysregulation leading to anxiety, stress and fear of the unknown. The protective factors which resulted in some gains being made in his personal and social skill development in both the drama and home settings and to a lesser extent in the ASD class, such as preventative and reactive strategies, were not found consistently across settings and in all situations experienced. The implications of this will be discussed in Chapter Eight.

6.7 Competitiveness and Self-Esteem

The data suggest a link between Fred's levels of competitiveness and his self-esteem. This in contrast to the literature, which claims that due to impaired Theory of Mind, people with ASD do not demonstrate competitive emotions (Shamay-Tsoory, 2008). Fred demonstrated competitive behaviour in all settings, except for when in role in drama, and this was commented on by all respondents and by Fred himself. This section examines Fred's levels of competitiveness in each setting and a possible link between his levels of competitiveness and self-esteem as the literature claims that young people with ASD and PDA demonstrate lower levels of self-esteem than their allistic peers (McCauley et al., 2019; van der Cruijsen & Boyer, 2020).

6.7.1 Winning and Losing

Fred's teacher reported that in school he was 'fiercely competitive' and 'wants to win so much' (Teacher PC, 6th November 2018). Fred himself expressed his love of winning when talking about running races, stating 'I like being the best' (Fred PC, 15th February 2018). For example, when playing chasing in the park with his sister, she caught him but he refuted claims that he had not won, and insisted on the game being replayed (Field notes, 20th April 2018). This goes against the claims of Kaminsky & Dewey (2001) that people with ASD are less competitive with their siblings. In more structured games, such as board games, his mum and aunt stated that recently he has developed an understanding of winning and losing in this context, specifically when he does not feel at fault. This is in keeping with theories on self-attribution, where one's own abilities are not the reason for a poor performance, and reduce the damage to self-evaluation (Foley Meeker, 1990). For example, when Claire won the board game Frustration he was fine, as his mother explained to him 'It is completely random and anyone can win, it doesn't matter what you do, it is just the number you get on the dice'. She believed this really helped him, as it wasn't a 'reflection on his abilities' and he didn't respond as he usually would, becoming angry, upset and having a meltdown (Mum PC, 1st February 2019). Similarly, his aunt noted that when playing snakes and ladders now, he 'understands that one person wins and one person loses - he is ok with that' (Aunt Quest, May 2019). He is comfortable in activities where luck rather than skill dictate the outcome and winning is not a reflection of his abilities. This results in him not feeling under as much pressure to succeed, mitigating the differences between winning and losing (Foley Meeker, 1990). In the drama setting, winning and losing were not directly observed, however, in games inbuilt in drama stories, such as 'Hunt and Hide' (SD Notes, 27th January 2018), Fred demonstrated appropriate levels of competitiveness, in keeping with the context. However, he was less competitive in the drama setting than in other settings, and reasons for this are discussed later.

Fred's own insights in relation to competitiveness revealed that 'sometimes I win and sometimes I don't' (Fred PC, 15th February 2019), but he did not elaborate on how he feels when he doesn't win, and I didn't probe further, due to the risk of consciousness raising (Patai, 1991). This could point towards deficits in emotional literacy, as his factual response reports what occurs, rather than his desires or wishes in this regard. Bardel et al. (2010) identify that self-esteem can directly impact the feelings associated with winning and losing (see also Rosenberg, 1965; Rosenburg & Rosenburg, 1978), and data indicate that when his own abilities are not in question, losing is not difficult for Fred, in comparison to less structured activities where his abilities are under the spotlight. However, a desire to win did not occur in drama, even during informal games at the start of each session, when Fred appeared unconcerned if caught by peers during chasing, laughing and joking before proceeding to chase others:

Even when playing chasing before class, Fred loves to pretend he is someone else, embodying the physical and vocal characteristics as he says "I'm going to get you" which the others love. I remember him one time being a runaway truck whose brakes failed, and he was warning the others that he was going to crash into them, and then when he caught someone, he transformed into a flashy sports car to escape. The sense of fun and freedom was great for him, like a release of energy. (DT1, 11th May 2019)

6.7.2 Competitiveness In-Role

Levels of competitiveness in role in the home and school settings could not be assessed, as Fred led and narrated the sociodramatic play interactions observed, without competition. As noted previously, when interjections occurred, he shut these down and continued with his narration. When in-role in drama, Fred was less competitive than when out-of-role, and more receptive to others' ideas, and when his ideas were not accepted by the group, he still 'participated very well in the drama' (SD notes, 14th January 2017). In drama Fred had to compete with peers for ideas to be accepted, however, he accepted this as part of the routine ebb and flow of the class. The SD model prioritises collective roles such as 'we are journalists looking for the truth' (see Neelands, 1984), which appeared to support and enable Fred, encouraging him to work together with the others and rely on each other to complete tasks. This is in keeping with claims that facing defeat has less of an impact on self-esteem when working as part of a group, as there is less focus on the individual (Coholic et al., 2009; Foley Meeker, 1990). This collaborative focus in drama on lowering competitive emotions is supported by the literature, which claims that young people with ASD working with their peers in exclusive settings can enhance collective and individual self-esteem (Cooper et al., 2020; Crane et al., 2021). Collaborative group work has also been identified as a positive strategy to engage children with PDA (Fidler & Christie, 2019).

This collaboration did not allow for one child to dominate, or have their ideas heard over others, which was observed in other settings for Fred. Where one child shared their ideas, they were refined and developed by the other students through planning and discussion before going on the fictional mission, and afterwards during reflection (DT1 11th May 2019). Alongside the group role, the power of being in-role and in a facilitated fictional world could be contributing to Fred's lower levels of competitiveness in the drama setting. This is in keeping with his mum's comments that when he is aware that winning or losing is not a reflection on his abilities, he does not mind losing (Foley Meeker, 1990). In the drama context, the safe space of 'stepping into someone else's shoes', in a facilitated environment where the strategies of 'protection into role' and 'protection into emotion' are enacted during planning and teaching (Davis, 2014) appear to have the same impact on Fred and could be the reason for lower levels of competitiveness demonstrated when in-role. As discussed previously, the structure of the SD and teacher communication methods may also be contributing factors. Foley Meeker (1990) states that a cooperative setting may have an impact on levels of competitiveness, which could help explain why Fred's lack of competitiveness in-role did not generalise from the drama setting to either the home or school setting when he was similarly in-role but unable to accept others' ideas. The act of being in-role acted as a powerful social stimulus for Fred but appears insufficient to counteract other environmental factors present. This suggests that the cooperative and collaborative group focus to activities in SD may have facilitated the enactment of appropriate pro-social skills such as negotiation in (and out) of role, and taking turns (SD notes, 2016-2018), which is discussed below.

6.7.3 Turn Taking

In school it was reported that Fred 'has a major issue with going last' when participating in games that involve turn taking (Teacher PC, 6th November 2018). He can accept being last in one game, but if he is last to take his turn in the next game he finds this very difficult: 'I was last, I am always last, I hate being last' (Teacher PC, 6th November 2018). Similarly, in the home setting, Fred always wants to be first. An example of this is when the siblings are going to the cupboard to get a treat after dinner, and Fred will 'nearly elbow Claire out of the way' to get there first (Mum PC, 15th February 2019). While there were some examples of Fred struggling to take his turn in drama, these were infrequent, with research notes commenting on Fred visibly making an effort in this area; 'he gets impatient but today when asked to hold it he did, but the exertion on his face was clear' (SD notes, 22nd October 2017). On one occasion, when struggling to wait his turn to share an idea he stated 'turn taking is dead" and went outside the circle and lay on the floor, with his head down while kicking his legs' (SD notes, 7th October 2017). When this occurred, the class kept going, and Fred re-joined after a short time [the lead teacher assigned an

assistant teacher to monitor the situation from a distance giving him space and opportunity to self-regulate]. The social stimulus and motivator of the drama, combined with expectations in this setting could explain Fred more easily complying with the conventions of turn taking here, in comparison to other environments. There is evidence to support that his competitiveness may be linked to a desire to be praised and acknowledged by adults in all settings. In school as noted previously, he sought approval from the teacher after she had praised another child's art work, saying, 'mine is terrible' and asking her 'What about mine?' (Field notes, 18th April 2018). In drama, when a peer's idea was commended, he asked 'Was my idea good?' (SD notes, 19th May 2018). Fred may have been seeking to enhance his level of self-esteem (Harter, 2012; Mann et al., 2004). Interestingly, this goes against the PDA literature which claims that direct praise has a negative effect (O'Nions et al., 2016; O'Nions et al., 2018). This was not evidenced in the home setting perhaps owing to praise being evenly distributed between Fred and his sister, and accommodations being made for Fred, as discussed previously.

6.7.4 Perspectives on Fred's Self-Esteem

Perspectives on Fred's self-esteem differed between the home and school settings, with selfesteem being described to interview respondents as 'how Fred would perceive himself in a group'. His teacher suggested that Fred's self-esteem appeared to be 'quite high, nearly strangely' (Teacher PC, 6th November 2018). She gave a description of how she believes he views himself: 'look amn't I the greatest, you know. And wanting to be the leader and wanting to be the boss and wanting to be in charge' (Teacher PC, 6th November 2018). In contrast, Fred's mum shared that he sometimes says he hates himself, wants to kill himself and that he has a low opinion of himself. She noted that he was using this type of language less now, however 'he would still kind of question himself or doubt himself' (Mum PC, 15th February 2019). She appears to equate his level of self-esteem to the environment he's in, and the people he's with, noting that his level of self-esteem 'depends on the group'. She felt he would be quite confident in school and drama, however if he was in 'new settings or quite busy settings...or if there was a lot of family around', he would be less confident (Mum PC, 15th February 2019). When using co-created improvised storytelling and think aloud protocols to elicit Fred's perspective of his own self-esteem, I asked him if friends think that he is 'brilliant, sometimes brilliant' etc. He felt that people view him as 'kind of brilliant' and placed his thumb in the middle to represent this (Fred PC, 1st February 2019). When discussing races Fred asserted 'I am so good at them' (Fred PC, 15th February 2019), demonstrating a high level of self-esteem. His mum's rating is lower than Fred's and is supported in the literature which claims that parents rate their children with ASD lower than the child themselves, as children may overestimate levels of self-esteem due to processing difficulties, and parents may excessively worry (van der Cruijsen & Boyer, 2020). In drama, his rating remained

unchanged at three out of five over a two-year period with notes indicating that he mostly values and perceives himself positively and is confident in making decisions and asserting his point of view. However, the notes record occasional dips during that period when he appears to be affected by external events which he can struggle to process and communicate. During these moments he doubts himself and his abilities, calling himself 'stupid' and tapping his hand off his head on one occasion (SD notes, October 15th 2016). However, it is noted that his mood is quickly lifted when the drama starts.

It is evident that the physical setting, but more importantly the number of people present, and Fred's relationship with those people, impacts his levels of self-esteem and confidence. One reason Fred demonstrates lower levels of self-esteem in the home setting in comparison to the school and drama settings, could be dependent on the people present and his relationship (more than familiarity) with them, as the literature suggests that higher levels of self-esteem are generated and displayed when young people with ASD are with ASD peers (Cooper et al., 2020), which is the case in both the drama and ASD class in school, but not at home.

6.7.5 Summary

While the data cannot categorically link self-esteem to Fred's levels of competitiveness, the evidence suggests a connection. He appeared to demonstrate higher levels of self-esteem in settings in which he was less competitive (Coholic et al., 2010; Foley Meeker, 1990). Greater levels of competitiveness in the school and home setting were observed, such as wanting to win, being first to take his turn, and needing to be right in conversations. This was not recorded in drama, but did not generalise across settings as the conditions which created that environment such as understanding expectations of how the drama class works, active and routine opportunities to practise social interaction in real and 'as if' situations, collaborative work, collective role-playing, facilitated learning, and relationship building through 'standing in the shoes of others' and seeing things from a different point of view, were not consistently evidenced in the other settings. Strategies which were found to support Fred's social skill development are discussed in the final section.

6.8 Support Strategies

One of the aims of this study was, where possible, to identify supporting and inhibiting factors impacting Fred's social skill development and the generalisability of social skills. Findings reveal that anxiety was a major inhibitor to Fred's social interactions and development. His mum noted that she uses strategies to defuse situations and calm Fred at home 'without even knowing that

they are strategies' (Mum PC, 1st February 2019). Specific strategies which emerged in this study to minimise Fred's anxiety are discussed below.

6.8.1 Preventative Strategies

6.8.1.1 Distraction Techniques

The strategies that Fred's mum referred to included distraction techniques, noting that when she gets 'warning vibes' she can direct Fred in a different direction, which generally prevents frustration and outbursts. Evidence of distraction techniques were found in the drama setting, such as the teacher lowering her voice, and using a different tone to draw Fred's interest back to the story when he had removed himself from the group and threatened to leave. Eye contact was also found to be effective, with the drama teacher establishing eye contact momentarily to make a connection with him, then lowering it but keeping her body and extended hand in the direction of Fred (palm upwards in an open and inviting gesture) whilst continuing the story with the others. This was reported as being effective in distracting him momentarily to allow him space to selfregulate, shift attention and assess the situation - with a visually supportive adult presence nearby (SD notes, 2016-2018). Letting the child know that you are empathetically present but not smothering them with too much direct attention was one of the strategies used in SD to support children to self-regulate. These strategies support the call of Mazefsky et al. (2012) for a broader approach to emotion regulation in ASD which seeks to understand children's emotional responses to situations and how they can be facilitated to shift from negative emotions. The literature for children with PDA also notes the efficacy of distraction techniques (Fidler & Christie, 2019).

6.8.1.2 Logic

Explanations which seemed logical to Fred were deemed effective in the home setting to support him complying with requests. For example, when he wanted to climb on the sofa, and Mum explained that if he fell, he could hit his head off the table and hurt himself, he understood and accepted it (Field notes, 11th August 2018). This was also observed when David and Fred were starting a water fight, and David asked him to stop: 'You can't do that until my shoes are on' - Fred apologised and waited (Field notes, 18th April 2018). Logical explanations where the physical evidence could be seen appealed to his sense of order and fairness and may have empowered him to feel connected to what was going on in that moment, and/or in control, keeping feelings of uncertainty at bay (Stuart et al., 2020). Saying it is 'nearly time' to do something such as 'it's nearly dinner time' was generally successful (Mum PC, 18th April 2020). However, 'if the logic doesn't suit him, or doesn't affect him, he will tend to disregard it' (Mum PC, 4th March 2019). I observed several occasions where logical explanations were used at home and

unsuccessful. For example, when Fred and Claire were watching a video, and Mum was fast-forwarding to the correct part. The video kept forwarding past the spot where Fred wanted to stop. He became very frustrated and shouted. Despite explaining it was a mistake and she could rewind it back, he continued to be upset afterwards (Field notes, 20th April 2018). In this situation Fred could not perceive his mother's actions as being in error as it was less concrete or logical than the shoes or sofa examples. Another example recorded was when returning from a trip to the park and the door rebounded on him on his way into the house. He was clearly annoyed and said; 'Jeez who did that, who hurt me?' When Mum explained that it might have been her and that it was an accident, he responded angrily, 'No it wasn't, I hate you' (Field notes, 11th August 2018). This highlights his difficulty of shifting attention when his emotions are aroused, and the effect of logic being directly related to what he can or cannot visibly perceive in the environment. As he did not see his Mum struggling to hold the door, the only logical explanation was that someone deliberately swung it backwards, with the consequence of intending to hurt him. Her apology was insufficient as it failed to demonstrate to him what happened in that moment.

However, in school, Fred appeared to accept logic more readily when explanations were given, even when physical evidence was not present. The language used by Fred's teacher was of note when talking through incidents. She commented that she would explain to him that 'Well he wasn't really being mean he just, he just wasn't wanting to play your way, he wanted to play his own way and that's ok as well' (Teacher PC, 6th November 2018). This approach where she both empathises but also accords the perceived offender with the right to act according to their own needs, contrasts with accommodations made at home.

While both strategies are deemed effective to a degree, the literature highlights the importance of working through issues, supporting children with PDA to resolve conflict, which neither of these strategies did as the adult worked through the conflict rather than empowering Fred to do so for himself (Fidler & Christie, 2019). Fred's mum felt that this happened in drama, noting that when a falling out occurred, he had to deal with the situation and it was worked through (Mum PC, 15th February 2018). The SD model is predicated on the use of internal coherence or logic (Heathcote, 1984). The development and enactment of the drama is designed to appeal to children with ASD who tend to think logically (Sofronoff et al., 2011).

The whole experience operates on creating fictional worlds which appear logical to the autistic brain, and the participants are then comfortable enough and trust in the teachers to risk embracing the experience fully. We don't expose them to intense emotional experiences which can have the opposite effect and increase anxiety or worry. We use logic to navigate the middle ground where children are willing to go on the fictional journey and in so doing, are involved in educating their emotions, becoming aware of the

connection between emotions and physical manifestations of them. (DT1, 10th December 2019)

Rieffe et al. (2011) found a correlation between children with autism having a comprehensive understanding of emotional experiences and developing adaptive coping strategies. The drama model appears to provide experiential learning opportunities to counteract fragmented emotional understanding through employing what the notes regularly refer to as the 'logic of the drama' which appealed to Fred and other participants (SD notes, 2016-2018). This internal coherence was also evident in the drama plans reviewed for this study.

6.8.1.3 Accommodations Made by Others

The literature identifies that parents of children with PDA often attempt to meet their child's requests, as opposing them can lead to 'an escalation of the child's attempts to exert control' (O'Nions & Eaton, 2020, 415). This was evidenced at home for Fred, but not in other settings. Mum reasoned that 'if you give an inch it is easier for him than saying absolutely no', noting that if Claire and peers 'end up doing stuff that they really don't want to for a little while, [but] it's better than the alternative' (Mum PC, 4th March 2019). Fred prescribing what he wanted adults and children to do in the home setting evidences his use of socially strategic behaviour. This was evidenced in observations, and in recordings spanning three years of Fred playing with Claire and peers. Accommodating an approach of 'he persists until he gets his way' (Mum PC, 11th August 2018) contrasts somewhat with his behaviour in drama where compromise, achieved through pair and group work, was noted on a weekly basis (DT1, 11th May 2019). In the school setting, Fred led all play and social interactions observed, and when peers did not comply, he simply moved away from them, told an adult and did not re-join the group (Teacher PC, 6th November 2018). While the approaches taken at home and in drama differ, they highlight the importance of being flexible in empowering and including children with diverse minds and preferences, in contrast to the more rigid structure in school where Fred was supported, protected and listened to when problems arose, but not facilitated to negotiate social situations and interactions.

6.8.2 Strategies to Decrease Anxiety

6.8.2.1 Voice

According to his mother, the pitch and tone of voice she uses can prevent Fred's anxiety escalating in certain situations. For example, if something is cancelled at short notice, if she uses a voice which shows she is under pressure he will 'feed off that' but if she 'plays it down' saying 'Ah sure, it's no big deal' he generally remains calmer. She feels that he mirrors her and 'the

more low key you can keep things, the better' (Mum PC, 15th February 2019) (Christie et al., 2012). This was observed during a baking episode when he smashed an egg in his hand. He got quite upset saying 'I am never baking again' and 'You tricked me to make that happen' (Field notes, 11th August 2018). His facial expression and tone of voice depicted anger, with his body rigid and eyes wide. He then watched a dinosaur video on his mum's phone and after some time and gentle probing from his mother, who remained calm throughout, he re-joined the activity. On other occasions however, such as the fast-forwarding incident with the video, he did not respond to her calm tone. His energy levels and the time of day/year may be implicated in his responses, as the baking event took place during the summer holidays when he was more relaxed, and the video incident after school, and visitors had been to the house.

The significance of voice and body position/posture were also reported in the drama setting as significant. While the impact of a calming tone of voice was not reported, a playful voice was deemed successful in de-escalating situations and reducing anxiety for Fred. The data report that he responded particularly well to lead teachers' lively and playful voice, and to interactions in role with both peers and teachers in role (Annual profile, July 2018). It seems that the use of dramatic and character voice guided him in being able to negotiate with peers, reducing anxiety and the need to control his environment. This had the knock-on effect of facilitating the development of other social skills such as listening, turn taking, compromising, negotiating, tolerating physical contact, sharing physical space, and eye contact which were reported as having improved in his annual profile from 2017 to 2018 (SD notes, July 2018). SD lesson plan guidance advised teachers to be aware of their physical presence and aim to empower participants through disempowering themselves physically and vocally, 'being one of the team'. The guidelines recommend sitting on the ground beside participants [depending on age-appropricacy], looking up rather than down at children where possible; using a range of facial, vocal and physical gestures to communicate uncertainty, not being sure of the answer or solution to problems posed (I don't know what we should do, what do you think?...); using playful and made up words such as boopy do, yikesy doodles, yackity yack, and using expressive interjections and exclamations such as aah, umm, err, dunno; seeking clarity and support from the children to assist them [the teachers] and other children; respecting their space; never looking at a child face-on but generally positioned at a 45-90 degree angle initially, then moving your body and/or face around depending on the child's comfort levels; making eye contact for a moment to establish a connection and then averting eye gaze to allow attention to shift to the task at hand, and bringing eye contact back when comfort levels are established and the logic for making eye contact has been created (i.e. it makes sense to do so at that moment) (Guidelines for Social Drama, 2017).

While voice was reported as being an effective strategy with Fred in the drama and home settings, albeit with different impacts, it did not arise in the school setting, either in the ASD or mainstream classrooms. Observational data record little variation in teacher voice when

interacting with Fred or peers. In keeping with literature in the field of drama (see Heathcote, 1984; O'Neill, 2015), it would appear that teachers disempowering themselves vocally, physically and in role, resulted in empowering Fred, decreasing anxiety, and motivating him by leaving concrete and visceral spaces and opportunities for him to engage, to fully experience the act of resolving challenges, conflicts and issues as part of a group. This was more evident in drama than in the home setting where the level of awareness of 'making space' for Fred to develop social skills was consciously enacted and supported.

By disempowering ourselves, we empower the children and after a while they become less dependent on us and start to figure things out themselves. It's like no one has ever given them this chance before. Like they have been "policed" and "minded", and it's well intentioned of course, but it's misguided in my experience. It's having the opposite effect on their social and personal skills development. (DT1, 11th May 2019)

6.8.2.3 Humour

Humour is identified as a strategy to support anxiety in children with PDA (Fidler & Christie, 2019; Woods, 2019). Data demonstrate that this was the case in the home and drama setting, but to a lesser extent in school. Fred used humour as a strategy to interact with others, and to dispel anxiety. In drama for example, when recapping on events that had taken place in the story so far, and he forgot a detail, he stated 'I need help' and then 'went on to say humorously that he was stuck between "my brain and my bum" (SD notes, 14th January 2017). There were examples of Fred's humour in relation to learning the names of people in the group, and 'he delighted in swapping names around and inventing silly food names' (SD notes, 21st January 2017) for his peers (n=5), with research notes stating 'Fred said he loves when people laugh and tries to make the group laugh' (SD notes, 5th November 2018). This enjoyment of humour was also observed at home, for example, when pretending to steal my cake, and Mum was discussing what was for tea, Fred joked 'who wants some face for tea?', (Field notes, 20th April 2018). These instances were frequent, and his Mum commented that he 'loves humour', 'has a brilliant sense of humour', and would have them 'all in stiches' (Mum PC, 1st February 2019). He uses jokes and humour to both interact and gain reactions from people. However, if people don't respond how he wants them to he can become frustrated (Mum PC, 1st February 2019), with his mother commenting that 'he is trying to set the stage and he is trying to be funny'.

Humour was observed in school, such as joking with his teacher about the length of time he got to spend on the computer, and making a play on words: 'I thought you said jail' (Field notes, 18th April 2018). However, his teacher noted that sometimes he is unsure if she is joking with him or being serious (Teacher PC, 6th November 2018). This could be due to the fact that

Fred sees his teacher as a figure of authority. However he also sees the lead teacher in drama as a figure of authority but his relationship with them is underpinned by humour and good natured banter. Relationships may be a key factor here. During news in drama, while Fred enjoyed the silly name game, it was noted that when the group were recapping everyone's names, he did not want anyone to know his 'real' name (n=2). On one occasion, he became annoyed, and the lead teacher used humour to dispel his anger, by telling him that 'she sometimes so got mixed up with names that she called her mother "Granny" at which he laughed and laughed' (SD notes, 19th November 2017). When later he stated again that he didn't want people to know his name she joked 'If I don't know your name, I might call you banana' (SD notes, 19th November 2017) and it evoked the same positive response in Fred. It is important to note that while humour was used to connect with Fred in this situation, it is used naturally throughout sessions and contributes to the playful environment and relationship building designed to support students in their everyday lives (DT2, 10th August 2021).

Humour also proved effective in the home setting to dispel stress. For example, when doing homework, he can become frustrated if his work is not perfect. His mum said 'it's the humour that gets around that', as she joked with him: 'teacher is not going to hang them in an art gallery' (Mum PC, 1st February 2019). Fred's teacher did not discuss humour as a way of supporting Fred when feeling anxious or under stress. Rating his humour as a two out of five, she added that he doesn't use humour often. This is in contrast to his mum who rated him as five of five, and Fred himself who rated himself highly and shared how he enjoyed telling jokes (Fred PC, 15th February 2019). Similarly, his aunt answered that he 'Often' understood and used humour during free play, and when interacting one to one with an adult or peer (Aunt Quest, May 2019). In drama he was rated as four out of five. There is a discrepancy in the way adults in the home and drama setting view Fred's use of humour in comparison to school. In school, he was observed using humour with peers more than adults, which could account for the teacher's lower rating also, and highlights the difference in relationships with adults across settings.

6.9 Conclusion

While several themes emerged during data analysis, one overarching theme stood out. This closely aligns with the PDA literature and was seen both in the home and school settings, but not in drama. Fred appeared to assert control over people and situations, due to a need for things to 'play out' as he imagined them in his head. This was done to help supress anxiety and fear of the unknown. In keeping with the literature (Fidler & Christie, 2019; O'Nions & Eaton, 2020; Stuart et al., 2020), fear of the unknown is linked to use of control to counteract it. In Fred's case, he imagines what may happen in games, social interactions, and life events, and when these do not unfold as imagined, or there is a deviation of any form, anxiety can ensue. Study respondents

confirmed this hypothesis: 'I think a lot of the time the disappointment comes from, in his head things are a particular way and then they just turn out differently' (Mum PC, 15th February 2018). Similarly, Fred's teacher commented that when things turn out differently to what he predicted in his head, he finds it difficult to cope (Teacher PC, 6th November 2018). Fred confirmed this preference by using a drama analogy, relating it to what he desires to happen in life where 'it's always happy, and the bad guys have been defeated' (Fred PC, 1st February 2019). To reduce stress and anxiety, the findings show that he instinctively attempts to control his environment.

Fantasy, imagination, and role play are defining features of PDA, with the literature claiming that fantasy and role play are used by young people to control their reality and reduce anxiety (Newson et al., 2003; O'Nions et al., 2014). This was demonstrated in the home and school settings but not in drama. Fred didn't demonstrate the same need to control that environment, or for things to play out as he imagined them. Data suggest that the structure of the drama model prepared participants for what was to come, involving them in the planning process before action happened which reduced potential anxiety. It afforded students choice (Heathcote, 1984), which is identified as a successful strategy for children with PDA, in an environment which was 'sensitive and responsive' to their interests and needs, resulting in decreased anxiety levels, and consequently a need to control (Fidler & Christie, 2019, 109). When working in-role, the data suggest that Fred required less control as the focus was not explicitly on him. Taking on the role of 'another', responding 'as if' he was that person' (O'Sullivan, 2015a), and stepping into the shoes of someone else (Heathcote & Bolton, 1999) is in keeping with theories of self-attribution (Foley Meeker, 1990) as the focus is on the role Fred has adopted, and not on himself, relieving anxiety and the pressure to achieve.

The data demonstrate that drama acted as a social motivator for Fred (White et al., 2007; Yoder & McDuffie, 2006), reducing anxiety, and over time the impulse to control as he became familiar with the format. His empathy towards and understanding of the role of the lead drama teacher as the authority figure (Baron-Cohen, 2008), challenges the PDA literature (O'Nions et al., 2018; Woods, 2020). This is significant as in all other settings where he employed fantasy and imagination, Fred took on the role of leader (O'Nions et al., 2018) narrating and directing the play and interactions, according to how he imagined things: typifying behaviour of PDA. However, in drama he understood this was not his role and appeared comfortable with that.

What emerged from the findings is that generalisability from the drama setting to other parts of Fred's life was not universally achieved, apart from evidence that imagination, use of role and insertion of tension were partially generalised. The case study reveals that the conditions demonstrated in the social drama environment were not evidenced or experienced by Fred in the home or school settings, for different reasons. Understanding ASD and PDA and employing appropriate strategies to both challenge and flexibly support Fred was not evenly demonstrated across settings. Adults in his life identified his behaviours as manipulative, rather than socially

strategic, suggesting a lack of understanding of Fred's behaviour and diagnosis, and a lack of awareness of appropriate methodologies to facilitate and enable rich learning and life experiences. Failure to recognise the significance of friendships and relationships, such as when Fred was separated from John and Edward, impacted the level of opportunities afforded to him to explore and develop social interactions in a meaningful way. Failing to hear, value and prioritise his voice and lived experience led to misunderstandings about what is important to Fred, and inadvertently prioritised what others think is important for him. The drama setting demonstrated a more flexible and appealing approach to Fred, one where neurodiversity was the norm, which allowed him to be comfortable and relaxed in what a lead drama teacher referred to as 'the structured chaos' model which facilitates social and personal skill development in layered and rich 'as if' worlds which parallel interactions in the real world (DT1, 10th December, 2019). The findings confirm that this approach doesn't, and possibly cannot, happen in other part of Fred's life. Paradoxically, supporting a seemingly inclusive and neurodiverse argument about acknowledging and respecting that all minds are different, the SD model operates in an exclusive setting. This raises questions about future pedagogical practices in a neurodiverse society which will be explored in the discussion chapter. The following chapter presents the second case study and the differences/similarities across both will be discussed in Chapter Eight with a view to exploring if and how the findings from this study can be put into practice.

Chapter Seven Case Study Two Peadar

7.1 Introduction

This chapter presents the findings across all research settings for Peadar. As discussed in the methodology, observational data were gathered in the form of field notes in the home, school, social drama (SD) and social club settings. Peadar's voice, and that of his parents, school teachers, SNAs, drama teachers and family members were used to assess if social skills generalised from drama to other settings, and to critically examine what was occurring in these settings to support or inhibit the demonstration of social skills. The following major themes are discussed below: Integrated and Exclusive Settings, Pair and Group Work, Concentration, Imagination, Social Stimuli, Humour, Expression of Emotion, and Empathy. For ease of comparison, these are presented across settings, focusing on evidence of generalisability and influencing variables, including levels of facilitation/support, nature of the environment, impact of peers, social stimulus, and interest levels. Examples are drawn from the data to highlight phenomena. A short introduction to each theme summarises the major findings, followed by a presentation and discussion of the sub-themes which emerged during analysis.

7.2 Integrated and Exclusive Settings

While the drama setting and social club are exclusively for young people with a diagnosis of ASD, Peadar attends a mainstream school, where he is integrated for all school subjects with peers without ASD. This section explores Peadar's experiences of both integrated and exclusive settings, and the findings suggest that he did not experience inclusion in the school setting owing to a lack of facilitation, however in exclusive settings, success was observed in some settings but not universally. Factors impacting Peadar's experiences in both are presented below.

7.2.1 Integrated Setting: School

Peadar attends a mainstream all boys secondary school, which has an ASD class and SEN resource room. He does not attend the ASD class, but occasionally uses the resource room. When transitioning to secondary school, there was no space in the ASD class and the psychologist working with him felt he would manage in a mainstream setting (Dad PC, 1st October 2019). His parents explained that while the school is very supportive of Peadar and his peers in the resource room, he cannot access any external state support services as he is attending mainstream school: 'He has no services, none' (Mum PC, 1st October 2019). He attends the resource room during free periods, to access his locker, or when Irish takes place (for which he is exempt). He spends morning break and a portion of lunchtime there. Seven other students use this space. Peadar

experiences integrated rather than inclusive education, because while he attends classes with typically developing (TD) peers with the support of an SNA, no inclusive pedagogies were observed or reported to support him (Field notes, May 2018-April 2019) (Ferguson, 2014; McGillicuddy & O'Donnell, 2013). He sought friendships with allistic peers due to his sense of humour aligning more with peers without ASD (discussed later), but he was not observed interacting with any classmates during or outside of class, nor was facilitated to do so. The presence of an SNA in the classroom could influence how peers perceived and interacted with him (DES, 2011), although this was not reported for or by Peadar.

The role of teachers is significant when considering inclusive education in Peadar's school. During History, for example, the teacher afforded students an opportunity to work in pairs if they wished (Field notes, 8th April 2019). This was the only time I observed group or pair work in the school, and Peadar's SNA confirmed that what I observed was the norm (SNA PC, 9th April, 2021). While the other boys moved to form pairs, Peadar stayed where he was, working by himself with the SNA's support. The desks were organised for two people to sit beside each other, but he did not attempt to move, nor was it suggested by either teacher or SNA. This was potentially a valuable learning opportunity for him, particularly significant for social/communication skills. This may be because they lacked confidence in engaging with him or lacked knowledge about the importance of social interaction in his development. It highlighted a low level of awareness of how inclusion and inclusive practices could be facilitated in the school. Similarly, in the art classroom where students from the resource room studied alongside allistic peers, Peadar sat at a group desk with his SNA and three boys from the resource room, interacting with them occasionally through responding to comments made (Field notes, 9th April 2019). There was no interaction with peers who were not from the resource room during the 80minute class.

7.2.2 Facilitation/Support for Meaningful Inclusion

Peadar's lack of interaction with peers was noted during observations. His parents, unprompted, raised this as an issue, stating 'I would have hoped for a bit more of that in [school name], a bit more mixing with the "other", but they tend not to do that' (Mum PC, 1st October 2019). Exploring what she meant by 'meaningful integration', she referred to the need for structured and facilitated opportunities for integration, noting that 'the Asperger kids aren't going to just float in, it needs to be more set and staged, more orchestrated for them to have that opportunity to befriend the other neurotypicals' (Mum PC, 1st October 2019). This is in keeping with Williams et al. (2017) who claim that schools need to provide facilitations for pupils with ASD to socialise, both formally and informally. When discussing how this might be done, both parents reported that extra-curricular activities that were not sport focused such as technology-based clubs or a

climate change group could facilitate this. They felt it would enable children 'on the spectrum' to interact with allistic peers benefiting all involved as 'immediately you end up befriending somebody there of a similar ilk' (Mum PC, 1st October 2019). However, when Peadar was asked what teachers could do to support him getting to know peers in the mainstream setting, he commented 'I'm fine as it is really' without wanting to elaborate (Peadar PC, 1st October 2019). The data suggest that his parents see benefits to social inclusion that he himself may not, or that he is nervous of stepping out of his comfort zone in mainstream classes. However, conversations with Peadar, his parents and my observations demonstrated that he had an interest in making/retaining friendships with peers, autistic or allistic, with whom he shared common interests, particularly humour (which is discussed later).

7.2.3 Exclusive Settings

Both the drama and social club were exclusive settings for young people with ASD. While the literature indicates mixed results in relation to the success of such settings for young people with ASD (Coelho, 2019; IIan et al., 2021), Kennedy-Killian (2013) as mentioned in Chapter Four investigated parent and participant perspectives of the exclusivity of the SD model and found that 73% of parents and 71% of participants did not want the classes to be inclusive to allistic children. Peadar's response appears similar to these findings. He developed meaningful peer relationships, and his parents spoke highly of the benefits of this setting, with Peadar himself commenting that his favourite thing about attending drama was 'the people, the social interaction'; 'I'm being more social, I'm more willing to give it a try and speak to people' (Peadar PC, 21st May 2018). However, in contrast to the drama setting, data suggest that Peadar did not enjoy attending social club and did not generally engage with participants. He was only observed once in this setting, as he stopped attending during the study reporting a lack of enjoyment, however adults in the social club confirmed that what I observed was typical behaviour for him in this setting. While one exclusive setting was successful for Peadar, the other was not.

Data indicate that neither the integrated nor exclusive settings were solely successful in enabling Peadar to interact with peers. Findings suggest that he was driven to initiate and pursue social interaction when interest levels were raised, irrespective of who the other person/people were: adult or child, allistic or not. His interest was piqued by the topic or subject matter, rather than the interlocuter.

7.3 Collaborative Activities

This section explores Peadar's participation in group and pair activities across all settings. Data indicate that he enjoyed participating in pair and small group work. There was, however, a lack of facilitated group work in school and social club settings, despite the literature recording the

benefits of social interaction and inclusion (Boavida & da Ponte, 2011; Hart & Whalon, 2011). This is in contrast to drama, where it underpinned the approach. The data demonstrate that Peadar displayed greater engagement in both pair and group work in SD than in any other setting, which he occasionally initiated. However, these opportunities were rarely observed in other settings, and therefore generalisability of participation levels from the drama environment cannot be established. The variables impacting levels of participation in different settings are explored below in order to better understand the phenomenon.

7.3.1 Perspectives on Peadar's Participation in Pair/Group Work

In SD, Peadar participated well in pair and group work, with teacher notes regularly stating 'he is a team player and enjoys being part of the group' (SD notes, 11th November 2017). Examples included sharing ideas with peers such as what jobs the animals could do in a drama about an inverse world: 'Dolphins as teachers and penguins as fishermen' (SD notes, 14th January 2017); working as part of a group to create a ship; and planning and improvising with peers in small groups [16 direct references to his team player skills and interactions were found in the documentary evidence reviewed]. However, one drama teacher noted he was selective of the peers he would choose to work with, preferring to work with close friends who shared his interests, but acknowledged that he would work with anyone if placed in a pair/group with them (DT2 PC, 10th August 2021). Peadar's enthusiasm for group work was recognised by his teachers in school, despite not being observed during the research period. All teachers highlighted his willingness to work in a small group or with a pair describing this as something that happened 'often', and his SNA commenting that he will work as part of a pair 'very often', and in a small group 'often' (SNA Quest, May 2018). This however was not reported after he joined a new class in 5th year, post the Covid-19 lockdowns, with his SNA stating 'he would rather work by himself' (Anna PC, 20th April 2021). [The impact of the Covid lockdowns is discussed in the conclusion to this study.] She noted that in the resource room he participated in group activities such as baking, owing to his comfort levels with the people present, which he confirmed: 'depends on who I am with, like normally I am fine with that' (Peadar PC, 1st October 2019). He rated himself as 4 out of 5 on enjoyment of pair/small group work, commenting that in the drama context 'I like it' (Peadar PC, 1st October 2019).

7.3.2 Impact of Peers and Environment

The data indicate that his level of interest in the social stimulus had a more significant impact than the peers present. He was not observed participating in group or pair work in the school setting during my observations, possibly because this was not a methodology frequently employed during the state examinations year during which Peadar was observed. Peadar noted greater inclusion of group work in school during the following year (Transition Year). Given the choice of working individually or as part of a group his preference was to work as part of a group as 'if you don't know what to do, people can give you suggestions' (Peadar PC, 1st October 2019). He stated his preference to work in a group with his friends, who he clarified as the 'people I know' (Peadar PC, 1st October 2019). The peers Peadar chose to interact with at lunch time were Simon and Danny, who were not in any of his classes but with whom he shared interests in video games and witty banter.

In drama, structured pair and small groups were routinely used throughout sessions, and participation was expected, and necessary to build and progress the story (Heathcote, 1978). Peadar was consistently able to work with others, although he preferred to work with peers he regarded as friends, such as Betty, who he referred to one of the 'OGs' (originals, i.e. participants who had been in the class with him a long time) and who shared similar interests (Peadar PC, 1st October 2019). SD observation notes demonstrate excellent collaboration during pair work, for example, 'Peadar worked well with Robert. He gave Robert opportunities to speak, but took the lead as was needed in this pairing' (SD notes, 30th September 2017), with teachers recording that he had 'good leadership skills' (DT2, 10th August 2021). He also worked successfully, in and outof-role, with peers whom he would not have selected himself. For example, when working with Frank. [Frank displayed repeated vocalisation and stereotypic behaviours.] Peadar found Frank's behaviours frustrating and responded 'negatively to Frank's news and comments' (SD notes, 9th January 2016), 'copying noises that Frank was making when he was speaking' (SD notes, 5th March 2016). The group were tasked with working together to come up with a plan to save TiR [teacher in role] as Granny Cop, a retired, well-respected member of the 73rd Precinct. Whilst on a case, Granny Cop was captured and held captive in a warehouse, with several obstacles in the way of the group saving her such as cluster bombs (created using masking tape on the floor) and TiR as security guards. When Frank shared his ideas to save her, Peadar initially 'found it difficult to accept his plan, pointing out all the flaws' (SD notes, 23rd April 2016). The group had previously rejected Peadar's plan, however when in role, 'when the group was going to save Granny Cop, and they met Carlos, a TiR who worked for the gang, Peadar supported Frank's idea of pretending that they were security guards' (SD notes, 23rd April 2016). In role, he prioritised enacting a successful plan to save Granny Cop, over his own plan, or his relationship with Frank.

Another example occurred with Lucas, another student with pronounced stereotypic behaviours. Ongoing challenges were recorded in the notes, and it was evident Peadar was irritated by Lucas' behaviour, covering his ears when Lucas was talking during news time (SD notes, 21st October 2017). Peadar showed reluctance to work with Lucas when placed in a group with him, 'he moved away from his group (Lucas kept following him and Peadar kept moving away from him), but he eventually sat on the edge of the group', edging in, and finally

participating (SD notes, 21st January 2017). As in the example above, it was the context of the activity and the drama as a social stimulus (Yoder & McDuffie, 2006; Stokes & Osnes, 1989) rather than the peers involved that Peadar appeared to value.

The social club setting offered another example where the social stimulus of the fictional world enabled Peadar to engage with peers he would not usually engage with. When he arrived, he lay on the sofa, back to the group, playing on his phone for 40 minutes. However, when he did engage, he created a story set in a fictional world which acted as the social stimulus through which he engaged with peers. The engagement started when a peer threw a cushion at him. He turned around, and immediately entered into role stating 'This is my kingdom, no one beats purple man' [the cushion he was holding was purple]. He then created a fictional world, with characters, a made-up language and a physical setting of a 'tunnel of doom' [the space between two sofas in the room]. He inserted tension in the form of 'leaders' who they had to communicate with and a ferocious beast who had to be kept in the tunnel: 'the head will bite you if you put your hand in', narrating that the beast was 'trying to escape, may day, may day' (Field notes, 24th May 2018). While only one peer threw the cushion, Peadar succeeded in engaging and drawing in four others. He offered reassurance to Jim, in role as the beast in the tunnel of doom saying 'It's safe, don't worry Jim' (Field notes, 24th May 2018). This demonstrates Peadar's empathy when in role (discussed later). This engagement lasted for approximately 15 minutes, and throughout Peadar narrated and led the direction of play. In this setting his peers followed his undisputed narration, adopting the roles he ordained. The fictional world appeared to be the social motivator for the teenagers to engage and acted as a social stimulus: skills which Peadar may have generalised from the drama space. This revealed parallels to Fred's behaviour when in role (see Chapter 6). The attraction of being in role was similar for Fred reflecting their investment in the fictional world and commitment to role and character which facilitated interaction above every other consideration. While an example of participation in group work, the example also demonstrates Peadar's propensity to dominate in unstructured settings, another characteristic shared with Fred.

Initially, when Peadar started drama aged eight, he tried to dominate the direction of play and refused to work with others, only willing to pursue his own ideas (DT2, 10th August 2021). The data on his profile reveal he would become angry and quickly frustrated, knocking tables and chairs over, and sitting cross legged with his back to the group in a corner of the room, often underneath a table. He would regularly pull blankets and sheets (from the props box) over his space to create a secluded hideout. However, the data indicate that once the action started, he would discretely leave his 'base' and rejoin the others without making a fuss. It records that he 'intensely disliked listening to other students' news' unless it interested him and would say 'wake me up when this is over' (Annual profile, July 2013). He rarely if ever participated directly in news time, and the first record of him doing so is from 2014 when he engaged a new student (Jason) in a prolonged conversation about a video game. Jason became a close friend of his, both

in drama and outside of it. They shared the same interests and had a similar sense of humour (DT1, 11th May 2019). Interestingly, Jason took the lead on most activities and Peadar was happy to follow. The annual profile for 2015/16 (July 2016) record that while Jason and Peadar automatically chose to work together at every opportunity, they demonstrated improved flexibility and willingness to work with others when asked to do so. Of the data analysed during 2015/16 - 2017/18, only one incident of Peadar's earlier tendency to dominate was recorded where he was described as 'struggling with team work' because 'he was trying to dominate' (SD notes, 13th May 2017). It is an area in which Peadar had greatly improved, as noted by his parents who accord the changes in him due to being able to 'be himself' in drama, his understanding of the structure of the classes, the value of the collaborative approach adopted, and the positive experiences and expectations of how young people work together in this setting which he doesn't encounter elsewhere (Audio recording, parents' PC, 23rd April 2014). Both parents described his changed behaviour as transformed in relation to a willingness to work with others and not have a meltdown if things don't go his way (Audio recording, parents' PC, 23rd April 2014).

7.3.3 Participation in Whole Class Activities

As with small group and pair work, his levels of voluntary participation in whole class activities were linked to interest levels in the task/subject area. However when asked a question directly, he engaged regardless of topic. One of Peadar's SNAs, Colm, indicated that in terms of voluntary participation, he volunteers responses to questions 'sometimes' (SNA Colm Quest, May 2018) but observational data demonstrate that response levels depended on his interest and enjoyment of the subject. His second SNA Anna noted that while levels of participation correlate with interest, they are also linked to his relationship with the teacher: 'if he gets on with the teacher outside of class, he is more comfortable in their classroom' and participates more as a result (Anna PC, 20th April 2021). She rated him as 3 out of 5 for participation, however if it's a class he liked she said it would 'definitely be a 4 or a 5' (Anna PC, 20th April 2021). My observations supported this, revealing he raised his hand voluntarily to answer in classes he enjoyed. This occurred also in drama where he enthusiastically contributed and volunteered answers when interested in the content, with his drama teachers rating him as 4 out of 5 in this area. This was an area where improvements were made as he developed an understanding of the expectation of socially engaging in other people's news and lives, asking relevant questions, but would do so for a limited time only (SD notes, 14th April 2017), which is explored below.

7.3.4 Impact of Interest Factor and Duration

When larger group activities or conversations were taking place in the drama setting, Peadar fully engaged if the topic was of personal interest (Arora et al., 2021; Wang et al., 2020). Despite this,

even when interested, he would take breaks from the activity/group conversation, almost appearing to recharge and reenergise as a result of the effort required for social interactions. In the home setting, his parents similarly observed that he will engage and participate in group conversations for a 'limited time' (Dad PC, 24th May 2018) such as when going out for a meal to celebrate his brother's 21st birthday where he engaged in conversation for a certain amount of time, and then 'he got to the point where he's like "that's it, I'm finished, I'm done so I will be out at the bus stop" (Mum PC, 24th May 2018). This occurred during news time in drama where, even if Peadar actively participated, he would often complain about the length of time spent on news, communicating his desire to start the drama: 'Are we going to do anything interesting today? We've spent twenty minutes doing news' (SD Notes, 18th February 2017). Time also presented as a factor during interactions with peers of his choosing (Simon and Danny) discussing topics of interest during lunch in school. On one occasion observed, during the 40 minutes spent together, they engaged in conversation and jokes, and then played on their phones for a while, before re-engaging. The longest observed sustained oral interaction between them was approx. four minutes (Field notes, 8th & 9th April 2019). Similarly, during news in drama, Peadar often played games on his phone when others were speaking, however when asked to put it away, he did so and re-engaged (SD notes, 25th March 2017; DT2, 10th August 2021). Choosing to move between his phone and interactions could demonstrate a need for 'time out', before re-engaging. His SNA commented on how he uses his phone for this purpose, signalling 'don't talk to me, I'm blocking you out' (Anna PC, 20th April 201). This is similar to him moving away physically from a group when he appears to have lost interest in the topic of conversation as reported by his parents and drama teachers, which will be explored later.

The level of structure provided, in addition to the length of engagement, could be variables for Peadar. For example, in school, he knew that classes were 40 minutes involving shorter periods of whole class listening and answering questions. When Peadar was directly asked a question he responded with ease, as it was clear what was expected. This is in contrast to family occasions such as birthday celebrations, which are not structured in a formal way and continued for considerably longer. The formal drama sessions themselves were structured activities, whereas the news element was specifically designed to replicate the routine back and forth of unstructured daily conversation and interaction, which the data demonstrate Peadar engaged with for a limited time only. He would play with objects, such as swinging on his chair when he began to lose interest and when the structure was too flexible and unclear to him (Peadar PC, 1st October 2019). His drama teachers reflected that the facilitated, structured, sequential nature of drama appealed to him recognising that within this there were many moments of' intentionally 'structured chaos' (DT1, 11th May 2019) where the teachers and participants were charged with remaining open, fluid and responsive to what unfolded as a consequence of their improvised interactions with characters and peers, and their engagement with the story (DT2, 10th August

2021). Similarly, he engaged in structured work which was facilitated in the resource classroom at school (Anna PC, April 2021). This is in keeping with studies which highlight the importance of structured activities for young people with ASD (Lewis et al., 2005; Wegerif & Dawes, 2004).

There is no evidence of generalisability across participation levels and willingness to work in groups/pairs from the drama setting to other parts of his life. Environmental considerations such as expectations, the structure of tasks, interest levels and social stimulus appeared to impact Peadar. He selected to work by himself in the school setting, which he also did on occasion in SD, which is discussed below.

7.3.5 Working Solo

In SD, the data demonstrate that Peadar chose to work by himself 'some of the time', in relation to planning and drawing tasks such as creating maps or character outlines, even when he had been afforded the opportunity to work in a group, with his drama teacher commenting that this occurred when he had an idea that was different to the others (Audio recording, PC, 19th April 2016). An example of this was when the group were faced with a character Butch, a dictator in an animal kingdom who wanted to get rid of weaker animals and set strict curfews. As the groups were working together to decide what to do to make society fair and just, Peadar piped up 'I am going to work solo' (SD notes, 13th February 2016), and created a plan by himself to break into Butch's castle to gather more information. While his ability to compromise and collaborate has evolved greatly since joining SD (DT2, 10th August 2021), the documentary evidence reports several examples where Peadar shared his solo ideas that were not always appropriate to the situation. For example, stating 'My team all did their own ideas' and when asked 'How could these ideas work together?', he responded 'I don't think they can' (SD notes, 3rd December 2016).

A desire to work 'solo' as he himself referred to it was mostly evidenced when completing imaginative drawing tasks. While some tasks were individual, such as creating a character profile, others were designed as group tasks, and Peadar would often choose to work alone on these. An example was when the group were drawing where the drama would be set. Peadar choose to draw by himself, using a section of the large sheet of paper laid out. When his group were presenting what they had created, he reported that he drew the 'spooky forest beside the police station' (SD notes, 2nd April 2016). He elaborated that it 'is a very tough station, very demanding and very bad criminals and crimes happen there' (LP, 2nd April 2016). His desire to work alone could be due to his active imagination, and a need to express these ideas in a Jungian sense of individuation, developing his fullest potential at that moment (Jung & Riklin, 1910). His drama profile from 2015/16 records his frustration and anxiety at being interrupted when engrossed in sketching his contribution to the drama. During interview, one of the drama teachers felt that he was anxious to work 'solo' on his ideas in order to record them as soon as they came

into his head for fear of forgetting them (Drama Teacher PC, 9th August 2021). This phenomenon was also recorded in relation to other participants desperately wanting to 'off-load their ideas' for fear of forgetting them and wanting to hold the floor while they had everyone's attention (Clarke & Fox Tree, 2002). In contrast to others in his drama class, the desire to work solo was rarely seen when Peadar was working in role, or when reflecting/discussing out-of-role after an activity (DT2, 10th August 2021). He was able to accept when his ideas were not embraced or used by the group, and capable of assenting to others' ideas. His belief and investment in the drama, which his drama teacher commented was very strong (DT2 PC, 10th August 2021), appeared to help him forgo his own ideas to develop the overall drama story and experience, and suggests an ability to compromise not usually reported in people with ASD (Rucklidge, 2009; Hui Min & Lay Wah, 2011). His drama teacher suggested that having 'lived through' and experienced situations when other participants tried to dominate the story, which only resulted in delaying the action (from his point of view), helped facilitate his ability to compromise in order to develop and progress the drama (DT2, 10th August 2021). This was identified for Fred also in Chapter Six where the drama afforded him the opportunity to 'live through' meaningful and 'real world' type social interactions, which did not regularly occur in other settings. In addition, Peadar is reported as recognising 'compromise in action', i.e. he can see the flexibility of the SD model which allows participants opportunities to develop their ideas individually at the design and planning phases, and to work collaboratively at other times (DT1, 11th May 2019). This flexible approach appeared to operate half way between the school (more tightly structured) and the unstructured social club setting. His desire to work solo appears related to a degree of pride and interest in his imaginative creations, which was not observed in other settings. Classes in school were highly structured, predominantly involving a teacher led question and answer approach, which did not facilitate Peadar inputting ideas, or responding imaginatively to the content.

The next section discusses his problem solving abilities, which involved him working as part of a group and individually to resolve problems.

7.4 Problem Solving

While the literature on ASD claims that problem solving in both educational and real world contexts can be challenging (Cox & Root, 2021; Bogte et al., 2007; Hill & Bird, 2006) data from this case study demonstrates mixed results. Variables included content and environment, with Peadar struggling in some settings and demonstrating strong abilities in others. Opportunities for problem solving within the structured school curriculum were not observed, but he was observed using problem solving skills in real world contexts successfully. For the purposes of this study real world problem solving is understood as problems that arose for him outside of the structured

curriculum or drama story, which the literature suggests can be difficult for people with ASD (Merrill et al., 2017).

7.4.1 Perspectives on Peadar's Problem Solving

Data indicate that Peadar rates himself highly in relation to problem solving in drama, as do his drama teachers (Annual profile, 2017; DT2 PC, 10th August 2021). When using the 'thumbs up, thumbs down' approach I asked him 'In drama we solve lots of mysteries, and use clues and things to solve problems, would you say you find that easy, middle or hard?' (Peadar PC, 1st October 2019). He responded with thumbs up without delay, spontaneously referring to de-coding a letter, which had taken place three and a half years previously, going into great detail stating 'I mean, me and one of the old people, Mary, found a piece of paper, found a code.....and we cracked the code' (Peadar PC, 1st October 2019). This aligns with his drama teachers' reports in which he is rated consistently between four (very good) and five (excellent). His baseline profile in 2012 placed him at a relatively high three out of five on the Social Drama Assessment Tool (SDAT) when he began.

Peadar's parents discussed problem solving in relation to concrete tasks, such as lego and solving what they referred to as 'real life problems'. They commented that 'he's not bad, it depends on what it is' (Mum PC, 1st October 2019). Using the SDAT scale, both parents independently rated his problem solving ability in real world contexts as a three, as did his SNAs. However Peadar rated himself using the same tool as a five. The discrepancy could be due to the fact that his parents don't see him engaged in detailed problem solving in the fictional world where he is highly motivated. He exhibited excellent problem solving skills when working in role, demonstrating an ability to think quickly and respond to situations appropriately (Cerbo & Rabi, 2019). The following section presents evidence of Peadar's ability to problem solve when in role and also when improvising in real world contexts.

7.4.2 Planning

Peadar demonstrated excellent problem solving skills when working in role, in particular when planning interactions with a TiR or SiR. His abilities were demonstrated by identifying and predicting problems that may arise (n=8), in keeping with Heathcote's (1984) theory of problem solving 'from within'. An example occurred during a press conference when Butch and Mr Tom (the dog and cat leaders) shared that the humans in the zoo were eating too much food, and 'there would be rationing of the remaining supplies for everyone until they can come up with a solution' (LP, 30th January 2016). When someone suggested killing Butch to solve the problem of the food shortage, Peadar said 'We can't kill Butch, there will be a search party sent out' (SD notes, 30th January 2016) elaborating on why and what they should do. This demonstrates a scientific

approach of formulating, assessing and addressing the issue at hand in somewhat of an Aristotelian method. In Aristotle's approach, aporiai ('problems' or 'impasses') are regularly presented during drama and require the searcher to problematise and consider all the difficulties beforehand by working collaboratively and listening to the different contending arguments before being in a position to judge the best way forwards out of that impasse (Quarantotto, 2020). Peadar's classmates were leaning towards a less well thought out solution of simply 'killing' the ruling dictator, in keeping with Morgan & Saxton's (1989) 'kill the king' theory in drama to solve the problem. In contrast, using an Aristotelian approach, Peadar worked out the likely consequences of his peer's proposed 'solution', and shared other possible perspectives. For example, he later offered a solution to help the hungry humans in the zoo: 'Take the food, share it and say Butch gave it to us as a treat' (SD notes, 30th January 2016). This reveals his ability to empathise, as well as problem solve when working in role, which will be returned to later in the chapter. His skill at identifying and offering solutions was evidenced on many occasions, where he had 'lots of theories in relation to the red rose (e.g. grave digging)' (SD notes, 24th March 2018). The data record several instances of Peadar working creatively and critically within the group to overcome problems (n=8), and enthusiastically share his ideas. The 'wonderment' or astonishment (thauma) which Aristotle spoke about is stimulated when one encounters an impasse (Quarantotto, 2020), and this aspect of drama appealed greatly to Peadar. It allowed him to philosophise to a degree, which was often taken up and expanded upon by others in SD.

While no structured group or individual problem solving of this nature was observed or reported in the home or school setting, Peadar was observed engaging in real world problem solving which was improvisational in nature.

7.4.3 Improvisation

An ability to improvise and respond to unfolding, albeit fictional situations, is a building block of the SD model. Sessions are intentionally designed to provide participants with opportunities to 'live through' experiences which are unscripted and improvised, and require participants to draw from their own resources to respond and problem pose in moments of challenge or crisis (DT1, 10th December 2019). Peadar's strong improvisation skill when problem solving was observed in drama, most commonly when interacting in role. Phillips (2013) found that being in role affords children the opportunity to problem solve and improvise (see also Ladousse & Malay, 2004). An example occurred when improvising with TiR as 'Sneaky Peaky'. Sneaky Peaky was holding people hostage, and 'threatening to harm himself and all those around him' (LP 5th March 2016), when Peadar in role negotiated with Sneaky Peaky for everyone's release. The notes record that 'Peadar was fantastic negotiating and convincing TiR to let him in' (SD notes, 5th March 2016). The data report that Peadar had the ability to enact agreed plans, but also to

improvise when opportunities arose. He engaged particularly well in role, reflecting on interactions and using information gleaned to piece together clues to help solve the mystery, for example, when decoding a letter which had been handed into the police station about a kidnapping. The notes record that Peadar working in his group 'read the letter carefully to try and decipher it. Very clear, astute and methodical about interrogation. Decoded note on the letter' with his team (SD notes, 21st May 2016).

Similarly, an ability to think on his feet and improvise was found in real world problem solving in a variety of settings. In school when he didn't want to attend PE (Physical Education), he employed a variety of improvisational strategies to avoid participating. In the social club, he found a way to engage with peers through improvising that was enjoyable, whereas prior to this he was not interacting on any level. While no structured problem solving tasks were observed in the home setting, his parents shared an example of when he was in the city centre with his friend, Harold. Harold did not walk him to the bus stop as agreed, and Peadar did not know where to go. In this instance he called his parents and told them that he did not know where he was but remained calm (Mum & Dad PC, 1st October 2019). His parents were surprised and pleased that he had drawn on his resourcefulness and improvised during a difficult moment to find a solution without panicking. While this example is encouraging, no further examples were observed or shared, indicating that he may not have many opportunities to develop this skill, apart from in drama. His SNA commented that she would love to see him 'flourish' without an SNA present (Anna PC, 20th April 2021), highlighting that someone is always with him and when problems arise, he has adult support he can turn to at all times, diminishing his need to problem solve or improvise. This was reported by his parents as a concern five years earlier when discussing the high levels of support provided in primary school which they felt almost 'saturated the child' and could be 'very intense'. They said his psychiatrist at the time felt his SNA was 'sitting on' and 'over supporting him' by organising everything, with his Dad noting that Peadar would whisper to his SNA if he wanted a pencil instead of asking another child to pass it to him (Audio recording, parents' PC, 19th April 2016). They hoped his experience in mainstream secondary school would be different where 'he would also turn around to a friend and say look I forgot that, have you ... rather than the adult jumping in' (Audio recording, parents' PC, 19th April 2016). Unfortunately, the data suggest that 'a dependency model' as his father had referred to it some years earlier had not lessened in school. This was also evident in Fred's case study.

Peadar was afforded regular opportunities to practice problem solving in the drama setting, in multiple scenarios, employing multiple exemplars (Stokes & Baer, 1977; Stokes & Osnes, 1989). Fictional worlds enabled him to develop these skills in 'as if' environments, standing in the shoes of another (Heathcote, 1984; O'Neill & Lambert, 1982) and improvising in response to situations as they unfolded. Much literature in the area of problem solving and ASD focuses on practising through didactic single role plays (e.g. Cote et al., 2010; 2014; Shure, 1992),

however the process based model enabled Peadar to improvise when problem solving, which would not have been possible in a didactic style, scripted role play (Ladousse & Malay 2004; Phillips, 2013).

Peadar demonstrated a strong ability to problem solve in some settings when afforded the opportunity to do so, however while there is limited evidence of generalisation, it appears a lack opportunities outside of drama may limit his development in this area more generally.

There is a correlation between problem solving and levels of sustained concentration which is explored below.

7.5 Concentration

While very good levels of concentration were evidenced in relation to structured oral tasks, discrepancies regarding Peadar's levels of concentration were identified in relation to written tasks. The data demonstrate good levels of concentration in the drama setting, which were not evidenced to the same extent in the school and home settings. Variables considered were the time of day, length of task, motivation and methodologies used. While the literature states that interest levels directly impact levels of concentration (Burack et al., 2016; Robison, 2011; Szcytko et al., 2018), this was not always the case for Peadar.

7.5.1 Oral Tasks

Across all settings Peadar demonstrated excellent levels of concentration when participating in structured oral tasks, sometimes regardless of interest level, which challenges the literature in ASD (Burack et al., 2016; Robison, 2011). In Geography, for example, which he stated he did not enjoy (Peadar PC, 10th April 2019), and in History, he appeared to be engaged throughout the oral elements of the lesson, volunteering to answer questions. For example, at the start of History, when the teacher carried out a quiz, whereby each question was connected to the previous person's answer, he answered without difficulty (Field notes, 10th April 2019). Sometimes his physical stance did not depict concentration, for example, in Geography when the teacher was reading, he 'did not follow along in the book, but instead looked at the teacher, rubbed his eyes and had his hands covering his face' (Field notes, 9th April 2019). However, he was able to answer questions when asked, proving he was listening and engaging. Peadar's father commented on this stating that 'some of his teachers had observed that, they said that he wasn't listening or paying attention. He does, he takes a lot in' (Dad PC, 1st October 2019). While Peadar may not always be sitting still or looking at the teacher, the observational data highlight that he was still listening and focusing (Doherty-Sneddon et al., 2012). However, his SNA highlighted that his levels of concentration were directly linked to interest levels, his mood 'there are good days and bad days', which was supported by his drama teacher (DT2, 10th August 2021), and the duration of the class

(Anna PC, 20th April 2021). The correlation between interest and concentration levels is in keeping with the literature (Burack et al., 2016; Robison, 2011; Szcytko et al., 2018), and still stands despite his ability to concentrate in subjects he said he doesn't enjoy, which may be more related to his relationship with the teacher than to the content.

In drama, Peadar demonstrated high levels of concentration when working in role, completing oral tasks and interactions such as taking on the role of the chairperson of a crime unit investigating a murder, where he was 'very involved throughout' (SD notes, 27th May 2017). His drama teachers rated him a four out of five for concentration with many examples recorded, such as when improvising a court scene, where he came up with questions for cross examination on the spot (SD notes, 3rd June 2017). In comparison, his out-of-role levels of concentration varied and depended on interest level and time spent on the activity (as discussed earlier).

While Peadar displayed high levels of concentration when participating in oral tasks in both school and drama, data indicate this was not the case for written tasks in the home and school setting.

7.5.2 Written Tasks

Peadar noted that he does not like writing, calling the interview 'The "I hate writing" podcast' when the topic was raised (Peadar PC, 1st October 2019). The absence of enjoyment and interest could account for a lack of concentration during some written tasks, such as homework. While it appeared from observation data that Peadar was concentrating, his SNA noted to me 'He's very lazy' when he was not completing the work at a satisfactory pace (Field notes, 8th April 2019). Similarly, in Art Peadar completed his drawing task quickly and with apparent ease, however when he was asked to come up with a written title for it, he struggled and spent much of the 80minute class working on it. In contrast, there were examples when he demonstrated very good concentration during short written tasks and 'finished while the rest of the class were still working' (Field notes, 8th April 2019). At the end, he said to me 'It's not exactly the most exciting class is it?' (Field notes, 8th April 2019). Despite his lack of interest, his perception of it as a short written task (approx. eight minutes) appears to have been a key factor: 'That's not much' (Field notes, 8th April 2019), indicating that if he feels a task is manageable he can focus more easily. His struggle to concentrate during written tasks in History and Art, subjects he enjoys is not fully in keeping with the literature and suggests that the size, duration and structure of tasks are key factors.

In comparison, in SD he demonstrated high levels of concentration when completing drawing and writing tasks in role, such as map making and creating character profiles, investing extremely high levels of detail and rarely finished before the time was up. For example, 'For his character profile he was a time traveller and wanted to fix everything that is wrong with the world.

He said that his last mission was saving a child from a burning house' (SD notes, 24th September 2016). This could be attributed to the fact that written tasks in drama were nearly always accompanied by a choice to either write and/or draw, which Peadar enjoys and associates with imaginative expression (Peadar PC, 1st October 2019). They were also tightly timed, with seven to ten minutes allocated to the activity. Working in role with a purpose, for example, to build a character, or solve a problem appeared to motivate him, in comparison to responding to tasks or activities which he perceived as lacking purpose. This appeal of logic was noted as significant for Fred also. In drama, participants are encouraged to employ divergent thinking, and this appeared to motivate Peadar to develop coherent and compelling written and illustrated fictional narratives which he was enthusiastically willing to orally expound upon. Motivation enhances levels of concentration (Burack et al., 2016) and Dillon and Underwood (2012) reported the same phenomenon in computer mediated imaginative storytelling with children with ASD. Interestingly, when asked if he liked all the drama stories he responded 'not all of them' (Peadar PC, 1st October 2019), but levels of concentration and engagement did not appear to be impacted by this, nor by external events or his emotions. This is in keeping with findings relating to interest levels and concentration in school where despite classes being unruly, he maintained concentration. The data suggest that the purpose of an activity and internal logic were overriding motivating factors for Peadar. Therefore, being asked to write a caption according to the teacher's specification for his art work appears not to have made sense to him, and he struggled for over an hour with it. The evidence points towards the degree of internal coherence or logic as a main contributory factor, i.e. if the activity or task made sense to him and had purpose as he perceived it, he could sustain extensive levels of concentration, largely irrespective of the external environment. His emotional state appeared not to impact his ability to concentrate if he was interested in the storyline, and only one example was recorded where a peer he was working with had a negative impact on his levels of concentration and engagement. Even when asked about potentially moving class with some other students where he became quite upset, he immediately regulated his emotional state once the group were asked to create a character for the fictional 'NECTO' competition, because they needed to go to the awards ceremony to gather surveillance information: 'he created his character by himself, and presented it to the group with no difficulty (characteristics such as: hot headed, flamboyant, living in space and can teleport featured in his written work)' (SD notes, 22nd October 2016).

Similarly in other settings, the environment did not emerge as a contributing factor, as in both Art and Geography he commented on disruptive behaviours in class, but these did not adversely affect his concentration, challenging the literature in the field (e.g. Matson et al., 2013). When discussing strategies to cope with classmates' behaviour, he said 'I just try and ignore them', 'I think of nothing' and 'enter the void'. When probed, he described the void as 'it's just black' (Peadar PC, 1st October 2019). This physically manifested as 'zoning out', where he placed

his head in his hands, covered his face or stared into the distance (Field notes, 9th April 2019). It was observed twice in the school setting when he was invested in the content being studied, and on both occasions he was able to engage and maintain concentration. The same single-minded approach was observed in drama where a lack of attention to peers' stereotypic behaviours seems to stem from his atypical perception and approach to learning (Sapey-Triomphe et al., 2018). For Peadar the social context and socially relevant cues in those situations was less relevant for him than to his TD peers, who responded to the disruption spontaneously.

The same was found in the home setting when family members or visitors were talking noisily or engaged in household tasks. Although his parents rated his concentration levels between one to two on the SDAT scale, the lowest rating they gave for any skill, Peadar rated his own concentration across all settings and activities as three out of five. Interestingly, his drama teachers rated him as four. His parents expressed concern about his levels of concentration in the home setting, specifically when completing written homework, noting that he would be slumped over the table, and 'there would be a lot of shifting' (Dad PC, 24th May 2018). The literature confirms that efforts to concentrate on a task can be accompanied by repeated sounds, phrases or movements (Marom et al., 2018). His SNA reported him as being 'lazy' and not concentrating when he observed similar behaviours in the classroom. In contrast, such behaviours were accepted as routine and normal in SD where children sprawled out on the floor, sat at a table, or found their own space in the room (often under a table or leaning against the wall), and physical posture as best suited their needs, without comment from teachers. Encouraging a comfortable and natural approach when speaking, listening, drawing or writing was demonstrated in drama but not in other settings, and may have impacted others' perceptions and interpretation of his concentration levels.

Time of day and energy levels were found to have marginal impact across settings (Anna PC, 20th April 2021; DT2 10th August 2021). However, structure did play a role irrespective of setting, as when engaged in written tasks and given clear instructions on how long he had to complete the task and what would happen next, he succeeded. This appears to be even more significant for Peadar than perceived purpose or interest levels. People with ASD have better outcomes when instructions are explicit rather than having to be extracted and generalised (Sapey-Triomphe et al., 2018; Van der Hallen et al., 2016).

Concentration levels demonstrated in SD did not purportedly generalise to the home and school settings, possibly owing to differences in perception of what concentration looks like. Recognition that children concentrate in different ways, and opportunities to maximise that in a flexible environment were evident in the drama setting, but not elsewhere. Being challenged through purposeful and enjoyable tasks which require concentration and problem solving skills did not occur in either the school or social club (the former being overly prescriptive and the latter lacking structure and facilitation). Writing in role, incorporating drawing and a flexible use of

imagination in a process-based creative pedagogy, contrasted with the school and homework tasks observed which focused on completing a product. In contrast to the research which claims that children with ASD experience difficulty in developing creative imaginative content in writing (Asaro-Sadler, 2016), Peadar's data support that he successfully connects imagination with socially based creativity, mentalising, and narrative production in his written work in drama (Crespi et al., 2016; Kaufman, 2017). This may be because of the flexible environment it occurred in. The role of imagination in Peadar's life is explored next.

7.6 Imagination

While the research continues to highlight a lack of imagination in children with ASD as demonstrated through social and communication difficulties, repetitive play and the absence of invented games (Bourke, 2020; Ivan et al., 2020), findings from this case study align with Carlson & White (2013) and Ten Eycke & Muller (2015) who associate the components of Executive Function with the components of imagination in autism, such as the inhibition of representations of reality and thinking flexibly about ideas based in fantasy. However, as this section will show, Peadar demonstrated excellent imagination in the context of understanding imagination as an essential and defining characteristic of human thought (Singer and Singer, 2013), and as related to the literature on creativity where it refers to the generation and conceptualisation of novel ideas (Harris, 2000) in life and not just related to fantasy. Against a Vygotskian (1967) perspective where imagination builds on previous experiences, Peadar was observed combining elements of past experiences in an effort to create something new and novel (Grandin, 2007). Following drama in education, SD adopts an 'as-if' metaxic approach where working in the fictional world informs our understanding of the real world with participants maintaining a foothold in both simultaneously; with learning in one informing the ether (Boal, 2001; Bolton, 1984). Evidence of Peadar's imaginative capacity are drawn mostly from data relating to the drama setting, as opportunities to engage imagination were not frequently observed or reported in other settings.

7.6.1 Differing Perspectives on Peadar's Imagination

Respondents held quite different perspectives about Peadar's imagination, ranging from excellent to not very strong. This may be because some interviewees did not observe him using imagination, or because of possible differences in understandings of imagination and autism.

Peadar shared how much he enjoys using his imagination, stating his favourite thing about drama was 'playing with your imagination' (Peadar PC, 1st October 2019). When discussing robotics, a new subject he was taking during TY in school, he enthusiastically discussed how he used his imagination. When asked to rate his imagination, he gave it a five out of five (Peadar PC, 1st October 2019), the same rating as his drama teachers. Peadar's teachers

and SNAs varied in their opinions however, with his Art teacher commenting that she witnessed him using his imagination 'very often' but Colm (SNA) who accompanies him to Art stating he had not witnessed Peadar using his imagination at all. Two other teachers completed the questionnaire, with one stating they had 'not witnessed' him using his imagination and the other stating he used it 'sometimes' (Teachers 1 and 2 Quest, April 2019). In contrast Anna (SNA) rated his imagination as 4 to 5, describing it as 'high', and giving an example of creative story writing to illustrate (Anna PC, 20th April 2021). Discrepancies could be due to the fact that observations revealed no opportunities outside of Art class for Peadar to use his imagination in school, which Anna confirmed. This implies that participating teachers may not have seen Peadar using imagination at all, in keeping with Trotman's (2008) findings of a lack of understanding of imagination in secondary schools. Subject content, pedagogies adopted, and levels of interaction and relationships with Peadar could also be factors in how frequently they see him engage his imagination. Informal conversations with wider school staff during observation days suggested a lack of understanding around this terminology, and a variety of interpretations of what it means to be imaginative in the school setting. Consensus emerged around the notion of imagination being the reserve of creativity and the arts, with Peadar's SNA supporting this, claiming that in Maths and Physics there is 'not much creativeness there' (Anna PC, 20th April 2021).

When discussing imagination his parents felt that he demonstrated good imagination 'within confines' (Dad PC, 1st October 2019). His father gave an example of him creating a 'great art project' based on a video game, but added that the content was not original, which again highlights differing understandings of imagination by adults in his life. This was also found for Fred, and is in keeping with generativity theories (Hill, 2004), rather than more contemporary understandings of imagination. Rating his use of imagination as a 'two to three' out of five, his mother added 'I wouldn't say it is amazing' (Mum PC, 1st October 2019). In the home setting, he was not observed using imagination with peers in a traditional face to face sense, but was observed playing video games online, engaging his imagination, and orally and viscerally interacting with peers through this medium. This could be explained through the research of Ten Eycke & Muller (2015) who posit that perceived deficits in imagination for students with ASD are due to their social deficits rather than deficits in imagination. When playing online, Peadar's adaptation of familiar stories and contexts was highly inventive and creative, and in keeping with Weisberg's (1986) and Vygotskian (2004) theories on imagination and the generation of novelty through combining past experiences. This was acknowledged in the drama setting, with one drama teacher commenting that he demonstrated 'excellent narratives in relation to fiction that he would be familiar with' (DT2, 10th August 2021), and another noting the social appropriateness of his imaginative interventions to the situations being explored: 'he's pretty amazing at connecting with others in the class about online games and imaginatively morphing some of these fictional characters in new directions to appropriately fit the dramas we are doing. It's been a

great way for him to make friends in the group which have developed into friendships beyond the class' (DT1, 11th May 2019). Recent research on the impact of massive multi-player online role-playing games with secondary school students points to higher levels of imagination, originality of thought and creativity amongst players than non-players, with positive impact on players' sense of leadership, intuition and sense of humour (Mikhailova, 2019). However, in this study outside of drama, the data suggest that online and video games were not regarded or recognised as imaginative or valuable social activities by adults in Peadar's life.

7.6.2 Lack of Opportunity to use Imagination in School

When asked about using imagination in school he observed 'I'm kind of limited' (Peadar PC, 1st October 2019) and spoke about how he only got to use imagination in two subjects (Art and Robotics). He said that he enjoyed and was proud of his art work, and his Art teacher told me in his presence that he 'is an art machine' (Field notes, 9th April 2019). However, he spent most of a class coming up with a title for a print he had created previously, which was shark themed. His aim was to come up with an inventive and humorous title and he made numerous attempts (Field notes, 9th April 2019). However, his SNA and teacher informed him that the title was too long, so he came up with a simple factual title, and also changed the lettering in response to their requests. He was clearly frustrated, as depicted by his body language and facial expression, and while his creativity and imagination was accepted through the art he created, he was frustrated at not being allowed the same flexibility in titling the work: 'If I could make mine long, I could actually make a good one' (Field notes, 9th April 2019). Course work restrictions and teacher expectations limited Peadar's imagination and creativity on this occasion. His father also commented on the lack of room for creativity, curiosity and individuality at school, referencing a TED talk about education systems, which 'says that we are given these vessels of imagination, curiosity and creativity and everything, and what we do is we beat it out of them' (Dad PC, 1st October 2019). When I asked Peadar if he would like to be able to use imagination more in school he answered without hesitation 'yes, so much' (Peadar PC, 1st October 2019), and when probed on how the school might facilitate this, he suggested 'I guess more drawing stuff' (Peadar PC, 1st October 2019). He did not mention drama methodologies, and when asked about this, he expressed uncertainty that they would be successful in the school setting. Referring to its group collaborative nature, he found it difficult to imagine his teachers using drama, whereas he could imagine them using drawing and art in other classroom settings as students are seated individually.

7.6.3 Demonstrating Imagination

Data highlight Peadar's active imagination, but he required a degree of facilitation or 'an opening' in order to feel comfortable and confident exercising it. Outside of Art class, school was not a conducive environment, and at home, opportunities for imaginative interaction largely focused around video/online games. In drama, the data report him as responsive and quick to enter fictional and imaginative worlds and he was always on the look-out for opportunities or that 'open door' as Trotman (2008) refers to it, when he could move from what he perceived as mundane reality into an interior, free-willed imaginative lifeworld (Audio recording, parents' PC, 19th April 2016). This he did with ease and almost automatically. His annual profile (July 2015) records that he waits patiently until news time is over, almost like an actor waiting for the real action to begin, and then he lights up and shines. His bubbly personality comes to the fore. The notes record that "his imagination is a social lifeline" for him, which is picked up again after two years when his profile queries the extent to which he relies on drama and the imaginative world as a vehicle to socially connect and interact with others outside of drama classes (July 2017). In a parent interview, Mum and Dad said that his time in drama is the most fulfilled and genuinely content time of his week, and after drama he "is buzzing with ideas for the week waiting to go the following week. It is helping him a lot with his social skills. We only wish the same was happening at school" (Audio recording, parents' PC, 19th April 2016). His ability to engage his imagination in drama, and the impact it has on his social interactions, is in keeping with literature in the field which emphasises the social group focus of drama which supports imaginative development, and the routing of imagination in the social context (Cooper, 2013; Kearney, 1994; Wheeler-Brownlee, 1998).

During drama, Peadar sustained sophisticated roles for the duration of sessions, and was able to differentiate between fiction and reality (scoring consistently 5 out of 5 on the SDAT scale over a five year period). On occasion, his contributions were influenced by films and video games. This aligns with Trotman's (2008) findings where the understanding of imagination and creativity did not accord with the place of originality in imagination as articulated in much contemporary research (Richard et al., 2020; Vong et al., 2020). Peadar similarly reflected a more child and adolescent portrayal of imagination than adult interpretation which regards gaming and similar activities as inimical to imaginative and creative development (Trotman, 2008). In drama, while video games and films were often a starting point for Peadar, his interest in and capacity for improvisation facilitated novel and original responses to characters and plots. Between 2016 and 2018, several of the drama storylines did not enable direct correlations to films/video games, and the data demonstrate levels of original thought evidenced by Peadar. A strong ability to improvise was instrumental in allowing him to craft original and highly imaginative interactions, for example, when cross examining Mr Blake in the court room about a cold case murder of a

local woman twenty years earlier. He created questions on the spot, without time to prepare which stretched the capacity of TiR and the SiRs (SD Notes, 3rd June 2017). Many similar examples of improvisation were evidenced when interacting in role, for example, meeting an injured captain in a war time drama, and asking/answering questions, inferring theories based on information received (SD notes, 4th March 2017). The data are conclusive that in the drama setting Peadar engaged his imagination frequently, with ease, and created original characters and content working as part of a group and individually. His imaginative capacity was attributed to contributing to his ability to make and sustain friendships with two peers in particular, which lasted for many years. Their imaginative "plotting and scheming when working in groups built strong bonds which you'd see carry on in their conversations after drama class as they walked out together" (DT2 PC, 10th August 2021). The same imaginative playfulness was demonstrated with his allistic peers in school, Simon and Danny. As discussed, his initiation of an impromptu drama in the social club demonstrated a desire to reach out and connect with others when more traditional communication methods were less comfortable for him (Ten Eycke & Muller, 2015). It presented an enjoyable opportunity to connect with peers without the challenge of traditional norms of social engagement. However, it was not actively encouraged or facilitated in that environment, and Peadar refused to return reporting that he didn't feel comfortable: 'I don't want to go because they are all assholes' (Field notes, 24th May 2018). Using imagination appears to have been an appealing and comfortable way to interact with peers, and intrinsically rewarding and satisfying (Csikszentmihalyi & Whalen, 1993). His creative disposition was facilitated in SD, and to a degree in Art, the only arts subject available in his school, and during free time at home when allowed to play video games, but not in his resource or mainstream classes.

7.6.4 Conclusion

Peadar's use of imagination in the social club appeared to be a generalised skill from the drama setting but wider generalisability cannot be claimed due to the low number of incidents observed or reported outside drama. However, the findings point towards the significance of imagination as a tool both to enjoyably engage with his interior lifeworld and somewhat unusually, share that experience with others through drama (Singer and Singer, 1990, 2013). His data challenge the persistent view in the literature that children with ASD have limited imaginations as revealed through patterns of repetitive play and the absence of invented games (Bourke, 2020; Ivan et al., 2020), or conversely, that their imaginations are dominated by the fantastical (Ferguson et al., 2019). His use of imagination represented a more holistic understanding of the construct than typically features in the literature on ASD. This was also found in Fred's case study, demonstrating free will, enjoyment and expression, control over imagined worlds, freedom to exercise personal interpretation, opportunities to link imagination to the development of novel

ideas, and exercising imagination as a thinking skill, mode of philosophical enquiry, and an expression of their emotional intelligence (Root-Bernstein, 2014; Taylor et al., 2020). The findings across both case studies advance that limited opportunities to use imagination in the school settings, suggest a need to transcend traditional subject boundaries such as Art and an appropriate reframing of inclusive curriculum and pedagogy which will be discussed in the following chapter.

7.7 Social Stimuli

The literature highlights the importance of social stimuli for young people with ASD to support social interactions and act as a social motivator (White et al., 2007), but recognises an impairment in their ability to extract value or meaning necessarily from social stimuli (Hanley et al., 2014), and their orientation towards non-social stimuli (Burnside et al., 2016; Gale et al., 2019; Tillmann et al., 2021). It is of note that in both case studies, no evidence of Fred or Peadar responding to physical over social stimuli was found. This is in keeping with an earlier study which found that children who had participated in social drama for two or more years performed significantly better on social than physical attribution tests when compared with other studies of children with ASD (Boran, Delany & O'Sullivan, 2011; O'Sullivan, Boran & Delany, 2012b). While an under researched area, studies which incorporate social stimuli identify their importance and demonstrate success (Corbett et al., 2014; DeRosier et al., 2011; Laugeson et al., 2012, 2014). For Peadar, a social stimulus of common interest to himself and peers was essential to developing friendships, however it was not always necessary once a strong connection had been established. Another emerging theme was his use of a prop as a social stimulus with peers of his choosing, and his use of the fictional world to engage peers which was found for Fred also, even those he does not like, indicating that the enjoyment and fulfilment received from participation outweighed his personal feelings towards those present. Data reveal that his circumscribed interests (CIs) were a powerful determinant in his attention and focus, but drama acted as both a CI and social stimulus for Peadar. In contrast to the literature which claims that people with ASD show greater motivation towards the non-social world (Wang et al., 2020), in Peadar's (and Fred's) case, the fictional world acted as a CI and a social stimulus, thereby motivating him in the drama setting and increasing his social interaction (acting as a social motivator) most visibly through his attention on the interlocuter (usually in role), and modulating his gaze and facial expressions (Doherty-Sneedon et al., 2012, 2013) according to the demands of the unfolding drama story. Parallels between drama and game-based learning have been mentioned above, but recent research suggests that children with ASD pay more attention to cartoons than to real social stimuli (Zhang, Peng & Zhang, 2020). Challenging those studies to a degree, the data here point towards a melding of social and non-social worlds through SD. The more complex the cartoon or online

game, the more direct eye attention it elicits from children (Zhang et al., 2020). The data here confirm Peadar's high levels of engagement and socially appropriate and relevant behaviours when the drama was challenging, complex and exciting. The same was found for Fred. However, in contrast to the virtual worlds of cartoon and online games, SD brought participants directly into lived experiences with other people in the real world, albeit framed through a fictional lens but with a metaxic objective: where the learning from the fictional world seeps into the real world (Boal, 1992).

However, social stimuli were not always successful for Peadar, and variables included his interest levels and the level of structure in the task or activity (Mo et al., 2019). If multiple social stimuli were present, it appeared more difficult for him to engage. During formal school time, he did not engage in either social or non-social stimuli owing to the tight structure and limited opportunities presented in class. These are discussed below.

7.7.1 Common Interests as Social Stimuli and The Impact of Peers

The social stimulus of a common interest between Peadar and his peers was identified as important when getting to know peers, but it was not as important once a meaningful relationship had been established. Adults in the school setting commented that Peadar engages more easily with peers when 'the topic of conversation is of interest to him' (Teacher 1 Quest, May 2018; also supported by Teachers 2 and 3 Quests, and Anna PC, 20th April 2021). His drama teacher supported this, noting he would choose to engage with peers who 'were into the same kind of things' (DT2, 10th August 2021). Peadar himself placed value on common interests when forging new relationships. This was evident when co-creating a fictional world with me to establish the strategies he feels are important to support him when getting to know new people. He was asked to imagine he was working in his dream job, which he selected as 'a game designer', and during the in-role interview when asked what advice he would give a new colleague who wanted to know how to hang out and get to know people, he suggested 'probably look for someone who is like you, look for people who kind of like the same things as you do' (Peadar PC, 1st October 2019). He later commented that Simon and Danny share the same interests, and in-school observations supported this when I observed them discussing video games and jokes on several occasions. Humour was identified as a social stimulus for Peadar with peers across all settings, and is explored later. Similarly, in the home setting, Peadar interacted with peers online via an app, with the stimulus being a common interest in gaming which acted as a successful social motivator, in keeping with the literature surrounding virtual worlds, common interests and developing friendships (Gallup et al., 2016; Mikhailova, 2019; Sundberg, 2018). He spent the majority of time at home doing this during my observation days. When playing and interacting online with peers he was highly focused and engaged, and clearly excited, often shouting when something

unexpected occurred. When discussing why he enjoys this interaction rather than just playing the game alone he commented 'because you have more people to play with and more people you can react with. It would be kind of boring if it was just you against things' (Peadar PC, 1st October 2019). This is in-keeping with his opinions on group work, where he stated he prefers working in a group than by himself. He consciously seeks out peers with similar interests, using common interests as a social stimulus to facilitate enjoyable and meaningful interaction. Peadar's CI in online games and humorous situations, overlapped nicely with that of his peers Simon and Danny (Harrop et al., 2019). His lack of more idiosyncratic or age-inappropriate CI (South et al., 2005) facilitated meaningful and satisfying interaction with his typically developing peers. It partially explains his overall lack of engagement with peers in the autism support unit (resource class) with whom he did not appear to share many interests.

Comfort levels seem important here also, as Peadar's parents noted that once he has developed a meaningful relationship with a peer, the social stimulus of a common interest is less relevant. Citing the example of Harold, who he knows through gaming, his Dad observed 'Interestingly, Peadar will go into town and play soccer which he hates, but he will play it with Harold because he knows it has to be a bit of give and take' (Dad PC, 1st October 2019). This shows a level of awareness of developing and maintaining friendships which appeal to him and indicates his ability to be flexible and engage in reciprocal relationships with peers of his choosing. Through friendship, he has acquired important social skills of delayed gratification and self-regulation (Vink et al., 2020). This was also evident in drama where he developed an ability to comfortably suppress his own interests to facilitate others (DT2, 10th August 2021), such as Betty's idiosyncratic interest in rock bands and eccentric music, which he would not share but which he happily 'tolerated' when they met after drama class in MacDonald's every week to discuss the layered drama stories which they both enjoyed (Audio recording, parents' PC, 13th May 2015).

7.7.2 Physical Object / 'Prop' as a Non-Social Stimulus Facilitating Social Interaction

Non-social stimuli such as physical objects typically attract the attention of people with ASD, which increase in importance as the impact of social stimuli comparatively decrease owing to challenges in extracting the value of social stimuli (Hanley et al., 2014; Koterba et al., 2014). However, in Peadar's case, his ability to mediate his CI's, often through a non-social stimulus such as a prop or object, resulted in satisfying and meaningful social interactions. The term 'prop' is used in this study to denote an object used to support and communicate meaning. Findings indicate that Peadar used 'props' or objects to initiate interactions in the home and school setting,

with peers of his choosing, but not in drama. This could be as a result of the structure of the drama classes, in comparison to the other settings where free time was unstructured and unfacilitated.

In the home setting his parents identified his dog Kate as an important social stimulus, and also a safety 'prop' to break barriers and ease social interactions. When I first arrived at his home, he immediately introduced me to Kate, and she became the concrete social stimulus used to support his interactions with me. While I was known to Peadar previously, being in his home setting was unfamiliar, and he used Kate to support him initially. His parents confirmed that introducing Kate to visitors was his way of interacting when people arrive at the house, saying 'come in and see Kate' (Mum PC, 1st October 2019).

In school the data reveal that Peadar used physical objects to initiate and sustain interaction. For example, when he saw Simon in the corridor between classes, he used Simon's bag to maintain the interaction as he did not have the conversation skills to engage him further, but through grabbing his bag and playing with it, he succeeded in 'buying time' to extend the desired interaction a little longer although little was said (Field notes, 9th April 2019). Other examples occurred in the lunch room where Peadar used a drink bottle as a prop during interaction, 'joking, pretending to take Danny's drink' (Field notes, 9th April 2019). Once he gained Danny's attention, he participated in a short humorous interaction, before both boys returned to their phones. Observations (n=6) in school show Peadar using props to gain peers' attention, but only with peers of his choosing. Opportunities to engage through playing games on their phones were observed in the resource room but declined by Peadar (n=3) such as when Keith attempted to engage him (Field notes, 8th April 2019). Keith was not a peer whom Peadar choose to interact with, later stating that 'sometimes Keith is a really annoying person' (Peadar PC, 1st October 2019).

In drama, Peadar was observed initiating and sustaining interactions frequently with peers of his choosing, both in and out-of-role without a prop. The circular seating arrangement in drama and familiar structure where young people gather for the first five to seven minutes chatting with their friends before news time may have supported and facilitated his social interaction.

7.7.3 Fictional World as Social Stimulus

As discussed previously, the fictional world as a social stimulus was highly effective for Peadar in the drama setting, and was similarly reported for Fred. Excellent levels of participation and engagement with all peers were evidenced when in role (DT2 PC, 10th August 2021) and as mentioned, Peadar himself referred to the importance of the social aspect of drama noting the best thing about drama was 'the people, the social interaction' (Peadar PC, 1st October 2019). While using a fictional world as a social stimulus outside of drama was observed on only one occasion in the social club during the study period, it is notable because shifting his social

attention to social information in that setting revealed an overt attention bias to fictional worlds which significantly, he both initiated and sustained, revealing adaptive social attention abilities more generally associated with TD peers (Wang et al., 2020; Johnson, 2014). This was only observed when Peadar was engaged in fictional worlds, whether through drama or playing online games.

7.7.4 Less Successful Social Stimuli

Not all social stimuli were successful for Peadar, with variables including interest level, presence of multiple social stimuli, and on occasion peers. While the research attests that the presence of competing non-social stimuli and the environment may interfere with a person's engagement with social stimuli in daily life (Sasson & Touchstone, 2014), in Peadar's case, it appeared that it was competing social stimuli which occasionally proved challenging. He appeared to have generalised the ability to employ adaptive social abilities in his environment, a skill which was explicitly targeted in SD lessons (LP, 2016-2018).

While Peadar's parents believed that a structured social stimulus was necessary for him to interact with peers he doesn't know: 'if he met new peers, he would find it difficult to just hang there, it would be much easier if there was an organised purposeful activity' (Mum PC, 1st October 2019), the data challenge this to a degree. For example, in school when playing rounders, he did not participate or engage with peers, except to say 'No' when asked to take his turn. During the game, the rules and structure weren't closely followed, with Peadar discussing this lack of fairness afterwards: 'Now can you see why I didn't want to play?' (Field notes, 9th April 2019). This social stimulus was unsuccessful due to a lack of structure and inadequate facilitation, and is in keeping with the theories of Lewis et al. (2005) and Wegerif & Dawes (2004), who claim facilitation and clear structure is necessary for successful participation. Without these factors present, Peadar was unwilling to try the activity.

These factors were also relevant when multiple activities were on offer and multiple peers present. For example, in the social club, where the young people were left to select what they wished to play (pool, darts, board/card games, etc.). Peadar chose not to engage, lying on a sofa, facing away from peers and playing on his phone. Similarly, at a party with a few peers he knew from drama, but many he did not, his parents commented that he was 'totally out of his comfort zone', as 'his main group were not there' (Field notes, 21st May 2018), highlighting the importance of pre-established peer relationships for him (O'Hagan & Hebron, 2017). In this instance, while there were several activities which could have acted as a social stimulus, as they were activities he usually enjoys, such as a gaming room, movie room and food room, he only briefly engaged with one peer playing Nintendo Switch. In contrast, his parents discussed a party where he also knew only one or two children, but participated fully. This took place in 'Jump

Zone', a play centre with a variety of areas, all based around trampolining. Mum felt he engaged and participated as the environment and structured activity 'allowed for that' (Parent PC, 24th May 2019). While Jump Zone was structured, moving between areas in the facility, it was not the only factor as the physical environment acted as a non-social stimulus lending itself to aspects of imaginative play and fictional characterisation (appealing to his circumscribed interests, CIs), and it appeared that these supported his social interaction with unknown peers on that occasion.

Challenging a dominant trend in the literature which asserts an interest in non-social stimuli particularly relating to CIs over interest in social stimuli as a characteristic of ASD (Falck Ytter et al., 2013), Peadar appears to bridge that divide by consciously using physical objects to sustain social interactions in school, a phenomenon not seen in drama or with his parents and immediate family members due to his apparent comfort and familiarity with the structures and people in those environments. The data support that Peadar visibly relaxed more when he used a social stimulus aligned with his CIs to guide his interactions through unknown situations or experiences. This acted as an important support in taking the emphasis away from routine chit chat which he reported as finding uncomfortable, less meaningful and not enjoyable, and direct it to characters or situations where he was more comfortable and confident, such as video games, humour, his beloved dog, and the fictional world. Such a bridging strategy allowed him to counteract a core diagnostic feature of ASD, namely excessive attention to objects related to circumscribed interests (Klin et al., 2007). Instead of becoming excessively preoccupied by objects related to his CIs which typically distract children with ASD from attending to social stimuli (Sasson & Touchstone, 2014), Peadar had learned to meld his CIs with social stimuli such as looking at people's eyes and displaying the ability to shift attention from one stimulus to another (Mo et al., 2019).

Humour was identified as a social stimulus for Peadar and his use of humour is discussed below.

7.8 Humour

Humour is believed to improve social communication (Nagase, 2019b), and is necessary for social interaction and forming relationships (Agius & Levey, 2019; Silva et al., 2017). However, there is debate surrounding its use and appreciation by people with ASD (Asperger, 1991; Nagase & Tanaka, 2015; Werth et al., 2001). Humour appeared to act as a social stimulus for Peadar across all settings, choosing to interact with adults over peers who he perceived as being able to engage in humorous interactions more effectively. His use of humour generalised across all settings and its significance in his life and social interactions is considered below.

7.8.1 Humour to Interact and Initiate Interactions

In all settings, Peadar was regularly observed using humour to initiate interactions with peers and adults, which challenges the literature pertaining to an absence of humour in the ASD population (Samson et al., 2013; Wu et al., 2014). In school it was evidenced only in informal settings such as the resource room, when moving between classrooms, and in the lunch room. Informal interactions with Simon and Danny demonstrate his use of humour as a social stimulus. Simon and Danny are in the year below him, and not in any of his classes or the resource room, but they are the peers who he chooses to spend lunch time with. On one occasion, when he saw them walking towards him on the stairs he loudly said 'There they are now, the two messers', so that they could clearly hear him. He then smiled directly at them maintaining eye gaze when saying hello and engaging in a few moments of banter (Field notes, 24th May 2018). These types of interactions were regularly observed in the SD setting, with Peadar's drama teacher commenting that 'he loved the banter, loved the social aspect' (DT2, 10th August 2021). Peadar often used humour to 'kick start a chat', using humour with his SNA when moving between classes, helping to ease him into a socialisation mindset (Anna PC, 20th April 2021), with Colm commenting that this was his main method of communication with him (Colm PC, 21st May 2018). Examples from the resource room included when Peadar delivered a humorous commentary about his peers as they entered the room as a way of introducing them and the SNA to me (Field notes, 24th May 2018). The most extended periods of sustained interaction observed were when Peadar was having lunch in the lunch room with Simon and Danny. He constantly used humour, such as pretending to steal Danny's drink, sharing jokes, and trying to get them to repeat something silly/funny. He was not observed participating in any conversations without humour, or of a serious nature with these peers.

This contrasts with the SD environment, where he participated in conversations of a serious nature without humour such as when considering bullying incidents reported by peers during news time (SD notes, 4th October 2016) or when he shared about his SNA's mother dying, with the notes from that day reporting 'He shared the news that his SNA's Mum had passed away and demonstrated great empathy ('it is so sad')' (SD notes, 18th June, 2018). In role, Peadar was able to deal with serious issues, demonstrate appropriate empathy for others and engage in discussions relating to societal issues, for example, when he proposed solutions for climate action during a dystopian futuristic drama (SD notes, May 14th 2016) and when he was in role as a human rights lawyer in a post-Bosnian War drama (SD notes, Jan 13th 2018). Initially when he started, Peadar would not engage in conversations during news time which were serious, and he would 'react badly to children talking about serious issues, having meltdowns until we started the drama' (DT1, 11th May 2019). There are reports of him going underneath the tables to shut himself off from 'news time' and only appearing when the topic interested him or was of a

humorous nature (Annual student profile, July 2013). He developed less reliance on humour as a social stimulus over time, and after two years the notes report that he had learned to tolerate conversations of a serious nature, with eventual participation and sharing of issues during news time. However, this did not detract from his appreciation and use of humour which was observed both in and out-of-role, during informal conversations with friends, during news time, and when waiting in the corridor with his Dad and friends before drama started and again when leaving (DT1, 11th May 2019).

In the home setting Peadar used wit and humour when interacting with his parents, such as when getting ready for school, jocosely noting 'you are so good to me!' when Dad found his missing school tie (Field notes, 21st May 2018). Other examples included discussing the events of the day after school and at the dinner table, for example, making jokes about Donald Trump and America (Field notes, 21st May 2018). His interactions with peers at home (online gaming) were not analysed to ascertain the level of humour used by Peadar, to protect his privacy but frequent laughter was noted in my field notes. His parents believe that humour has strengthened his ability to interact with others. It was nurtured from a young age, with his father commenting that he used humour deliberately with Peadar since a young child, as he didn't want him to have a literal interpretation of language (Dad PC, 1st October 2019). All interview respondents identified Peadar's sense of humour as the facilitative tool for interaction with which he appears most comfortable. The analysis revealed some evidence that he occasionally used it to good effect as a deflective device also, which enabled him to lead interactions and conversations back to topics he was more comfortable and interested in.

7.8.2 Perspectives on Peadar's Use of Humour to Interact

Peadar's parents strongly emphasised the importance of developing humour in young people with ASD to support social interactions with peers. When asked to rate his use of humour on a scale of one to five, his father enthusiastically said '10' (Dad PC, 1st October 2019). Similarly, both his drama teacher and SNA rated him highly at four to five for humour (Anna PC, 20th April 2021; DT2 PC, 10th August 2021).

Peadar placed the same importance as his parents on the construct, and during an enacted interview scenario about a fictional world where humour did not exist, he joked that he and his friends would have to talk about 'politics' (Peadar PC, 1st October 2019). He developed this further noting that they might talk about games or 'relatable stuff that happened that day' (Peadar PC, 1st October 2019), suggesting that comfort levels and feeling able to be himself around people appears significant in how he relates to the world. This was demonstrated in drama also, where he was comfortable and confident discussing serious topics with peers. He was clear though that humour helps him to socialise, explaining 'well I mean it helps because it makes, like, the

situation more comfortable instead of just being like serious, very serious' (Peadar PC, 1st October 2019). Being 'comfortable in the world', and trying to create situations which are less stressful and more comfortable to be in emerged as important for Peadar, but was not referenced in other respondents' data relating to him. With a rating of three out of five on the SDAT scale, his anxiety levels were identified as moderate, and based on the data here, humour appears to be a coping mechanism for Peadar.

When asked to rate his use of humour, he rated himself as four out of five, stating 'I am not really saying that I am the funniest person on the planet' (Peadar PC, 1st October 2019). Data demonstrate that the teachers of the classes he enjoys most reported he 'often' used humour (Teacher 1 & 3 PC, May 2018), with Colm stating he uses humour 'Very-often' (SNA Quest, May 2018). In comparison, in a subject where he did not find the content interesting, nor appeared to have established a relationship with her, that teacher said he used humour 'sometimes' (Teacher 2 Quest, May 2018). In school, no examples of Peadar using or responding to humour in any of the mainstream classes were recorded.

7.8.3 Humour as a Bridge with Allistic Peers

When sharing her perspective on humour, Peadar's mother felt 'if you can develop a sense of humour in an autistic child, it does bridge that literal bit' (Mum PC, 1st October 2019). Both parents noted that his humour enables him to interact with what they called 'neurotypical' (NT) peers, observing that 'a lot of his friends he is close with aren't on the spectrum' (Mum PC, 1st October 2019). In the home context, his mother gave an example of when Peadar invited his allistic friend Harold to visit the family mobile home in the South East of Ireland, and they 'just chit chat, chit chat, chit chat...they have a great sense of humour' (Mum PC, 1st October 2019). In both school and other contexts, Peadar befriends peers who are allistic, and his parents feel this is due to a shared sense of humour, which they feel 'he misses in other people with autism, they wouldn't get it' (Mum PC, 1st October 2019). This perception is commonly held about people with ASD but recent scholarship challenges this, attesting to the influence of the sensory environment on people with ASD when responding to humour (Nagase, 2019b).

The data support that 'Peadar is funny. He has a really good sense of humour' (Mum PC, 1st October 2019), and is naturally drawn to peers and adults with whom he can share that sense of humour, irrespective of whether they have autism or not. During an extended interview, Peadar developed the idea of a 'quick fire round' where I took on the role of 'host' asking him to choose answer A or B as quickly as possible. For one question, I asked him who he would prefer to 'hang out with' and gave two choices. On five out of six occasions Peadar selected an adult over a peer, selecting Colm (SNA) over all peers, including Simon and Danny, however he considered this for some time before responding. When probed further as to why he selected Colm, he explained

'he is a legend, he is relatable' and 'he cracks a few jokes...and that's nice' (Peadar PC, 1st October 2019). Peadar valued that Colm was dependable, and that you knew what to expect with him. He said that adults are 'really like sociable people and really mature so it's not like they...they just have a mess, sometimes they do' (Peadar PC, 1st October 2019).

Being comfortable, enjoying a laugh together and feeling relaxed are priorities for Peadar. The data suggest that he found those opportunities generally with SNAs in school, but also with Simon and Danny. This was evident on one occasion when during a long lunch break (35 minutes) he asked me to sit 'where the teachers and SNAs sit' (Field notes, 8th April 2019), implying that he wanted to spend time with Simon and Danny without me present. In drama, the peers he chose to engage with shared his humour and quick wit, and he formed lasting friendships with Betty and Alfie, regularly meeting up outside of the drama space. This doesn't align with comments by his parents that he is more comfortable with allistic peers. Peadar himself didn't mention this at any stage, choosing to interact with people, peers or adults, with autism or not, who shared his love of humour. His Dad acknowledged 'I'm not even sure that he necessarily notices the difference between people' (Dad PC, 1st October 2019).

Peadar's use of humour to initiate interactions and as a social stimulus generalises across all settings, in keeping with Samson (2013) that humour acts as a 'social glue'. Humour is an emotional response to stimuli, and in ASD can be linked to people's strong sensory responses to their environment through emotion (Nagase, 2019a). The lack of humour evidenced in Peadar's classrooms more generally, could contribute to difficulties for children with ASD in applying their social skills in school, as Rawlings (2013) found a link between poorer humour appreciation and opportunities to apply and use social skills.

7.9 Expressing Emotions

Young people with ASD can find it difficult to verbally express their emotions appropriately to peers and adults (Beck et al., 2021; Chu et al., 2020). However, data from this case study yielded mixed results. Peadar demonstrated an ability to express how he was feeling in environments he was familiar with and comfortable in, however when less comfortable, he didn't. Instead, he physically moved away from the situation. This was also evident with Fred. Peadar physically communicated when he did not want to engage/participate in activities, in keeping with Zane et al. (2018) who found that adolescents with ASD displayed more intense, frequent and varied emotional responses than TD peers when "unencumbered by social pressure" (p. 1111). Differences in interpretation of the social setting and understanding of emotional display rules in those settings contribute to differences in emotional behaviours between TD peers and those with ASD (Barbaro & Dissanayake, 2007; Begeer et al., 2011). This may help explain why Peadar did not verbally express how he was feeling to peers who frustrated him in school or social club, in

contrast to drama (DT2, 10th August 2021). He expressed a range of emotions such as joy, sadness, pride, fear, happiness, anger and boredom, but it was frustration which came to the fore by respondents more often in this study than any other emotion. This emerged for Fred also and is reflected in the literature for children with ASD (Jahromi et al., 2012; Northrup et al., 2020). Factors affecting his expression of emotion are considered below.

7.9.1 Expression of Emotions to Peers and Adults

In most instances Peadar was able to zone out from the misbehaviour of peers in school using 'the void' method of self-regulation previously mentioned. This is important as it eases behavioural issues which can undermine a person with autism's mental health (Torrado et al., 2017). It also increases their independence by minimising emotional outbursts and dysregulation (Myers & Johnson, 2007). This was evident in school where apart from occasionally depicting worry and anxiety on his face, he tightly controlled his emotional responses. This also occurred in the social club when he appeared frustrated by a peer playfully hitting him with a cushion, but he did not vocalise this to the peer or to an adult close by but waited to share his frustration with his father in the car on the way home, saying 'it was horrible' (Field notes, 24th May 2018). The data support that being in a comfortable environment facilitated emotional release, such as in Art class in school where he told a peer from the resource room to 'Shut Up' when he failed to provide an appropriate response to Peadar's idea (Field notes, 10th April 2019). Similarly, in drama, he was regularly recorded verbally and facially expressing frustrations with peers, particularly during news time: 'Peadar became frustrated by Greg's shouting and said to him "You know, you ruin everything sometimes" (SD notes, 9th April 2016). He feels comfortable expressing himself in social contexts where he is at ease, which is in contrast to his coping mechanism in school where he himself states that he tries to 'ignore them' and 'enter the void' (Peadar PC, 1st October 2019). Peadar demonstrates an awareness of the social context and an ability to apply appropriate display rules in regulating his emotional behaviours, such as when his friend Harold forgot to bring him to the bus stop and he found himself lost and alone in the city centre. Despite his parents asking him to discuss this with Harold explaining that leaving someone in town 'isn't something a friend does' (Mum PC, 1st October 2019), he didn't raise it with him subsequently, suggesting he was aware of the social context in which he and his friend were out in town together as two young people enjoying a social outing (Zane et al., 2018). Showing awareness of the social subtlety of the situation, and an ability to modify his emotional state revealed his ability to employ adaptive behaviour when the context required it. This is an important skill as Mazefsky et al. (2013) highlight long term effects of emotional dysregulation in people with ASD including depression, anxiety, impulsivity and irritability.

While Peadar was less comfortable expressing emotion to peers, he did so relatively easily with adults he was comfortable with. This may be because his parents consistently advised him to tell an adult present if anything happened that he was not comfortable with; a common phenomenon amongst parents. His SNA noted that he would tell her when he was frustrated or upset, but he would not communicate this to his peers (Anna PC, 20th April 2021). This was also observed by SNA Colm who commented that he expresses his feelings appropriately to adults 'very often' but only 'sometimes' with peers (SNA Quest, May 2018). In the school setting nine instances of Peadar expressing how he was feeling to adults were documented; on six occasions to the SNAs and three to me. In these instances, he was not upset by someone, but upset because he did not want to do something, such as PE.

This highlights again the importance of comfort levels in an environment for Peadar, such as the home setting, where as a result he can express his emotions with ease. His parents shared about the recent death of the family dog, Kate, with whom Peadar had a special bond. Both parents felt that this emotionally testing time demonstrated his ability to express and vocalise how he was feeling, with his mother commenting 'he cried a lot, he talked a lot, and then he would go off to his room, then he would come back in' (Mum PC, 1st October 2019). His parents rated his ability to express his emotions appropriately between a three and a four. In contrast, Peadar only rated himself as a two when expressing his feelings to both adults and peers, noting 'it depends on how serious the situation is really and what the mood is of me really' (Peadar PC, 1st October 2019). The discrepancy in ratings could be due to the fact that Peadar's parents see him expressing emotion to them, and not as frequently in other environments where he may feel less comfortable.

7.9.2 Physicality to Express Emotion

The data indicate that when Peadar does not want to participate, or lacks interest, he physically removes himself from the space, with examples occurring in all settings. The only exception was during the actual drama session when working in role. A similar finding emerged for Fred.

In school, when Peadar did not want to do something, he employed avoidance and physical removal strategies when in the resource room, such as going to the bathroom and not returning until his SNA went to look for him. On one occasion when it was time for PE, he stayed in the resource room and hid behind a beanbag, which he placed on his head (Field notes, 9th April 2019). Similar strategies were observed in the social club and in the drama setting. For example, when not interested in news, he would place his jumper or a chair on his head, trying to distract the focus away from the news: 'he was putting a chair on his head and saying he is a deer' (SD notes, 14th April 2018) or physically remove himself from the circle when he lacked interest or had no news to share. However, when the recap of the previous drama session began 'he joined the circle and gave a detailed recap for the group' (SD notes, 27th February 2016), The act of

removing himself from the group, but still participating and engaging from the side-lines was also evidenced by Fred in SD but not found in other settings. In Peadar's case 'rotating around the pole' [a pillar in the centre of the room] (SD notes, 9th September 2017), 'playing with the printer', 'wandering around the room' (SD notes, 27th February 2016), 'playing with hangers' (SD notes, 27th January 2018) and sitting on the edge of a group circle (n=14) may have revealed a need to be physically removed when topics not of interest were being discussed. But he remained poised and engaged, ready to interject when the topic changed (SD notes, 11th November 2017). For example, on one occasion where he physically sat away from the group he 'engaged in the discussion from the corner' (SD notes, 13th February 2016) and when the group were creating elements for their fictional world, he participated fully in discussing the shape of the buildings.

The data suggest that Peadar physically removes himself to express that he does not want to participate, and in so doing attempts to assert a level of control over the situation. This emerged as a theme for Fred also. However, in drama, his physicality was not always related to levels of disinterest as the majority of the time he wanted to participate due to the social stimulus of the drama. Physically moving appeared to help him regulate his emotional state by filtering his frustration if conversations deviated from the drama story, thereby allowing him to remain engaged and poised without having an emotional upset if things did not go to plan:

Over the years you could see that Peadar was learning to regulate his emotions pretty well. During the first two years he really struggled when things did not go his way and he had regular meltdowns which destroyed the rest of the session for him. This used to annoy him even more as I remember one time he was telling his Dad and me after class how he felt "robbed" by Joyce out of the "one class he loved every week" because she was saying stupid things which annoyed him so much he couldn't cope. We used to encourage him during the class to walk off his frustration whilst still listening in case anything really important to the story was said and to come back to the group when he felt ready. (DT1, 10th December 2019).

Being flexible and responsive to his needs appears to have increased his ability to both communicate his emotional state whilst self-regulating as appropriate to the demands of the situation. His parents noted an improvement in his ability to express his emotions when upset, highlighting events such as sports day where when he didn't win 'he had a little cry but was fine', whereas previously 'he just couldn't lose!' (Mum PC, 1st October 2019). There is a contrast between how Peadar expressed emotion verbally and with apparent ease in drama and at home, and in the school setting where he disengaged mentally, and on occasion physically, but did not express emotion to peers or teachers apart from his SNAs. The lack of generalisability could be due to the structure of the different environments. The more flexible and participative structure in drama enabled him to express how he was feeling, without restraint, whereas the more formal

school structure did not enable this. The people present was also significant. In drama, Peadar was with some of the same teachers and peers since he started in 2012. This familiarity, combined with the small class sizes could be the reason he felt comfortable expressing frustration with peers. While the social club was a similar size, he had only been attending for six months, and was less familiar with peers and leaders. A less 'hands on' or interventionist approach in both the social club and school settings appears in contrast to SD where teachers directly intervened in the emotional sphere to support Peadar. Mazefsky et al. (2013) point towards the need to assist people with ASD in this matter who experience high sensitivity and a disability to identify and describe feelings (Berthoz & Hill, 2005). The implications of what Ashburner et al. (2008, 2010) describe as teacher deficiencies in mainstream school settings to respond to the needs of children with ASD can lead to children being bullied, academic underachievement, and challenging behaviours. They argue compellingly that if self-regulation is to be achieved, emotions should be recognised and managed, and many individuals with ASD have to receive assistance in this regard. This points towards the value of the facilitated 'living through' experience of the SD model.

Peadar's ability to express emotion, particularly frustration did not generalise from the drama and home settings to other environments and appeared related to his degree of comfort in those spaces and the levels of intervention and assistance provided to support his emotional education. Although the literature highlights the importance of emotion regulation for people with ASD, the evidence found that in Peadar's case it manifests as a form of suppression in school and in some social settings, and is likely to be unhealthy and damaging for his emotional growth and personal/ social development (Cai et al., 2018; 2019). Comfortable environments like home and SD and to a degree his Art class in school which he enjoyed and where established relations existed, supported him to respond naturally to unfolding events rather than suppress and inhibit his emotional development.

His demonstration of empathy was similarly connected to people he had a positive relationship with and is discussed below.

7.10 Empathy

While challenges relating to empathy have been posited for people with ASD (Baron-Cohen & Wheelwright, 2004), Peadar demonstrated empathy for those he felt comfortable with in all settings, and in role in the drama setting, in particular towards TiR. He did not demonstrate the same level of empathy towards SiR (students in role), with data suggesting that he empathised with the most vulnerable characters, who were usually TiRs occupying a lower status than the students. In social club he showed empathy for a SiR who he had positioned as the vulnerable character. Perspectives vary greatly in relation to Peadar's ability to demonstrate empathy, with relationships being one of the main contributing factors.

7.10.1 Perspectives on Peadar's Empathy

When discussing empathy, his parents rated him as a five out of five, commenting 'he is way more empathetic, more than would be neurotypical, with the people he cares about, if I cut my finger or anything he would be like "are you all right" (Dad PC, 1st October 2019). However, they noted that with 'people he is removed from' (Dad PC, 1st October 2019) it's different. He has learnt to say 'That's sad', but he doesn't demonstrate empathy unless it is directly related to someone he cares about. For example, if he heard on the news that a plane crashed, he wouldn't demonstrate empathy as it is distanced from his life (Mum PC, 1st October 2019). Staff perspectives in the school setting yielded mixed results. Anna (SNA) rated him as four out of five, citing examples where he demonstrated empathy towards her, describing the gestures as 'the tiniest things, but you know he is aware', including opening doors and asking how she is (Anna PC, 20th April 2021). Likewise, Colm stated that he would see Peadar demonstrate empathy 'very often' in a small group setting and one to one with an adult (SNA PC, May 2018). His Art teacher similarly commented that Peadar displays empathy 'very often' and is 'very caring' (Teacher 3 Quest, May 2018), in contrast to other teachers who felt that he demonstrated empathy only 'sometimes' (Teacher 1 & 2 Quests, May 2018). This may be because the Art teacher sees Peadar sitting at a group table with peers known to him from the resource setting and his SNA. During observation days she engaged in conversation with him suggesting she has a personal relationship with Peadar and may know him in a different way to other teachers. It is likely the other teachers do not see Peadar interact as their classes were set up so that students sit by themselves at a desk, and no interaction between Peadar and other students took place during observation days in these classes.

When exploring the concept of empathy with Peadar using story techniques, we discussed if his friends were feeling sad would there be anything he could do to help them. He shared that sometimes there is, and when probed further about what strategies he used he commented 'tell my jokes' (Peadar PC, 1st October 2019). In relation to how well he can do this, he rated himself as a three out of five. This again contrasts with Peadar's parents' views in relation to his levels of empathy and could be linked to self-perception and levels of confidence (Jamison & Schuttler, 2015). It is noted that the interview question focused on how he supports other people, rather than his perspectives on how frequently he demonstrates empathy, so had the question been framed differently, it may have elicited a different response. Differences reported by adults in Peadar's life could be attributed to the different settings in which they see him. Drama teachers rated him highly, particularly when in role, which is explored below.

7.10.2 In Role

In the drama setting, Peadar was rated at four out of five for empathy. He demonstrated excellent skills in this regard in relation to planning and carrying out interventions to help characters in need, where he would often be 'emotionally moved' (DT2 PC, 10th August 2021). For example, when planning how to question a character who had been framed for his friend's murder it was noted that Peadar 'demonstrated a good awareness of how we should approach questioning with William Blake (e.g. we cannot ask him directly about the murder), commenting about how upset he must be if he has been framed for his friend's murder' (SD notes, 20th May 2017). Many examples were recorded of empathy when interacting with TiR such as, when the students were in role as 'Omegas' exploring a new planet called Tar in the Andromeda Galaxy and they came across a TiR who was lying under a blanket, with a sign saying 'Wounded Tar Commander'. Peadar approached the commander and told the other students not to interrogate her and to 'Just leave her in peace' (SD notes, 8th February 2017). Similarly, when the group had to make a decision about how to save their Head Officer who was being held hostage by the evil 'Dark Panther' (a criminal master mind in a drama), he shared 'We can't arrest them or they might kill the sergeant' (SD notes, 28th May 2016). Peadar demonstrated strong empathy for TiRs when they played a vulnerable character, or a character who the group knew and loved. This was the case across all drama stories. This is not observed in other settings, as TiR was only evidenced in the drama space. The element of belief in the fictional world, and his commitment to role and investment in the drama story led to empathy with fictional characters.

Empathy towards vulnerable characters seems to have been a key enabler for Peader, such as when the group enacted their plan to save Granny Cop and Peadar 'realised that not all the group had made it back, he wanted to go back and get them, and he did' (SD notes, 23rd April 2016). Overall, empathy for SiR was rarely observed possibly because students often adopted a collective role (Bolton, 1998; Cook, 1917), and TiR was more commonly framed as needing help. A similar phenomenon was observed in social club when he entered into role and created a story as a social stimulus to interact with peers. In this story, Jim was 'trapped' and only spoke in dolphin language. Peadar communicated with him saying 'I speak human, don't worry. What do you want me to tell the rescuers?' and asking 'My boy, are you alright?' (Field notes, 24th May 2018). This highlights his level of investment and belief in the drama, which in this context he created himself. It also emphasises his imagination and creativity, and his ability to use these empathetically in an un-facilitated context.

7.10.3 Out-of-Role

Empathy was recorded when Peadar was out-of-role, however the frequency was much lower (n=4). Examples occurred during news time, such as when Áine shared that she was having a difficult time with peers in school, and he responded saying 'Aw no', adding 'You have your family at least' (SD notes, 21st January 2017). All empathetic comments were made towards peers with whom Peadar would typically enjoy spending time, and choose to work with in a group, in keeping with his parents' and drama teacher's comment relating to empathy and the significance of personal relationship: 'out of role Peadar demonstrated excellent empathy to specific peers' (DT2 PC, 10th August 2021). Empathy was not observed in school, and the lack of a pedagogical approach to facilitate it may explain why. In contrast, empathetic intervention is facilitated in SD when a sad comment or a difficult issue is shared, 'empathetic comments from peers are actively encouraged and elicited' (DT1, 10th December 2019). For example, as previously noted, Peadar demonstrated empathy towards his SNA Colm, whose mother had died, sharing it with his peers during news time in the drama setting (SD notes, 9th June 2018). This provided a natural opportunity for peers to also reciprocate and empathise with him. A lack of such facilitated interaction and encouragement to experience and practise empathy in the school setting, particularly in mainstream classes, may impact Peadar's capacity in this area.

7.11 Conclusion

When looking across the data, generalisability of social skills evidenced in drama was not found universally in all parts of Peadar's life. It is evident that while his skills have developed in SD over the six years he had attended, a corresponding improvement in the school setting was not observed or reported. This diminishes the role of age and development related factors as his improved social skills were not demonstrated to the same extent in all parts of his life. As reported in this chapter, it suggests that those supportive strategies in the home and SD settings, were not universally facilitated in other settings for several reasons. Addressing the third aim of this study, several factors emerged as supportive or as an adverse corollary, inhibited the demonstration of Peadar's social skills. These centred around feeling comfortable and at ease to be himself in an environment, the degree of active facilitation and mediation of social skills education employed, the level of understanding of ASD and use of appropriate pedagogies, and his relationship with adults and peers were all found to be significant in determining the extent to which Peadar was confident and comfortable practising appropriate social skills. Like Fred in Chapter Six, apart from drama there were not many opportunities to explore, practice and experience social skills in Peadar's life. It calls into question the extent of independence achievable by these children and young people which is ultimately the objective of education, and in particular their social skills education which is crucially important for children with ASD. The findings point towards the challenge of inconsistencies in Peadar (and Fred's) life. It's like living a half-life, trying to balance experiences which are inconsistent and uneven in their life across settings. The following chapter will attempt to consider the evidence from both case studies in order to address the research questions.

Chapter Eight Discussion

8.1 Introduction

The previous two chapters presented the findings from each case study respectively, focusing on factors enhancing and inhibiting the demonstration of social skills, and levels of generalisability achieved. The study aimed to critically examine if social skills demonstrated in Social Drama (SD) by two case study participants were generalised to other environments, such as their home and school settings. This chapter will explore the implications of the findings overall in relation to the research questions:

- 1) What is occurring in the Social Drama classroom to encourage the use of appropriate social skills when working in role/fictional contexts?
- 2) Are participants using the same social skills demonstrated during social drama classes in other settings?
- 3) What factors influence and affect the use of social skills in other settings?

The first section focuses on environmental factors in the school and home settings, and the second explores elements of the SD model which are implicated in the generalisability of social skills. The data reported in the second section were derived from an analysis of the available documents and literature in relation to the SD model. The final section reflects upon the success of SD methods for eliciting participant voice. Implications for policy and practice are discussed, and appropriate recommendations drawn. The two case studies are not compared systematically as occurs in traditional multiple case study design, as they are individually unique with multiple variables making it challenging to compare like with like, however common themes which relate to the research questions are identified and discussed. The chapter does not repeat specific findings which were comprehensively presented in Chapters Six and Seven, but rather, the focus here is on looking across the evidence from both case studies and relating it to the wider literature in the field, including government policy and practice in education. The findings are not generalisable beyond the individual case studies as discussed in Chapter Five, but their discussion highlights novel areas which may impact discussions around diversity and inclusion in the Irish context. In response to question two, the findings revealed very limited evidence of generalisability from SD to other settings, with several inhibiting factors present in the school and home settings, which were the principal sites of exploration in this study.

8.2 Environment

8.2.1 School Environment

This study shows environmental factors were the largest inhibitors to demonstration and generalisation of social skills across settings. In responding to the first research question, the environmental factors which supported demonstration of social skills in the SD setting specifically will be explored in section 8.3, with this section addressing aspects of the third question by focusing on elements that were not present, reported or observed, or that hindered demonstration and generalisation of social skills notably a lack of facilitated inclusion in mainstream settings, lack of meaningful relationships with adults in educational settings, and the structure and formality of these environments.

The findings demonstrate that in educational settings, while physical integration with mainstream settings occurred, authentic inclusion and participation (AsIAm, 2020) was not present, despite its prominence in current Irish educational policy (e.g. DES, 2015; NCSE, 2019, 2015, 2011). However, no accommodations appeared to have been made for participants in these settings, which even earlier Irish and International policies state as a basic requirement (e.g. Education Act, 1998; EPSEN Act, 2004; Salamanca Statement, 1994; UNCRPD, 2006). Lack of social inclusion for children with ASD and PDA leads to a lack of opportunity to practice social skills with multiple peers, meaning opportunities for generalisation of social skills across settings was severely restricted. The findings are not consistent with recent research focusing on inclusive practices in Irish mainstream schools for children with SEN (Rose & Shevlin, 2021), or in relation to child-centred ASD specific teaching methodologies which the NCSE (2015) reported as being very good. Lack of inclusion evidenced in this study could be an issue pertaining to teacher attitudes to students with ASD more broadly in Ireland, as Leonard & Smyth's (2020) research demonstrates that 54% of teacher participants (n=78) had a negative attitude to inclusion of pupils with ASD in the mainstream setting (see also Anglim, Prendeville & Kinsella, 2018). This could be owing to a lack of understanding of the importance of social inclusion for young people with ASD, and the teacher's role in facilitating this (Davy & Tynan, 2021). This emerged in both case studies, with emphasis placed on academic rather than social inclusion. Rodden et al. (2019) highlight that while policy perspectives tend to be a little more optimistic, teachers, particularly subject-specialists working in secondary schools, in Ireland and internationally, tend to be less well disposed towards inclusion (De Vroey, Sruyf & Petry, 2016). In the Irish context, McGillicuddy & O'Donnell (2014) found that teachers perceived their role as facilitators of academic potential and not of social inclusion. This highlights the role of SNAs in this study, which found that they met the care needs of Fred and Peadar on one level, with positive relationships identified by both children towards their SNAs, but their awareness of the social

needs of the participants was less evident. They similarly struggled to evidence a knowledge or familiarity of the participants' social skills abilities and potentiality which contrasts with the high expectations demonstrated by the SD teachers. The findings concur with other studies which report that while mainstream teachers position themselves to 'teaching students who can learn', the SNA's role is 'positioned to scaffold learning for students who experience difficulties in mainstream classrooms' (Rodden et al., 2019, 246).

Of even greater concern was the lack of awareness in both the ASD/resource classes and the mainstream classes observed in this study of the reciprocal benefits of inclusion and neurodiversity in the classroom. Davy & Tynan (2021) found that by adopting a Universal Design for Learning (UDL) approach, all students benefitted, and they call for temporal and physical changes to be made to the structure of every classroom for the benefit of all, but particularly for students with ASD who can experience considerable sensory impact from the classroom environment. The findings here support that, and perhaps somewhat uniquely, present evidence that both students' social skills developed in the SD environment with rich, diverse and interactive social stimuli more so than physical stimuli. It evidences that where temporal and physical accommodations are factored in, such as preparation and adequate time for transitions, the routine of free time at the start of SD, followed by news and then the drama, and appropriate lighting with minimal visual distractions on the wall, participants were enabled to participate authentically and fully (i.e. personally, socially, emotionally, physically and cognitively). This study identified early on that difference is an identifier of diversity and not of problems or deficits (Reid & Valle, 2004). The findings reveal that the construction of disability in both educational settings influenced teachers' views and practices, positioning Fred and Peadar on the peripheries rather than as central players in their own lives. There was no evidence that either the mainstream or ASD specific classrooms fostered a whole person development approach towards Fred or Peadar or that they recognised and valued the uniqueness of each individual (Kang, 2009). Whilst not articulated, the findings point towards a medical rather than a sociocultural model, moulded by teachers' attitudes (Collins, 2013) which did not socially or academically stretch, motivate, encourage or engage Fred and Peadar. This study recognised the complexity of ASD as a spectrum of ability and its unique complexity (AsIAm, 2020), highlighting that a single approach will not suit everyone's needs, and identifying the value of both ASD exclusive settings and inclusion in mainstream classes. However, the evidence here suggests that significant barriers to authentic inclusion remain in terms of misconceptions about the condition and the abilities of those living with ASD, unnoticed exclusion from group activities, unfavourable teacher-student ratios, poor levels of peer understanding, a lack of awareness of social inclusion and limited knowledge of pedagogical practices for engaging students with ASD. These echo some of the findings from the Chief Inspector's Report at the Department of Education in 2019.

New understandings of the importance of social inclusion and the role of the teacher in this process, could be achieved through Initial Teacher Education (ITE), which in Ireland, according to a recent large-scale study currently focuses on SEN rather than inclusive education (Hick et al., 2019). After completing ITE teachers do not feel adequately equipped to create inclusive learning environments (NCSE, 2017), something which also motivated my personal professional journey and interest in the field of inclusion and SEN, prompting me to undertake an M.Ed. some years ago. In addition to ITE provision, continuous professional development (CPD) has enhanced teachers' positive attitudes to inclusion for children with ASD (Sharma & Nuttal, 2016; Avramidis & Kalyva, 2007), however not all studies report positive outcomes (Kisbu-Sakarya & Doenyas, 2021; Leonard & Smyth, 2020) with Young et al. (2017) finding that Irish teachers who completed CPD in the area scored only marginally better than those who did not. While Kenny et al. (2020) outline that CPD to support inclusive practice is not a requirement of the Teaching Council, the findings from this study and recent research in Ireland point towards the value of ASD specific CPD to realise inclusive education. Young et al. (2017) posit that while a high proportion of Irish teachers have taught a student with ASD, their knowledge of the condition remains limited. It is hoped that some of the findings from this study may help augment existing CPD provision with new content around the role of experiential, facilitated process drama and arts-based approaches to support the generalisability of social skills across the spectrum. While CPD for teachers features prominently in several NCSE and DES policy reports and government legislation, few address the practical supports of how to achieve inclusion in schools (AsIAm, 2020). A further weakness of current provision is the lack of attention to cooccurring conditions, reflecting the complexity of ASD where it is estimated that over half of people living with autism have co-occurring conditions (Catalá-López et al., 2019). This was relevant for one of the participants, and it is noteworthy that there is only one CPD course identified for teachers in Ireland focusing on PDA.

This study concludes that facilitated inclusive education was not occurring for Fred and Peadar, and facilitated opportunities for participants to interact with peers was absent also. Appropriate facilitation supporting demonstration of social skills was evidenced during group work in SD, but missing from the school settings. It is unclear why inclusive group work was not being practised in light of its documented success in facilitating social interaction (Boavida & dePonte, 2011; Grey et al., 2007; Hart & Whalon, 2011; Lozano et al., 2010; MacKay et al., 2007; Scott, 2019) but hypothesised that a lack of awareness and inadequate resources as found in other studies, applied here also. It is recommended that purposeful group work be used frequently in educational contexts to facilitate social inclusion, and practice social skills with multiple peers in keeping with generalisability theories of Stokes & Osnes (1989). In an inclusive society which Ireland has aspired towards for the last two decades (Govt. of Ireland, 2002), the lack of collaborative group work evidenced in this study goes against government policy at all levels:

social, economic, cultural, and educational. Building human and social capital where every person has the right and responsibility to participate fully and contribute meaningfully to society, relies on an education system which recognises and nurtures each individual, helping them realise their potential. However, the findings in this study suggest that for both Fred and Peadar, the lack of attention to their social skills in schools, essential for people with ASD as noted previously to support them in developing and maintaining friendships, participate in education, gain meaningful employment and experience independent living (Nuernberger et al., 2012, 2013), could have a detrimental effect on their later life chances and opportunities. Therefore, affording Fred and Peadar opportunities to participate in social interaction with peers through purposeful group work and targeted interventions for example, would not only allow them to practice invaluable social skills, and in turn develop relationships with peers, as evidenced in the SD setting, but also meet curricular requirements and go some way towards fulfilling Government and NGO policy aspirations.

The research demonstrates that the type of relationship participants had with adults in educational settings, specifically familiarity and comfort levels, had a direct impact on their demonstration of social skills, in particular expressing how they were feeling. Teachers in this study generally adopted a traditional role of the teacher at the top of the class imparting knowledge (Kaymakamoglu, 2018), with structured teaching occurring in most classes. Both Fred and Peadar had one staff member with whom they spent most of the day who they felt somewhat comfortable expressing their feelings to, in keeping with Blacher et al.'s (2014) claims that comfort levels with adults lead to easier demonstration of social skills in environments where these adults are present. Discussing with participants the practicalities of expressing their emotions in spaces that are not their comfort zone, (usually the exclusive settings, Banks et al., 2016), such as specific language and strategies to approach mainstream class teachers and adults supervising break times, could support them in expressing their emotions, as according to Begeer et al. (2011) people with ASD can struggle to understand emotional display rules in some settings (see Barbaro & Dissanayake, 2007). In particular, the evidence suggests that participants would benefit from mainstream teachers forming individual relationships with them (e.g. speaking to them during class, and outside of the classroom such as on the corridor or in the yard, asking them about their interests etc.), which may reduce anxiety in the mainstream settings and act as a positive role model for NT peers in terms of supporting meaningful communication and interaction with students with ASD. It is predicted that this may lessen the level of unhealthy expressive suppression that was evidenced in school for both participants (Cai et al., 2019).

The findings are in keeping with those of Chu et al. (2020), that school environments are not supporting learners with ASD. The evidence here would go further suggesting that the holistic education of students with ASD was not a priority or actively facilitated in the participants' schools. The teaching methodologies observed were based around Look Up Table Learning

(LUT), which emphasises categorisation and rote learning (Qian & Lipkin, 2011), in comparison to the SD model, which encompasses INT learning. INT supports generalisability, encouraging participants to draw on previous experience and adapt them to real life scenarios, which is in keeping with the aims of the SD model. This has an impact on social learning, and could be a contributing factor to the demonstration of social skills in the SD environment. The findings here however contrast with the literature which claims that INT can be challenging for those with ASD (see Qian & Lipkin, 2011; Sapey-Triomphe, 2018). While the results demonstrate what can be achieved when appropriate pedagogies which support and align with the strengths and interests of children and young people with ASD and PDA are employed, it simultaneously highlights the lack of awareness and possible motivation to address the inclusion of all learners. The discussion here has focused on the mainstream settings, but the findings additionally suggest that the ASD and resource classes similarly proved inadequate in terms of facilitating and supporting participants' social skills development.

8.2.2 Home Environment

While educational settings did not appear to make appropriate accommodations for inclusion of participants with particular reference to social skills and interaction, in the home setting, in keeping with Green et al. (2018), adaptations were made by family members to ensure participants could remain in their comfort zone. For example, Fred's sister and peers were encouraged to play games which Fred wanted to over their own desires and interests. This was a protective mechanism put in place to ensure participants did not feel anxious or overwhelmed, which is understandable owing to high levels of stress that can be experienced by parents of children with ASD and PDA (see Clauser et al., 2021; Grey et al., 2021; Soppitt, 2020). However, the findings suggest that it may be limiting participants' experiences of social skills where flexibility and adaptability, which are necessary for responding to set backs, and important skills of negotiating and survival in real world settings (Nelson Niehues et al., 2016; Brussoni et al., 2012) are not being experienced. This was identified by Peadar's Mum, who highlighted that the SD setting presents opportunities for Peadar to negotiate with his peers, in comparison to at home where 'those boundaries aren't pushed' (Mum PC, 1st October 2019). Lack of opportunity to experience these in the home setting results in a lack of ability to generalise these skills. Based on the findings of this study, it is suggested that at home, participants should be challenged, to enable them to practice flexibility, adaptably and compromise with family members and friends. In keeping with the theories of generalisability expounded in this study, opportunities to experience social skills in the safe space of the home setting, may support the generalisation of important social skills when faced with similar opportunities and challenges in other contexts. The study found a similar pattern of overly protecting and supporting children and young people

with ASD and PDA in both the home and ASD specific classes/resource room in school. While this approach has merits when children need 'a wrap around comforting support', it also risks under equipping children with the very skills they need to survive and thrive in society.

It is proposed that education and training courses should be available for parents, as research carried out by McCarthy (2019) shows that knowledge and confidence in parents of children with ASD increases when training is undertaken. It is important that training offered is relevant to the needs of the child, parents and the family, and should be generalisable to a variety of settings, in keeping with findings of Murphy & Tierney (2006). Courses for parents of children with ASD are currently well prescribed and attended in Ireland (e.g. DES, 2012; McCormack, 2018), however it is crucial that these courses are not reactive only such as focusing on reducing disruptive behaviours (e.g. Postorino et al., 2017) but instead use evidence based practices and take a holistic approach with a positive focus, such as strategies for supporting demonstration and most importantly as highlighted in this study, the generalisation of social skills across settings. These courses should be made available to all parents, regardless of financial status or physical location, which has been identified by Murphy & Tierney (2006) as a barrier to accessing training, and feature a blended approach with online and traditional face to face methods, focusing on developing home environments which enable children with ASD and PDA to demonstrate social skills and practice flexibility. Parental courses could include some elements and learning from the SD model which will be explored in the next section.

8.3 Social Drama Model

As discussed previously, generalisability was not planned for in the design of the SD model, however as shown, many elements were in keeping with theories of generalisability including social motivators, value of the social stimulus, multiple exemplars and training diversely. Despite this, and in answering the second research question, generalisability of social skills for participants to other settings cannot be claimed, owing to environmental factors in other settings not supporting demonstration or generalisation of social skills. However, positive demonstration of social skills in the SD setting was evidenced, and in answering the first research question (see below), this section explores the factors that enabled this.

1. What is occurring in the Social Drama classroom to encourage the use of appropriate social skills when working in role/fictional contexts?

This study concludes that the pedagogy employed in the SD setting was the overarching reason participants were enabled to use appropriate social skills, in keeping with Peter's (2009) findings that drama pedagogy develops social skills. As mentioned above, the SD model similarly reflected an approach where each participant was inherently valued and respected and their differences and potential as resourceful, social human beings who have a valuable and unique

contribution to make to their community and to wider society underpinned the work. The data revealed that as a fluid and evolving practice in the field of social skills interventions, the SD model sought through process drama and experiential learning to trial ways of actively involving all participants in the sessions, and the study found it elicited a degree of success in this regard. Firstly, the drama proved to be a successful social stimulus which acted as a social motivator for Fred and Peadar, which Yoder & McDuffie (2006) highlight as a key component of any social skills intervention for active participation. Acting as a powerful social stimulus for both participants, it led to sustained social engagement, in keeping with the theories of Koegel et al. (2009). This level of interest in the social stimulus of the drama enabled participants to maintain focus, and the incorporation of their CI led to a degree of self-regulation, as they knew they would have an opportunity to engage with their CI at some point in the drama story, or discuss it with peers during news. It is recommended that future social skills interventions connect participants' CIs to the social stimuli, as it should improve their involvement in the intervention and ability to form social connections as occurred in this study (see Arora et al., 2021; Hanley et al., 2014; Wang et al., 2020).

In the SD model, an imaginative environment was created, which incorporated fictional worlds, working in role, problem solving, use of voice, developing relationships with teachers and peers, group work and embodied explanations incorporating vocal, facial and visual cues, all of which created opportunities for social skills to be practiced across multiple fictional worlds and roles, in keeping with Stokes & Osnes' (1989) multiple exemplars for generalisation theories. The study shows that the imaginative environment of the SD setting supported participants in demonstrating and practising social skills. The imaginative environment hinged on the fictional worlds explored in each session such as Toyland at Christmas, where the children had to work to ensure that Miss Michaelmas did not get her way and let children only receive educational toys for Christmas, and 'Point Hope' a military training base where participants had to train in survival tactics, work as spies and respond to emergency callouts (SD Lesson Plans 2014-2015). In all fictional worlds participants took on roles, and practiced social skills, which acted as a protective mechanism through aesthetic distancing (see Heathcote & Bolton, 1994; Eriksson, 2011). The findings from this study unexpectedly evidenced research carried out by Taylor et al. (2020) relating to paracosms, the spontaneous creation of imaginary worlds, which claims that a high level of social understanding is needed to engage with paracosms. Participants in this study used paracosms, or fictional worlds to engage peers in unfacilitated settings, evidencing Taylor et al.'s (2020) beliefs that such worlds are central to their social interactions. This is in contrast to the attitudes and actions espoused in the school, and to a lesser degree the home settings, where the degree of sophistication of participants' social skills was not always recognised or understood. This reflects an understanding of 'difference' underpinning this study, and points towards the impact of the SD approach in valuing and creating the environmental conditions necessary to support children evidencing their social skills in practise. It could be claimed that the participants' experience of SD enabled them to generalise this skill to other settings, however paracosms in the ASD population is currently not explored in the literature, and research in this area is recommended. While limited research has been carried out relating to elements of imagination and social skills such as the positive impact of imaginative elements (e.g. story and pretend play) on social skills (Kohm, et al., 2015; Lewis & Banerjee, 2013), Carlson et al. (2014) additionally highlight that pretence can improve Executive Function (EF), which impacts social skill development and demonstration. The link between imaginative environments and social skills, to the author's knowledge, has not yet been explored in the literature, and based on the findings of this study warrants attention. The findings demonstrated that the imaginative environment of the drama setting enabled participants to demonstrate social skills and interact with peers with ease. Creating this imaginative environment could be replicated in other environments through the use of SD methods. However, teachers' lack of understanding of imagination was evidenced in this study (see Trotman et al., 2008), so education focusing on a broader concept of imagination, its importance in education, specifically for those with ASD and PDA, may need to occur before these methods could be authentically implemented.

A contributing factor to the imaginative environment were the structures in place in the SD setting, in particular its narrative structure. The narrative structure developed the drama story, introducing characters, inserting tension and giving clear instructions for tasks, in keeping with Egan (1986) who identified story as being an important element of social interventions. The use of 'and then', similar to Egan's (1988) 'next step' in the narrative, gives participants an indication of what will happen next so the structure is not unexpected, but events within these structures are, keeping participants curious and interested in the social stimulus of the drama with a sense of security and familiarity owing to the structures in place. Fred and Peadar responded well to this playful, narrative approach. Changes in the drama were sign posted by teachers' use of dramatic pause and 'drama voice' when narrating the 'and then' moments. The 'drama voice' used by teachers involved lowering their tone of voice and using vocal expression to depict an air of mystery, which gained and maintained participants' attention, drawing them further into the fictional world (O'Sullivan, 2017). Alongside the narrative structure, the level of structure of the SD setting overall was identified as an enabler for the demonstration of social skills.

Education and home settings were found to be either highly structured (e.g. classrooms, baking, gaming) or offered little to no structure (e.g. yard space at school, free play), and neither was found to enable participants to demonstrate social skills or engage with peers unilaterally. While Ung (2017) claims benefits of structured environments for engagement, concentration and behaviour (see also Schultheis, Boswell & Decker, 2000; Sorensen & Zarrett, 2014; Kunce & Mesibov, 1998), the impact of the level of structure of environments on social skills is not explored in the literature. However, the evidence here suggest that the SD model created an 'in

between' space, that was not binary, but operated on a continuum, facilitating opportunities for participants to demonstrate social skills in an environment where they report feeling at ease, but where there were unknown fictional elements to challenge, excite and engage them, combining structural with unstructured elements. This environment enabled participants to demonstrate social skills with multiple peers and teachers, more than was evidenced in other settings. It is proposed that this in between space allowed participants to be comfortable and secure in the environment. The SD model drew on Vygotsky's Zone of Proximal Development (ZPD) (1978) which allows for this in between space, specifically focusing what a learner can do without help, and identifying where support is needed. In SD, the learning had a social focus following Vygotsky, with teachers who had an in-depth knowledge of ASD and participants deciding on levels of support and structure needed at each stage of the experience. While there is a wealth of research exploring the use of Vygotsky's ZPD with the ASD population for learning outcomes (e.g. Brojerdi, 2017), there is no research, to the author's knowledge focusing on its impact on the environmental structures to enhance social skill development, and this is an area in which future research is needed. It is recommended that all settings should, where possible, aim to create an 'in between' level of structure to enable social skill development and practice. In order to achieve this, training for parents and teachers may be needed to enable them to understand the importance of this environment, and practical ways in which they can implement/facilitate this. This should enable participants to practice social skills with feelings of security in multiple settings, which could enhance generalisability, as well as develop relationships with peers and family members. The perceived informality of the SD setting also appeared to contribute to this 'in between' level of structure. The informal atmosphere was created through playful use of teacher's voice, informal language, physical set up of the space (quite minimal), and opportunities for students to incorporate their Cl's in the drama. When perceivably highly structured and rigid routines were created in other settings, a relaxed space to practice social skills was not provided, with findings from this study showing that participants did not demonstrate social skills with the same level of frequency or ease in such formal settings (e.g. mainstream classrooms). A defining factor in creating the 'in between' space, informal environment and implementing the narrative structure in the SD setting, is the facilitation style of the drama teachers.

Firstly, a unique aspect of the facilitation in the SD setting was the teachers' in-depth knowledge of participants, and their relationship with them. The small exclusive setting, with a highly favourable teacher-student ratio, the same lead teachers present each year which enabled them to get to know participants well, and in turn the participants developed a strong reciprocal relationship with the teachers, all contributed to the safe space and comfort levels facilitating the demonstration of social skills (Blacher et al., 2014). The teachers had an in-depth knowledge and active experience of ASD (O'Sullivan, 2017), which can be lacking in both exclusive and inclusive educational settings in Ireland and elsewhere (see Daly et al., 2016; Finlay, Kinsella &

Prendeville, 2019; Gómez-Mari, Sanz-Cerva & Tárraga-Mínguez, 2021). This knowledge, combined with knowing the participants as individuals, enabled teachers to take a holistic approach in supporting Fred and Peadar in engaging with the drama, and interacting with peers, where teachers use individualised strategies with participants (e.g. to engage them when they become disengaged, and support them when they become frustrated). This allowed the participants to access the social intervention of the drama, and as a result develop their social skills and work with peers. A seemingly minor, but effective aspect of facilitation in the SD setting was teachers' use of humour, during news and throughout the drama. In keeping with the theories of Rawlings (2013) the link between humour and opportunities to demonstrate social skills was evidenced in the SD setting, but not present in the integrated educational settings. This use of humour also contributed to the informal environment which Fred and Peadar reported enjoying. It is recommended that teachers in mainstream inclusive settings use humour in their interactions with students with ASD and their TD peers, which could also facilitate the former in comfortably interacting with their peers in the school setting as both case study participants used humour advantageously to engage with peers.

Another aspect of this facilitation style was the level of choice participants were afforded, which is in keeping with best practice when working with children with ASD and PDA (see Doyle et al., 2020; Fidler & Christie, 2019; Lough et al., 2012). Choice relating to the direction of the drama was a defining feature of the SD model, such as deciding what type of fictional world the story will be set in, their own individual characters and individual and group choices (for example, how to save Granny Cop from her captors in keeping with Heathcote's (1984) advice on choice in drama). These elements of choice, paralleled real-world scenarios, whereby in their daily lives participants must make choices and decisions based on situations and facts presented/available to them, often in stressful situations. These parallels with real life are in keeping with the belief that drama enables participants with ASD to try out social skills without the risk of consequence that occurs in the real world (see Heathcote, 1984; Lerner & Levin, 2007; Lerner & Mikami, 2012; O'Connor, 2010; Tseng et al., 2020), which reflect the aims of social skills interventions for people with ASD. Choice enabled Fred and Peadar to feel ownership and commitment to the drama stories, and led to enhanced levels of engagement, which is in keeping with Chan et al.'s (2014) theories of ownership of learning and levels of engagement (see also Koegel & Koegel, 2006; Voltz & Damiano-Lantz, 1993). Facilitated choice and ownership enabled participants to feel invested in the drama, and enhanced their social motivation (see Koegel & Koegel, 2006; Siller & Sigman, 2002). This enabled participants to engage with peers to develop the drama, in turn practicing social skills and developing peer relationships. This was most prominent when participants were working in role, which as outlined by Bolton (2010), offers another layer of distance and aesthetic protection (see also Davis, 2014). While choice and ownership are mentioned in curriculum documents, such as being a key principle of Junior Cycle Education, in reality, they feature sporadically at both primary and post primary levels (see NCCA 2015; NCCA, 2020). It is recommended that both choice and ownership are embedded in curriculum documents across subject areas, and implemented by teachers in both inclusive and exclusive educational settings. Despite Peadar's concerns that teachers would not be able to enact drama in his school, drama pedagogy has been commonly used across curricular subjects such as history, science, literacy and oral language (see Baldwin & Fleming, 2003; Dorion, 2009; Freebody & O'Grady, 2019; Gill, 2013) and it is suggested these methods be used to enhance levels of choice and ownership across subject areas in Irish primary and post-primary schools, and training offered to support teachers in this area. According to Szcytko et al. (2018), this level of choice could have a positive impact on mood, concentration and behaviour, as well as benefits to social development (see also Eversole et al., 2016; Robison, 2011). Drama methods would also support classrooms having a more 'in between' structure, which this study has shown enables participants to demonstrate social skills and develop peer relationships.

A feature of the facilitation style of the SD model which encompasses teacher participant relationship, choice and ownership was the shared power between the teacher and participant, which is common in process drama (see Heathcote, 1984; Morgan & Saxton, 1987; O'Neill, 2015; Tam, 2016). Specifically, the aim of teachers in the SD model was to disempower themselves, in order to empower the students, and this occurred most commonly through TiR (O'Sullivan, 2017). This use of TiR supports McDonagh's (2014) findings, that TiR builds reciprocal relationships between teachers and students. This level of empowerment enabled Fred and Peadar to feel comfortable participating in SD, making choices and driving the drama forward.

The final aspect of the facilitation style which supported participants' empowerment was the teachers' structuring of tasks and then physically and metaphorically stepping back for a moment to allow participants to experience independence, take on leadership roles, and negotiate with peers without an adult immediately intervening and inadvertently taking over. Following Heathcote's (1995) Mantle of the Expert approach, SD teachers 'busied' themselves momentarily with the issues the drama presented, after they had set up the task, but participants knew they were on hand and available if needed. Both in and out-of-role, they checked in with the participants to assess and support as needed. This is in keeping with Vygotsky's ZPD (1978), and strikes a balance which those working in education settings with young people with ASD can struggle to achieve (see Hume et al. 2014; Symes & Humphrey, 2011). This level of independence was empowering for participants, as it gave them the confidence to independently interact with peers with the knowledge that they had support if needed. Based on the success of this facilitation style in this study, it is recommended that it be implemented in settings where no or loose structure is present for participants, such as free play during lunch time in school settings, as this was a setting in which both participants in this study struggled with social interaction. It is suggested that training relating to Vygotsky's ZPD (1978), alongside practical strategies could support

teachers and parents facilitating this. Practical strategies could include elements of the SD model as discussed here, such as creating a fictional world, asking children to create characters and present them to each other. Social facilitation in this space is acknowledged in the recent literature and it is surmised that the natural environment of the school yard could further support generalisation of social skills (see Able, 2015; Doak, 2020; Vincent, 2018), which provides further justification for the inclusion of facilitation in this space for students with ASD and PDA.

This study demonstrated that participants showed an increased ability to tolerate and work with peers. Heightened levels of flexibility and adaptability towards peers was evidenced in the fictional world of the drama, in keeping with the findings of Tseng et al. (2020), such as forgoing their own ideas to develop the drama story in which they were highly invested (see also O'Neill & Lambert, 1982). The drama as a social motivator and stimulus was found to be the overriding reason for this, as both Fred and Peadar were highly invested in the drama story wanting it to continue and progress above all else, understanding the need to co-operate and be flexible to develop the drama story and achieve their common goal (see Heyward, 2010; Juirnovic, 2016; Toivanen & Pyykko, 2012). Therefore, they demonstrated an ability to be adaptable and accommodating to ensure that the story could develop, even without their ideas. The findings demonstrate that participants were able to employ adaptive social abilities in the SD setting, a skill which was targeted during SD lessons. This challenges the findings of Kim, Bal & Lord (2014) who claim that children with ASD struggle with this. It is therefore recommended that elements of drama could be used in educational and home settings to develop tolerance and flexibility, which is explored further in the concluding section.

As stated previously, the SD model is an exclusive setting for young people with ASD. This goes against the findings of Birnschein et al. (2021) who cite the importance of TD peers for generalisability in the intervention setting, and to support acceptance by TD peers (see Hundert et al., 2014). However, findings from Kennedy-Killian's (2013) study on the exclusivity of SD found that parents and participants believed that the exclusive nature of the model enabled a safe environment, a sense of community and belonging, a sense of ownership, enjoyable classes and the right to choose an ASD-specific learning environment. However, the lack of incorporation of TD peers could be a variable in social skills not generalising from the SD space to other environments and warrants future research.

The SD methods used in the study were not only successful for demonstration of social skills, but also for eliciting child voice, which is explored in the next section.

8.4 Drama Methods to Elicit Child Voice

This study deemed the use of drama methodologies, alongside individualised, child led and modification approaches (Goodall, 2020; Kortesluoma et al., 2003; Tesfaye et al., 2019)

successful in eliciting child voice, as I gained insights into participants' social worlds, with greater depth than when questions were asked out-of-role. The participants' familiarity with the drama methodologies employed proved an essential factor in its success, and my familiarity with participants, and knowledge of their worlds including areas of interest, school life and friendships, allowed me to construct a suitable interview framework for each participant, while adapting this, based on the child's wants and needs, throughout the interviews (Goodall, 2020; Kortesluoma et al., 2003). The use of role alongside the other considered elements enabled participants to distance from the social skill/situation being explored, in keeping with Bolton's (1992) metaxis, allowing them to share their perspectives, distanced from the emotion of the situation (see also Bolton, 2010; Davis, 2014). This study demonstrates the importance of including participant voice of those with ASD and PDA, owing to their perspectives differing from other stakeholders, for example, both participants' friendships in the school setting were questioned by teachers, SNAs and parents, in keeping with the findings of O'Hagan & Hebron (2017). However, both Fred and Peadar shared they had close friends in this space.

Based on this study, it is recommended that when interviewing children with ASD and PDA it could be beneficial for interviewers to spend time getting to know participants ahead of interviewing them to ensure interview techniques are designed for each individual and that the participant is comfortable in their presence. Alternatively, someone known to the participant, such as a teacher, SNA or parent could work in conjunction with a researcher to design and carry out the interview, combining expertise in knowing the child, ASD/PDA and interview techniques. It is also recommended that interviewers use a communication technique with which participants are comfortable and confident, in this case process drama and visual cues and signals, to enable them to understand and respond to questions meaningfully and minimise misinterpretation.

8.5 Generalisation Theories and the Social Drama Model

While generalisability was not methodologically accounted for in the design of the SD model, as discussed previously, Train Diversely (Stokes & Osnes, 1989) occurred including multiple exemplars, stimuli, trainers and settings, and making antecedents and consequences less discriminable, owing to variety in conditions of training (e.g. a variety of fictional worlds). However, in keeping with seminal theorists and more recent studies (e.g. Corbett et al., 2015; Radley et al., 2014a; Stokes & Baer, 1977; Stokes & Osnes, 1989) this alone proved insufficient to achieve generalisability to other settings. While modest evidence was found to support a degree of generalisability in some areas such as the initiation of spontaneous fictional worlds, the impact of the environment in the school, and to a lesser degree and for different reasons, the home as discussed in section 8.2 above, inhibited against the generalisation of social skills demonstrated in SD to these settings. It suggests that those elements of SD as evidenced in the case studies and

discussed in section 8.3, could be significant in helping to achieve generalisability in other settings if some or all components were incorporated and included in pedagogic and social interaction strategies in the school (mainstream and ASD specific/resource classes) and home settings. The findings imply that if teachers and parents adopt SD methods (e.g. creating fictional worlds, working in role, narrative structures), it may create an environment in which participants could generalise social skills from the SD setting to these natural environments. This is in keeping with Stokes & Baer's (1989) theories on generalisation, specifically the Incorporation of Functional Mediators, which are mapped onto recommendations arising from this study in the table below.

Table 8.1: Generalisation Theories and the SD Model

Generalisations theories (Stokes & Osnes,	Recommendations
1989)	
Incorporation of common salient social	Teachers in mainstream settings and parents
stimuli	adapting their characteristics in line with SD
(e.g. characteristics of a person)	methods used by teachers in the SD setting:
	• Incorporation of SD methods (e.g.
	role, imaginative environments,
	tension and fictional worlds)
	Use of humour
	Taking an interest in participants
	Offering choice
	Facilitating independence
	Disempowerment to empower the
	child
	Horizontal decision making to re-
	balance power
Incorporate salient self-mediated verbal and	Teachers in mainstream settings and parents
overt stimuli (e.g. language)	adapting their use of language to include:
	Use of humour
	Playful voice
	Drama voice
	Dramatic pause
	Narrative structures ('and then')

Therefore, the findings from this study are in keeping with the generalisation theories of Stokes & Baer (1989), suggesting that the incorporation of the above generalisation strategies could create environments whereby participants are enabled to demonstrate social skills and generalise these to other natural environments.

8.6 Overall Implications

The overall implication from this study is that drama, specifically elements of the SD model, could be used in educational and home settings to support demonstration and generalisation of social skills and as a form of inclusive pedagogy in mainstream education (Florian & Black-Hawkins, 2011). However, the study highlights that current practice in educational settings does not typically embody creative, imaginative or in most cases active or collaborative learning, and therefore for teachers to employ this method not only would education and training be needed, but also a shift in mind-set, and of teachers view of their role in the classroom setting (Roddden et al., 2019). This is in keeping with Shevlin & Banks (2021) who claim that to achieve an inclusive system 'would require a root and branch overhaul of existing policies' (1), demonstrating that there are flaws at policy level, which were evidenced by practices in schools in this study. Employing an arts-based and creative teaching pedagogy such as SD may seem out of reach for some without appropriate training, however, teachers and SNAs could start by facilitating group and pair work to support social interactions in classrooms, and facilitate activities during free time, which are currently fully unstructured, and do not support participants interacting with peers. In the home setting, parents highlighted the positive impact of the SD model on their children and despite the practice heretofore where 'homework' was not incorporated nor parents directly involved (see Chapter Three), the study findings support changes in the model in that regard. Therefore, parents could be trained to implement aspects of the SD model with participants and their siblings/peers in the home setting, which could support social skill development and generalisability through creating the 'in between' level of structure, encouraging flexibility through having to compromise and work together in role, and exploring emotions and complicated life experiences through the use of fictional worlds and role.

As outlined previously, role enabled participants to not only explore fictional contexts, but to reflect on events that occurred in their daily life through a degree of aesthetic distance. Role, alongside fictional worlds, was the way in which participants chose to interact with peers in facilitated (e.g. SD setting) and unfacilitated settings (e.g. Peadar in youth group and Fred in the soft play area in school). The power of role in the interview context and in participants' daily lives was apparent, and it is recommended that teachers and parents allow and facilitate

participants' entering into role in home and educational settings, and that training be provided to enable them to co-create fictional worlds for participants to explore.

8.7 Conclusion

To conclude, elements of the SD model which enabled participants to demonstrate social skills were the imaginative environment, taking on a role, the facilitation style of teachers which enabled the narrative, informal and in between structure. Teacher-participant relationships, level of choice and empowerment of participants were also identified as significant factors. In contrast, the environments in other settings did not enable frequent demonstration of social skills owing to lack of meaningful relationships with adults in educational settings and the structure and formality of these environments. Therefore, this study concludes that social skills did not generalise from the SD setting to other spaces, owing to strong environmental factors in those settings.

Education and training for teachers and parents on the use of drama methods, specifically SD methods, to enable participants to engage with peers would be beneficial. This training would specifically focus on creating the 'in between' level of structure and support for young people (encompassing Vygotsky's ZPD), facilitating creation of fictional worlds, working in role and group work, supporting teachers to develop relationships with young people with ASD/PDA and the use of drama as a methodology in mainstream educational settings. The literature highlights a dearth of courses for parents and teachers specifically focusing on the development of social skills in mainstream educational settings and the home, and inclusive practices generally, for young people with ASD and PDA. Therefore, it is posited that there could be demand for such training, with Fred's mum commenting that she would be interested in being trained in SD methods (Mum PC, 1st February 2019). These recommendations will be further explored in the final chapter, which concludes the study.

Chapter Nine Conclusion

9.1 Introduction

This chapter briefly outlines the aims of this research and overall findings. It presents the recommendations from the study focusing on policy reform and education for parents, teachers, children and young people with ASD and PDA. It identifies the limitations of the study, followed by areas in which future research could be carried out.

9.2 Findings

This study aimed to ascertain what was occurring in the SD setting to enable participants to demonstrate social skills, if these skills were generalising to other settings, and factors that enhanced or inhibited demonstration of social skills in all settings. The research shows that specific factors in the SD setting, such as the imaginative environment, narrative structures, the informal 'in between' level of structure and informality of the environment, relationship with teachers, level of choice, group work, use of role and fictional worlds, the drama as social stimulus and incorporation of CIs enabled participants to demonstrate and develop social skills. The SD model also incorporates generalisation theories; multiple exemplars, stimuli, trainers and settings, and making antecedents and consequences less discriminable, owing to variety in conditions of training (e.g. variety of fictional worlds) (Stokes & Osnes, 1989). However, social skills did not generalise from the drama setting to natural environments. This was owing to environmental factors in other settings, including lack of facilitated inclusion, poor teacher-pupil relationships and the structure and formality of these environments. If used in home and educational settings, the elements deemed successful in the SD setting could lead to generalisability of social skills for participants. This would be in keeping with Stokes & Osnes' (1989) generalisation theories, specifically the incorporation of functional mediators; common salient social stimuli and selfmediated verbal and overt stimuli. One element of the SD model where generalisability could be claimed was the use of spontaneous fictional worlds, or paracosms (Silvey & MacKeith, 1988; Taylor et al., 2020) to interact with peers. The study presented unexpected findings which were not directly related to the research questions including lack of inclusive education and participant voice in studies involving the ASD and PDA population. The next section will explore the recommendations and implications for educational policy and practice emerging from this study.

9.3 Recommendations

The findings suggest a number of recommendations pertaining to reform of Irish educational policy and practice for teachers and parents, which are outlined below.

9.3.1 Recommended Policy Reform

- The findings recommend that policy in Irish education at primary and post-primary level incorporate compulsory CPD in inclusive pedagogies across subject areas and also during unstructured time (e.g. lunch time) with a focus on facilitated inclusion, which will benefit all learners including those with ASD and PDA (Hick et al., 2019).
- Currently Irish policy dictates that child voice must be considered in educational research (see Department of Children and Youth Affairs, 2014; 2015; Education Act, 1998; Fleming, 2015; National Children's Strategy, 2000), and guidelines for incorporation of child voice with disability in the Irish context exist (National Disability Authority, 2002; Whyte, 2005). However, there is no policy specifically relating to the necessity of inclusion of child voice in disability research more broadly. As outlined in this study, this is imperative, owing to participants' opinions varying from that of their parents, teachers and other stakeholders. Therefore, it is recommended that policy focusing on inclusion of child/participant voice in disability studies, with appropriate guidelines for researchers to translate policy into practice, be developed.
- Creativity is an underlying principle of the post primary curriculum (Junior and Senior Cycle) (see NCCA, 2009b, 2015) and is proposed as a key competency in the Draft Primary Framework Curriculum (see NCCA, 2020). While a focus on developing creative and imaginative thinking is present, this is not explored methodologically in curricular documents or teacher guidelines. It is recommended that the use of creative, imaginative and arts-based teaching and learning methodologies, such as drama approaches, be embedded in curriculum documents and teacher guidelines, which will benefit not only children with ASD and PDA, but all learners.
- Owing to their role in developing social skills and social interaction, evidence based social skills interventions such as the SD model in this study should form part of the core curricula in early childhood, primary and post primary mainstream and SEN educational provision to support social inclusion and interaction amongst all learners in inclusive classrooms.
- There is a lack of attention to issues of generalisability in the research and consequently
 in policy documents. Funding should be provided to increase awareness of the
 importance of generalisability amongst parents, teachers and young people living with
 ASD and PDA to encourage dissemination of best practice in interventions which
 prioritise generalisability of social skills.

9.3.2 Education for Teachers and Parents

This study's findings demonstrate that education and training is needed for teachers and parents across multiple areas. These were discussed in the previous chapter, and specific recommendations and guidelines for training are outlined below.

9.3.2.1 Facilitated Inclusion

Education is needed for student teachers (ITE) and practising teachers (CPD) relating to the importance of their role in facilitated inclusion in neurodiverse classrooms, particularly for students with ASD and PDA. Practical methods and strategies to support facilitated inclusion should be provided, such as process drama methodologies and group work as discussed in this study. The facilitation of inclusion during unstructured time (e.g. yard, lunch break) should be specifically addressed, offering teachers concrete suggestions of age appropriate social stimuli and motivators (e.g. group based games, creation of fictional world) to foster social inclusion and understanding of difference and diversity. It is recommended that similar education should be available to parents both of children with additional needs and those without additional needs.

9.3.2.2 Imaginative and Creative Methodologies in Education

Education for teachers and parents relating to what imagination is, and its importance for people with ASD and PDA relating to social skills and other areas of social cognition and inclusion is recommended. Education should equip parents and teachers with practical ways to create imaginative environments in their setting (e.g. creating fictional worlds, use of role for adults and children and presenting imaginative scenarios, with dramatic elements of tension and role across curricular areas). All students should be facilitated to develop their own understanding of imagination and creativity in their social and intellectual development, and in supporting awareness of difference in socially inclusive and diverse classrooms and wider society.

9.3.2.3 Creating Environments which Support Social Skill Demonstration

Educating parents and teachers on the impact of environmental factors on the demonstration of social skills is recommended. Equipping them with practical ways to facilitate and implement these in their settings such as in school creating the 'in between' level of structure and less formal environment through developing teacher pupil relationships, using humour, embedding narrative structures, creating opportunities for choice and facilitating collaborative group work while allowing participants a level of independence should be explored. In the home setting, creating

an environment where participants are challenged in role, alongside strategies implemented in school is of importance.

9.4 Recommendations for Future Research

While the area of social skills interventions features prominently in the literature on ASD, the study drew attention to a number of areas which are under-researched and require further attention. These are outlined below.

9.4.1 Implementation of Inclusive Framework in Primary and Secondary Schools

While this study can only reflect on findings from two case studies, in both these studies schools were not following the *Inclusive Education Framework* (NCSE, 2011). It is recommended that further research into the practical implementation of the inclusive framework in multiple primary and post-primary schools, with a representative sample, be carried out. This would highlight successful areas of implementation of the framework, alongside areas in which teachers and SNAs need further support, and training programmes could be designed and implemented based on the findings. It is recommended that voices of all stakeholders, in particular children in these settings, be carefully considered.

9.4.2 Links between Imagination and Social Skills

As identified previously, participants in this study demonstrated an enhanced ability to demonstrate social skills when in role, using paracosms, across settings. This research has identified a link between imagination, initiation of interactions and demonstration of social skills, particularly when in role. Owing to the special significance of role in this study for both case study participants, the relationship between being in role in a fictional world and the multiple roles people play in their daily lives warrants exploration and research. It could lead to further insights about role which may enhance the development and direction of novel and appealing social skills interventions for children and young people with ASD and PDA. In light of the connection which emerged in this study, research exploring the association between paracosms for people with and without ASD may yield insights into social diversity and degrees of difference and neurodivergence in society which could inform the literature in ASD and PDA.

In addition, the link between imagination and social skills is under explored in the literature. It would be beneficial for research specifically exploring this connection in the ASD and PDA populations to occur, to inform future social skills interventions, outline methodological

implications for educational settings and strategies for home environments. Similarly, there is a dearth of research relating to the impact of imaginative environments on social skills with any population, and based on the findings of this research, it is an area which warrants further research within the ASD and PDA populations.

9.4.3 Further Research on Generalisability of Social Drama Model

While similar findings across both case studies were reported pertaining to levels of generalisability of social skills, and the factors which enhance and impede the demonstration of such skills across settings, this was a small scale study, and therefore results cannot be generalised. This research replicated with more participants from the SD model would be beneficial to further understand the generalisability of the SD model, and factors that enhance the demonstration of social skills in all settings.

9.4.4 Environmental Structures to Enhance Social Skill Development

The findings demonstrated the impact of environmental factors on social skill demonstration. While this research identified specific environmental factors that impacted this, as discussed previously, this was a small scale study, and therefore findings cannot be generalised. It is recommended that further research assessing this topic with the ASD and PDA population be carried out, in multiple settings, to access their views and experiences of factors which support or impede the demonstration of social skills in diverse settings and contexts. Although beyond the remit and scope of the present study, it is noted that both participants attended all boys schools. The impact of a gender imbalanced environment on students with ASD and PDA warrants research as this is almost uniquely an Irish phenomenon.

9.4.5 PDA in Ireland

To date, there is only one report on the experiences of children with PDA in Ireland (see Doyle et al., 2020). Therefore, it is recommended that further research be conducted in Ireland focusing on the educational experiences of children with PDA, with their voice at the fore, which was absent from Doyle et al.'s (2020) study. Future research on PDA in Irish educational settings should focus on inclusive practices in schools for children with PDA, with a view to facilitating courses for teachers focusing on inclusion of students with PDA in mainstream settings, and information relating to presentation of PDA, which has been identified as necessary (see Doyle et al., 2020).

9.4.6 Assessment

Previous research has assessed the outcome measures of diagnostic assessments, and concerns were raised relating to the validity, and efficacy of these assessments (see Anagnostou et al., 2015; Lecavalier et al., 2014; Scahill et al., 2015). Similarly the literature review concluded that many assessments used with the ASD population to assess perceived differences (e.g. anxiety, ToM, attention, emotion, imagination. EF) are not suitable as they have not been designed specifically for an ASD population (see Gernsbacher & Yergeau, 2019; Spain et al., 2018; Vandewouw et al., 2020). This is leading to inconsistencies in the literature relating to these areas within the ASD population (see Geurts et al., 2014; Kenworthy et al., 2008). Therefore, it is recommended that research be carried out relating to the assessments used to assess perceived differences in ASD to ascertain the shortfalls in the current assessments. These findings would enable future design of more suitable assessment methods for this population, which in turn would allow for more accurate depiction of the differences of the ASD population.

9.5 Limitations

A limitation of this study was the small sample size, resulting in findings not being generalised to the wider population of those attending SD classes. Owing to gate keepers, gender balance was not present, and while measures were taken to ensure bias was managed, such as triangulation, this cannot be guaranteed owing to my work in the SD project and relationship with participants prior to the commencement of the research (Abrantowitz & Whiteside, 2008; Cleary et al., 2008). An unexpected limitation of this study was the global Covid-19 pandemic, which impacted the timeline of this study, owing to challenges accessing school staff to interview. This is explored in the following section, outlining the impact of the pandemic on participants and their social skills.

9.6 Impact of Covid-19 on Social Skills

Follow up conversations with Peadar's SNA and Fred's mother demonstrated a negative impact of Covid-19 lockdowns on both participants. Upon returning to school after the second school closure (3 months), both participants were reported as being withdrawn and socially disengaged. Fred was using less verbal language and Peadar was not interacting with peers and had increased reliance on his mobile phone in school. This is in contrast to the characteristics of participants during the data collection period for this study, and has caused concern for parents and members of the school community. This demonstrates the negative impact that withdrawal from routine, peers at school and other daily interactions had on the participants, in keeping with research carried out in the field of ASD and the impact of Covid-19 (see Berard et al., 2021; Levante et

al., 2021). While online education took place for students with ASD in Ireland at both primary and post primary level (Burke & Dempsy, 2020; Scully, Lehance & Scully, 2021), it is clear that social isolation (Skipp, 2021), the absence of peers and physically attending school impacted participants' ability, and desire to, socially interact once they returned to the school setting. It is important that in the case of future school closures, provision for young people with SEN, specifically ASD and PDA, be considered, owing to the long-term implications on socialisation. It is recommended that current government guidelines are updated with this in mind (see DES, 2021). A survey carried out after the first block of school closures (3 months) highlights that upon returning to schools, owing to classes working in closed 'pods' many children with SEN were not able to attend mainstream settings (AsIAm, Inclusion Ireland & Down Syndrome Ireland, 2020), which in time may have implications on development of social skills and sense of belonging.

9.7 Significance of the study

This study's contribution is significant owing to a dearth of research in the area of generalisability of social skills from the intervention to natural environments for this population. While this study aimed to add to current literature in the field, it specifically set out to explore the generalisability of the SD model owing to anecdotal evidence gathered, with the hope of delving deeper into understanding what is occurring in the SD model to enable participants to demonstrate social skills in that setting. It is anticipated that this study has contributed to understanding of generalisability of social skills for those with ASD and PDA. The successful demonstration of social skills in the SD setting has been previously reported (see O'Sullivan, 2017; 2021; O'Sullivan et al., 2010), but this study successfully built on this research to identify the elements of the SD model which are supporting demonstration of social skills for participants. The study identified that for generalisability to occur from the SD model to other settings, substantial changes in other environments need to transpire, as discussed in the last chapter.

A finding of significance emerging from this study is the participants' experiences of inclusive education. Inclusive education is prominent internationally, with the Irish education system striving to achieve this at primary and post primary level. This study has shown that best practices relating to inclusive education (e.g. NCSE, 2011) were not wide spread in the participants' schools, which raises the question of the prevalence of these practices in schools with this population in Ireland. It is anticipated that this study's contribution to the field is developing understanding, and awareness of, the social experiences of two young people, with ASD and PDA. Specifically, it is hoped that the identified elements for supporting social skills for these participants may be implemented and used, to inform and support social skill

demonstration and generalisability in future educational practices, which can lead to friendships and more successful life outcomes (Bernier & Gerdts, 2010; Zager et al., 2012).

9.8 Personal Reflections on the Research Journey

Upon reflection, this study was truly 'lived through', which enabled me to gather insights not only into participants' social skills, but all aspects of their lives. Being welcomed into family homes, meeting extended family and friends, and accessing nearly all aspects of participants' lives, led to challenges for me disconnecting at the end of the study. I still wonder how participants and their families are, with the Covid-19 pandemic adding an extra layer of concern for participants, and considering their reported decline during this time (Anna PC, 20th April 2021; Mum Informal PC, 6th May 2021). Starting out on this research journey I could not have imagined the insights I would gain into the participants' lives and the way in which they view the world. While the research questions guided this journey, the unexpected findings which emerged from the data, raised many questions for me, namely the lack of inclusive practices demonstrated in participants' schools and the lack of inclusion of participant voice in studies pertaining to the ASD population and social skills. Having worked on the SD project, I knew the enjoyment participants experienced from observing them, however it was comments made by Fred and Peadar (see below), and witnessing them use role and fictional worlds to interact with peers which highlighted the impact of the SD model for me, and the importance of it for these participants and their families. Below are some of images with comments from parents and participants relating to the SD model recorded in the data, and following this, Peadar's voice concludes this study.

Parents' Perspectives

He got a lot from the interactions

He's a totally different person now then he was It just makes sense for him, its gold dust

It just really tapped into something for him that he just really benefits from

He is much more chilled out, he is much more at peace with himself

There is some kind of magic going on behind them doors

Going to a situation where you make a friend, even that's a massive positive

The drama gave him focus and it just made a lot of things very clear for him

You have to have an area for them it has to be facilitated I think Learning how he learns, its not by him doing things, it is by him seeing things or understanding the way other people can do things by hearing about them or seeing them, rather than by out in the general world and observing stuff. it is easier for him if he hears about it or sees about it and has the logic behind it, like and i think drama just ticks all them boxes for him

If he didn't have drama, where else would he have got the social piece from?

They are learning without realising they are learning, so that is brilliant

We need drama

Participants' Perspectives

It's fun to do it with other people

The best thing was the people, the social interaction

I like the stories, when we are acting out stuff

It is great fun

Playing with my imagination

I like being a character

I like the group work in drama

Favourite thing about drama: we get to choose the characters that we are

While the findings from this study demonstrate that social skills did not generalise from the SD setting to natural environments, in a conversation with Peadar in the resource room at school, unprompted, he started talking about drama and stated 'because of drama I'm being more social. I'm more willing to give it a try and speak to people, so usually I'll watch, and then try talking to them and see if I like it' (Peadar PC, 24th May 2018). It appears that for Peadar, the SD setting has impacted his social interactions in other settings, perhaps in a way that cannot be measured or quantified by external sources, or even by Peadar himself. While the 'how' was not articulated by Peadar, even when followed up in interview, it is clear that for him the SD model positively impacted his confidence relating to social skills.

Reference List

- Aabe, N., Fox, F., Rai, D., & Redwood. S. (2019). Inside, outside and in-between: The process and impact of co-producing knowledge about autism in a UK Somali community. *Health Expectations*, 22(4), 752–760. doi: 10.1111/hex.12939
- Able, H., Sreckovic, M., Schultz, T., Garwood, J., & Sherman, J. (2015). Views From the Trenches: Teacher and Student Supports Needed for Full Inclusion of Students with ASD. *Teacher Education and Special Education*, 38(1), 44-57. DOI: 10.1177/0888406414558096
- Abrantowitz, J., & Whiteside, S. (2008). Getting Started in Clinical Research: Developing a Productive Clinic-Based Laboratory. In D. McKay (Ed.), *Handbook of Research Methods in Abnormal and Clinical Psychology* (pp. 191-202). California: SAGE Publications, Inc.
- Acar, C., Tekin-Iftar, E., & Yikmis, A. (2017). Effects of Mother-Delivered Social Stories and Video Modelling in Teaching Social Skills to Children With Autism Spectrum Disorders. *The Journal of Special Education*, *50*(4), 215–226. https://doi.org/10.1177/0022466916649164
- Acker, L., Knight, M., & Knott, F. (2018). 'Are they just gonna reject me?' Male adolescents with autism making sense of anxiety: An interpretative phenomenological analysis. *Research in Autism Spectrum Disorders*, 56, 9–20. DOI: 10.1016/j.rasd.2018.07.005
- Ackroyd, J. (2007). Real Play, Real Feelings and Issues of Protection: Drama in Education Beyond the Classroom. *NJ*, *31*(1), 23-32. DOI:10.1080/14452294.2007.11649506
- Adair, J. (1984). The Hawthorne effect: A reconsideration of the methodological artifact. Journal of Applied Psychology *69*(2): 334-345. https://doi.org/10.1037/0021-9010.69.2.334
- Adams, L., Gouvousis, A., VanLue, M., & Waldron, C. (2004). Social Story Intervention: Improving Communication Skills in a Child with an Autism Spectrum Disorder. *Focus on Autism and Other Developmental Disabilities*, 19(2), 87–94. https://doi.org/10.1177/10883576040190020301
- Agee, R. (2018). A Multiple Case Study of the Efficacy of Learning Strategies, Aids, and Technologies on the Experiences of Learners with Autism Spectrum Disorder (Doctoral dissertation, Northcentral University, USA). Available from ProQuest Dissertations Publishing, 10982293.
- Agius, J., & Levey, S. (2019). Humour Intervention Approaches for Children, Adolescents and Adults. *Israeli Journal for Humour Research*, 8(1), 8-28. http://www.israeli-humor-studies.org/media/02-humanintervention_approaches_for_children.pdf
- Aitken, V., Fraser, D., & Price, G. (2007). Negotiating the spaces: Relational pedagogy and power in drama teaching. *International Journal of Education and the Arts*, 8(14), 1-19/http://www.ijea.org
- Akkerman, S., Admiral, W., Brekelmans, M., & Oost, H. (2006). Auditing quality of research in social sciences. *Quality and Quantity*, 42(2), 257-274. DOI 10.1007/s11135-006-9044-4
- Alam, A., Rampes, S., & Ma, D. (2021). The Impact of COVID-19 Pandemic on Research. *Translational Perioperative and Pain Medicine*, 8(10), 312-314. DOI: 10.31480/2330-4871/133

- Aldao, A., Nolen-Hoeksema, S. & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Child Psychology Review*, *30*(2), 217-237. https://doi.org/10.1016/j.cpr.2009.11.004
- Alderson-Day, B., & McGonigle-Chalmers, M. (2011). Is it a bird? Is it a plane? Category use in problem-solving in children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 41(5), 555–565. https://doi.org/10.1007/s10803-010-1077-9
- Allen, J. (1979). Drama in schools: its theory and practice. London: Heinemann.
- Althoff, C., Dammann, C., Hope, S., & Ausderau, K. (2019). Parent-Mediated Interventions for Children With Autism Spectrum Disorder: A Systematic Review. *The American Journal of Occupational Therapy*, 73(3), 7303205010p1–7303205010p13. https://doi.org/10.5014/ajot.2019.030015
- Amador, S. (2018). Teaching Social Skills Through Sketch Comdey and Improv Games: A Social Theatre Approach for Kids and Teens including those with ASD, ADHD, and Anxiety. London: Jessica Kingsley Publishers.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Anagnostou, E., Jones, N., Huerta, M., Halladay, A. K., Wang, P., Scahill, L... Dawson, G. (2015). Measuring social communication behaviors as a treatment endpoint in individuals with autism spectrum disorder. *Autism: An International Journal of Research and Practise*, *19*(5), 622–636. doi.org/10.1177/1362361314542955
- Andersen-Warren, M. (2013). Dramatherapy with children and young people who have autistic spectrum disorders: an examination of dramatherapists' practices. *Dramatherapy*, *35*(1), 3–19. https://doi.org/10.1080%2F02630672.2013.773132
- Anderson, D., Oti, R., Lord, C., & Welch, K. (2009). Patterns of Growth in Adaptive Social Abilities Among Children with Autism Spectrum Disorders. *Journal of Abnormal Child Psychology*, *37*, 1019-1034. https://doi.org/10.1007/s10802-009-9326-0
- Anderson, J. (2012). Media Research Methods. London: SAGE Publications.
- Anderson, M. (2011). *MasterClass in Drama Education: Transforming Teaching and Learning*. London: Continuum International Publishing Group.
- Andreou, M., & Skrimpa, V. (2020). Theory of Mind Deficits and Neurophysiological Operations in Autism Spectrum Disorders: A Revie. *Brain Sciences*, 10(6), 393. doi:10.3390/brainsci10060393
- Anglim, J., Prendeville, P., & Kinsella. W. (2018). The self- efficacy of primary teachers in supporting the inclusion of children with autism spectrum disorder. *Educational Psychology in Practice*, 34(1), 73-88. DOI: 10.1080/02667363.2017.1391750
- Angrosino, M. (2004). Participant Observation and Research on Intellectual Disabilities. In E. Emerson, C. Hatton, T. Thompson & T. Parmenter (Eds.). *International Handbook of Applied Research in Intellectual Disabilities* (pp. 161-178). England: John Wiley & Sons Ltd.
- Angrosino, M. (2007). *Doing Ethnographic and Observational Research*. U. Flick (Ed.). London: SAGE Publications Ltd.

- Arias, AA., Rea, MM., Adler, EJ., Haendel AD., & Van Hecke, AV. (2021). Utilizing the Child Behavior Checklist (CBCL) as an Autism Spectrum Disorder Preliminary Screener and Outcome Measure for the PEERS® Intervention for Autistic Adolescents. *Journal of Autism and Developmental Disorders*, 30. doi: 10.1007/s10803-021-05103-8. Epub ahead of print. PMID: 34052960.
- Armstrong, T. (2012). Neurodiversity in the Classroom. Strength-Based Strategies to Help Students with Special Needs Succeed in School and Life. USA: Library of Congress.
- Armstrong, T. (2017). Neurodiversity: The Future of Special Education? *Education Leadership*, 74(7), 10-16. https://eric.ed.gov/?id=EJ1138105
- Arnout, B., Rahman, D., Elprince, M., Abada, A. & Jasim, K. (2020). Ethnographic research method for psychological and medical studies in light of COVID-19 pandemic outbreak: Theoretical approach. *Journal of PublicAffairs*, 1-8, DOI: 10.1002/pa.240
- Arora, I., Bellato, A., Gilga, T., Ropar, D., Kochar, P., Hollis, C., & Groom, M. (2021). What is the Effect of Stimulus Complexity on Attention to Repeating and Changing Information in Autism? *Journal of Autism and Developmental Disorders*, https://doi.org/10.1007/s10803-021-04961-6
- As I Am (2019, August). *Social Imagination*. Retrieved from https://asiam.ie/category/communication/social-imagination/
- Asaro-Sadler, K. (2016). Writing instruction and self-regulation for students with autism spectrum disorders. *Topics in Language Disorders*, *35*(3), 266–283. https://doi.org/10.1097/TLD.00000 00000 0000093.
- Ashar, Y. K., Andrews-Hanna, J. R., Dimidjian, S., & Wager, T. D. (2017). Empathic care and distress: predictive brain markers and dissociable brain systems. *Neuron*, *94*, 1263–1273. doi: 10.1016/j.neuron.2017.05.014
- Ashburner, J., Ziviani, J., & Rodger, S. (2010). Surviving in the mainstream: Capacity of children with autism spectrum disorders to perform academically and regulate their emotions and behavior at school. *Research in Autism Spectrum Disorders*, 4(1), 18–27. DOI: 10.1016/j.rasd.2009.07.002
- Ashburner, J., Ziviani, J., Rodger, S. (2008). Sensory processing and classroom emotional, behavioral, and educational outcomes in children with autism spectrum disorder. *American Journal of Occupational Therapy*, 62(5), 564–573. https://doi.org/10.5014/ajot.62.5.564
- Ashworth, M., Guerra, D., & Kordowicz, M. (2019). Individualised or standardised outcome measures: A co-habitation? *Administration and Policy in Mental Health*, *46*(4), 425–428. https://doi.org/10.1007/ s10488-019-00928-z
- AsIAm (2020). Inclusion in our Special Classes and Special School: A Submission to the National Council for Special Education from ASIAM. https://asiam.ie/inclusion-in-our-special-classes-and-special-schools/
- AsIAm, Inclusion Ireland & Down Syndrome Ireland (2020). Educational Supports on the Re-Opening of Schools: A report by AsIAm, Down Syndrome Ireland and Inclusion Ireland on educational supports on the return to school in September 2020. https://asiam.ie/students-with-additional-needs-face-new-challenges-during-covid-19/
- Asperger, H. (1991). 'Autistic psychopathy' in childhood. In U. Frith (Ed.), *Autism and Asperger Syndrome* (pp. 37–92). Cambridge: Cambridge University Press.

- Atkinson, P. (2014). For Ethnography. London: SAGE Publications.
- Attwood, T. (2008). *The Complete Guide to Asperger's Syndrome*. London: Jessica Kingsley Publishers.
- Austin, G., Groppe, K., & Elsner, B. (2014). The reciprocal relationship between executive function and theory of mind in middle childhood: A 1-year longitudinal perspective. *Frontiers in Psychology*, 5(655). doi: 10.3389/fpsyg.2014.00655
- Autism Speaks (2018, September). *Julia debuts on Sesame Street episode about autism acceptance*. Retrieved from: https://www.autismspeaks.org/news/julia-debuts-sesame-street-episode-about-autism-acceptance
- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*, 22(4), 367–389. https://doi.org/10.1080/08856250701649989
- Aylott, J. (2003). *Developing a social understanding of autism through the 'social model'* (unpublished doctoral thesis). UK: Sheffield Hallam University, UK.
- Baer, D. (1981). A flight of behaviour analysis. *Behavior Analysis*, 42(2), 85-97. doi: 10.1007/BF03391857
- Baez, S., & Ibanez, A. (2014). The effects of context processing on social cognition impairments in adults with Asperger's syndrome. *Frontiers in Neuroscience*, 8(1), 270. https://doi.org/10.3389/fnins.2014.00270
- Bai, B. (2018). Understanding primary school students' use of self-regulated writing strategies through think-aloud protocols. *System*, 78(1), 15-26. https://doi.org/10.1016/j.system.2018.07.003
- Bailey, S. (2021). Drama for the Inclusive Classroom: Activities to Support Curriculum and Social-Emotional Learning. New York: Routledge.
- Balaisis, J. (2002). The Challenge of Teaching in Role. *Applied Theatre Researcher*, *3*(3). https://www.intellectbooks.com/asset/771/atr-3.3-balaisis.pdf
- Baldwin, P. & Fleming, K. (2003). *Teaching Literacy Through Drama: Creative Approaches*. London: Routledge.
- Ballinger, C. (2008). Over-rapport. In L. M. Given (Ed.), *The Sage encyclopaedia of qualitative research methods* (p. 589-601). Thousand Oaks, California: Sage.
- Bambara, L., Cole, C., Kunsch, C., Tsai, S.-C., & Ayad, E. (2016). A peer-mediated intervention to improve the conversational skills of high school students with Autism Spectrum Disorder. *Research in Autism Spectrum Disorders*, 27, 29–43. https://doi.org/10.1177/0040059918775057
- Banks, J., & McCoy, S. (2017). An Irish Solution...? Questioning the Expansion of Special Classes in an Era of Inclusive Education. *The Economic and Social Review*, 48(4), 441-461. https://www.esr.ie/article/view/822
- Banks, J., McCoy S., Frawley, D., Kingston, G., Shevlin, M., & Smyth, F. (2016). *Special Classes in Irish Schools Phase 2 A qualitative Study: Research Report No. 24.* National Council for Special Education, Trim.

- Banks, J., McCoy, S., & Frawley, D. (2018). One of the gang? Peer relations among students with special educational needs in Irish mainstream primary schools. *European Journal of Special Needs Education*, 33(3), 396-411. http://dx.doi.org/10.1080/08856257.2017.1327397
- Barbaro, J., & Dissanayake, C. (2007). A comparative study of the use and understanding of self-presentational display rules in children with high functioning autism and Asperger's disorder. *Journal of Autism and Developmental Disorders*, 37(7), 1235–1246. DOI: 10.1007/s10803-006-0267-y
- Bardel, M., Fontayne, P., Colombel, F., & Schiphof, L. (2010). Effects of match result and social coparison on sport state self-esteem fluctuations. *Psychology of Sport and Exercise*, *11*, 171-176. doi:10.1016/j.psychsport.2010.01.00
- Baron-Cohen, S. (1995). The eye direction detector (EDD) and the shared attention mechanism (SAM): Two cases for evolutionary psychology. In C. Moore & P. J. Dunham (Eds.), *Joint attention: Its origins and role in development* (pp. 41–59). UK: Lawrence Erlbaum Associates, Inc.
- Baron-Cohen, S. (2003). *The essential difference: male and female brains and the truth about autism.* Cambridge: Basic Books.
- Baron-Cohen, S. (2007). The biology of the imagination. *Entelechy*. Reprinted from R. Headlem Wells & J. McFadden, J (Eds.), *What is human nature?* London: The Continuum International Publishing Group.
- Baron-Cohen, S. (2008). *Autism and Asperger Syndrome: All the Information you need, straight from the experts*. Oxford: Oxford University Press.
- Baron-Cohen, S. (2010). Autism and the Empathizing-Systemizing (E-S) Theory. In P. Zelazo, M. Chandler & E. Crane. (Eds.), *Developmental Social Cognitive Neuroscience* (pp.1-14). London: Psychology Press
- Baron-Cohen, S. (2020). *The Pattern Seekers: How Autism Drives Human Invention*. USA: Basic Books.
- Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with asperger syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, 34(2), 163–175. https://doi.org/10.1023/B:JADD.0000022607.19833.00
- Baron-Cohen, S., Bowen D. C., Holt, R. J., Allison, C., Auyeung, B., Lombardo M. V...Lai, M. (2015). The "reading the mind in the eyes" test: complete absence of typical sex difference in 400 men and women with autism. *PLoS One 10*(8), e0136521. doi: 10.1371/journal.pone.0136521
- Baron-Cohen, S., Leslie, A., & Frith, U. (1985). Does the autistic child have a "theory of mind"? *Cognition*, 21(1), 37-46. https://doi.org/10.1016/0010-0277(85)90022-8
- Baron-Cohen, S., Richler, J., Bisarya, D., Gurunathan, N., & Wheelwright, S. (2003). The systemizing quotient: an investigation of adults with Asperger syndrome or high–functioning autism, and normal sex differences. Philosophical Transactions of the Royal Society Biological Sciences, 358(1430), 361-374. https://doi.org/10.1098/rstb.2002.1206

- Barr, J., & Cascia, J. (2018). Brief Report: Parent and teacher ratings of empathizing and systemizing in children with Autism Spectrum Disorder. Journal of Educational Sciences & Psychology, 8(70). https://www.proquest.com/docview/2302387761?pq-origsite=gscholar&fromopenview=true
- Barrault, JL. (1951). Reflection on the theatre. London: Rockliff.
- Barry, T., Klinger, L., Lee, J., Palardy, N., Gilmore, T., & Bodin, D. (2003). Examining the Effectiveness of an Outpatient Clinic-Based Social Skills Group for High Functioning Children with Autism. *Journal of Autism and Developmental Disorders*, *33*(6), 685–701. DOI: 10.1023/b:jadd.000006004.86556.e0
- Bauminger, N., Solomon, M., Aviezer, A., Heung, K., Brown, J., & Rogers, S. (2008) Friendship in high-functioning children with autism spectrum disorder: Mixed and non-mixed dyads. *Journal of Autism and Developmental Disorders* 38(7), 1211–1229. doi: 10.1007/s10803-007-0501-2
- Bauminger-Zviely, N., Eden, S., Zancanaro, M., Weiss, P., & Gal, E. (2013). Increasing social engagement in children with high-functioning autism spectrum disorder using collaborative technologies in the school environment. *Autism*, *17*(3), 317–339. DOI: 10.1177/1362361312472989
- Beadle-Brown, J., Wilkinson, D., Richardson, L., Shaughnessy, N., Trimingham, M., Leigh,.....Himmerich, J. (2018). Imagining Autism: Feasibility of a drama-based intervention on the social, communicative and imaginative behaviour of children with autism. *Journal of Autism*, 22(8) 915-927. DOI: 10.1177/1362361317710797
- Beauchamp, T., & Childress, J. (2013). *Principles of Biomedical Ethics*. Oxford: Oxford University Press.
- Beaumont, R., Rotolone, C., & Sofronoff, K. (2015). The secret agent society social skills program for children with high-functioning autism spectrum disorders: A comparison of two school variants. *Psychology in the Schools*, *52*(4), 390-402. DOI: 10.1002/pits.21831
- Becher, T. (1989). Academic Tribes and Territories: Intellectual Inquiry and the Cultures of Disciplines. Milton Keynes: SRHE/OUP.
- Beck, K., Connor, C. M., Breitenfeldt, K. E., Northrup, J. B., White, S. W., & Mazefsky, C. A. (2021). Assessment and Treatment of Emotion Regulation Impairment in Autism Spectrum Disorder Across the Life Span: Current State of the Science and Future Directions. *Child Adolesc Psychiatr Clin N Am*, 29(3). 527-542. doi: 10.1016/j.chc.2020.02.003.
- Begeer, S., Banerjee, R., Rieffe, C., Terwogt, M. M., Potharst, E., Stegge, H., & Koot, H. M. (2011). The understanding and self-reported use of emotional display rules in children with autism spectrum disorders. *Cognition & Emotion*, 25(5), 947–956. DOI: 10.1080/02699931.2010.516924
- Begeer, S., Malle, B., Nieuwland, M., & Keysar, B. (2010). Using Theory of Mind to represent and take part in social interactions: Comparing individuals with high-functioning autism and typically developing controls. *European Journal of Developmental Psychology*, 7(1), 104-122. DOI: 10.1080/17405620903024263
- Beidel, D., Turner, S., & Morris, T. (2000). Behavioral treatment of childhood social phobia. *Journal of Consulting and Clinical Psychology*, 68(6), 1072–1080. PMID: 11142541.

- Belanger, H. G., Kirkpatrick, L. A., & Derks, P. (1998). The effects of humor on verbal and imaginal problem solving. *Humor: International Journal of Humor Research*, 11, 21–31. doi:10.1515/humr.1998.11.1.21
- Bellini, S., & Hopf, A. (2007). The development of the Autism Social Skills Profile: A preliminary analysis of psychometric properties. *Focus on Autism and Other Developmental Disabilities*, 22(2), 80–87. https://doi.org/10.1177/10883576070220020801
- Ben-Itzchak, E., & Zachor, D. (2021). Dog training intervention improves adaptive social communication skills in young children with autism spectrum disorder: A controlled crossover study. *Autism*, 25(6), 1-12. DOI: 10.1177/13623613211000501
- Bennett, T. A., Szatmari, P., Bryson, S., Duku, E., Vaccarella, L., & Tuff, L. (2013). Theory of Mind, Language and Adaptive Functioning in ASD: A Neuroconstructivist Perspective. *Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie canadienne de psychiatrie de l'enfant et de l'adolescent*, 22(1), 13-19. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3565710/
- Benning, S., Kovac, M., Campbell, A., Miller, S., Hannah, E., Damiano, C...Dichter, G. (2016). Late Positive Potential ERP Responses to Social and Nonsocial Stimuli in Youth with Autism Spectrum Disorder. *Journal of Autism Developmental Disorder*, 46, 3068-3077. DOI 10.1007/s10803-016-2845-y
- Berard, M., Rattaz. C., Peries, M., Loubersac, J., Munir, K., & Baghdadli, A. (2021). Impact of containment and mitigation measures on children and youth with ASD during the COVID-19 pandemic: Report from the ELENA cohort. *Journal of Psychiatric Research*, *137*, 73-80. https://doi.org/10.1016/j.jpsychires.2021.02.041
- Berard, N., Loutzenhiser, L., Sevigny, P., & Alfano, D. (2017). Executive Function, Social Emotional Learning, and Social Competence in School-Aged Boys with Autism Spectrum Disorder. *Canadian Journal of School Psychology*, 32(3-4), 265-281. https://doi.org/10.1177/0829573517707907
- Berenguer, C., Miranda, A., Colomer, C., Baixauli, I., & Rosello, B. (2018). Contribution of Theory of Mind, Executive Functioning, and Pragmatics to Socialization Behaviors of Children with High Functioning Autism. *Journal of Autism Developmental Disorder*, 48(2), 430-441. DOI 10.1007/s10803-017-3349-0
- Berger, A. (2011). *Media and Communication Research Methods: An Introduction to Qualitative and Quantitative Approaches* (2nd ed.). California: SAGE Publications.
- Berggren, S., Fletcher-Watson, S., Milenkovic, N., Marschik, P., Bölte, S., & Jonsson, U. (2018). Emotion recognition training in autism spectrum disorder: A systematic review of challenges related to generalizability. *Developmental Neurorehabilitation*, 21(3), 141-154. DOI: 10.1080/17518423.2017.1305004
- Berkovits, L., Eisenhower, A. & Blacher, J. (2017). Emotion Regulation in Young Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 47, 68–79. https://doi.org/10.1007/s10803-016-2922-2
- Bernard, R. (1988). Research Methods in Cultural Anthropology. California: SAGE Publications, Inc.
- Bernard, R. (2000). *Social Research Methods: Qualitative and Quantitative Approaches*. California: SAGE Publications.

- Bernier, R., & Gerdts, J. (2010). *Autism Spectrum Disorders: A Reference Handbook*. USA: Greenwoord Publishing Group.
- Berthoz, S., & Hill, E. (2005). The validity of using self-reports to assess emotion regulation abilities in adults with autism spectrum disorder. *Eur. Psychiatry*, 20(3), 291–298. DOI: 10.1016/j.eurpsy.2004.06.013
- Bertschy, K., Skorich, D. P., & Haslam, S. A. (2019). Self-categorization and Autism: Exploring the Relationship Between Autistic Traits and Ingroup Favouritism in the Minimal Group Paradigm. *Journal of Autism and Developmental Disorders*, 50(9), 3296-3311. doi: 10.1007/s10803-019-04149-z.
- Bever, L. (2019, September 19). How a 'Sesame Street' Muppet became embroiled in a controversy over autism. Washington Post. https://www.washingtonpost.com/health/2019/09/19/how-sesame-street-muppet-became-embroiled-controversy-over-autism/
- Billings, D., & Halstead, J. (2009). *Teaching in nursing: A guide for faculty* (2nd ed.). St. Louis, MO: Elsevier Saunders.
- Bird, G., & Cook, R. (2013). Mixed emotions: the contribution of alexithymia to the emotional symptoms of autism. *Transl Psychiatry*, 23(3), e285. doi: 10.1038/tp.2013.61
- Birnschein, A., Paisley, C., & Tomeny, T. (2021). Enhancing social interactions for youth with autism spectrum disorder through training programs for typically developing peers: A systematic review. *Research in Autism Spectrum Disorders*, *84*, (101784). https://doi.org/10.1016/j.rasd.2021.101784
- Bishop, E. (2018). The Relationship between Theory of Mind Traits Associated with Autism Spectrum Condition and Pathological Demand Avoidance Presentations (Unpublished doctoral thesis). University College Long, UK.
- Bishop-Fitzpatrick, L., Mazefsky, C. A., Eack, S. M., & Minshew, N. J. (2017). Correlates of social functioning in autism spectrum disorder: The role of social cognition. *Research in Autism Spectrum Disorders*, *35*, 25–34. DOI: 10.1016/j.rasd.2016.11.013
- Blacher, J., Howell, E., Lauderdale-Littin, S., DiGennaro Reed, D., & Laugeson, E. (2014). Autism spectrum disorder and the student teacher relationship: A comparison study with peers with intellectual disability and typical development. *Research in Autism Spectrum Disorders*, 8, 324-333. http://dx.doi.org/10.1016/j.rasd.2013.12.008
- Black, M., Chen, N., Iyer, K., Lipp, O., Bolte, S., Falkmer, M...Girdler, S. (2017). Mechanisms of facial emotion recognition in autism spectrum disorders: Insights from eye tracking and electroencephalography. *Neuroscience & Biobehavioral Reviews*, 80, 488-515. https://doi.org/10.1016/j.neubiorev.2017.06.016
- Bloom, P. (2017). Empathy and Its Discontents. *Trends in Cognitive Sciences*, 21(1), 24-31. https://doi.org/10.1016/j.tics.2016.11.004
- Blustein, J. (2012). Philosophical and ethical issues in disability. *Journal of Moral Philosophy*, 9, 573–587. doi:10.1163/17455243-00904002
- Boal, A. (1992). Games for Actors and Non-Actors (2nd ed.). London: Routledge.

- Boal, A. (2001). Theatre of the Oppressed (Pluto Classics). USA: Theatre Communications Group Inc.
- Boavida, A. M., & da Ponte, J. P. (2011). Investigacion colaborativa: potenciales y problemas. *Revista deEducacion y Pedagogia*, *23*(59), pp. 125–35. https://revistas.udea.edu.co/index.php/revistaeyp/article/view/8712
- Boelen, PA., & Reijntjes, A. (2009). Intolerance of uncertainty and social anxiety. *Journal of Anxiety Disorders*, 23(1), 130-135. doi: 10.1016/j.janxdis.2008.04.00
- Bogte, H., Flamma, B., van der Meere, JD., & van Engeland, H. (2007). Cognitive flexibility in adults with high functioning autism. *Journal of Clinical and Experimental Neuropsychology*, 30(1), 33–41. doi: 10.1080/13803390601186668
- Bolton, G. (1979). Towards a Theory of Drama in Education. England: Longman.
- Bolton, G. (1984). Changes in thinking about drama in education. *Theory Into Practice*, 24(3), 151-157. https://doi.org/10.1080/00405848509543166
- Bolton, G. (1986). Weaving theories is not enough. *New Theatre Quarterly*, 2(8), 369-371. doi:10.1017/S0266464X00002396
- Bolton, G. (1992). New Perspectives on Classroom Drama. England: Nelson Thornes Ltd.
- Bolton, G. (1998). Acting in classroom drama: A critical analysis. England: Trentham Books.
- Bolton, G. (2003). *Dorothy Heathcote's Story: The Biography of a Remarkable Drama Teacher*. England: Trentham Books.
- Bolton, G. (2010). Gavin Bolton: Essential Writings (D. Davis, Ed.). England: Trentham Books Ltd.
- Bonis, S. (2016). Stress and Parents of children with Autism: *A Review of Literature. Issues in Mental Health Nursing*, 37(1), 157-163. https://doi.org/10.3109/01612840.2015.1116030
- Boran, L., Delany, D., & O'Sullivan, C. (2011, March). *Executive Function and Creativity in Autism Spectrum Disorder*. Paper presented at No Mind Left Behind. Royal Concert Hall, Glasgow.
- Boran, L., Delany, D., & O'Sullivan, C. (2011, March). *Executive Function and Creativity in Autism Spectrum Disorder*. Paper presented at No Mind Left Behind. Royal Concert Hall, Glasgow.
- Borg, S. (2001). The research journal: a tool for promoting and understanding researcher development. *Language Teaching Research*, *5*(2), 156–177. https://doi.org/10.1177/136216880100500204
- Bos, J., & Stokes, M. (2019). Cognitive empathy moderates the relationship between affective empathy and wellbeing in adolescents with autism spectrum disorder. *European Journal of Developmental Psychology*, 16(4), 433-446, DOI:10.1080/17405629.2018.1444987
- Bossaert, G., Colpin, H., Pijl, S., & Petry, K. (2015). Quality of Reciprocated Friendships of Students with Special Educational Needs in Mainstream Seventh Grade, *Exceptionality*, 23(54), 54-72. 10.1080/09362835.2014.986600
- Bottema-Beutel, K., Kim, S., & Crowly, S. (2019). A systematic review and meta-regression analysis of social functioning correlates in autism and typical development, *Autism Research*, *12*(2), 152-175. https://doi.org/10.1002/aur.2055

- Bottini, S. (2018). Social reward processing in individuals with autism spectrum disorder: A systematic review of the social motivation hypothesis. *Research in Autism Spectrum Disorders*, *45*, 9-26. http://dx.doi.org/10.1016/j.rasd.2017.10.001
- Boucher, J. (2012). Putting theory of mind in its place: psychological explanations of the socio-emotional-communicative impairments in autistic spectrum disorder. *Autism*, 16(3), 226-46. doi: 10.1177/1362361311430403
- Bourke, L., Marriott-Fellow, M., Jones, A., Humphreys, L., Davies, S., Zuffiano, A., & López-Pérez, B. (2020). Writing with imagination: the influence of hot and cold executive functions in children with autism characteristics and typically developing peers. *Reading and Writing*, *33*, 935-961. https://doi.org/10.1007/s11145-019-09989-w
- Bowell, P. & Heap, B. (2005). Drama on the Run: A Prelude to Mapping the Practice of Process Drama. *The Journal of Aesthetic Education*, *39*(4), 58-69. DOI: 10.1353/jae.2005.0036
- Bowell, P., & Heap, B. (2010). Drama is not a dirty word: past achievements, present concerns, alternative futures. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 15(4), 579-592. https://doi.org/10.1080/13569783.2010.512191
- Bowell, P., & Heap, B. (2013). *Planning Process Drama: Enriching teaching and learning*. UK: Routledge.
- Boyd, L. E., Ringland, K. E., Haimson, O. L., Fernandez, H., Bistarkey, M., & Hayes, G. R. (2015). Evaluating a collaborative iPad game's impact on social relationships for children with autism spectrum disorder. *ACM Transactions on Accessible Computing*, 7(1), 1-18. https://doi.org/10.1145/2751564
- Bozikis, T. (2012). *Theatre Communications Class: Impact on Students With and Without Autism* (unpublished bachelor thesis). Northern Illinois University, Chicago. http://commons.lib.niu.edu/handle/10843/16556
- Bradley, K., & Male, D. (2017). Forest School is muddy and I like it: Perspectives of young children with autism spectrum disorders, their parents and educational professionals. *Educational & Child Psychology*, *34*(2), 80-93. Retrieved from http://www.netley.camden.sch.uk/welcome/wp-content/uploads/2017/06/Forest-School-research-paper-Kate-Bradley.pdf
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. DOI: 10.1191/1478088706qp0630a
- Braverman, D. (2012). Inclusive Theatre for Young Audiences. Project Report. TYA-UK.
- Brecht, B. (1964). Brecht on Theatre: The Development of an Aesthetic. USA: Farr, Straus & Giroux.
- Brewer, J. (2000). Ethnography. Buckingham: Open University Press.
- Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the Craft of Qualitative Research Interviewing* (3rd ed.). California: SAGE Publications, Inc.
- Brojerdi, F. (2017). How do teachers try to enhance social interactions in students with autism and which methods do they apply? (unpublished masters thesis). University of Gothenburg, Sweeden.

- Brooke, N., Winchell, M., Sreckovic, T., & Schultz, T. (2018). Preventing Bullying and Promoting Friendship for Students with ASD. *Education and Training in Autism and Developmental Disabilities*, *53*(3), 243-252. https://www.jstor.org/stable/10.2307/26563465
- Brownlow, C., Rosqvist, H.B., & O'Dell, L. (2015). Exploring the potential for social networking among people with autism: challenging dominant ideas of 'friendship'. *Scandinavian Journal of Disability Research*, 17(2), 188–193. DOI: http://doi.org/10.1080/15017419.2013.859174
- Brussoni, M., Olsen, L. L., Pike, I., & Sleet, D. A. (2012). Risky play and children's safety: Balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, *9*(9), 3134–3148. doi:10.3390/ijerph9093134
- Bryman, A. (2006). Research Methods and Organization Studies. London: Routledge.
- Bryman, A. (2016). Social Research Methods (5th ed.). Oxford: Oxford University Press.
- Buhr, K., & Dugas, M. (2009). The role of fear and anxiety and intolerance of uncertainty in worry: An experimental manipulation. *Behaviour Research and Therapy*, 47(3), 215-223. DOI: 10.1016/j.brat.2008.12.004
- Burack J. A., Russo N., Kovshoff H., Palma Fernandes T., Ringo J., Landry O., & Iarocci G. (2016). How I attend not how well do I attend: Rethinking developmental frameworks of attention and cognition in autism spectrum disorder and typical development. *Journal of Cognition and Development*, 17, 553–67. http://dx.doi.org/10.1080/15248372.2016.1197226.
- Burke, J., & Dempsy, M. (2020). *Covid-19 Practice in Primary Schools in Ireland Report*. Kildare: Maynooth University.
- Burnette, C.P., Mundy, P.C., Meyer, J.A., Sutton, S., Vaughan, A., & Charak, D. (2005). Weak Central Coherence and Its Relations to Theory of Mind and Anxiety in Autism. *Journal of Autism and Developmental Disorders*, 35, 63–73. https://doi.org/10.1007/s10803-004-1035-5
- Burnside, K. & Wright, K., & Poulin-Dubois, D. (2016). Social Motivation and Implicit Theory of Mind in Children With Autism Spectrum Disorder. *Autism Research*, 10(11), 1834-1844. doi: 10.1002/aur.1836
- Cai, R., Richdale, A., Dissanayake, C., Trollor, J., & Uljarevic, M. (2019). Emotion regulation in autism: Reappraisal and suppression interactions. *Autism*, 23(3), 737-749. DOI: 10.1177/1362361318774558
- Cai, R., Richdale, A., Uljarevic, M., Dissanayke, C., & Samson, A. (2018). Emotion Regulation in Autism Spectrum Disorder: Where Are We and Where We Need to Go. *Autism Research*, 11, 962-978, DOI: 10.1002/aur.196
- Calder, L., Hill, V., & Pellicano, E. (2013). 'Sometimes I want to play by myself': Understanding what friendship means to children with autism in mainstream primary schools. *Autism*, *17*(3), 296-316. DOI: 10.1177/1362361312467866
- Caldwell-Cook, C. (1917). The play way: an essay in educational method. London: Heinemann.
- Caldwell-Harris, C., & Jordan, C. (2014). Systemizing and special interests: characterizing the continuum from neurotypical to autism spectrum disorder. *Learning and Individual Differences*, 29, 98–105. https://doi.org/10.1016/j.lindif.2013.10.005

- Carcary, M. (2020). The Research Audit Trail: Methodological Guidance for Application in Practice. *The Electronic Journal of Business Research Methods*, *18*(2), 166-177. www.ejbrm.com
- Carlson, S. M., & White, R. E. (2013). Executive function, pretend play, and imagination. In M. Taylor (Ed.), *The Oxford handbook of the development of imagination*. Oxford: Oxford University Press.
- Carlson, R., Pekrul, S., Flis, T., & Schloesser, R. (2021). Autism Spectrum Disorder Across the Lifespan Part II. *Psychiatric Clinics of North America*, 44(1):95-110. Netherlands: Elsevier
- Carlson, S., White, R., & David-Unger, A. (2014). Evidence for a relation between executive function and pretense representation in preschool children. *Journal of Cognitive Development*, 29(6), doi:10.1016/j.cogdev.2013.09.001.
- Carneiro, A., Soares. S., Rescorla, L., & Dias, P. (2021). Meta-Analysis on Parent—Teacher Agreement on Preschoolers' Emotional and Behavioural Problems. *Child Psychiatry & Human Development*, 52, 609–618. doi.org/10.1007/s10578-020-01044-y
- Carotenuto, M., Ruberto, M., Fontana, M., Catania, A., Misuraca, E., Precenzano, F...Smirni, D. (2019). Executive functioning in autism spectrum disorders: a case-control study in preschool children. *Curr Pediatr Res*, 23(3), 112-116. www.currentpediatrics.com
- Carruthers, S., Pickles, A., Slonims, V., Howlin, P., & Charman, T. (2020). Beyond Intervention into Daily Life: A Systematic Review of Generalisation Following Social Communication Interventions for Young Children with Autism. *Autism Research*, *16*, 506-522. DOI: 10.1002/aur.2264
- Cat, S. (2019). PDA by PDAers: From Anxiety of Avoidance and asking to Meltdowns. UK: Jessica Kingsley Publishers.
- Cerbo, S., & Rabi, N. (2019). Drama Activities as Tool for Socialization of Learners with Autism. *International Journal of Academic Research in Business and Social Sciences*, 9(6), 1250–1261. DOI: 10.6007/IJARBSS/v9-i6/6102
- Chaidi, I., & Drigas, A. (2020). Autism, Expression, and Understanding of Emotions: Literature Review. *International Journal of Online and Biomedical Engineering*, 16(2), 94-111. DOI: 10.3991/ijoe.v16i02.11991
- Chamberlain, B., Kasari, C., & Rotheram-Fuller, E. (2007). Involvement or isolation? The social networks of children with autism in regular classrooms. *Journal of Autism and Developmental Disorders*, *37*, 230–242. DOI 10.1007/s10803-015-2575-6
- Chan, P., Graham-Day, K., Ressa, V., & Peters, M. (2014). Beyond Involvement: Promoting Student Ownership of Learning in Classroom. *Intervention in School and Clinic*, 50(2), 105-113. DOI: 10.1177/1053451214536039
- Chan, R., Leung, C., Ng, D., & Yau, S. (2018). Validating a Culturally-sensitive Social Competence Training Programme for Adolescents with ASD in a Chinese Context: An Initial Investigation. *Journal of Autism and Developmental Disorders*, 48(2), 450-460. DOI 10.1007/s10803-017-3335-6
- Charman, T. (2000). Theory of mind and the early diagnosis of autism. In S. Baron-Cohen, H. Tager-Flusberg, & D. J. Cohen (Eds.), *Understanding other minds: Perspectives from developmental cognitive neuroscience* (pp. 422–441). Oxford: Oxford University Press.

- Charman, T., Swettenham, J., Baron-Cohen, S., Cox, A., Baird, G., & Drew, A. (1997). Infants with autism: An investigation of empathy, pretend play, joint attention, and imitation. *Developmental Psychology*, *33*(5), 781–789. https://doi.org/10.1037/0012-1649.33.5.781
- Chasen, L. (2011). Social skills, emotional growth and drama therapy. London: Jessica Kingsley.
- Cheng, Y., Huang, C.-L., & Yang, C.-S. (2015). Using a 3D Immersive Virtual Environment System to Enhance Social Understanding and Social Skills for Children with Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 30(4), 222–236. https://doi.org/10.1177/1088357615583473
- Chevallier, C., Kohls, G., Troiani, V., Brodkin, E., & Schultz, R. (2012). The social motivation theory of autism. *Trends in Cognitive Sciences*, 16(4), 231-239. doi:10.1016/j.tics.2012.02.007
- Cholemkery, H., Medda, J., Lempp, T., & Freitag, C. M. (2016). Classifying autism spectrum disorders by ADI-R: Subtypes or severity gradient. *Journal of Autism and Developmental Disorders*, 46(1), 2327–2339. doi:10.1007/s10803-016-2760-2
- Chown, N. & Beardon, L. (2017). Theoretical Models and Autism. In F. Volkmar (Ed.) *Encyclopaedia* of Autism Spectrum Disorders (pp. 1-7). New York: Springer.
- Chown, N., Robinson, J., Beardon, L., Downing, J., Hughes, L., Leatherland, J...MacGregor. D. (2017). Improving Research About Us, With Us: A Draft Framework for Inclusive Autism Research. *Disability & Society* 32(5), 720–734. doi: 10.1080/09687599.2017.1320273.
- Christie, P. (2007). The distinctive clinical and educational needs of children with pathological demand avoidance syndrome: Guidelines for good practice. *Good Autism Practice*, 8(1), 3-11.
- Christie, P., Duncan, M., Fidler, R., & Healy, Z. (2012). *Understanding Pathological Demand Avoidance Syndrome in Children: A guide for parents, teachers and other professionals*. London: Jessica Kingsley. https://reachjournal.ie/index.php/reach/article/view/40
- Chu, H.-C., Tsai, W. W.-J., Liao, M.-J., Chen, Y.-M., &, Chen, J.-Y. (2020). Supporting E-Learning with Emotion Regulation for Students with Autism Spectrum Disorder. *Educational Technology & Society*, 23(4), 124–146. https://www.jstor.org/stable/26981748
- Church, B., Rice, C., Dovgopoly, A., Lopata, C., Thomeer, M., Nelson, A., & Mercado, E. (2015). Learning, plasticity, and atypical generalization in children with autism, *Psychon Bull Rev*, 22, 1342-1348. DOI 10.3758/s13423-014-0797-9
- Clark, A. (2005) 'Ways of seeing: using the Mosaic approach to listen to young children's per-spectives', in Clark, A., Kjørholt and Moss, P. (Eds.) *Beyond Listening. Children's perspectives on early childhood services* (pp. 29–49). Bristol: Policy Press.
- Clark, A., & Moss, P. (2011). Listening to Young Children: The Mosaic Approach (2nd ed.). London: NCB.
- Clark, H. & Fox Tree, J. (2002). Using uh and um in spontaneous speech. *Cognition*, 84, 73–111. www.elsevier.com/locate/cognit
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, *12*(3), 297–298. https://doi.org/10.1080/17439760.2016.1262613

- Clauser, P., Ding, Y., Chen, E., Cho, S., Wang, C., & Hwang, J. (2021). Parenting styles, parenting stress, and behavioral outcomes in children with autism. *School Psychology International*, 42(1), 33-56. http://dx.doi.org/10.1177/0143034320971675
- Cleary, M., Walter, G., Matheson, S., & Siegfried, N. (2008). In L. Callara (Ed.), *Nursing Education Challenges in the 21st Century*. New York: Nova Science Publishers, Inc.
- Clements, C., Zoltowski, A., Yankowitz, L., Yerys, B., Schultz, R. & Herrington, J. (2018) Evaluation of the Social Motivation Hypothesis of Autism A Systematic Review and Meta-analysis. *JAMA Psychiatry*, 78(8), 797-808. doi:10.1001/jamapsychiatry.2018.1100
- Coad, J., Gibson, F., Milnes, L., Randall, D., & Carter, B. (2015). Be my guest! Challenges and practical solutions of undertaking interviews with children in the home setting. *Journal of Child Health Care*, 19(4), 432–443. https://doi.org/I0.1177/1367493514527653
- Cobb, W. (2016). Research methods: how will I collect the data? In R. Austin (Ed.), *Researching Primary Education*. London: SAGE Publications Ltd.
- Coelho, E. (2019). Positive and Negative Effects of Inclusive Education on Social Development for Students with Autism Spectrum Disorder: A Literature Review (unpublished undergraduate thesis). USA: Salem State University, USA.
- Coholic, D., Lougheed, S., & Lebreton, J. (2009). The Helpfulness of Holistic Arts-Based Group Work with Children Living in Foster Care. *Social Work with Groups*, *32*, 29-46. DOI: 10.1080/01609510802290966
- Conn, C. (2019). *Using Drama with Children on the Autism Spectrum: A Resource for Practitoners in Education and Health* (2nd ed.). London: Routledge.
- Conner, C., White, S., Scahill, L., & Mazefsky, C. (2020). The role of emotion regulation and core autism symptoms in the experience of anxiety in autism. *Autism*, *24*(4), 931-940. https://journals.sagepub.com/doi/10.1177/1362361320904217
- Connor, D. (2013). Kiss my Asperger's: turning the tables of knowledge. *International Journal of Inclusive Education*, 17(2), 111-129. DOI: 10.1080/13603116.2011.605911
- Connors, H., Douglas, S., Jensen-Doss, A., Landes, S. J., Lewis, C., McLeod, D., Stanick, C., & Lyon, A. (2021). What gets measured gets done: How mental health agencies can leverage measurement-based care for better patient care, clinician supports, and organizational goals. *Administration and Policy in Mental Health*, 48(2), 250–265. doi.org/10.1007/s10488-020-01063-w
- Conroy, C., Ong, A., & Rodricks, D. (Ed.). (2021). *On Access in Applied Theatre and Drama Education*. Oxon: Routledge.
- Constantino, J., & Gruber, C. (2005). *The Social Responsiveness Scale (SRS) Manual*. Los Angeles California: Western Psychological Services.
- Cooke, E., Smith, V., & Brenner, M. (2020). Parents' experiences of accessing respite care for children with Autism Spectrum Disorder (ASD) at the acute and primary care interface: a systematic review. *BMC Pediatrics*, 20(244). https://doi.org/10.1186/s12887-020-02045-5

- Cooper, C. (2013). The imagination in action: TIE and its relationship to Drama in Education today. In A. Jackson & C. Vine (Eds.). *In Learning Through Theatre: The Changing Face of Theatre in Education* (3rd ed.) (pp. 41-60). Oxon: Routledge.
- Cooper, C., & Cooper, C. (1996). *Teachers Under Pressure: Stress in the Teaching Profession*. Oxon: Routledge.
- Cooper, J., Heron, T., & Heward. W. (2007). *Applied Behavior Analysis* (2nd ed.). UK: Pearson Education Limited.
- Cooper, K., Smith, L., & Russell, A. (2017). Social identity, self-esteem, and mental health in autism. *European Journal of Social Psychology*, 47(7), 844-854. https://doi.org/10.1002/ejsp.2297
- Cooper, R., Cooper, K., Russell, A., & Smith, L. (2020). "I'm Proud to be a Little Bit Different": The Effects of Autistic Individuals' Perceptions of Autism and Autism Social Identity on Their Collective Self-esteem. *Journal of Autism and Developmental Disorders*, *51*, 704-714. https://doi.org/10.1007/s10803-020-04575-4
- Corbett, B., Blain, S., Ioannou, S., & Balser, M. (2017). Changes in anxiety following a randomized control trial of a theatre-based intervention for youth with autism spectrum disorder. *Autism*, 21(3), 333-343. DOI: 10.1177/1362361316643623_
- Corbett, B., Ioannou, S., Key, A., Coke, C., Muscatello, R., Vandekar, S., & Muse, I. (2019). Treatment Effects in Social Cognition with Behavior following a Theater-based Intervention for Youth with Autism. *Developmental Neuropsychology*, 44(7), 481-494. https://doi.org/10.1080/87565641.2019.1676244
- Corbett, B., Key, A., Qualls, L., Fedteau, S., Newson, C., Coke, C. & Yoder, P. (2016). Improvement in Social Competence Using a Randomized Trial of Theatre Intervention for Children with Autism Spectrum Disorder. *Journal of Autism Development Disorder*, 46, 658–672. DOI 10.1007/s10803-015-2600-
- Corbett, B., Swain, D., Newson, C., Wang, L., Song, Y., & Edgerton, E. (2014). Biobehavioral profiles of arousal and social motivation in autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, *55*, 924–934. doi:10.1111/jcpp.12184
- Corsaro, W., & Molinari, L. (2008). Entering and Observing in Children's Worlds: A Reflection on a Longitudinal Ethnography of Early Education in Italy. In P. Christensen & A. James (Eds.) *Research with Children: Perspectives and Practices* (pp. 239-259). New York: Routledge
- Cote, D., Jones, V., Barnett, C., Pavelek, K. & Nguyen, H. (2014). Teaching Problem Solving Skills to Elementary Age Students with Autism. *Education and Training in Autism and Developmental Disabilities*, 49(2), 189–199. http://www.jstor.org/stable/23880604
- Cote, D., Pierce, T., Higgins, K., Miller, S., Tandy, R., & Sparks, S. (2010). Increasing skill performances of problem solving in students with intellectual disabilities. Education and Training in Autism and Developmental Disabilities, *45*(4), 512–524. http://www.jstor.org/stable/23879757
- Côté, I., Getty, L., & Gaulin, R. (2011). Aphasic theatre or theatre boosting self-esteem. *International Journal on Disability and Human Development*, 10(1), 11-15. DOI: 10.1515/ijdhd.2011.007

- Cotnam-Kappel, M. (2014). Tensions in Creating Possibilities for Youth Voice in School Choice: An Ethnographer's Reflexive Story of Research. *Canadian Journal of Education*, 31(1), 140–162. Retrieved from https://journals.sfu.ca/cje/index.php/cje-rce/article/view/1489
- Courtney, R. (1971). A Dramatic Theory of Imagination. *New Literary History, Performances in Drama, the Arts, and Society*, 2(3), 445-460.
- Coussens, M., Destoop, B., Baets, S., Desoete, A., Oostra, A., Vanderstraeten, G....Van de Velde, D. (2020). A Qualitative Photo Elicitation Research Study to elicit the perception of young children with Developmental Disabilities such as ADHD and/or DCD and/or ASD on their participation. *PLoS One*, 15(3), 1-20. doi: 10.1371/journal.pone.0229538
- Cox, S. & Root, J. (2021). Development of Mathematical Practices Through Word Problem-Solving Instruction for Students with Autism Spectrum Disorder. *Exceptional Children*, 87(3), 1-18. https://doi.org/10.1177%2F0014402921990890
- Craig, J. & Baron-Cohen, S. (1999). Creativity and Imagination in Autism and Asperger Syndrome. *Journal of Autism and Developmental Disorders*, 29 (4), 319-326. https://doi.org/10.1023/A:1022163403479
- Craig, J., & Baron-Cohen, S. (1999). Creativity and imagination in autism and Asperger Syndrome. *Journal of Autism and Developmental Disorders*, 29(4), 319-326. DOI: 10.1023/A:1022163403479
- Craig, J., Baron-Cohen, S., & Scott, F. (2001). Drawing ability in autism: A window into the imagination. *Israel Journal of Psychiatry*, *38*(3-4), 242-53. PMID: 11725423.
- Craine, M. (2020). Changing Paradigms: The Emergence of the Autism/Neurodiversity Manifesto. In S. Kapp (Ed.), *Autistic Community and the Neurodiversity Movement* (pp. 255-276). Singapore: Palgrave Macmillan. https://doi.org/10.1007/978-981-13-8437-0_19
- Crane, L., Hearst, C., Ashworth, M., Davies, J. & Hill, E. (2021). Supporting Newly Identified or Diagnosed Autistic Adults: An Initial Evaluation of an Autistic-Led Programme. *Journal of Autism and Developmental Disorders*, *51*, 892–905. https://doi.org/10.1007/s10803-020-04486-4
- Cremin, M. (1998). The Imagination, and Originality, in English and Classroom Drama. *English in Education*, 32(2), 4-13. DOI: 10.1111/j.1754-8845.1998.tb00144.x
- Crespi, B., Leach, E., Dinsdale, N., Mokkonen, M., & Hurd, P. (2016). Imagination in human social cognition, autism, and psychotic-affective conditions. *Cognition*, 150, 181–199. oi: 10.1016/j.cognition.2016.02.001
- Creswell, J., & Miller, D. (2000). Determining Validity in Qualitative Inquiry. *Theory Into Practice*, 39(3), 124–130. https://doi.org/http://dx.doi.org/10.1207/s15430421tip3903_2
- Creswell, J., & Plano Clark, V. (2007). *Designing and Conducting Mixed Methods Research* (Second). London: SAGE Publications, Inc.
- Crimmens, P. (2006). *Drama Therapy and Storymaking in Special Education*. London: Jessica Kingsley Publishers.

- Csikszentmihalyi, M., & Whalen, S. (1993). *Talented teenagers: The roots of success & failure*. Cambridge: Cambridge University Press.
- Cullinan, E. (2017). Voice of the Child-An Investigation into the Social Inclusion of Children with Autistic Spectrum Disorder in Mainstream Primary Settings, *REACH Journal of Special Needs Education in Ireland*, 30(1), 23-35. https://reachjournal.ie/index.php/reach/article/view/40
- Dahl, V., Ramakrishnan, A., Spears, A., 1 Jorge, A., Lu, J., Bigio, N., & Chacko, A. (2020). Psychoeducation Interventions for Parents and Teachers of Children and Adolescents with ADHD: a Systematic Review of the Literature. *Journal of Developmental and Physical Disabilities*, 32, 257–292. doi: 10.1007/s10882-019-09691-3
- Daly, P., Ring, E., Egan, M., Fitzgerald, J., Griffin, C., Long, S...Wall, E. (2016). An Evaluation of Education Provision for Students with Autism Spectrum Disorder in Ireland. Research Report No. 21. Trim: National Council for Special Education.
- Danker, J., Strnadová, I., & Cumming, T. (2019). Picture my well-being: Listening to the voices of students with autism spectrum disorder. *Research in Developmental Disabilities*, 89(1), 130-140. https://doi.org/10.1016/j.ridd.2019.04.005
- Davanport, S. (2020). Out of Searching Comes New Vibrance. In K. Kapp (Ed.) *Autistic Community and the Neurodiversity Movement* (pp. 147-154). Singapore: Palgrave Macmillan
- Davis, D. (2014). Imagining the Real. London: Institute of Education Press.
- Davis, D. (Ed.). (1997). Interactive Research in Drama Education. England: Trentham Books Ltd.
- Davis, J., Watson, N., & Cunningham-Burley, S. (2014). Disabled children, ethnography and unspoken understandings: The collaborative construction of diverse identities. In P. Christensen & A. James, *Research with Children: Perspectives and Practices* (pp. 21-39). London: Routledge.
- Davy, K. & Tynan, F. (2021). Support Pupils with Autism Spectrum Disorder (ASD) in the Mainstream Primary School. *REACH Journal of Inclusive Education in Ireland*, *34*(1), 6-18. https://reachjournal.ie/index.php/reach/issue/view/42/3
- Dawson, G., Carver, L., Meltzoff, A., Panagiotides, H., McPartland, J., & Webb, S. (2002). Neural correlates of face and object recognition in young children with autism spectrum disorder, developmental delay and typical development. *Child Development*, 73(3), 700–717. DOI: 10.1111/1467-8624.00433
- Day, T., & Prunty, A. (2015). Responding to the challenges of inclusion in Irish schools. *European Journal of Special Needs Education*, 30(2), 237-252. DOI:10.1080/08856257.2015.1009701
- de Vries, M., Verdam, M., Prins, P., Schmand, B., & Geurts, H. (2018). Exploring possible predictors and moderators of an executive function training for children with an autism spectrum disorder. *Autism*, 22(4), 440-449. https://doi.org/10.1177/1362361316682622
- De Vroey, A., Struyf, E., & Petry, K. (2016). Secondary schools included: A literature review. *International Journal of Inclusive Education*, 20(2), 109–135. https://doi.org/10.1080/13603116.2015.1075609

- Delano, M., & Snell, M. (2006). The Effects of Social Stories on the Social Engagement of Children with Autism. *Journal of Positive Behavior Interventions*, 8(1), 29–42. https://doi.org/10.1177/10983007060080010501
- Delany, D., & Boran, L. (2011). *Integrated Executive Function Training in Autism Spectrum Disorder*. Paper presented at No Mind Left Behind. Royal Concert Hall, Glasgow.
- Dellapiazza, F., Michelon, C., Vernhet, C., Muratori, F., Blanc, N., Picot, MC., & Baghdadli, A. Sensory processing related to attention in children with ASD, ADHD, or typical development: results from the ELENA cohort. *Eur Child Adolesc Psychiatry*, *30*(2), 283-291. doi: 10.1007/s00787-020-01516-5.
- Demetriou, E., Lampit, A., Quintana, D., Naismith, S., Son, Y., Pye, J.....Guastella, A. (2018). Autism spectrum disorders: A meta-analysis of executive function. *Molecular Psychiatry*, 23, 1198-1204. doi:10.1038/mp.2017.75
- Dennis, B., & Huf, C. (2020). Ethnographic research in childhood institutions: participations and entanglements. *Ethnography and Education*, *15*(4), 445-461. https://doi.org/10.1080/17457823.2020.1722951
- Denzin, N.K. (1978). Sociological methods: A sourcebook. New York, NY: McGraw-Hill.
- Department of Children and Youth Affairs (2000). *National Children's Strategy* (2000). Dublin: Government Publications.
- Department of Children and Youth Affairs (2015). *National Youth Strategy 2015-2020*. Dublin: Government Publications.
- Department of Children and Youth Affairs, (2014). *The National Policy Framework for Children and Young People 2014 2020.* Dublin: Government Publications.
- Department of Education and Skills (DES) (2011). *The Special Needs Assistant Scheme: A Value for Money Review of Expenditure on The Special Needs Assistant Scheme*. Dublin: DES.
- DeRosier, M. E., Swick, D. C., Davis, N. O., McMillen, J. S., & Matthews, R. (2011). The efficacy of a Social Skills Group Intervention for improving social behaviors in children with high functioning autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 41(8), 1033–1043. doi: 10.1007/s10803-010-1128-2.
- DeRosier, M., & Gilliom, M. (2007). Effectiveness of a Parent Training Program for Improving Children's Social Behavior. *Journal of Child and Family Studies*, 16, 660–670. DOI: 10.1007/s10826-006-9114-1
- DES (2014). Circular to the Management Authorities of Primary Schools, Special Schools, Secondary, Community and Comprehensive Schools and the Chief Executive Officers of the Educational Training Boards. Westmeath: Department of Education and Skills.
- DES (2020). Educational Provision for Learners with Autism Spectrum Disorder in Special Classes Attached to Mainstream Schools in Ireland. Dublin: Department of Education and Skills.
- DES (2021). Updated Guidance on Continuity of Schooling: Supporting Pupils with Special Educational Needs: For mainstream primary and special schools. Dublin: Department of Education and Skills.

- DES. (1998). *Major Initiative in Special Education Services: Move Marks Breakthrough for Integrated Education and Children with Autism.* Press Release, Thursday 5th November 1998. Dublin: Department of Education and Science.
- DES. (2002). Circular SP ED07/02, Applications for Full-Time or Part-Time Special Needs Assistant Support to Address the Special Care Needs of Children with Disabilities. Dublin: Department of Education and Science.
- Deschamps, P., Been, M., & Matthys, W. (2014). Empathy and Empathy Induced Prosocial Behaviour in 6- and 7-Year-Olds with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 44, 1749–1758. DOI 10.1007/s10803-014-2048-3
- DeThorne, L. (2020). Revealing the Double. *The Asha Leader*, 58-67. https://doi.org/10.1044/leader.FTR2.25042020.58
- DeVoe, M. (1977). Cooperation as a function of self-concept, sex and race. *Education Research Quarterly*, 2(2), 3-8.
- Dewalt, K. M., & Dewalt, B. R. (2010). *Participant observation: A guide for fieldworkers*. Walnut Creek, CA: AltaMira Press.
- DeWalt, K., & DeWalt, B. (2002). *Participant observation: A guide for fieldworkers*. Walnut Creek, CA: AltaMira.
- Dewey, J. (1932). Frontiers of Consciousness Series: Theory of the Moral Life. New York: Irvington Publishers, Inc.
- Di Tella, M., Ardito, RB., Dutto, F., & Adenzato, M. (2020). On the (lack of) association between theory of mind and executive functions: a study in a non-clinical adult sample. *Sci Rep*, *10*(1), 17283. doi: 10.1038/s41598-020-74476-0.
- DiCriscio, A. S., Miller, S., Hanna, E., Kovac, M., Turner-Brown, L., Sasson, N....Dichter, G. (2016). Brief report: Cognitive control of social and nonsocial visual attention in autism. *Journal of Autism and Developmental Disorders*, 46(8), 2797–2805. DOI: 10.1007/s10803-016-2804-7
- Dillon, G., & Underwood, J. (2012). Computer mediated imaginative storytelling in children with autism. *Journal of Human-Computer Studies*, 70 (2), 169-178. https://doi.org/10.1016/j.ijhcs.2011.10.002
- Dixon, J., Singleton, R., & Straits, B. (2016). *The Process of Social Research*. Oxford: Oxford University Press.
- Doak, L. (2020). Realising the 'right to play' in the special school playground. *International Journal of Play*, 9(4), 414-438. DOI: 10.1080/21594937.2020.1843805
- Dogan, R., King, M., Fischetti, A., Lake, C., Matthews, T., & Warzak, W. (2017). Parent-implemented behavioral skills training of social skills. *Journal of Applied Behaviour Analysis*, 50(4), 805-818. doi: 10.1002/jaba.411
- Doherty-Sneddon, G., Riby, D. M., & Whittle, L. (2012). Gaze aversion as a cognitive load management strategy in autism spectrum disorder and Williams syndrome. *Journal of Child Psychology and Psychiatry*, *53*(4), 420–430. doi: 10.1111/j.1469-7610.2011.02481.x

- Doherty-Sneddon, G., Whittle, L., & Riby, D. M. (2013). Gaze aversion during social style interactions in autism spectrum disorder and Williams syndrome. *Research in Developmental Disabilities*, 34(1), 616–626. http://dx.doi.org/10.1016/j.ridd.2012.09.022
- Dolan, B., Van Hecke, A., Carson, A., Karst, J., Stevens, S., Schohl, K.... Hummel, E. (2016). Assessment of Intervention Effects on In Vivo Peer Interactions in Adolescents with Autism Spectrum Disorders (ASD). *Journal of Autism and Developmental Disorders*, 46(6), 2251-2259. doi: 10.1007/s10803-016-2738-0
- Donnellan, AM., Mesaros, RA., & Anderson, JL. (1984). Teaching Students With Autism in Natural Environments: What Educators Need From Researchers. *The Journal of Special Education*, 18(4), 505-522. doi:10.1177/002246698401800407
- Dorion, K. (2009). Science through Drama: A multiple case exploration of the characteristics of drama activities used in secondary science lessons. *International Journal of Science Education*, 31(16), 2247-2270. DOI: 10.1080/09500690802712699
- Doyle, A., Kenny, N., & McNally, S. (2020). *Mapping Experiences of Pathological Demand Avoidance in Ireland: Executive Summary 25th January 2020*. PRISM. Dublin: Family Support Across the Spectrum. https://www.prismdlr.com/pda-ireland
- Drever, E. (2013). *Using Semi-Structured Interviews in Small Scale Research: A Teacher's Guide*. Australia: SCRE Publication.
- Dubey, I., Ropar, D., & Hamilton, A. (2016). Brief Report: A Comparison of the Preference for Viewing Social and Non-social Movies in Typical and Autistic Adolescents. *Journal of Autism Developmental Disorders*, 47, 514-519. DOI 10.1007/s10803-016-2974-3
- Duncan, A., Liddle, M., & Stark, L. J. (2021). Iterative Development of a Daily Living Skills Intervention for Adolescents with Autism Without an Intellectual Disability. *Clinical child and family psychology review*, 24(4), 744–764. https://doi.org/10.1007/s10567-021-00360-6
- Dundon, R. (2021). *PDA in the Therapy Room: A Clinician's Guide to Working with Children with Pathological Demand Avoidance*. London: Jessica Kinglsey Publishers.
- Dunn, J. (2016). Demystifying process drama: exploring the why, what, and how. *NJ*, 40(2), 127-140. DOI: 10.1080/14452294.2016.1276738
- Duvekot, J., van der Ende, J., Verhulst, F. C., & Greaves-Lord, K. (2018). Examining bidirectional effects between the autism spectrum disorder (ASD) core symptom domains and anxiety in children with ASD. *Journal of Child Psychology and Psychiatry*, *59*, 277–284. https://doi.org/10.1111/jcpp.12829
- Eack, S. M., Mazefsky, C. A., & Minshew, N. J. (2015). Misinterpretation of facial expressions of emotion in verbal adults with autism spectrum disorder. *Autism*, 19(3), 308–315. DOI: 10.1177/1362361314520755
- Earl, L. (2020). The doing of ethnographies of eating: writing, observing, and eating chip butties during ethnographic research in primary schools in England. *International Journal of Qualitative Studies in Education*, 1-16. DOI: 10.1080/09518398.2020.1761476

- Earl, L. (2020): The *doing* of ethnographies of eating: writing, observing, and eating chip butties during ethnographic research in primary schools in England. *International Journal of Qualitative Studies in Education*, DOI: 10.1080/09518398.2020.1761476
- Eder, D., & Fingerson, L. (2001). Interviewing Children and Adolescents. In J. Gubrium & J. Holstein (Eds.), *Handbook of Interview Research: Context & Method*. California: SAGE Publications.
- Egan, K. (1986). Teaching as Story Telling: An Alternative Approach to Teaching and Curriculum in the Elementary School. USA: University of Chicago Press
- Egan, K. (1988). Supplement to Teaching as Story Telling. *Canadian Journal of Education 13*(3), 452-454. DOI: 10.2307/1494927
- Einfeld, S., Beaumont, R., Clark, T., Clarke, K., Costley, D., Gray, K., Howlin. (2018). School-based social skills training for young people with autism spectrum disorders. Journal of Intellectual & Developmental Disability, 43(1), 29-39. https://doi.org/10.3109/13668250.2017.1326587
- Eisenberg, N., Eggum, N. D., & Di Giunta, L. (2010). Empathy related responding: Associations with prosocial behavior, aggression, and intergroup relations. *Social Issues and Policy Review*, 4(1), 143–180. doi:10.1111/j.1751-2409.2010.01020.x.
- Elias, R. & White, S. (2020). Measuring Social Motivation in Autism Spectrum Disorder: Development of the Social Motivation Interview. *Journal of Autism and Developmental Disorders*, *50*, 798-811. https://doi.org/10.1007/s10803-019-04311-7
- Ellis, C., & Beauchamp, G. (2012). Ethics in Researching Children with Special Educational Needs. In I. Palaiologu (Ed.) *Ethical Practice in Early Childhood* (pp. 47-63). London: SAGE Publications Ltd.
- Emerich, D., Creaghead, N., Grether, S., Murray, D., & Grasha, C. (2003). The comprehension of humorous materials by adolescents with high-functioning autism and Asperger's syndrome. *Journal of Autism and Developmental Disorders*, 33(3), 253–257. DOI: 10.1023/a:1024498232284
- Emerson, R., Fretz, R., & Shaw, L. (1995). *Writing Ethnographic Fieldnotes*. Chicago: University of Chicago Press.
- Eriksson, S. (2011). Distancing. In S. Schonmann (Ed.) *Key Concepts in Theatre/Drama Education*. The Netherlands: Sense Publishers.
- Eschenfelder, V., & Gavalas, C. (2017). Joint Attention and Occupations for Children and Families Living with Autism Spectrum Disorder: A Scoping Review. *The Open Journal of Occupational Therapy*, 5(4). https://doi.org/10.15453/2168-6408.1349
- Ethnographic Research Inc. (2021). What is ethnography? Available at: https://www.ethnographic-research.com
- Eversole, M., Collins, D., Karmarkar, A., Coltn, L., Phillips Quinn, J., Karsbaek, R....Hilton, C. (2016). Leisure Activity Enjoyment of Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 46, 10-20. DOI: 10.1007/s10803-015-2529-z
- Ewing, R., & Saunders, J. (2019). *The School Drama Book: Drama, literature and literacy in the creative classroom.* Sydney: Currency Press.

- Facer, K., & Enright, B. (2016). Creating Living Knowledge: The Connected Communities Programme, Community-University Relationships and the Participatory Turn in the Production of Knowledge. Bristol, UK: University of Bristol/AHRC Connected Communities.
- Fage, C., Consel, C., Etchegoyhen, K., Amestoy, A., Bouvard, M., Mazon, C., & Sauzéon, H. (2019). An emotion regulation app for school inclusion of children with ASD: Design principles and evaluation. *Computers & Education*, 131, 1-21. https://doi.org/10.1016/j.compedu.2018.12.003
- Falck-Ytter, T., Bölte, S., & Gredebäck, G. (2013). Eye tracking in early autism research. *Journal of Neurodevelopmental Disorders*, 5(28). https://doi.org/10.1186/1866-1955-5-28
- Farr, W., Yuill, N., & Raffle, H. (2010). Social benefits of a tangible user interface for children with Autistic Spectrum Conditions. *Autism*, *14*(3), 237–252. https://doi.org/10.1177/1362361310363280
- Farrell, T. S. C. (2019). Standing on the shoulders of giants: Interpreting reflective practice in TESOL. *Iranian Journal of Language Teaching Research*, 7(3), 1-14. https://doi.org/10.30466/IJLTR.2019.120733
- Fawcett, L. M., & Garton, A. F. (2005). The effect of peer collaboration on children's problem-solving ability. *British Journal of Educational Psychology*, 75(2), 157–169. https://doi.org/10.1348/000709904X23411
- Fayette, R., & Bond, C. (2018). A systematic literature review of qualitative research methods for eliciting the views of young people with ASD about their educational experiences. *European Journal of Special Needs Education*, 33(3), 349-365. DOI: 10.1080/08856257.2017.1314111
- Fenton, A., & Krahm, T. (2007). Autism, Neurodiversity and Equality Beyond the 'Normal'. *Journal of Ethics in Mental Health*, 2(2), 106. https://jemh.ca/issues/v2n2/documents/JEMH_V2N2_Theme_Article2_Neurodiversity_Autism.pdf
- Ferderer, M. (2012). Weak Central Coherence Theory Problem Solving in Adults with Asperger Syndrome (unpublished thesis). The University of Southern Mississippi, USA.
- Ferguson, G. (2014). *Including children with disabilities in mainstream education: An exploration of the challenges and considerations for parents and primary school teachers.* (Unpublished masters thesis). Technological University Dublin, Dublin.
- Ferguson, H., Black, J., & Williams, D. (2019). Distinguishing reality from fantasy in adults with autism spectrum disorder: Evidence from eye movements and reading. *Journal of Memory and Language*, 106, 95-107. https://doi.org/10.1016/j.jml.2019.03.001
- Ferguson, J., Milne, C., Cihon, J., Leaf, J., McEachin, J., & Leaf, R. (2020). Using the teaching interaction procedure to train interventionists to implement the Cool versus Not CoolTM procedure. *Behavioral Interventions*, *36*, *211-227*. DOI: 10.1002/bin.1741
- Eernandez-Prieto, M., Moreira, C., Cruz, S., Campos, V., Martínez-Regueiro, R., Taboada, M... Sampaio, A. (2021). Executive Functioning: A Mediator Between Sensory Processing and Behaviour in Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 51(6), 2091-2103. doi: 10.1007/s10803-020-04648-4. PMID: 32915356.

- Fidler, R., & Christie, P. (2019). *Collaborative Approaches to Learning for Pupils with PDA*. UK: Jessica Kingsley Publishers.
- Filipe, M., Veloso, A., Fronta, S., & Vicente, S. (2020). Executive functions and pragmatics in children with high-functioning autism. *Reading and Writing*, *33*, 859-875. https://doi.org/10.1007/s11145-019-09975-2
- Fine, M. (1994). Working the hyphens: Reinventing the self and other in qualitative research. In N. Denzin, & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 70-82). California: Sage.
- Finlay, C., Kinsella, W., & Prendeville, P. (2019). The professional development needs of primary teachers in special classes for children with autism in the republic of Ireland. *Professional Development in Education*, DOI: 10.1080/19415257.2019.1696872
- Finlay-Johnson, H. (1912). The Dramatic Method of Teaching. England: Ginn.
- Finnegan, R., Trimble, T. & Egan, J. (2014). Irish parents' lived experience of learning about and adapting to their child's autistic spectrum disorder diagnosis and their process of telling their child about their diagnosis. *The Irish Journal of Psychology*, 35(2-3), 78–90. DOI: 10.1080/03033910.2014.982143T
- Finnigan, E., & Starr, E. (2010). Increasing social responsiveness in a child with autism: A comparison of music and non-music interventions. *Autism*, 14(4), 321–348. DOI: 10.1177/1362361309357747
- Finnigan, E., & Starr, E. (2010). Increasing social responsiveness in a child with autism: A comparison of music and non-music interventions. *Autism*, *14*(4), 321–348. DOI: 10.1177/1362361309357747
- Fisher, W., Felber, J., Philips, L., Craig, A., Paden, A., & Niemeier, J. (2019). Treatment of resistance to change in children with autism. *Journal of Applied Beheviour Analysis*, 52(4), 974-993. doi: 10.1002/jaba.588
- Fitzpatrick, P., Fraizer, J., Cochran, D., Mitchell, T., Coleman, C., & Schmidt, R. (2018). Relationship Between Theory of Mind, Emotion Recognition, and Social Synchrony in Adolescents With and Without Autism. *Frontiers in Psychology*, *9*(1337). https://doi.org/10.3389/fpsyg.2018.01337
- Fleming, D. (2015). Student Voice: An Emerging Discourse in Irish Education Policy. *International Electronic Journal of Elementary Education*, 8(2), 223-242. http://www.iejee.com
- Fletcher-Watson, S., & Bird, G. (2020). Autism and empathy: What are the real links? *Autism*, 24(1), 3-6. https://doi.org/10.1177/1362361319883506
- Fletcher-Watson, S., Petrou, A., Scott-Barrett, J., Dicks, P., Graham, C., O'Hare, A... McConachie, H. (2016). A trial of an iPad intervention targeting social communication skills in children with autism. *Autism*, 20(7), 771–782. DOI: 10.1177/1362361315605624
- Flick, U. (2009). An Introduction to Qualitative Research (4th ed.). London: SAGE Publications Ltd.
- Florian, L., & Black-Hawkins, K. (2011). Exploring Inclusive Pedagogy. *British Educational Research Journal*, *37*(5), 813-828. https://doi.org/10.1080/01411926.2010.501096

- Flynn, P. (2014). Empowerment and Transformation for Young People with Social, Emotional and Behavioural Difficulties Engaged with Student Voice Research. *New Zealand Journal of Educational Studies*, 49(2), 162–175.
- Foley Meeker, B. (1990). Cooperation, Competition, and Self-Esteem: Aspects of Winning and Losing. *Human Relations*, 43(3) 205-219. https://doi.org/10.1177/001872679004300301
- Fórsa. 2018. *Professionalisation for Special Needs Assistants: Research from Fórsa Trade Union*. https://www/forsa.ie/wp-content/uploads/2018/04/SNA-survey-Forsa-2018.pdf.
- Foukara, A. (2020). Is Peter Slade's Drama Method Educational or Therapeutic? *International Journal of Innovation and Applied Studies*, 29(4), 1321-1326. http://www.ijias.issr-journals.org/
- Fraley, B., & Aron, A. (2004). The effect a shared humorous experience on closeness in initial encounters. *Personal Relationship*, 11(1), 61–78. https://doi.org/10.1111/j.1475-6811.2004.00071.x
- Freebody, K. & O'Grady, A. (2019). *Historical Thinking for History Teachers: Drama pedagogy in the teaching of history*. Routledge, ebook ISBN: 9781003115977
- Friend, M. (2011). *Special education contemporary perspectives for school professionals* (3rd ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Frith, U. (1989). A new look at language and communication in autism. *International Journal of Language & Communication in Autism*, 24(2), 123-150. https://doi.org/10.3109/13682828909011952
- Frith, U., Happé, F., & Siddons, F. (1994). Autism and theory of mind in everyday life. *Social Development*, 3(2), 108–124. https://doi.org/10.1111/j.1467-9507.1994.tb00031.x
- Frye, R. E. (2018). Social skills deficits in autism spectrum disorder: Potential biological origins and progress in developing therapeutic agents. *CNS Drugs*, *32*(8), 713–734. https://doi.org/10.1007/s4026 3-018-0556-y
- Furlano, R. (2018). *Self-Perception in Autism Spectrum Disorder* (unpublished doctoral thesis). Queen's University, Canada.
- Fusch, P., Fusch, G. & Ness, L. (2017). How to Conduct a Mini-Ethnographic Case Study: A Guide of Novice Researchers. *The Qualitative Report*, 22(3), 923-941. https://doi.org/10.46743/2160-3715/2017.2580
- Gabriel, J., Angevin, E., Rosen, T., & Lerner, M.D. (2015). Use of theatrical techniques and elements as interventions for autism spectrum disorders. In Sofia, G. (Ed.), *Theater and Cognitive Neuroscience* (pp. 163 176). London, UK: Bloomsbury Academic.
- Gale, C., Eikeseth, S., & Klintwall, I. (2019). Children with Autism how Atypical Preference for Non-social Stimuli. *Scientific Reports*, 9(10355). https://doi.org/10.1038/s41598-019-46705-8
- Gallacher, L., & Gallagher, M. (2008). Methodological Immaturity in Childhood Research? Thinking through 'participatory methods'. *Childhood*, *15*(4), 499-516. https://doi.org/10.1177/0907568208091672

- Gallagher, K. (2007). Conceptions of Creativity in Drama Education. In L. Bresler (Ed.) *International Handbook of Research in Arts Education Part 1* (16) (pp. 1229-1240). Springer: The Netherlands
- Gallas, K. (2003). *Imagination and literacy: A teacher's search for the heart of learning*. New York: Teachers College Press.
- Galligan, J. (2009). *De-masking the silence-Drama Therapy: For Children with ASD* (unpublished masters thesis). Virgina Commonwealth University, USA.
- Gallup, J., Serianni, B., Duff, C., & Gallup, A. (2016). An Exploration of Friendships and Socialization for Adolescents with Autism Engaged in Massively Multiplayer Online Role-Playing Games (MMORPG). *Education Training in Autism and Developmental Disabilities* 3, 223-237.
- Galton, M., & MacBeth, J. (2008). Teachers Under Pressure. London: SAGE Publications Ltd.
- Gantman, A., Kapp, S., Orenski, K., & Laugeson, E. (2012). Social Skills Training for Young Adults with High-Functioning Autism Spectrum Disorders: A Randomized Controlled Pilot Study. *Journal of Autism and Developmental Disorders*, 42, 1094–1103. DOI: 10.1007/s10803-011-1350-6
- Gao, X., & Harris, D. (2014). Generalizability theory. *Health Measurement Scales*. https://doi.org/10.1093/med/9780199685219.003.0009
- Gavrielidou-Tstelepi, E. (2013). Research in policy making in education: Is there a place for the social model? *Purpose, Process and Future Direction of Disability Research*, 73-88. doi: 10.1007/978-94-6209-422-2
- Gernsbacher, M. A., & Pripas-Kapit, S. R. (2012). Who's missing the point? A commentary on claims that autistic persons have a specific deficit in figurative language comprehension. *Metaphor and Symbol*, 27, 93–105. http://dx.doi.org/10.1080/10926488.2012.656255
- Gernsbacher, M., & Yergeau, M. (2019). Empirical Failures of the Claim That Autistic People Lack a Theory of Mind. *Archives of Scientific Psychology*, 7, 102-118. DOI: http://dx.doi.org/10.1037/arc0000067
- Geurts, H., Sinzig, J., Booth, R., & Happé, F. (2014). Neuropsychological heterogeneity in executive functioning in autism spectrum disorders. *International Journal of Developmental Disabilities*, 60(3), 155-162. https://doi.org/10.1179/2047387714Y.0000000047
- Giangreco, M., Doyle, M., & Suter, J. (2014). Teacher Assistants in Inclusive Schools. In L. Florian (Ed.). *The SAGE Handbook of Special Education* (pp. 429-439). London: SAGE Publications
- Gill, C. (2013). Enhancing the English-Language Oral Skills of International Students Through Drama. *English Language Teaching*, 6(4), 29-41. doi:10.5539/elt.v6n4p29
- Gillberg, C. (2010). The ESSENCE in child psychiatry: Early Symptomatic Syndromes Eliciting Neurodevelopmental Clinical Examinations. *Research in Developmental Disabilities*, 31(6), 1543-1551. https://doi.org/10.1016/j.ridd.2010.06.002
- Gillberg, C., Gillberg, I., Thompson, L., Biskupsto, R., & Billstedt, E. (2015). Extreme ("pathological") demand avoidance in autism: a general population study in the Faroe Islands. *European Child & Adolescent Psychiatry*, 24, 979-984. https://doi.org/10.1007/s00787-014-0647-3

- Giserman-Kiss, I., Gorenstein, M., Feldman, E., Rowe, M., Grosman, H., Weissman, J...Siper, P. (2020). The Immersive Theater Experience for Individuals with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 50, 1079-1080. https://doi.org/10.1007/s10803-019-04284-7
- Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldire.
- Goldberg, M., Allman, M., & Hagopian, L., Triggs, M., Frank-Crawford, M...DeLeon, I. (2017). Examining the reinforcing value of stimuli within social and non-social contexts in children with and without high-functioning autism. *Autism*, *21*(7), 881-895. https://doi.org/10.1177/1362361316655035
- Goldstein, T., Lerner, M., Paterson, S., Jaeggi, L., Toub., T., Hirsh-Paesk, K., & Golinkoff, R. (2019). Stakeholder Perceptions of the Effects of a Public School-Based Theatre Program for Children with ASD. *Journal for Learning through the Arts*, 15(1), doi: 10.21977/D915136948
- Goleman, D. (1995). Emotional Intelligence. New York: Bantam Dell.
- Gómez-Marí, I., Sanz-Cervera, P., & Tárraga-Mínguez, R. (2021). Teachers' Knowledge Regarding Autism Spectrum Disorder (ASD): A Systematic Review. *Sustainability*, *13*(5097), 1-23. https://doi.org/10.3390/su13095097
- Goodall, C. (2020). *Understanding the Voices and Educational Experiences of Autistic Young People:* From Research to Practice. UK: Routledge.
- Goodson, A. (2018). *Emotion Regulation and Executive Function in Children and Adolescents with Autism Spectrum Disorder and Pathological Demand Avoidance Traits*, (unpublished doctoral dissertation). University College London, London.
- Gotham, K., Risi, S., Pickles, A., & Lord, C. (2006). The Autism Diagnostic Observation Schedule (ADOS). *Journal of Autism and Developmental Disorders*, 37(4), 613-27. doi: 10.1007/s10803-006-0280-1
- Government of Ireland. (2018.) *Ministerial Press Release: Minister Bruton welcomes special needs assistants scheme review* [online at https://www.educationie/en/Press-Events/Press-Releases/2018-press-releases/PR18-05-30.html].
- Graby, S. (2016, June). *Unworkable Conditions: Work, Benefits and Disabled People's Resistance to Capitalism*. Paper presented at the Association for Social and Political Philosophy conference, London.
- Graham, M. (2013). Geography/internet: ethereal alternate dimensions of cyberspace or grounded augmented realities?. *The Geographical Journal*, 179(2), 177-182. http://www.jstor.org/stable/43868547
- Graham. S., & Harris, K. R. (2003). Students with learning disabilities and the process of writing: A meta-analysis of SRSD studies. In L. Swanson, K. R. Harris, & S. Graham (Eds.), *Handbook of research on learning disabilities* (pp. 383–402). New York, NY: Guilford
- Grandin, T. (1997). A personal perspective on autism. In D. J. Cohen & F. R. Volkmar (Eds.), *Handbook of autism and pervasive develop- mental disorders*, (pp. 1032–1042). Hoboken: Wiley.

- Gray, C. (2015). The New Social Story BookTM: Over 150 Social Stories That Teach Everyday Social Skills to Children and Adults with Autism and Their Peers. USA: Future Horizons Firm.
- Grazzani, I., Ornaghi, V., Conte, E., Pepe, A., & Caprin, C. (2018). The Relation Between Emotion Understanding and Theory of Mind in Children Aged 3 to 8: The Key Role of Language. *Frontiers in Psychology*, 9(724). doi: 10.3389/fpsyg.2018.00724
- Green, C. (2018). Mainstream schools VS. SEN: A thematic analysis exploring teachers' perspectives on children with Autistic Spectrum Disorders (ASD) behaviour in mainstream schools vs Special Educational Needs (SEN) (Unpublished undergraduate thesis). Manchester Metropolitan University, Manchester.
- Green, J. (2020). Commentary: Anxiety and behaviour in and beyond ASD; does the idea of 'PDA' really help?-a commentary on Stuart et al. (2020). *Child and Adolescent Mental Health*, 25(2), 74-76. https://doi.org/10.1111/camh.12379
- Green, J., & Garg, S. (2018). Annual research review: The state of autism intervention science: Progress, target psychological and biological mechanisms and future prospects. *Journal of Child Psychology and Psychiatry*, 59(4), 424–443. https://doi.org/10.1111/jcpp.12892
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11, 255-274. https://doi.org/10.3102%2F01623737011003255
- Greene, J., & Caracelli, V. (1997). Defining and Describing the Paradigm Issue in Mixed-Methods Evaluation. *New Directions for Evaluations*, 74, 5-17. Doi: 10.1002/ev.1068
- Greimel, E., Schulte-Ruther, M., Kircher, T., Kamp- Becker, I., Remschmidt, H., Fink, G.,... Herpertz-Dahlmann, B. (2010). Neural mechanisms of empathy in adolescents with autism spectrum disorder and their fathers. *NeuroImage*, 49(1), 1055-1065. doi:10.1016/j.neuroimage.2009.07.057
- Grey, B., Dallos, R., & Stancer, R. (2021). Feeling 'like you're on...a prison ship'-Understanding the caregiver and attachedment narratives of parents of autistic children, Human Systems. *Therapy, Culture and Attachments, 1*(1), 96-114. https://doi.org/10.1177/26344041211000202
- Grey, I., Bruton, C., Honan, R., McGuinness, R., & Daly, M. (2007). Co-operative Learning for Children with an Autistic Spectrum Disorder (ASD) in Mainstream and Special Class Settings: An exploratory study. *Educational Psychology in Practice*, 23(4), 317-327. DOI: 10.1080/02667360701660936
- Griffin, C. (2021). 'Do I get a say in this?' Considering the Voice of the Child in the Context of the Special Needs Assistant Scheme. In A. Leavy & Nohilly, M. (Edts.), *Perspectives on Childhood* (pp. 2-24). UK: Cambridge Scholars Publishing.
- Grigsby, K. (2001). Participant Observation. In B. Thyer (Ed.), *The Handbook of Social Work Research Methods*. California: SAGE Publications, Inc.
- Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J. J. Gross (Ed.), *Handbook of Emotion Regulation* (3rd ed.) (pp. 3-24). New York, NY: Guilford Press.
- Grove, N (2021). Using Storytelling to Support Children and Adults with Special Needs: Transforming lives through telling tales. London: Routledge.

- Guldberg, K., Bradley, R., Wittemeyer, K., Briscombe, J., Phillips, C. and Jones, G. (2017). *Good Autism Practice: Full Report*. London: Autism Education Trust
- Guli, L., Semrud-Clikeman, M., Lerner, M. & Britton, N. (2013). Social Competence Intervention Program (SCIP): A pilot study of a creative drama program for youth with social difficulties. *The Arts in Psychotherapy*, 40(1), 37-44. https://doi.org/10.1016/j.aip.2012.09.00
- Gulsrud, A., Hellemann, G., Freeman, S., & Kasari, C. (2014). Two to Ten Years: Developmental Trajectories of Joint Attention in Children with ASD Who Received Targeted Social Communication Interventions. *Autism Research*, 7(2), 207-215. DOI: 10.1002/aur.1360
- Gundogan, A., Ari, M., & Gonen, M. (2003). The Effect of Drama on the Creative Imagination of Children in Different Age Groups. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education)*, 28(2), 206-220. https://dergipark.org.tr/tr/download/article-file/87170
- Gunning, C., Holloway, J., Fee, B., Breathnach, O., Bergin, C. M., Greene, I., & Ni Bheolain, R. (2019). A systematic review of generalization and maintenance outcomes of social skills intervention for preschool children with autism spectrum disorder. *Review Journal of Autism and Developmental Disorders*, 6(2), 172–199. https://doi.org/10.1007/s40489-019-00162-1
- Hall, J., (2021). Friendship standards: The dimensions of ideal expectations. *Journal of Social and Personal Relationships*, 29(7), 884-907. doi:10.1177/0265407512448274
- Hamilton, K., Hoogenhout, M., & Malcolm-Smith, S. (2016). Neurocognitive considerations when assessing Theory of Mind in Autism Spectrum Disorder. *Journal of Child & Adolescent Mental Health*, 28(3), 233-241, DOI: 10.2989/17280583.2016.1268141
- Hammersley, M. (2006). Ethnography: problems and prospects. *Ethnography and Education*, 1(1), 3-4. DOI: 10.1080/17457820500512697
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice* (3rd ed.). New York: Routledge.
- Hammett, D., Twyman, C., & Graham, M. (2015). *Research and Fieldwork in Development*. London: Routledge.
- Hammouni, Z., Poldma, T., Kehayia, E., Verduyckt, I., Martiniello, N., Hervieux, E., & Wittich, W. (2021). Designing an Inclusive Theatre Environment: Co-creating a Relaxed Performance Within the Segal Centre for Performing Arts in Montreal. In C. Shin., G. Di Bucchianico, S. Fukuda, Y. Ghim, G. Montagna, C. Carvalho (Eds.) Advances in Industrial Design, 260. Springer, Cham. https://doi.org/10.1007/978-3-030-80829-7_29
- Hanley, M., Riby, D. M., & McCormack, T. (2014). Attention during social interaction in children with autism: Comparison to specific language impairment, typical development, and links to social cognition. *Research in Autism Spectrum Disorders*, 8(7), 908-924. https://doi.org/10.1016/j.rasd.2014.03.020
- Happé, F. (1993). Communicative competence and theory of mind in autism: A test of relevance theory. *Cognition*, 48(2), 101-119. https://doi.org/10.1016/0010-0277(93)90026-R
- Happé, F. (2003). Theory of Mind and Self. Annals of the New York Academy of Sciences, 1001(1), 134-144. DOI: 10.1196/annals.1279.008

- Happé, F., & Booth, R. (2008). The Power of the positive: Revisiting weak coherence in autism spectrum disorders. *The Quarterly Journal of Experimental Psychology*, 61(1), 50-63. DOI:10.1080/17470210701508731
- Happe, F., & Frith, U. (2006). The weak coherence account: detail-focused cognitive style in autism spectrum disorders. *Journal of Autism Developmental Disorders*, *36*(1), 5–25. DOI: 10.1007/s10803-005-0039-0
- Hardy, I., Kloetzer, B., Moeller, K., & Sodian, B. (2010). The analysis of classroom discourse: Elementary school science curricula advancing reasoning with evidence. *Educational Assessment*, 15(3–4), 197–221. https://doi.org/10.1080/10627197.2010.530556
- Hare, D., Wood, C., Wastell, S., & Skirrow, P. (2015). Anxiety in Asperger's syndrome: Assessment in real time. *Autism*, 19(5), 542-552. DOI: 10.1177/1362361314531340
- Harmsen, I. (2019). Empathy in Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 49, 3939–3955. https://doi.org/10.1007/s10803-019-04087-w
- Harrington, C., Foster, M., Rodger, S., & Ashburner, J. (2014). Engaging young people with Autism Spectrum Disorder in research interviews. *British Journal of Learning Disabilities*, 133(5), e1241-8. doi: 10.1542/peds.2013-3406.
- Harris, P. L., & Leevers, H. J. (2000). Pretending, imagery and self-awareness in autism. In S. Baron-Cohen, H. Tager-Flusberg, & D. J. Cohen (Eds.), *Understanding other minds: Perspectives from developmental cognitive neuroscience* (pp. 182–202). Oxford: Oxford University Press.
- Harrop, C., Amsbary, J., Towner-Wright, S., Reichow, B., & Boyd, B. (2019). That's what I like: The use of circumscribed interests within interventions for individuals with autism spectrum disorder. A systematic review. Research in Autism Spectrum Disorders, 57, 63-86. https://doi.org/10.1016/j.rasd.2018.09.008
- Hart, J., & Whalon, K. (2011). Creating Social Opportunities for Students with Autism Spectrum Disorder in Inclusive Settings, *Interventions in School and Clinic*, 45(5), 273-279. DOI: 10.1177/1053451210395382
- Harter, S. (2012). *Self-Perception Profile for Children: Manual and questionnaires*. Denver, CO: University of Denver.
- Hartley, C., & Fisher, S. (2018). Do Children with Autism Spectrum Disorder Share Fairly and Reciprocally? *Journal of Autism and Developmental Disorders*, 48(8), 2714–2726. https://doi.org/10.1007/s10803-018-3528-7
- Haseman, B. (2014). Heathcote's practice-led teaching: Pioneering research as well as pioneering pedagogy. *Drama Research: International Journal of Drama in Education*, *5*(1), 1-13. https://eprints.qut.edu.au/83798/
- Hatfield, T., Brown, R., Giummarra, M., & Lenggenhager, B. (2019). Autism spectrum disorder and interoception: Abnormalities in global integration? *Autism*, *23*(1), 212-222. https://doi.org/10.1177/1362361317738392
- Hayashi, M., Kato, M., Igarashi, K., & Kashima, H. (2008). Superior fluid intelligence in children with Asperger's disorder. *Brain and Cognition*, 66(3), 306-310. https://doi.org/10.1016/j.bandc.2007.09.008

- Heathcote, D. & Bolton, G. (1994). Drama for Learning: Dorothy Heathcote's Mantle of the Expert Approach to Education. England: Heinemann Drama.
- Heathcote, D. (1978). Of These Seeds Becoming. In R. Shuman (Ed.), *Educational Drama for Today's Schools*. Metuchen, NJ: Scarecrow Press.
- Heathcote, D. (1984). *Collected Writings on Education and Drama* (L. Johnson, & C. Armstrong Eds.). Illinois: Hutchinson & Co.
- Heathcote, D. (2000). Introduction. In Berry, K. (Ed.), *The Dramatic Arts and Cultural Studies: Acting against the Grain*. London: Falmer Press A Member of the Taylor & Francis Group.
- Helfer, B., Boxhoorn, S., Songa, J. Steel, C., Maltezos, S., & Asherson, P. (2021). Emotion recognition and mind wandering in adults with attention deficit hyperactivity disorder or autism spectrum disorder. *Journal of Psychiatric Research*, 134, 89–96. DOI: 10.1016/j.jpsychires.2020.12.059
- Henn, M., Weinstein, M., & Foard, N. (2006). A short introduction to Social Research. London: SAGE Publications Ltd.
- Herbrecht, E., Poustka, F., Birnkammer, S., Duketis, E., Schlitt, S., Schmotzer, G., & Bolte, S. (2009). Pilot evaluation of the Frankfurt Social Skills Training for children and adolescents with autism spectrum disorder. *European Child & Adolescent Psychiatry*, *18*(6), 327–335. https://reachjournal.ie/index.php/reach/article/view/37
- Hesse-Biber, S., & Leavy, P. (Eds.). (2011). *The Practice of Qualitative Research* (2nd ed.). Thousand Oaks, California: SAGE Publications, Inc.
- Heyward, P. (2010). Emotional Engagement Through Drama: Strategies to Assist Learning through Role-Play. *International Journal of Teaching and Learning in Higher Education*, 22(2), 197-203. https://files.eric.ed.gov/fulltext/EJ930153.pdf
- Hick, P., Matziari, A., Mintz, J., Ó Murchú, F., Cahill, K., Hall, K...Solomon, Y. (2019). *Initial Teacher Education for Inclusion Final Report to the National Council for Special Education: Research Report Number 27*. Meath: National Council for Special Education.
- Higashida, N. (2013). The Reason I Jump. New York: The Random House Publishing Group.
- Hill, E. (2004). Evaluating the theory of executive dysfunction in autism. *Developmental Review*, 24, 189-233. doi:10.1016/j.dr.2004.01.001
- Hill, E., & Bird. (2006). Executive processes in Asperger syndrome: patterns of performance in a multiple case series. *Neuropsychologial*, *44*(14), 2822-35. doi: 10.1016/j.neuropsychologia.2006.06.007
- Hill, E., & Frith, U. (2003). Understanding autism: insights from mind and brain. *Philos Trans R Soc Lond B Biol Sci*, 28, 281-289. doi: 10.1098/rstb.2002.1209
- Hill, T. (2013). Weak Central Coherence and Social Skills in Children with Autism Spectrum Disorders: The Role of Anxiety and Cognitive Functioning (unpublished masters thesis). New Orleans: Tulane University.

- Hoffmann, L., Wilbert, J., Lehofer, M., & Schwab, S. (2020). Are we good friends?-Friendship preferences and the quantity and quality of mutual friendships. *European Journal of Special Needs Education*, *36*(4), 502-516. DOI: 10.1080/08856257.2020.1769980
- Hojeij, Z., Meda, L., & Kaviani, A. (2021). Using reflective journals for analysing pre-service, early childhood teachers' perceptions of practicum experiences. *Issues in Educational Research*, 31(1), 130-148. http://www.iier.org.au/iier31/hojeij.pdf
- Holdhus, K., S., Høisæter, K., Mæland, V., Vangsnes, K. S., Engelsen, M., Å Espeland., & Espeland, A. (2016). Improvisation in Teaching and Education—Roots and Applications. *Cogent Education*, 3, 1204142. https://doi.org/10.1080/2331186X.2016.1204142
- Holopainen, A., de Veld, D., Hoddenbach, E., & Begger, S. (2019). Does Theory of Mind Training Enhance Empathy in Autism? *Journal of Autism and Developmental Disorders*, 49, 3965–3972. https://doi.org/10.1007/s10803-018-3671-1
- Holt, P. (2017). Multiple Exemplar Training: Some Strengths and Limitations. *Behaviour Analyst*, 40, 225–241. https://doi.org/10.1007/s40614-017-0083-z
- Hood, S., Luczynski, K., & Mitteer, D. (2017). Toward Meaningful outcomes in teaching conversation and greeting skills with individuals with Autism Spectrum Disorder. *Journal of Applied Behaviour Analysis*, 50(3), 459-486. doi: 10.1002/jaba.388
- Hopkins, D. (2014). A Teacher's Guide to Classroom Research (5th ed.). England: Open University Press.
- Howe, C., & Griffin, C. (2020). Is Ireland at a Crossroads of Inclusive Education? *REACH Journal of Special Needs Education in Ireland*, 33(1), 44-56. https://www.reachjournal.ie/index.php/reach/article/view/8/8
- Howes, C., & Matheson, C. (1992). Sequences in the Development of Competent Play with Peers: Social and Social Pretend Play. *Developmental Psychology*, 28(5), 961–74. Doi: 10.1037/0012-1649.28.5.961
- Howlin, P. (2002). Interventions and outcome in autism. *Journal of Intellectual Disability Research*, 2, 69-99. https://doi.org/10.1016/S1874-5911(02)80004-5
- Hughes, J. (2016). *Nothing About Us Without Us. Increasing Neurodiversity in Disability and Social Justice Advocacy Groups*. https://autisticadvocacy.org/wp-content/uploads/2016/06/whitepaper-Increasing-Neurodiversity-in-Disability-and-Social-Justice-Advocacy-Groups.pdf
- Hui Min, L., & Lay Wah, L. (2011). Teaching of speech, language, and communication skills for young children with severe autism spectrum disorders: What do educators need to know? *New Horizons in Education*, *59*(3), 16-28. https://files.eric.ed.gov/fulltext/EJ955538.pdf
- Hume, K., Boyd, B., Hamm, J., & Kucharczyk, S. (2014). Supporting Independence in Adolescents on the Autism Spectrum. *Remedial and Special Education*, 35(2), 102-113. DOI: 10.1177/0741932513514617
- Humphrey, N., & Symes, W. (2010). Perceptions of social support and experience of bullying among pupils with autistic spectrum disorders in mainstream secondary schools. *European Journal of Special Needs Education*, 25(1), 77-91. https://doi.org/10.1080/08856250903450855

- Hundert, J., Rowe, S., & Harrison, E. (2014). The Combined Effects of Social Script Training and Peer Buddies on Generalized Peer Interaction of Children With ASD in Inclusive Classrooms. *Focus on Autism and Other Developmental Disabilities*, 29(4), 206-2015. DOI: 10.1177/1088357614522288
- Hunter, K. (2014). Shakespeare's heartbeat: Drama games for children with autism. London: Rutledge.
- Hutchins, N., Burke, M., Bowman-Perrott, L., Tarlow, K., & Hatton, H. (2020). The Effects of Social Skills Interventions for Students with EBD and ASD: A Single-Case Meta-Analysis. *Behaviour Modification*, 44(5), 773-794. https://doi.org/10.1177/0145445519846817
- Hutchins, T. L., Prelock, P. A., & Bonazinga, L. (2012). Psychometric evaluation of the Theory of Mind Inventory (ToMI): A study of typically developing children and children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 42, 327–341. http://dx.doi.org/10.1007/s10803-011-1244-7
- Hutchison, S., Muller, U., & Iarocci, G. (2020). Parent Reports of Executive Function Associated with Functional Communication and Conversational Skills Among School Age Children With and Without Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 25, 2019-2029. https://doi.org/10.1007/s10803-019-03958-6
- Hutchison, SM., Müller U., & Iarocci, G. (2020). Parent Reports of Executive Function Associated with Functional Communication and Conversational Skills Among School Age Children With and Without Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 50(6), 2019-2029. doi: 10.1007/s10803-019-03958-6
- Iacoboni, M. (2008). Mirroring people. New York: Farrar, Strauss and Giroux.
- Ilan, M., Meiri, G., Manelies, L., Faroy, M., Michaelovski, A., Flusser, H...Dinstein, I. (2020). Young ASD children in special and mainstream education settings have similar behavioral characteristics. *PsyArXiv Preprints*, https://doi.org/10.31234/osf.io/r9hmx
- Ingold, T. (2014). That's enough about ethnography! *Journal of Ethnographic Theory*, 4(1), 383-395. DOI: https://doi.org/10.14318/hau4.1.021
- INTO (2020). NCSE Progress Report on the Future of Special Schools and Classes: Submission on behalf of the INTO. https://www.into.ie/app/uploads/2019/11/NCSE-future-of-special-schools-and-classes.pdf
- Ioannou, S., Key, A., Muscatello, R., Klemencic, & Corbett, B. (2020). Peer Actors and Theater Techniques Play Pivotal Roles in Improving Social Play and Anxiety for Children With Autism. Frontiers in Psychology, 11(208). doi: 10.3389/fpsyg.2020.00908
- Irish Government (1998). Education Act. Dublin: Government Publications.
- Isbell, J., & Jolivette, K. (2011). Stop, Think, Proceed: Solving Problems in the Real World. *Intervention in School and Clinic*, 47(1), 31-38. https://doi.org/10.1177/1053451211406542
- Ito, H. (2009). An integrative model of humor elicitation. *Japanese Psychological Review*, 52(4), 469–497.

- Ivan, C., Ciolcă, C., & Dreve, A. A. (2020). Intervention Models for The Pre-Integration of Children with ASD in Mainstream Education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(4), 144-155. https://doi.org/10.18662/brain/11.4Sup1/161
- Izenstark, D. & Ebata, A. T. (2017). The Effects of the natural environment on attention and family cohesion: An experimental study. *Children, Youth and Environments*, 27(2), 93-109. http://www.jstor.org/action/showPublication?journalCode=chilyoutenvi
- Jaarsma P., & Welin S. (2012). Autism as a natural human variation: reflections on the claims of the neurodiversity movement. *Health Care Anal.*, 20(1), 20-30. doi: 10.1007/s10728-011-0169-9
- Jackson, E. (1990). I am a Fieldnote: field notes as a symbol of professional identity, in R. Sanjek (ed.), *Field notes: The Making of Anthropology* (pp. 3-33). NY: Cornell University Press.
- Jahromi, L., Meek, S., & Ober-Reynolds, S. (2012). Emotion regulation in the context of frustration in children with high functioning autism and their typical peers. *Journal of Child Psychology and Psychiatry*, *53*(12), 1250-1258. DOI: 10.1111/j.1469-7610.2012.02560.x
- James, A. (2007). Giving Voice to Children's Voices: Practice and Problems, Pitfalls and Potentials. *American Anthropologist*, 109(2), 261–272. DOI: 10.1525/aa.2007.109.2.261
- Jamison, T., & Schuttler, J. (2015). Examining social competence, self-perception, quality of life, and internalizing and externalizing symptoms in adolescent females with and without autism spectrum disorder: a quantitative design including between-groups and correlational analyses. *Molecular Autism*, 6(53), 1-16. https://doi.org/10.1186/s13229-015-0044-x
- Jarrold, C., Boucher, J., & Smith, P. (1996). Generativity deficits in pretend play in autism. *British Journal of Developmental Psychology*, *14*, 275-300. https://doi.org/10.1111/j.2044-835X.1996.tb00706.x
- Jasper, M. (2005). Using reflective writing within research. *Journal of Research in Nursing*, 10(3), 247–260. https://doi.org/10.1177/174498710501000303
- Jaswal, V., & Akhtar, N. (2019). Being versus appearing socially uninterested: Challenging assumptions about social motivation in autism. *Behavioral and Brain Sciences*, 42, E82. doi:10.1017/S0140525X18001826
- Jeffrey, B., & Troman, G. (2004). Time for Ethnography. *British Educational Research Journal*, *30*(40), 535-548. http://www.jstor.org/stable/1502175
- Jenkinson, R., Milne, E., & Thompson, A. (2020). The relationship between intolerance of uncertainty and anxiety in autism: A systematic literature review and meta-analysis. *Autism*, 24(8), 1933-1944. https://doi.org/10.1177/1362361320932437
- Jennings, S. (1978). Remedial Drama: A Handbook for Teachers and Therapists. UK: Pitman.
- Jennings, S., & Holmwood, C. (Ed.). (2020). *Routledge international handbook of play, therapeutic play and play therapy*. Oxon: Routledge.
- Johnson, A., & Johnson, O. (1990). Quality into Quantity on the Measurement Potential of Ethnographic Field Work. In R. Sanjek (Ed.), *Fieldnotes: The Makings of Anthropology* (pp. 161-172). New York: Cornell University Press.

- Johnson, M. H. (2014). Autism: Demise of the innate social orienting hypothesis. *Current Biology*, 24(1), R30–R31. https://doi.org/10.1016/j.cub.2013.11.021
- Johnson, R., & Christensen, L. (2013). Educational Research. UK: SAGE Publications Ltd.
- Johnstone, K. (2012). Impro: Improvisation and the theatre. Oxon: Routledge
- Jolliffee, T., & Baron-Cohen, S. (2001). A test of central coherence theory: Can adults with high-functioning autism or Asperger syndrome integrate fragments of an object. *Cognitive Neuropsychiatry*, 6(3), 193-216. DOI: 10.1080/13546800042000124
- Jonassen, D. H., & Hung, W. (2008). All problems are not equal: Implications for problem-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 2(2), 6–28. https://doi.org/10.7771/1541-5015.1080
- Jones, C., Simonoff, E., Baird, G., Pickles, A., Marsden, A., Tregay, J., Happé, F., & Charman, T. (2018). The Association Between Theory of Mind, Executive Function, and the Symptoms of Autism Spectrum Disorder. *Autism Research*, *11*(1), 95-109. DOI: 10.1002/aur.1873
- Jones, P. (1996). Drama as Therapy: Theatre as Living. New York: Brunner-Routledge.
- Jones, P. (2012). Approaches to the futures of research Part 2: Measure for measures, researching, reviewing and re-framing drama therapy in practice. *Dramatherapy*, *34*(3), 116–138. https://doi.org/10.1080/02630672.2012.737630
- Jorgensen, D. (1989). *Participant Observation: A Methodology for Human Studies*. California: SAGE Publications.
- Joseph, R., & Tager-Flusberg, H. (2004). The relationship of theory of mind and executive functions to symptom type and severity in children with autism. *Developmental Psychopathology*, *16*(1), 137-155, doi: 10.1017/s095457940404444x.
- Jovchelovitch, S., & Bauer, M. (2000). Narrative Interviewing. In M. Bauer & G. Gaskell (Eds.), *Qualitative Researching with Text, Image and Sound: A Practical Handbook*. London: SAGE Publications Ltd.
- Juirnovic, M. (2016). Process Drama as a Form of Cooperative Learning. *Croatian Journal of Education*, 18(2), 239-253. doi: 10.15516/cje.v18i0.2107
- Jung, C.G. & Riklin, F. (1910). *The associations of normal subjects*. Princeton: The Princeton University Press.
- Jung, C.G. (2008). The archetypes and the collective unconscious. London: Routledge.
- Jung, S., Sainato, D., & Davis, C. (2008). Using High-Probability Request Sequences to Increase Social Interactions in Young Children with Autism. *Journal of Early Intervention*, 30(3), 163–187. https://doi.org/10.1177/1053815108317970
- Kaboski, J., Diehl, J., Beriont, J., Crowell, C., Villano, M., Wier, K., & Tang, K. (2015). Brief Report: A Pilot Summer Robotics Camp to Reduce Social Anxiety and Improve Social/Vocational Skills in Adolescents with ASD. *Journal of Autism and Developmental Disorders*, 45, 3862–3869. DOI: 10.1007/s10803-014-2153-3

- Kaiser, F., Byrka, K., & Hartig, T. (2010). Reviving Campbell's Paradigm for Attitude Research. Personality and Social Psychology Review, 14(4), 351-367. doi:10.1177/1088868310366452
- Kalb, L., & Loebar, R. (2003). Child Disobedience and Noncompliance: A Review. *Paediatrics Official Journal of the American Academy of Paediatrics*, 111(3), 641-652. DOI: https://doi.org/10.1542/peds.111.3.641
- Kalvin, C., Marsh, C., Ibrahim, K., Gladstone, T., Woodward, D., Grantz, H......Sukhodolsky, D. (2019). Discrepancies Between Parent and Child Ratings of Anxiety in Children with Autism Spectrum Disorder. *Autism Research*, *13*(1), 93-103. DOI: 10.1002/aur.2220
- Kaminsky, L., & Dewey, D. (2001). Sibling relationships of children with autism. *Journal of Autism and Developmental Disorders*, *31*(4), 399–410. DOI: 10.1023/a:1010664603039
- Kang, J. (2009). A Teacher's Deconstruction of Disability: A Discourse Analysis. *Disability Studies Quarterly*, 29(1). www.dsq-sds.org
- Kaplan, H., Hooper, P., & Gurven, M. (2009). The evolutionary and ecological roots of human social organization. *Philosophical Transactions B*, 364(1533), 3289–3299. doi: 10.1098/rstb.2009.0115
- Kapp, S. (2020). (Ed.). Lobbying Autism's Diagnostic Revision in the DSM-5. In *Autistic Community* and the Neurodiversity Movement (pp. 167-194). Singapore: Palgrave Macmillan.
- Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. *Developmental Psychology*, 49(1), 59–71. https://doi.org/10.1037/a0028353
- Karim, K. (2017). Autism Spectrum Disorder: An Introduction. In M. O'Reilly, J. Lester & T. Muskett (Eds.), A Practical Guide to Social Interaction in Autism Spectrum Disorders (pp. 33-60). London: Palgrave MacMillan.
- Kaufman, S. (2017, June). Rethinking Autism: From Social Awkwardness to Social Creativity. *Behavioural Scientist*. https://behavioralscientist.org/rethinking-autism-social-awkwardness-social-creativity/
- Kaymakamoglu, S. (2018). Teachers' Beliefs, Perceived Practice and Actual Classroom Practice in Relation to Traditional (Teacher-Centered) and Constructivist (Learner-Centered) Teaching (Note 1). *Journal of Education and Learning*, 7(1), 29-37. Doi: 10.5539/jel.v7n1p29
- Keane, M. (2019). An Exploration of the use of Social Drama with Children with Social and Communication Difficulties (unpublished masters thesis). University of Dublin, Trinity College, Dublin.
- Kearney, R. (1994). The Poetics of Imagining. New York: Harper Collins
- Kehl, D. (2021). A Transcendental Phenomenological Study to Explore How Involvement in Theatre Arts Programs Helps to Improve Social Functioning Skills in Adolescents With Autism Spectrum Disorder, From a Drama Teacher's Perspective, in Middle School (unpublished doctoral thesis). University of LaVerne California, California.
- Keller, F., & Schoenfeld, W. (1950). Principles of Psychology. USA: Appleton-Century-Crofts, Inc.

- Kellman, J. (2010). Floating objects, eggs, and more: Mind and structure in the art of children with autism. In B. Gerber & J. Kellman (Eds.), *Understanding students with autism through art* (pp. 32–37). Reston, VA: National Art Education Association.
- Kempe, A. (2018). Beauty and the Beast. Providing access to the theatre for children with autism. In B. Hadley, & D. McDonald (Eds.). *The Routledge Handbook of Disability Arts, Culture, and Media*. London: Routledge.
- Kempe, A., & Tissot, C. (2012). The use of drama to teach social skills in a special school setting for students with autism. *Social Skills and Autism, British Journal of Learning Support*, 27(3), 97-102. https://doi.org/10.1111/j.1467-9604.2012.01526.x
- Kennedy-Killian, S. (2013). "Different Together" Opinions of Participants and Stakeholders on Drama in Education for Children and Young People with Autism Spectrum Disorder (Unpublished master's thesis). University of Dublin, Trinity College, Dublin.
- Kenny, N., McCoy, S., & Mihut, G. (2020). Special education reforms in Ireland: changing systems, changing schools. *International Journal of Inclusive Education*. https://doi.org/10.1080/13603116.2020.1821447
- Kent, C., Cordier, R., Joosten, A., Wilkes-Gillan, S., Bundy, A., & Speyer, R. (2020). A Systematic Review and Meta-analysis of Interventions to Improve Play Skills in Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 7, 91-118. https://doi.org/10.1007/s40489-019-00181-y
- Kenworthy, L., Anthony, L., Naiman, D., Cannon, L., Wills, M., Luong-Tran, C....Wallace, G. (2014). Randomized controlled effectiveness trial of executive function intervention for children on the autism spectrum. *The Journal of Child Psychology and Psychiatry*, 55(4), 374-383. https://doi.org/10.1111/jcpp.12161
- Kenworthy, L., Yerys, B. E., Anthony, L. G., & Wallace, G. L. (2008). Understanding executive control in autism spectrum disorders in the lab and in the real world. *Neuropsychology Review*, 18(4), 320–33. doi: 10.1007/s11065-008-9077-7
- Kerins, P., & McDonagh, D. (2015). The Special Needs Assistant Scheme to Support Teachers in Meeting the Care Needs of Some Children with Special Educational Needs, Arising from a Disability (Circular 0030/2014): Potential Implications for Post-Primary Schools. REACH: *Journal of Inclusive Education in Ireland*, 28, 31–42. https://reachjournal.ie/index.php/reach/article/view/56
- Kerins, P., Casserly, A., Deacy, E., Harvey, D., McDonagh, D., & Tiernan, B. (2017). The professional development needs of special needs assistants in Irish post-primary schools. European Journal of Social Needs Education, 33(1), 31-46. https://doi.org/10.1080/08856257.2017.1297572
- Kerns, C. M., & Kendall, P. C. (2012). The presentation and classification of anxiety in autism spectrum disorder. *Clinical Psychology: Science and Practice*, *19*(4), 323–347. https://doi.org/10.1111/cpsp.12009
- Kianersi, S., Luetke, M., Ludema, C., Valenzuela, A., & Rosenberg, M. (2021). Use of research electronic data capture (REDCap) in a COVID-19 randomized controlled trial: a practical example. *BMC Medical Research Methodology*, *21*(175), 1-9. https://doi.org/10.1186/s12874-021-01362-2

- Kildahl, A., Helverschou, S., Rysstad, A., Wigaard, E., Hellerud, J., Ludvigsend, L., & Howlin, O. (2021). Pathological demand avoidance in children and adolescents: A systematic review. *Autism*, 25(8), 1-15. DOI: 10.1177/13623613211034382
- Killmeyer, S., & Kaczmarek, L. (2017). Parent training and joint engagement in young children with autism spectrum disorder. *Autism & Developmental Language Impairments*, 2, 1-16. DOI: 10.1177/2396941517699214
- Kim, A., Stembridge, S., Lawrence, C., Torres, V., Miodrag, N., Lee, J., & Boynes, D. (2015). Neurodiversity on the Stage: The Effects of Inclusive Theatre on Youth with Autism. *International Journal of Education and Social Science*, 2(9), 27-39. www.ijessnet.com
- Kim, J., Wigram, T., & Gold, C. (2008). The effects of improvisational music therapy on joint attention behaviors in autistic children: a randomized controlled study. *Journal of Autism and Developmental Disorders*, 38(9), 1758-66. doi: 10.1007/s10803-008-0566-6.
- Kim, M., & Pegg, J. (2019) Case analysis of children's reasoning in problem-solving process, *International Journal of Science Education*, 41(6), 739-758. https://doi.org/10.1080/09500693.2019.1579391
- Kim, S., Bal, V., & Lord, C. (2014). Adaptive Social Abilities in Autism, In V. Oatel, V. Preedy, & C. Martin (Eds.), *Comprehensive Guide to Autism*. UK: Springer.
- King, M., Williams, E., & Gleeson, K. (2019). Using photographs to explore self-understanding in adolescent boys with an autism spectrum condition. *Journal of Intellectual & Developmental Disability*, 4 (2), 232–243. https://doi.org/10.3109/13668250.2017.1326586
- Kisbus-Sakarya, Y., & Doenyas, C. (2021). Can school teachers' willingness to teach ASD-inclusion classes be increased via special education training? Uncovering mediating mechanisms. *Research in Developmental Disabilities*, 113, 103941. https://doi.org/10.1016/j.ridd.2021.103941
- Kleinhans, N., Richards, T., Weaver, K., Johnson, L. C., Greenson, J., Dawson, G., & Aylward, E. (2010). Association between amygdala response to emotional faces and social anxiety in autism spectrum disorders. *Neuropsychological*, 48(12), 3665-3670. doi: 10.1016/j.neuropsychologia.2010.07.022
- Kleinman, J., Marciano, P., & Ault, R. (2001). Advanced theory of mind in high-functioning adults with autism. *Journal of Autism Developmental Disorders*, 31(1), 29-36. DOI: https://doi.org/10.1002/icd.304
- Klin, A., & Jones, W. (2006). Attributing social and physical meaning to ambiguous visual displays in individuals with higher-functioning autism spectrum disorders. Brain and Cognition, 61(1), 40-53. https://doi.org/10.1016/j.bandc.2005.12.016
- Klin, A., Lin, D.J., Gorrindo, P., Ramsay, G., & Jones, W. (2009). Two-year-olds with autism fail to orient towards human biological motion but attend instead to non-social, physical contingencies. *Nature*, *459*(7244), 257-261. doi: 10.1038/nature07868
- Klin, A., Volkmar, F., & Sparrow, S. (1992). Autistic Social Dysfunction: Some Limitations of the Theory of Mind Hypothesis. *Journal of Child Psychology and Psychiatry*, *33*(5), 861–876. https://doi.org/10.1111/j.1469-7610.1992.tb01961.x

- Knott, F., Dunlop, W., & MacKay, T. (2006). Living with ASD: How do children and their parents assess their difficulties with social interaction and understanding? *Autism*, *10*, 609–617. DOI: 10.1177/1362361306068510
- Koegel, R., & Frea, W. D. (1993). Treatment of social behavior in autism through the modification of pivotal social skills. *Journal of Applied Behavior Analysis*, 26(3), 369–377. doi: 10.1901/jaba.1993.26-369
- Koegel, R., & Koegel, L. (2006). *Pivotal response treatments for autism: Communication, social, & academic development.* USA: Paul H Brookes Publishing.
- Koegel, R., Dyer, K., & Bell, L. (1987). The Influence of Child-Preferred Activities on Autistic Children's Social Behavior. *Journal of Applied Behavior Analysis*, 20(3), 243-252. https://doi.org/10.1901/jaba.1987.20-243
- Koegel, R., Koegel, L., Frea, P., & Smith, J. (1995). Teaching Children with Autism: Strategies for Initiating Positive Interactions and Improving Learning Opportunities. In L. Koegel & R. Koegel (Eds.), *Teaching children with autism: Strategies for initiating positive interactions and improving learning opportunities.* Baltimore: Paul H Brookes.
- Koegel, R., Vernon, T., & Koegel, L. (2009). Improving social initiations in young children with autism using reinforcers with embedded social interactions. *Journal of Autism and Developmental Disorders*, 39(9), 1240–1251. doi: 10.1007/s10803-009-0732-5
- Kohls, G., Schulte-Rüther, M., Nehrkorn, B., Muller, K., Kink, G., Kamp-Becker, I....Konard, K. (2013). Reward system dysfunction in autism spectrum disorders. *Social Cognitive and Affective Neuroscience*, 8(5), 565–572. doi: 10.1093/scan/nss033.
- Kohm, K., Holmes, R., Romeo, L., & Koolidge, L. (2015). The connection between shared storybook readings, children's imagination, social interactions, affect, prosocial behavior, and social play. *International Journal of Play*, 5(2), 128-140. DOI: 10.1080/21594937.2016.1203895
- Koles, B., & Nagy, P. (2014). Virtual worlds as digital workplaces: Conceptualizing the affordances of virtual worlds to expand the social and professional spheres in organizations. *Organizational Psychology Review*, 4(2), 175-195. DOI: 10.1177/2041386613507074
- Koning, C., Magill-Evans, J., Volden, J., & Dick, B. (2011). Efficacy of cognitive behavior therapy-based social skills intervention for school-aged boys with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 1282–1290. https://doi.org/10.1016/j.rasd.2011.07.011
- Kortesluoma, R.-L., Hentinen, M., & Nikkonen, M. (2003). Methodological Issues in Nursing Research: Conducting a qualitative child interview: methodological considerations. *Journal of Advanced Nursing*, *42*(5), 434–441. doi: 10.1046/j.1365-2648.2003.02643.x.
- Koterba, E. A., Leezenbaum, N. B., & Iverson, J. M. (2014). Object exploration at 6 and 9 months in infants with and without risk for autism. *Autism*, 18(2), 97–105. DOI: 10.1177/1362361312464826
- Kotroni, P., Bonoti, F., & Mavropoulou, S. (2019) Children with autism can express social emotions in their drawings. *International Journal of Developmental Disabilities*, 65(4), 248-256. DOI: 10.1080/20473869.2018.1434855

- Kowalski, R. M. (2001). The aversive side of social interaction revisited. In R. M. Kowalski (Ed.), *Behaving badly: Aversive behaviors in interpersonal relationships* (pp. 297–309). American Psychological Association. https://doi.org/10.1037/10365-011
- Kramer, G., & Ploesch, R. (2021). *Improvised Theatre and the Autism Spectrum: A Practical Guide to Teaching Social Connection and Communication Skills*. New York: Routledge.
- Kransy, L., Williams, B., Provencal, S., & Ozonoff, S. (2003). Social skills interventions for the autism spectrum: essential ingredients and a model curriculum. *Journal of Applied Behavior Analysis*, 12(1), 107–122. DOI: 10.1016/s1056-4993(02)00051-2
- Kretschmer, A., Lampmann, S., & Altgassen, M. (2014). Relations between moral reasoning, theory of mind and executive functions in children with autism spectrum disorders. *International Journal of Developmental Disabilities*, 60(3), 174-183. DOI:10.1179/2047387714Y.0000000045
- Kriete, T., & Noelle, D. C. (2015). Dopamine and the development of executive dysfunction in autism spectrum disorders. *PloS one*, *10*(3), e0121605. doi:10.1371/journal.pone.0121605
- Kuhnert, R., Begeer, S., Fink, E., & de Rosnay, M. (2017). Gender-differentiated effects of theory of mind, emotion understanding, and social preference on prosocial behavior development: a longitudinal study. *Journal of Experimental Child Psychology*, 154, 13–27. doi:10.1016/j.jecp.2016.10.001
- Kukull, W., & Ganguli, M. (2012). Generalizability: The trees, the forest, and the low-hanging fruit. *Neurology*, 78(23), 1886–1891. https://doi.org/doi.org/10.1212/WNL.0b013e318258f812
- Kunce, L., & Mesibov, GB. (1998) Educational approaches to high functioning autism and Asperger syndrome. In E. Schoepler, GB. Mesibov & L. Kunce (Eds.), *Asperger Syndrome or High-Functioning Autism*? (pp. 227–261). New York: Plenum Press.
- Kvale, S., & Brinkmann, S. (2009). *Interviews: Learning the Craft of Qualitative Research Interviewing*. California: SAGE Publications, Inc.
- Ladousse, G.P., & Malay, A. (Eds). (2004). *Role Play: Resource books for teachers*. New York: Oxford University Press.
- Laghi, F., Lonigro, A., Levanto, S., Ferraro, M., Baumgartner, E., & Baiocco, R. (2016). The Role of Nice and Nasty Theory of Mind in Teacher-Selected Peer Models for Adolescents With Autism Spectrum Disorders. *Measurement and Evaluation in Counselling and Development*, 49(3), 207-216. DOI: 10.1177/0748175615596784
- Lai, M, C., Anagnostou, E., Wiznitzer, M., Allison, C., & Baron-Cohen, S. (2020). Evidence-based support for autistic people across the lifespan: maximising potential, minimising barriers, and optimising the person-environment fit. *The Lancet Neurology*, 19(5), 434-451. DOI: 10.1016/S1474-4422(20)30034-X
- Landy, R. (2007). Persona and performance. London: Jessica Kingsley.
- Langston, W. (2011). *Research Methods Laboratory Manual for Psychology* (3rd ed.). United States of America: Wadsworth.

- Langton, E., & Frederickson, N. (2016). Mapping the education experiences of children with pathological demand avoidance. *Journal of Research in Special Educational Needs*, 16(4), 254-263. https://doi.org/10.1111/1471-3802.12081
- Lau, B., Leong, R., Uljarevic, M., Lerh, J., Rodgers, J., Hollocks, M.....Magiati, I. (2020). Anxiety in young people with autism spectrum disorder: Common and autism-related anxiety experiences and their associations with individual characteristics. *Autism*, 24(5), 1111-1126. DOI: 10.1177/1362361319886246
- Laugeson, E., Ellingsen, R., Sanderson, J., Tucci, L., & Bates, S. (2014). The ABC's of Teaching Social Skills to Adolescents with Autism Spectrum Disorder in the Classroom: The UCLA PEERS Program. *Journal of Autism and Developmental Disorders*, 44(9), 2244–2256. DOI: 10.1007/s10803-014-2108-8
- Laugeson, E., Frankel, F., Gantman, A., Dillon, A., & Mogil, C. (2012). Evidence-Based Social Skills Training for Adolescents with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 42(6), 1025–1036. DOI: 10.1007/s10803-011-1339-1
- Lecavalier, L., Wood, J. J., Halladay, AK.., Jones, NE., Aman, MG., Cook, EH... Scahill L. (2014). *Measuring anxiety as a treatment endpoint in youth with autism spectrum disorder. Journal of Autism Developmental Disorders*, 44(5):1128-43.doi: 10.1007/s10803-013-1974-9.
- Lecce, S., Bianco, F., Devine, R., & Hughes, C. (2017). Relations between theory of mind and executive function in middle childhood: A short-term longitudinal study. *Journal of Experimental Child Psychology*, 163, 69-86. DOI: 10.1016/j.jecp.2017.06.011
- LeCompte, M., & Schensul, J. (2013). *Analysis & Interpretation of ethnographic data: A mixed methods approach*. United Kingdom: AltaMira Press.
- Lee, R., Ward, A., Lane, D., Aman, M., Loveland, K., Mansour, R., & Pearson, D. (2021). Executive Function in Autism: Association with ADHD and ASD Symptoms. *Journal of Autism and Developmental Disorders*, 30(10). https://doi.org/10.1007/s10803-020-04852-2
- Lee, S., & Odom, S. (1996). The Relationship between Stereotypic Behavior and Peer Social Interaction for Children with Severe Disabilities. *Research and Practice for Persons with Severe Disabilities*, 21(2), 88-95. doi:10.1177/154079699602100204
- Lee, S., Simpson, R., & Shogren, K. (2007). Effects and Implications of Self-Management for Students with Autism: A Meta-Analysis. *Focus on Autism and Other Developmental Disabilities*, 22(1), 2-13. http://www.proedinc.com
- Leevers, H., & Harris, P. (1998). Drawing impossible entities; A measure of the imagination in children with autism, children with learning disabilities, and normal 4-year-olds. *Journal of Child Psychology and Psychiatry*, *39*(3), 399-410. PMID: 9670095.
- Lense, M., & Camarata, S. (2020). PRESS-Play: Musical Engagement as a Motivating Platform for Social Interaction and Social Play in Young Children with ASD. *Music & Science*, *3*, 1-13. DOI: 10.1177/2059204320933080
- Leonard, N., & Smyth, S. (2020). Does training matter? Exploring teachers' attitudes towards the inclusion of children with autism spectrum disorder in mainstream education in Ireland. *International Journal of Inclusive Education*, DOI: 10.1080/13603116.2020.1718221

- Lerner, M., & Levine, K. (2007). The Spotlight Method: An Integrative Approach to Teaching Social Pragmatics Using Dramatic Principles. *Journal of Developmental Processes*, 2(2), 91–102. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.511.8436&rep=rep1&type=pdf
- Lerner, M., & Mikami, A. (2012). A Preliminary Randomized Controlled Trial of Two Social Skills Interventions for Youth With High-Functioning Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 27(3), 147-157. DOI: 10.1177/1088357612450613
- Lerner, M., Mikami, A., & Levine, K. (2011). Socio-Dramatic Affective-Relational Intervention for Adolescents with Asperger Syndrome & High Functioning Autism: Pilot Study. *Autism*, *15*(1), 21-42. DOI: 10.1177/1362361309353613
- Leung, R., Vogan, V., Powell, T., Anagnostou, E., & Taylor, M. (2016). The role of executive functions in social impairment in Autism Spectrum Disorder. *Child Neuropsychology*, 22(3), 336-344. DOI: 10.1080/09297049.2015.1005066
- Levante, A., Petricchi, S., Bianco, F., Castelli, I., Colombi, C., Keller, R....& Lecciso, F. (2021). Psychological Impact of COVID-19 Outbreak on Families of Children with Autism Spectrum Disorder and Typically Developing Peers: An Online Survey. *Brain Sciences*, 11 (808), doi.org/10.3390/brainsci11060808
- Levinson, S., Neuspiel, J., A Eisenhower, A., & Blacher, J. (2021). Parent—Teacher Disagreement on Ratings of Behavior Problems in Children with ASD: Associations with Parental School Involvement Over Time. *Journal of Autism and Developmental Disorders*, *51*, 1966-1982. doi.org/10.1007/s10803-020-04675-1
- Levy, J. (2020). *Lego Therapy: Building Social Skills for Adolescents with an Autism Spectrum Disorder* (unpublished doctoral thesis). University College London, England.
- Lewis, A. (2009). Methodological Issues in Exploring the Ideas of Children with Autism Concerning Self and Spirituality. *Journal of Religion, Disability & Health*, *13*(1), 64-76. doi.org/10.1080/15228960802581446
- Lewis, J., & Banerjee, S. (2013). An investigation of the therapeutic potential of stories in Dramatherapy with young people with autistic spectrum disorder. *Dramatherapy*, 35(1), 29-42. http://dx.doi.org/10.1080/02630672.2013.772456
- Lewis, L., Trushell, J., & Woods, P. (2005). Effects of ICT group work on interactions and social acceptance of a primary pupil with Asperger's Syndrome. *British Journal of Educational Technology*, 36(5), 739-755. DOI: 10.1111/j.1467-8535.2005.00504.x
- Lillard, A. S., & Kavanaugh, R. D. (2014). The contribution of symbolic skills to the development of an explicit theory of mind. *Child Development*, 85, 1535—1551. https://doi.org/10.1111/cdev.12227
- Lim, H. & Slaughter, V. (2008). Brief Report: Human Figure Drawings by Children with Asperger's Syndrome. *Journal of Autism and Developmental Disorders*, *38*(5), 988-994. https://doi.org/10.1007/s10803-007-0468-z
- Lin, Y. (2010). Drama and possibility thinking-Taiwanese pupils' perspectives regarding creative pedagogy in drama. *Thinking Skills and Creativity*, *5*(3), 108-119. https://doi.org/10.1016/j.tsc.2010.09.001

- Lincoln, Y., & Guba, E. (1985). Naturalistic Inquiry. London: SAGE Publications, Inc.
- Liss, M., Mailloux, M., & Erchull, M. J. (2008). The relationships between sensory processing sensitivity, alexithymia, autism, depression, and anxiety. *Personality and Individuals Differences*, 45(3), 255–259. https://doi.org/10.1016/j.paid.2008.04.009
- Liu W., Li, M. &, Yi, L.(2016). Identifying children with autism spectrum disorder based on their face processing abnormality: A machine learning framework. *Autism Research*, *9*(8), 888-898. doi: 10.1002/aur.1615.
- Livingston, L., Carr, B., & Shah, P. (2019). Recent Advances and New Directions in Measuring Theory of Mind in Autistic Adults. *Journal of Autism and Developmental Disorders*, 49, 1738–1744 https://doi.org/10.1007/s10803-018-382
- Locke, J., Kang-Yi, C., Pellecchia, M., & Mandall, D. (2019). It's messy but real: a pilot study of the implementation of a social engagement intervention for children with autism in schools. *Journal of Research in Special Educational Needs*, 19(2), 135-144. doi: 10.1111/1471-3802.12436
- Loftin, R. L., Odom, S., & Lantz, J. (2008). Social Interaction and repetitive motor behaviors. *Journal of Autism and Developmental Disorders*, 38(6), 1124–1135. DOI: 10.1007/s10803-007-0499-5
- Lopata, C., Thomeer, M., Volker, M., & Nida, R. (2006). Effectiveness of a Cognitive-Behavioral Treatment on the Social Behaviors of Children with Asperger Disorder. *Focus on Autism and Other Developmental Disabilities*, 21(4), 237–244. https://doi.org/10.1177/10883576060210040501
- Lorenz, T., Reznik, N., & Heinitz, K. (2017). A Different Point of View: The Neurodiversity Approach to Autism and Work. In (Eds). M. Fitzgerald & J. Yip *Autism: Paradigms, Recent Research and Clinical Applications* (pp. 3-13). www.intechopen.com
- Lough, C., Rice, M., & Lough, L. (2012). Choice as a Strategy to Enhance Engagement in a Colouring Task in Children with Autism Spectrum Disorders. *Occupational Therapy*, 19(4), 204-211. DOI: 10.1002/oti.1337
- Lovaas, O. I. (1981). *Teaching developmentally disabled children: the me book*. Baltimore: University Park Press.
- Low, J., Goddard, E., & Melser, J. (2010). Generativity and imagination in autism spectrum disorder: Evidence from individual differences in children's impossible entity drawings. *British Journal of Developmental Psychology*, 24(2), 425-444. https://doi.org/10.1348/026151008X334728
- Loyd, D. (2013). Gaining views from pupils with autism about their participation in drama classes. *British Journal of Learning Disabilities*, *43*, 8-15, doi:10.1111/bld.12078
- Lozano, J., Alcaraz, S., & Colas, P. (2010) 'La ense~nanza de emociones y creencias a alumnos con trastornos del espectro autista: una investigación colaborativa.' Profesorado, *14*(1), 367–382. https://www.redalyc.org/pdf/567/56714113021.pdf
- Lundy, L. (2015). Model of Participation. In Department of Children and Youth Affairs, *National Strategy on Children and Young People's Participation in Decision Making (2015-2020)*. Dublin: Government Publications. https://assets.gov.ie/24462/48a6f98a921446ad85829585389e57de.pdf

- Lynch, B. (1996). Language Program Evaluation. Cambridge: Cambridge University Press.
- Lyons, V., & Fitzgerald, M. (2004). Humor in Autism and Asperger Syndrome. *Journal of Autism and Developmental Disorders*, 34(5), 521–531. DOI: 10.1007/s10803-004-2547-8
- Maas, C. (2019). Improvisational Theatre and Occupational Therapy for Children with Autism Spectrum Disorder. *International Journal of Disability, Development and Education, 68*(1), 10-25. DOI: 10.1080/1034912X.2019.1634793
- Macari, S., Chen, X., Brunissen, L., Yhang, E., Brennan-Wydra, E., Vernetti, A... Chawarska, K. (2021). Puppets facilitate attention to social cues in children with ASD. *Autism Research*, *14*(9), 1975-1985. doi: 10.1002/aur.2552
- MacKay, T., Knott, F., & Dunlop, A. (2007) Developing social interaction and understanding in individuals with autism spectrum disorder: A groupwork intervention. *Journal of Intellectual and Developmental Disability*, 32(4), 279-290. DOI: 10.1080/13668250701689280
- MacMullen Freeman, L., Locke, J., Rotheram-Fuller, E., & Mandell, D. (2017). Brief Report: Examining Executive and Social Functioning in Elementary-Aged Children with Autism. *Journal Autism of Developmental Disorder*, 47, 1890-1895. DOI 10.1007/s10803-017-3079-3
- Madden, R. (2010). *Being Ethnographic: A Guide to the Theory and Practice of Ethnography*. London: SAGE Publications.
- Maddox, B. B., & White, S. W. (2015). Comorbid social anxiety disorder in adults with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 45(12), 3949–3960. https://doi.org/10.1007/s10803-015-2531-5
- Mages, W. (2018). Does theatre-in-education promote early childhood development? The effect of drama on language, perspective-taking, and imagination. *Early Childhood Research Quarterly*, 45, 224-237. https://www.semanticscholar.org/paper/Does-theatre-in-education-promote-early-childhood-Mages/5a3490cd074bcc5298168aae971559e0a0e47491
- Magiati, I., Ozsivadjian, A., & Kerns, C. M. (2017). Phenomenology and presentation of anxiety in autism spectrum disorder. In C. M. Kerns, P. Renno, E. A. Storch, P. C. Kendall, & J. J. Wood (Eds.), *Anxiety in children and adolescents with autism spectrum disorder: Evidence based assessment and treatment* (1st ed) (pp. 33–54). London, England: Academic Press.
- Magnuson, K. M., & Constantino, J. N. (2011). Characterization of depression in children with autism spectrum disorders. *Journal of developmental and behavioral paediatrics*, *32*(4), 332–340. https://doi.org/10.1097/DBP.0b013e318213f56c
- Majoko, T. (2018). Inclusion of Children with Autism Spectrum Disorders in Mainstream Primary School Classrooms: Zimbabwean Teachers' Experiences. *International Journal of Special Education*, 33(3), 630-656. http://www.internationalsped.com/
- Mandelberg, J., Frankel, F., Cunningham, T., Gorospe, C., & Laugeson, EA. (2014). Long-term outcomes of parent-assisted social skills intervention for high-functioning children with autism spectrum disorders. *Autism*, *18*(3), 255-63. doi: 10.1177/136236131247240
- Mann, M., Hosman, C., Schaalma, H., & deVries, N. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research*, 19(4), 357-372. https://doi.org/10.1093/her/cyg041

- Mannay, D., & Morgan, M. (2015). Doing ethnography or applying a qualitative technique? Reflections from the 'waiting field'. *Qualitative Research*, 15(2), 166-182. DOI: 10.1177/1468794113517391
- Manning, J. & Kunkel, A. (2014). Researching Interpersonal Relationships: Qualitative Methods, Studies, and Analysis. California: SAGE Publications.
- Marks, D. (1999). Dimensions of Oppression: Theorising the embodied subject. *Disability & Society*, 14(5), 611–626. doi:10.1080/09687599925975
- Marom, M. K., Gilboa, A., & Bodner, E. (2018). Musical features and interactional functions of echolalia in children with autism within the music therapy dyad. *Nordic Journal of Music Therapy*, 27(3), 175-196. https://doi.org/10.1080/08098131.2017.1403948
- Marsack-Topolewski, C., & Gaves, J. (2019). "I worry about his future!" Challenges to future planning for adult children with ASD. *Journal of Family and Social Work*, 23(1), 71-85. https://doi.org/10.1080/10522158.2019.1578714
- Marshall, D., & Goodall, C. (2015). The Right to Appropriate and Meaningful Education for Children with ASD. *Journal of Autism and Developmental Disorders*, 45, 3159–3167. https://doi.org/10.1007/s10803-015-2475-9
- Marzullo-Kerth, D., Reeve, S., Reeve, K., & Townsend, D. (2011). Using multiple-exemplar training to teach a generalized repertoire of sharing to children with autism. *Journal of Applied Behavior Analysis*, 44(2), 279–294. doi: 10.1901/jaba.2011.44-279
- Maskey, M., Warnell, F., Parr, J. R., Le Couteur, A., & McConachie, H. (2013). Emotional and behavioural problems in children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43(4), 851-859. DOI: 10.1007/s10803-012-1622-9
- Mason, R. A., Davis, H. S., Boles, M. B., & Goodwyn, F. (2013). Efficacy of point-of-view video modeling: A meta-analysis. *Remedial and Special Education*, 34(6), 333–345. https://doi.org/10.1177/0741932513486298
- Masse, J., McNeil, C., Wagner, S., & Quetsch, L. (2016). Examining the Efficacy of Parent-Child Interaction Therapy with Children on the Autism Spectrum. *Journal of Child & Family Studies*, 25, 2508-2525. DOI 10.1007/s10826-016-0424-7
- Matson, J., Rieske, R., & Williams, L. (2013). The relationship between autism spectrum disorders and attention-deficit/hyperactivity disorder: An overview. *Research in Developmental Disabilities*, 34(9), 2475–2484. doi: 10.1016/j.ridd.2013.05.021
- Mattaini, M. (2020). Creating autistic space in ability-inclusive sensory theatre. *Youth Theatre Journal*, 34(1), 42-54. https://doi.org/10.1080/08929092.2019.1633719
- Matthews, J. (11th March 2020). Don't tell me how I feel [Blog Post]. Retrieved from: https://pathologicaldemandavoidanceaprofileofautism.com/author/changingthenarrativeaboutaut ism/page/2/
- Mayan, M. (2016). Essentials of Qualitative Inquiry. Oxon: Routledge.

- Mayes, SD., & Calhoun, SL. (2007). Learning, attention, writing, and processing speed in typical children and children with ADHD, autism, anxiety, depression, and oppositional-defiant disorder. *Child Neuropsychology*, *13*(6), 469–493. DOI: 10.1080/09297040601112773
- Mazefsky, C. Herrington, J. & Siegel, M. (2013). The role of emotion regulation in autism spectrum disorder. *J. Am. Acad. Child Adolesc. Psychiatry*, 52(7), 679–688. doi: 10.1016/j.jaac.2013.05.006.
- Mazumdar, P., Arru, G., & Battisti, F. (2021). Early detection of children with Autism Spectrum Disorder based on visual exploration of images. *Signal Processing: Image Communication*, 94, 116184. DOI: 10.1016/j.image.2021.116184
- Mazza, M., Mariano, M., Peretti, S., Masedu, F., Pino, M. C., & Valenti, M. (2017). The role of theory of mind on social information processing in children with autism spectrum disorders: A mediation analysis. *Journal of Autism and Developmental Disorders*, 47(5), 1369–1379. DOI: 10.1007/s10803-017-3069-5
- McAreavey, R., & Das, C. (2013). A Delicate Balancing Act: Negotiating with Gatekeepers for Ethical Research When Researching Minority Communities. *International Journal of Qualitative Methods*, 12, 113-131. https://doi.org/10.1177/160940691301200102
- McBurney, D., & White, T. (2010). *Research Methods* (8th ed.). United States of America: Wadsworth CENGAGE Learning.
- McCabe, U. (2017). The drama in sociodramatic play: implications for curriculum and pedagogy. *NJ*, 41(1), 3-13. DOI: 10.1080/14452294.2017.1329689
- McCarthy, E. (2019). Capturing the Voices of Parents: Needs, Experiences and Perspectives of Post-Diagnositc Parent Training in an ASD Assessment and Intervention Service (unpublished doctoral thesis). Mary Immaculate College University of Limerick, Ireland.
- McCauley, J., Harris, M., Zajic, M., Swain-Lerro, L., Oswald, T., McIntyre, N.....Solomon, M. (2019). Self-Esteem, Internalizing Symptoms, and Theory of Mind in Youth With Autism Spectrum Disorder. *Journal of Clinical Child & Adolescent Psychology, 48*(3), 400-411, DOI:10.1080/15374416.2017.1381912
- McCormack, P. (2018). Educating Students with Autism Spectrum Disorder (ASD) through the ASD Class Model: A Qualitative Study Exploring the Experiences of ASD Class Teachers and Principals in Irish Primary Schools (unpublished doctoral thesis). Dublin City University, Dublin.
- McDonagh, F. (2014). The teacher as co-creator of drama: A phenomenological study of the experiences and reflections of Irish primary school teachers. (unpublished doctoral thesis). Ireland: Mary Immaculate College University of Limerick, Ireland.
- McDonald, B., Goldstein, T., & Kanske, P. (2020). Could Acting Training Improve Social Cognition and Emotional Control. *Frontiers in Human Neuroscience*, *14*(348). doi: 10.3389/fnhum.2020.00348
- McGillicuddy, S., &. O'Donnell, G. (2014) Teaching students with autism spectrum disorder in mainstream post-primary schools in the Republic of Ireland. *International Journal of Inclusive Education*, *18*(4), 323-344. DOI: 10.1080/13603116.2013.764934

- McGuire, A., & Michalko, R. (2011.) Minds Between Us: Autism, mindblindness and the uncertainty of communication. *Educational Philosophy and Theory*, 43(2), 162-177. DOI: 10.1111/j.1469-5812.2009.00537.x
- McKeon, D. (2020). Soft barriers' The impact of school ethos and culture on the inclusion of students with special educational needs in mainstream schools in Ireland. *Improving Schools*, 23(2), 159-174. doi:10.1177/1365480219898897
- McLaughlin, S., & Rafferty, H. (2014). Me and 'It': Seven young people given a diagnosis of Asperger's Syndrome. *Education and Child Psychology*, 31(1), 63-78.
- McMahon, C., Vismara, L., & Solomon, M. (2013). Measuring Changes in Social Behavior During a Social Skills Intervention for Higher-Functioning Children and Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, *43*(8), 1843–1856. DOI: 10.1007/s10803-012-1733-3
- McNamara, T., & Roever, C. (2006). Psychometric Approaches to Fairness: Bias and DIF. *Language Learning*, 56(2), 81–128. https://doi.org/10.1111/j.1467-9922.2006.00381.x
- Meares, K., & Freeston, M. (2015). Overcoming Worry and Generalised Anxiety Disorder: A self-help guide using Cognitive Behavioral Techniques. Great Britain: Robinson.
- Mehiling, M. (2017). Differential Impact of Drama-Based versus Traditional Social Skills Intervention on the Brain-Basis and Behavioral Expression of Social Communication Skills in Children with Autism Spectrum Disorder (unpublished doctoral thesis). Ohio State University, Ohio, USA
- Mehling, M. H., Tassé, M. J., & Root, R. (2016). Shakespeare and autism: An exploratory evaluation of the Hunter heartbeat method. *Research and Practice in Intellectual and Developmental Disabilities*, 1–14. doi:10.1080/23297018.2016.1207202
- Mendelson, J., Gates, J., & Lerner, M. (2016). Friendship in School-Age Boys With Autism Spectrum Disorders: A Meta-Analytic Summary and Developmental, Process-Based Model. *Psychological Bulletin, American Psychological Association*, *142*(6), 601-622. DOI: 10.1037/bul0000041
- Mendez-Martinez, E., & Fernandez-Rio, J. (2021). Mermaids, dogs and chameleons: theatrical improvisation in adolescents with Asperger's Syndrome. *International Journal of Inclusive Education*, 25(4), 482-498. DOI: 10.1080/13603116.2018.1561960
- Menter, I., Elliot, D., Hulme, M., Lewin, J., & Lowden, K. (2011). *A Guide to Practitioner Research in Education*. London: SAGE Publications Ltd.
- Merrill, K., Smith, S., Cumming, M., & Daunic, A. (2017). A Review of Social Problem-Solving Interventions: Past Findings, Current Status, and Future Directions. *Review of Educational Research*, 87(1), 71-102. https://doi.org/10.3102/0034654316652943
- Meynert, M. J. (2014). Inclusive Education and Perceptions of Learning Facilitators of Children with Special Needs in a School in Sweden. *International Journal of Special Education*, 29(2), 35–52. http://www.internationaljournalofspecialeducation.com
- Mikhailova, O. B. (2019). High school students involved and not involved in mmorpg: creativity and innovativeness. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 7(2), 29-39. DOI: 10.5937/IJCRSEE1902029M

- Miller, T. (2017). Telling the difficult things: Creating Spaces for disclosure, rapport and 'collusion' in qualitative interviews. *Women's Studies International Forum, 61*, 81-86. https://doi.org/10.1016/j.wsif.2016.07.005
- Mills, B. (2008). Autism and Imagination. In M. Osteen, M. (Ed.), *Autism and Representation* (pp117-133). Oxon: Routledge.
- Mills, D., & Morton, M. (2013). Ethnography in Education. London: SAGE Publications Ltd.
- Milton, D., & Bracher, M. (2013). Autistics speak but are they heard? *A Journal of the BSA MEdSoc Group*, 7(2), 61-69. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1083.6803&rep=rep1&type=pdf
- Milton, D., Heasman, B., & Sheppard, E. (2018). Double empathy. In F. Volkmar (Ed.), *Encyclopaedia of autism spectrum disorders*. New York: Springer Nature. https://doi.org/10.1007/978-1-4614-6435-8 10227 3-1
- Milton, M. (2012). On the ontological status of autism: The "double empathy problem." *Disability & Society*, 27, 883–887. doi.org/10.1080/09687599.2012.710008
- Mingins, J., Tarver, J., Waite, J., Jones, C., & Surtees, A. (2021). Anxiety and intellectual functioning in autistic children: A systematic review and meta-analysis. *Autism*, 25(1), 18-32. https://doi.org/10.1177/1362361320953253
- Minihan, A., Kinsella, W., & Honan, R. (2011). Social skills training for adolescents with Asperger's syndrome using a consultation model. *Journal of Research in Special Educational Needs*, 11(1), 55–69. DOI: 10.1111/j.1471-3802.2010.01176.x
- Minne, E., & Semrud-Clikeman, M. (2011). A social competence intervention for young children with high functioning autism and Asperger syndrome: a pilot study. *Autism*, *16*(6), 586–602. https://doi.org/10.1177/1362361311423384
- Misailidi, P. & Papoudi, D. (2009). Expression, perception, and understanding of emotions in autism: Psychological and neurological findings. *Step in Social Sciences*, *54*, 127 145.
- Mishna, F. & Muskat, B. (1998). Group Therapy for Boys with Features of Asperger Syndrome and Concurrent Learning Disabilities: Finding a Peer Group. *Journal of Child and Adolescent Group Therapy*, 8(3), 97–114. https://doi.org/10.1023/A:1022984118001
- Mitchell, G., & Locke, K. (2015). Lay beliefs about autism spectrum disorder among the general public and childcare providers. *Autism*, 19(5), 553-561. https://doi.org/10.1177/1362361314533839
- Mo, S., Liang, L., Bardikoff, N., &. Sabbagh, M. A. (2019). Shifting visual attention to social and non-social stimuli in Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 65, 56-64. https://doi.org/10.1016/j.rasd.2019.05.006
- Moore, A. (2020). Pathological demand avoidance: What and who are being pathologised and in whose interests? *Global Studies of Childhood*, *10*(1), 39-52. DOI: 10.1177/2043610619890070
- Moreno, J. L. (1947). The social atom and death. Sociometry, 10(1), 80-84.

- Morgan, B., Maybery, M., & Durkin, K. (2003). Weak Central Coherence, Poor Joint Attention, and Low Verbal Activity: Independent Deficits in Early Autism. *Developmental Psychology*, *36*(4), 646-656. DOI: 10.1037/0012-1649.39.4.646
- Morgan, N., & Saxton, J. (1989). Teaching drama: A mind of many wonders. Cheltenham: Thornes.
- Morris, A. (2015). A practical Introduction to In-Depth Interviewing. London: SAGE Publications.
- Morrison, L., Kamps, D., Garcia, J., & Parker, D. (2001). Peer-mediation and monitoring strategies to improve initiations and social skills for students with autism. *Journal of Positive Behavior Interventions*, *3*(4), 237–250. https://doi.org/10.1177/109830070100300405
- Morrissey, B. (2020). Vehicle for inclusion or costly illusion? A critical policy analysis of the Special Needs Assistant scheme in Ireland. *British Journal of Special Education*, 47(4). DOI: 10.1111/1467-8578.12330
- Morse, J., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal of Qualitative Methods*, *1*(2), 1–19. https://doi.org/10.1177/160940690200100202
- Mortari, L. (2015). Reflectivity in Research Practice: An Overview of Different Perspectives, Interactional Journal of Qualitative Methods, 1-9. DOI: 10.1177/1609406915618045
- Mottron, L., Belleville, S., & Ménard, E. (1999). Local bias in autistic subjects as evidenced by graphic tasks: Perceptual hierarchization or working memory deficit? *Journal of Child Psychology and Psychiatry*, 40(5), 743–755. PMID: 10433408.
- Mottron, L., Mineau, S., Décarie, J. C., & Jambaqué, I. (1997). Visual agnosia with bilateral temporooccipital brain lesions in a child with autistic disorder: A case study. *Developmental Medicine* and Child Neurology, 39(10), 699–705. https://doi.org/10.1111/j.1469-8749.1997.tb07367.x
- Mpella, M., Evaggelinou, C., Koidou, E., & Tsigilis, N. (2019). The Effects of a Theatrical Play Programme on Social Skills Development for Young Children with Autism Spectrum Disorders. *International Journal of Special Education*, *33*(4), 828-845.
- Mul, C., Stagg, S., Herbelin, B., & Aspell, J. (2018). The Feeling of Me Feeling for You: Interoception, Alexithymia and Empathy in Autism. Journal of Autism and Developmental Disorders, 48, 2953–2967. https://doi.org/10.1007/s10803-018-3564-3
- Mundy, P. (2018). A review of joint attention and social-cognitive brain systems in typical development and autism spectrum disorder. *European Journal of Neuroscience*, 47, 497-514. doi:10.1111/ejn.13720
- Murchison, J. (2010). *Ethnography Essentials: Designing, Conducting and Presenting Your Research*. San Francisco: John Wiley & Sons Inc.
- Murphy, A., Radley, K., & Helbig, K. (2018). Use of superheros social skills with middle school-age students with autism spectrum disorder, *Psychol Schs.* 55(3), 323–335. https://doi.org/10.1002/
- Murphy, T. & Tierney, K. (2006). Parents of Children with Autistic Spectrum Disorders (ASD): A Survey of Information needs. Report to the National Council for Special Education, Special Education Research Initiative. Meath: National Council of Special Education.

- Mutreja, R., Craig, C., & O'Boyle, M. (2016). Attentional network deficits in children with autism spectrum disorder. *Developmental Neurorehabilitation*, 19(6), 389-397. DOI: 10.3109/17518423.2015.1017663
- Myers, S., & Johnson, C. (2007). Management of Children with Autism Spectrum Disorders. *Pediatrics Official Journal of the American Academy of Pediatrics*, 120(5), 1162-1182. DOI: https://doi.org/10.1542/peds.2007-2362
- Myles, B. S. (2005). Children and youth with Asperger syndrome. Thousand Oaks, CA: Corwin Press.
- Nagase, K. (2019a). Relationship Between Autism Spectrum Disorder Characteristics and Humour Appreciation in Typically Developing Individuals. *Cognition, Language, and Development*, 22(6), 2282-2297. https://doi.org/10.1177/0033294118804999
- Nagase, K. (2019b). The traits of autism spectrum disorder in the general population influence humor appreciation: Using the autism-spectrum quotient and HSPS-J19. *Cogent Psychology*, *6*, 1696000. doi.org/10.1080/23311908.2019.1696000
- Nagase, K., & Tanaka, M. (2015). Cognitive processes in humor appreciation among individuals with autism spectrum disorder: Causal inference and stimulus elaboration. *The Japanese Journal of Developmental Psychology*, 26, 123–134. doi:10.11201/jjdp.26.123
- Nardi, P. (2015). *Doing Survey Research: A Guide to Quantitative Methods* (3rd ed.). United Kingdom: Routledge.
- National Autistic Society (NAS) (2019, November). *National Autistic Society PDA Conference*. Birmingham England: National Autistic Society.
- National Disability Authority (2002). *Guidelines for Including People with Disabilities in Research*. Dublin: Government Publications.
- NCCA (2009a). *Aistear: The Early Childhood Curriculum Framework, Principles and themes.* Dublin: National Council for Curriculum and Assessment.
- NCCA (2009b). *Towards Learning: An Overview of Senior Cycle Education*. Dublin: National Council for Curriculum and Assessment. https://ncca.ie/media/2511/towards_learning_an_overview.pdf
- NCCA. (2015). *Framework for Junior Cycle 2015*. Dublin: Department of Education and Skills. https://ncca.ie/en/junior-cycle/framework-for-junior-cycle
- NCCA. (2020). *Draft Primary Curriculum Framework For Consultation: Primary Curriculum Review and Redevelopment*. Dublin: National Council of Curriculum and Assessment. https://ncca.ie/media/4456/ncca-primary-curriculum-framework-2020.pdf
- NCSE (2004). *Education for Persons with Special Educational Needs (EPSEN) Act.* Meath: National Council for Special Education
- NCSE (2016). NCSE POLICY ADVICE: Supporting Students with Autism Spectrum Disorder in Schools, A Guide for Parents/Guardians and Students. Meath: National Council of Special Education.
- NCSE. (2011). Inclusive Education Framework: A guide for schools on the inclusion of pupils with special educational needs. Meath: National Council for Special Education.

- NCSE. (2014). *Information for Parents/Guardians of Children and Young People with Autism Spectrum Disorder*. Meath: National Council of Special Education.
- NCSE. (2017). NCSE Welcomes a Better and More Equitable Way of Allocating Teaching Resources for Special Needs [Press Release]. https://www.sess.ie/sites/default/files/inline-files/NCSE_Press_Release_
- NCSE. (2018). Comprehensive Review of the Special Needs Assistant Scheme A New School Inclusion Model to Deliver the Right Supports at the Right Time to Students with Additional Care Needs. NCSE Policy Advice Paper No. 6. Meath: National Council of Special Education.
- NCSE. (2019). Policy Advice on Special Schools and Classes. An Inclusive Education for an Inclusive Society? Progress Report. Meath: National Council of Special Education.
- Neelands, J. (1984). Making Sense of drama: A guide to classroom practice. UK: Heinemann.
- Nelson Niehues, A., Bundy, A., Broom, A., & Tranter. P. (2016). Reframing healthy risk taking: Parents' dilemmas and strategies to promote children's well-being. *Journal of Occupational Science*, 23(4), 449-463. DOI: 10.1080/14427591.2016.1209424
- Nelson, A. (2010). Foundation Role Plays for Autism: Role Plays for Working with Individuals with Autism Spectrum Disorders, Parents, Peers, Teachers and Other Professionals. London: Jessica Kingsley Publishers.
- Neuhaus, E., Webb, S., & Bernier, R. (2019). Linking social motivation with social skill: The role of emotion dysregulation in autism spectrum disorder. *Developmental and Psychopathology*, 31(3), 931-943. doi:10.1017/S0954579419000361
- Newbury, D. (2001). Diaries and Fieldnotes in the Research Process. *Research Issues in Art Design and Media, 1*, 1020. https://icd.wordsinspace.net/course_material/mrm/mrmreadings/riadmIssue1.pdf
- Newman, I., & Covrig, D. (2013). Writer's Forum Building consistency between title, problem statement, purpose, & research questions to improve the quality of research plans and reports. *New Horizons in Adult Education & Human Resource Development*, 25(1) 70-79. https://doi.org/10.1002/nha.20009
- Newman, K.S., & Chin, M.M. (2003). High Stakes: Time Poverty, Testing, and the Children of the Working Poor. *Qualitative Sociology*, 26, 3–34. https://doi.org/10.1023/A:1021487219440
- Newson, E., Le Maréchal, K., & David, C. (2003). Pathological demand avoidance syndrome: a necessary distinction within the pervasive developmental disorders, *Archives of Disease in Childhood*, 88(7), 595–600. doi: 10.1136/adc.88.7.595
- Nichols, S. (2009). *Girls Growing Up on the Autism Spectrum: What Parents and Professionals Should Know About the Pre-Teen and Teenage Years*. England: Jessica Kingsley Publishers Ltd.
- Nicholson, N. (2013, May 24). *The empathy question: Theory of mind, culture, and understanding*. Retrieved from 2013/05/the-empathy-question-theory-of-mind.html
- Nicolaidis, C., Milton, D., Sasson, N., Sheppard, E., & Yergeau, M. (2019). An Expert Discussion on Autism and Empathy. *Autism in Adulthood*, 1(1). DOI: 10.1089/aut.2018.29000.cjn

- Nomura, R., & Maruno, S. (2011). Constructing a coactivation model for explaining humor elicitation. *Psychology*, 2(5), 477–485. doi:10.4236/psych.2011.25074
- Norwich, B. (2008). What future for special schools and inclusion? Conceptual and professional perspectives. *British Journal of Special Education*, 35(3), 136-143. http://dx.doi.org/10.1111/j.1467-8578.2008.00387.x
- Nuernberger, J. E., Ringdahl, J. E., Vargo, K. K., Crumpecker, A. C., & Gunnarsson, K. F. (2013). Using a behavioral skills training package to teach conversation skills to young adults with autism spectrum disorders. *Research in Autism Spectrum Disorders*, 7(2), 411–417. https://doi.org/10.1016/j.rasd.2012.09.004
- Nuske, H., Vivanti, G., & Dissanayake, C. (2013). Are emotion impairments unique to, universal, or specific in autism spectrum disorder? A comprehensive review. *Cognition & Emotion*, 27(6), 1042-1061. DOI: 10.1080/02699931.2012.762900
- Oakley, B., Brewer, R., Bird, G., & Catmur, C. (2016). Theory of Mind Is Not Theory of Emotion: A Cautionary Note on the Reading the Mind in the Eyes Test. *Journal of Abnormal Psychology*, 126(6), 818-823. http://dx.doi.org/10.1037/abn0000182
- O'Connor, P. (2000). Down the Yellow Brick Road, Applied Theatre Researcher. ISSN 1443-1726
- O'Connor, P. (2003). Reflection and Refraction: The Dimpled Mirror of Process Drama: How Process Drama Assists People to Reflect on Their Attitudes and Behaviours Associated with Mental Illness (unpublished doctoral thesis). Griffith University, Queensland, Australia.
- O'Connor, P., & O'Connor, B. (2018). Hearing Children's Voices: Is Anyone Listening? In K. Freebody et al. (Eds.), *Applied Theatre: Understanding Change* (pp.135-151). USA: Springer.
- O'Connor, P. (Ed) (2010). Creating Democratic Citizenship Through Drama Education: The Writings of Jonothan Neelands. England: Trentham Books Limited.
- Odom, S. L., & Watts, E. (1991). Reducing teacher prompts in peer-mediated interventions for young children with autism. *The Journal of Special Education*, 25(1), 26–43. https://doi.org/10.1177/002246699102500103
- O'Hagan, S., & Hebron, J. (2017). Perceptions of Friendship among Adolescents with Autism Spectrum Conditions in a Mainstream High School Resource Provision. *European Journal of Special Needs Education*, 32(3), 314-328. https://doi.org/10.1080/08856257.2016.1223441
- O'Kane, C. (2008). The Development of Participatory Techniques: Facilitating Children's Views about Decisions Which Affect Them. In Christensen, P. & James, A (Eds.), *Research with Children: Perspectives and Practices* (pp. 125-155). New York: Routledge.
- Ola, L., Gullon-Scott, F. (2020). Facial emotion recognition in autistic adult females correlates with alexithymia, not autism. *Autism*, 24(8), 2021-2034. https://doi.org/10.1177/1362361320932727
- Olcay-Gul, S., & Tekin-Iftar, E. (2016). Family Generated and Delivered Social Story Intervention: Acquisition, Maintenance, and Generalization of Social Skills in Youths with ASD. *Journal of Autism and Developmental Disabilities*, 51(1), 67-79. https://www.jstor.org/stable/10.2307/26420365
- Oliver, M. (1983). Social Work with Disabled People. Basingstoke: Macmillan

- Oliver, T., Shenkman, R., Diewald, L., & Smeltzer, S. (2021). Reflective journaling of nursing students on weight bias. *Nurse Education Today*, 98, 104702. https://doi.org/10.1016/j.nedt.2020.104702
- Olsen, W. (2012). *Data Collection: Key Debates and Methods in Social Research.* London: SAGE Publications Ltd.
- O'Neill, C. (1995). Drama Worlds: A Framework for Process Drama. Canada: Pearson Education Canada
- O'Neill, C. (2015) (Ed.). Dorothy Heathcote on Education and Drama: Essential Writings. Oxon: Routledge.
- O'Neill, C., & Lambert, A. (1982). *Drama Structures: A Practical Handbook for Teachers*. Cheltenham: Stanley Thornes.
- O'Nions, E., & Eaton, J. (2020). Extreme/ 'pathological' demand avoidance: an overview. *Paediatrics and Child Health*, 30(12), 411-415. DOI: 10.1016/j.paed.2020.09.002
- O'Nions, E., Gould, J., Christie, P., Gillberg, C., Viding, E., & Happé, F. (2016). Identifying features of 'pathological demand avoidance; using the Diagnostic Interview for Social and Communication Disorders (DISCO). *European Child and Adolescent Psychiatry*, 25, 407-419. DOI 10.1007/s00787-015-0740-2
- O'Nions, E., Viding, E., Floyd, C., Quinlan, E., Pidgeon, C., Gould, J., & Happé, F. (2018). Dimensions of difficulty in children reported to have an autism spectrum diagnosis and features of extreme/'pathological' demand avoidance. *Child and Adolescent Mental Health*, 23 (3), 220-227. doi: 10.1111/camh.12287
- O'Nions, E., Viding, E., Greven, C., Ronald, A., & Happé, F. (2014). Pathological demand avoidance: Exploring the behavioural profile. *Autism*, 18(5), 538-544. DOI: 10.1177/1362361313481861
- O'Reilly, M., & Dogra, N. (2017). *Interviewing Children and Young People for Research*. United Kingdom: SAGE Publications.
- Ortlipp, M. (2008). Keeping and Using Reflective Journals in the Qualitative Research Process. *The Qualitative Report*, 13(4), 695–705. doi: 10.46743/2160-3715/2008.1579
- Østern, A-L. (2021). (Ed.) *Teaching and Learning through Dramaturgy: Education as an Artful Engagement (Learning Through Theatre)*. London: Routledge.
- O' Sullivan, C. (1997). Drama or Mimesis? *IDEA International Research Journal*, 1(1), 15-26.
- O' Sullivan, C. (2006, October). *Education of the Emotions*. Presented at the National Conference on Asperger Syndrome. University College Dublin, Dublin.
- O' Sullivan, C., Delany, D., & Boran, L. (2010a, October). *Drama in Education and Executive Function Training*. Paper presented at Spectrum Alliance Conference, 'Common Themes: Strategies for Managing Co-occurring Conditions'. Red Cow Conference Centre, Dublin.
- O' Sullivan, C., Delany, D., & Boran, L. (2012a, April). *The Role of Drama in Developing Social Attribution Abilities in Children on the Autistic Spectrum.* Paper presented at Examining Theory & Practice in Inclusive Education. University of Dublin, Trinity College, Dublin.

- O'Sullivan C. (2015b). Drama and Autism. In F. Volkmar (Ed,), *Encyclopedia of Autism Spectrum Disorders*. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-6435-8_102102-1
- O'Sullivan, C. (2005, September). An Exploration of the Use of Drama in Education in the Education of Young People with Asperger Syndrome. Paper presented at the European Conference on Educational Research (ECER), University College Dublin, Dublin.
- O'Sullivan, C. (2006, February). *Asperger Syndrome and Making Sense of the World through Drama*. Paper presented at the Aspire National Conference, University of Dublin, Trinity College, Dublin.
- O'Sullivan, C. (2015a) Drama and Autism. In F. Volkmar (Ed.) *Encyclopedia of Autism Spectrum Disorders*. New York: Springer. https://doi.org/10.1007/978-1-4614-6435-8_102102-1
- O'Sullivan, C. (2017). Role-playing. In L. Cohen, L. Manion, & K. R. B. Morrison (Eds.), *Research Methods in Education (8th ed.)* (pp510 537). Abingdon, UK: Routledge.
- O'Sullivan, C. (2021). A Transdisciplinary Approach to Drama with Children and Young People on the Autism Spectrum: Introducing the Social Drama Model. [Manuscript submitted for publication]
- O'Sullivan, C., & McKernan, D. (2011). Building Bridges. Drama in the Social Education of Young People with Asperger Syndrome. *No Mind Left Behind*, Glasgow, March
- O'Sullivan, C., Davis, D., & Colleary, S. (2021). Who am I? Who can tell me who I am? Reflections on drama in a post-modern world. *Trinity Papers in Education*, 6(2).
- O'Sullivan, C. (2019). Using drama in education to support students with special educational needs in a changing world. *Facing the Gap Conference*, *Beijing*, *China*, *August 17th and 18th*, Drama Rainbow, pp. 1 34.
- O'Sullivan, C., & McKernan, D. (2011, March). *Building Bridges Drama in the Social Education of Young People with Asperger Syndrome*. Paper presented at No Mind Left Behind. Royal Concert Hall, Glasgow.
- O'Sullivan, C., Boran, L., Delany, D. (2012, July). A Study of the Role of Drama in Developing Social versus Physical Attribution Abilities in Children on the Autistic Spectrum. Paper presented at Borders and translations: Towards new paradigms and languages in drama education, IDIERI. Mary Immaculate College, University of Limerick, Limerick.
- O'Sullivan, C., McNulty, U., Conroy, L., Walsh, A., and McKernan, D. (2010b). Asperger Syndrome and Social Skills Education through Creative Drama. In D. Lyons (Ed.), *Creative Studies for the Caring Professions* (pp. 178 189). Dublin, Gill and McMillan.
- O'Toole, J. (1992). The Process of Drama: Negotiating Art and Meaning. UK: Routledge.
- O'Toole, J., & Dunn, J. (2002). *Pretending to Learn: Helping children learn through Drama*. Australia: Pearson Education Australia.
- Owen-DeSchryver, J., Carr, E., Cale, S., & Blakeley-Smith, A. (2008). Promoting Social Interactions Between Students with Autism Spectrum Disorders and Their Peers in Inclusive School Settings. *Focus on Autism and Other Developmental Disabilities*, 23(1), 15–28. https://doi.org/10.1177/1088357608314370
- Owens, J. (2007). Liberating voices through narrative methods: the case for an interpretive research approach. *Disability & Society*, 22(3), 299-313. https://doi.org/10.1080/09687590701259617

- Ozsivadjian, A., Knott. F., & Magiati, I. (2012). Parent and child perspectives on the nature of anxiety in children and young people with autism spectrum disorders: a focus group study. *Autism*, 16(2), 107-121. DOI: 10.1177/1362361311431703
- Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Adm Policy Mental Health*, 42(5), 533–544. doi:10.1007/s10488-013-0528-y.
- Palumbo, L., Rampone, G., Bertamini, M., Sinico, M., Clarke, E., & Vartanian, O. (2020). Visual Preference for Abstract Curvature and for Interior Spaces: Beyond Undergraduate Student Samples. *Psychology of Aesthetics, Creativity, and the Arts*. http://dx.doi.org/10.1037/aca0000359
- Pam, M.S. (2013). "SOCIAL STIMULUS 1," in *PsychologyDictionary.org*. https://psychologydictionary.org/social-stimulus-1/ (accessed July 18, 2021).
- Pankert, A., Pankert, K., Herpertz-Dahlmann, B., Konrad, K. & Kohls, G. (2014). Responsivity to familiar versus unfamiliar social reward in children with autism. *Journal of Neural Transmission*, *121*, 1199–1210. https://doi.org/10.1007/s00702-014-1210-6
- Parker-Jenkins, M. (2018). Problematising ethnography and case study: reflections on using ethnographic techniques and researcher positioning, *Ethnography and Education*, *13*(1), 18-33. DOI: 10.1080/17457823.2016.1253028
- Parsonson, B., & Baer, D. (1978). Training Generalized Improvisation of Tools by Preschool Children. *Journal of Applied Behavior Analysis*, 11(3), 363-380. https://doi.org/10.1901/jaba.1978.11-363
- Patai, D. (1991). US Academics and Third World women: is ethical research possible? In S. Gluck & D. Patai (Eds.). *Women's Words: The Feminist Practice of Oral History*. New York: Routledge.
- Patton, M. (1990). Qualitative evaluation and research methods (2nd ed.). Beverly Hills, CA: Sage.
- Pazey, B. (2021). Incorporating the Voices and Insights of Students with Disabilities: Let's Consider Our Approach. *International Journal of Student Voice*, 8, 1-27. https://ijsv.psu.edu/?article=incorporating-the-voices-and-insights-of-stu
- PDA Society (2006). *Pathological Demand Avoidance Syndrome: A reference booklet for clinicians*. UK: PDA Society.
- Pellicano, E. (2007). Links between theory of mind and executive function in young children with autism: Clues to developmental primacy. *Developmental Psychology*, *43*(4), 974–990. https://doi.org/10.1037/0012-1649.43.4.974
- Pellicano, E., & Burr, D. (2012). When the world becomes 'too real': a Bayesian explanation of autistic perception. *Trends in Cognitive Science*, 10, 504-10. doi: 10.1016/j.tics.2012.08.009.
- Pellicano, E., Maybery, M., Durkin, K., & Maley, A. (2006). Multiple cognitive capabilities/deficits in children with an autism spectrum disorder: "Weak" central coherence and its relationship to theory of mind and executive control. *Developmental and Psychopathology*, 18(1), 77-98. doi:10.1017/S0954579406060056

- Pelphrey, K., Morris, J., McCarthy, G., & LaBar, K. (2007). Perception of dynamic changes in facial affect and identity in autism. *Social Cognitive and Affective Neuroscience*, 2(2), 140149. doi:10.1093/scan/nsm010
- Peter, M. (1995). *Making Drama Special: Developing Drama Practice to Meet Special Educational Needs*. England: David Fulton Publishers.
- Peter, M. (2009). Drama: narrative pedagogy and socially challenged children. *British Journal of Special Education*, *36*(1), 9-17. https://doi.org/10.1111/j.1467-8578.2009.00414.x
- Peterson, J. (1991). *Dorothy Heathcote as philosopher, educator and dramatist* (unpublished doctoral thesis). The University of North Carolina, USA.
- Petrina, N., Carter, M., & Stephenson, J. (2014). The nature of friendship in children with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, 8(2), 111-126. https://doi.org/10.1016/j.rasd.2013.10.016
- Petrina, N., Carter, M., Stephenson, J., & Sweller, N. (2016). Perceived Friendship Quality of Children with Autism Spectrum Disorder as Compared to their Peers in Mixed and Non-mixed Dyads. *Journal of Autism and Developmental Disorders*, 46, 1334–1343. DOI 10.1007/s10803-015-2673-5
- Petrina, N., Carter, M., Stephenson, J., & Sweller, N. (2017). Friendship Satisfaction in Children with Autism Spectrum Disorder and Nominated Friends. *Journal of Autism and Developmental Disorders*, 47, 384–392. DOI 10.1007/s10803-016-2970-7
- Phelps, B. (2011). Response Generalization. In S. Goldstein & J. Naglieri (Eds.), *Encyclopaedia of Child Behavior and Development*. USA: Springer US.
- Phillips, B. (2013). The Effects of Role-Play on Concept Understanding and Critical Thinking Skills of Middle School Students (unpublished masters thesis). Montana State University, Montana.
- Piekny, J., & Maehler, C. (2013). Scientific reasoning in early and middle childhood: The development of domain-general evidence evaluation, experimentation, and hypothesis generation skills. *British Journal of Developmental Psychology, 31*(2), 153–179. https://doi.org/10.1111/j.2044-835X.2012.02082.x
- Pierce, K. L., & Schreibman, L. (1994). Teaching daily living skills to children with autism in unsupervised settings through pictorial self-management. *Journal of Applied Behavior Analysis*, 27(3), 471–481. https://doi.org/10.1901/jaba.1994.27-471
- Pina, F., Flavia, M., & Patrizia, O. (2013). Relationship between weak central coherence and mental states understanding in children with autism and children with ADHD. *Mediterranean Journal of Clinical Psychology*, *1*(1), DOI: 10.6092/2282-1619/2013.1.888
- Pinciotti, P. (1993). Creative Drama and Young Children: The Dramatic Learning Connection. *Arts Education Policy Review*, 94(36), 24-28. https://doi.org/10.1080/10632913.1993.9936938
- Pink, S. (2013). *Doing Visual Ethnography* (3rd ed.). London: SAGE Publications.
- Pino, M. C., Tempesta, D., Catalucci, A., Anselmi, M., Nigri, A., Iaria, G...Mazza, M. (2016). Altered cortico-limbic functional con-nectivity during an empathy

- task in subjects with post-traumatic stress disorder. J. *Psychopathol. Behav. Assessment*, 38, 398–405. doi: 10.1007/s10862-016-9538-x
- Piper, H., & Simons, H. (2005). Ethical Responsibility in Social Research. In B. Somekh & C. Lewin (Eds.). *Research Methods in the Social Sciences* (pp. 56-64). London: SAGE Publications Ltd.
- Porter, R. (2014). Making sense: drama therapy with adults with Asperger's Syndrome. *Dramatherapy*, *36*(2-3), 81-93. http://dx.doi.org/10.1080/02630672.2015.1018916
- Postorino, V., Sharp, W. G., McCracken, C. E., Bearss, K., Burrell, T. L., Evans, A. N., & Scahill, L. (2017). A systematic review and meta-analysis of parent training for disruptive behavior in children with autism spectrum disorder. *Clinical Child and Family Psychology Review*, 20(4), 391–402. https://doi.org/10.1007/s10567-017-0237-2
- Preece, D., & Jordan, R. (2010). Obtaining the views of children and young people with autism spectrum disorders about their experience of daily life and social care support. *Journal of Learning Disabilities*, 38(1), 10–20. doi.org/10.1111/j.1468-3156.2009.00548.x
- Prizant, B.M., & Field-Meyers, T. (2015). *Uniquely Human: A Different Way of Seeing Autism*. New York: Simon & Schuster.
- Qian, N. & Lipkin, R. (2011). A learning-style theory for understanding autistic behaviors. *Frontiers in Human Neuroscience*, 5(77), 1-17. doi: 10.3389/fnhum.2011.00077
- Quarantotto, D. (2020). Aristotle on Science as Problem Solving. *Topoi*, *39*(4), 857-868. Doi: 10.1007/s11245-018-9548-2
- Quirici, M. (2015). Geniuses without Imagination. *Journal of Literary & Cultural Disability Studies*, 9(1): 71-88. doi:10.3828/jlcds.2015.5
- Rabbitte, K., Prendeville., & Kinsella, W. (2017). Parents' experiences of the diagnostic process for girls with autism spectrum disorder in Ireland: An Interpretative Phenomenological Analysis. *Educational & Child Psychology*, 34(2), 54-66. file:///C:/Users/ECLOTW~1/AppData/Local/Temp/RabbittePrendevilleKinsella2017-1.pdf
- Radley, K., Dart, E., Brennan, K., Helbig, K., Lehman, E., Silberman, M., & Mendanhall, K. (2020). Social Skills Teaching for Individuals with Autism Spectrum Disorder: a Systematic Review. *Journal of Developmental Disorders*, *4*, 215-226. https://doi.org/10.1007/s41252-020-00170-x
- Radley, K., Dart, E., Furlow, C., & Ness, E. (2015). Peer-mediated discrete trial training within a school setting. *Research in Autism Spectrum Disorders*, *9*, 53–67. DOI: 10.1016/j.rasd.2014.10.001
- Radley, K., Ford, B., Battaglia, A., & McHugh, M. (2014a). The Effects of a Social Skills Training Package on Social Engagement of Children with Autism Spectrum Disorders in a Generalized Recess Setting. *Focus on Autism and Other Developmental Disabilities*, 29(4), 216–229. https://doi.org/10.1177/1088357614525660
- Radley, K., O'Handley, R., Ness, E., Ford, B., Battaglia, A., McHugh, M., &McLemore, C. (2014b). Promoting social skill use and generalization in children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 8(6), 669-680. https://doi.org/10.1016/j.rasd.2014.03.012

- Ramamoorthi, P., & Nelson, A. (2011). Drama Education for Individuals on the Autism Spectrum. In S. Schonmann (Ed.), *Key Concepts in Theatre/Drama Education* (pp. 177-181). Rotterdam: Sense Publishers.
- Randall, D. (2012). Revisiting Mandell's "least adult" role and engaging with children's voices in research. *Nurse Researcher*, 19(3), 39–43. DOI: 10.7748/nr2012.04.19.3.39.c9058
- Rasmussen, B. (2008). Beyond imitation and representation: extended comprehension of mimesis in drama education. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 13(3), 307-319. https://doi.org/10.1080/13569780802410673
- Ratto, A., Potvin, D., Pallathra, A., Saldana, L., & Kenworthy, L. (2020). Parents report fewer executive functioning problems and repetitive behaviors in young dual-language speakers with autism. *Child Neuropsychology*, 26(7), 917-933. DOI: 10.1080/09297049.2020.1733512
- Rawlings, D. (2013). Humor preference and the Autism Quotient in an undergraduate sample. *Humor*, 26(3), 411–421. https://doi.org/10.1515/humor-2013-0028
- Reading, S., Reading, J., Padgett, R. J., Reading, S., & Pryor, P. (2015). The Use of Theatre to Develop Social and Communication Behaviors for Students with Autism. *Journal of Speech Pathology & Therapy*, *I*(1). doi: 10.4172/2472-5005.1000102
- Reddy, V., Williams, E., & Vaughan, A. (2002). Sharing humor and laughter in autism and Down's syndrome. *British Journal of Psychology*, *93*(2), 219–242. DOI: 10.1348/000712602162553
- Reeves, C. (2010). A difficult negotiation: fieldwork relations with gatekeepers. *Qualitative Research*, 10(3), 35-331.DOI: 10.1177/1468794109360150
- Reid, D., & Valle, J. (2004). The Discursive Practice of Learning Disability: Implications for Instruction and Parent—School Relations. *Journal of Learning Disabilities*, *37*(6). https://doi.org/10.1177/00222194040370060101
- Reyes, N., Factor, R., & Scarpa, A. (2020). Emotion regulation, emotionality, and expression of emotions: A link between social skills, behavior, and emotion problems in children with ASD and their peers. *Research in Developmental Disabilities*, *106* (103770). https://doi.org/10.1016/j.ridd.2020.103770
- RIA. (2020). The impact of COVID-19 on Irish research and innovation. Dublin: Royal Irish Academy.
- Rice, L., Wall, C., Fogel, A., & Shic, F. (2015). Computer-Assisted Face Processing Instruction Improves Emotion Recognition, Mentalizing, and Social Skills in Students with ASD. *Journal of Autism and Developmental Disorders*, 45(7), 2176–2186. DOI: 10.1007/s10803-015-2380-2
- Richard, V., Aubertin, P., Yang, Y. Y., & Kriellaars, D. (2020). Factor Structure of Play Creativity: A New Instrument to Assess Movement Creativity. Creativity Research Journal, 32(4), 383-393. https://doi.org/10.1080/10400419.2020.1821567
- Riches, N., Loucas, T., Baird, G., Charman, T., & Simonoff, E. (2016). *Journal of Autism and Developmental Disorders*, 46, 155-163. DOI 10.1007/s10803-015-2560-0
- Rieffe, C., Oosterveld, P., Meerum, Terwogh, M., Mootz, S., Van Leeuwen, E., & Stockman, L. (2011). Emotion Regulation and Internalising Symptoms in Children with Autism Spectrum Disorders. *Autism*, *15*(6), 655-670. doi: 10.1177/1362361310366571

- Ritchie, M. (2021). *Using Theatre to Teach Social Skills to Students on the Autism Spectrum Masters Theses & Specialist Projects* (unpublished masters thesis). Western Kentucky University, USA. https://digitalcommons.wku.edu/theses/3489
- Roberts, J., & Simpson, K. (2016). A review of research into stakeholder perspectives on inclusion of students with autism in mainstream schools. *International Journal of Inclusive Education*, 20(10), 1084-1096. DOI: 10.1080/13603116.2016.1145267
- Robison, J. E. (2011). Be Different. New York: Crown Archetype.
- Rodden, B., Prendeville, P., Burke, S. & Kinsella, W. (2019). Framing secondary teachers' perspectives on the inclusion of students with autism spectrum disorder using critical discourse analysis. *Cambridge Journal of Education*, 49(2), 235-253. DOI: 10.1080/0305764X.2018.1506018
- Roddy, Á., & O'Neill, C. (2020). Predictors of unmet needs and family debt among children and adolescents with an autism spectrum disorder: Evidence from Ireland. *Health Policy*, 124(3), 317-325. https://doi.org/10.1016/j.healthpol.2020.01.005
- Rodgers, J., Hodgson, A., Shields, K., Wright, C., Honey, E., & Freeston, M. (2017). Development of the Coping with Uncertainty in Everyday Situations (CUESc) programme. *Journal of Autism and Developmental Disorders*, 47(12), 3959–3966. https://doi.org/10.1007/s10803-016-2924-0
- Rodgers, J., Hodgson, A., Shields, K., Wright, C., Honey, E., & Freeston, M. (2017). Towards a treatment for intolerance of uncertainty in young people with autism spectrum disorder: Development of the Coping with Uncertainty in Everyday Situations (CUESc) programme. *Journal of Autism and Developmental Disorders*, 47, 3959–3966. https://doi.org/10.1007/s10803-016-2924-0
- Root, J., & Browder, D. (2019). Algebraic Problem Solving for Middle School Students with Autism and Intellectual Disability. *Exceptionality*, 27(2), 118-132. https://doi.org/10.1080/09362835.2017.1394304
- Root-Bernstein, M. (2014). *Inventing imaginary worlds: From childhood play to adult creativity across the arts and sciences*. New York: Rowman & Littlefield Publishers.
- Rose, R., & Shevlin, M. (2017). A Sense of Belonging: Children's Views of Acceptance in "Inclusive" Mainstream Schools. *International Journal of Whole Schooling, Special Issue*, 65-80. https://files.eric.ed.gov/fulltext/EJ1142322.pdf
- Rose, R., & Shevlin, M. (2021). Establishing Pathways to Inclusion: Investigating the Experiences and Outcomes for Students with Special Educational Needs. London: Routledge.
- Rose, R., Shevlin, M, Winter, E., & O'Raw, P. (2015). Project IRIS-Inclusive Research in Irish Schools: A longitudinal study of the experiences of and outcomes for pupils with special education needs (SEN) in Irish Schools. NCSE Research Reports No: 19. Meath: National Council for Special Education
- Rosenberg, F.R., Rosenberg, M., & McCord, J. (1978). Self-esteem and delinquency. *Journal of Youth and Adolescence*, 7, 279–294. https://doi.org/10.1007/BF01537978
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton, New Jersey: Princeton University Press.

- Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.
- Rosenburg, N., Congdon, M., Schwartz, I., & Kamps, D. (2015). Use of Say-Do Correspondence Training to Increase Generalization of Social Interaction Skills at Recess for Children with Autism Spectrum Disorder. *Education and Training in Autism and Developmental Disabilities*, 50(2), 213-222. https://www.jstor.org/stable/24827536
- Rosqvist, H., Kourti, M., Jackson-Perry, D., Brownlow, C., Fletcher, K., Bendelman, D., & O'Dell, L. (2019). Doing it differently: emancipatory autism studies within a neurodiverse academic space. *Disability & Society*, *34*(7-8), 1082-1101. DOI: 10.1080/09687599.2019.1603102
- Rossello, B., Bergenguer, C., Baixauli, I., Garcia, R., & Miranda, A. (2020). Theory of Mind Profiles in Children with Autism Spectrum Disorder: Adaptive/Social Skills and Pragmatic Competence. *Frontiers in Psychology*, 11(567401). https://doi.org/10.3389/fpsyg.2020.567401
- Roth, I. (2007). Autism and the imaginative mind. In I. Roth (Ed.), *Proceedings of the British Academy: Imaginative Minds* (pp. 277–306. Oxford: Oxford University Press.
- Rotheram-Fuller, E., Kasari, C., Chamberlain, B., & Locke, J. (2010). Social involvement of children with autism spectrum disorders in elementary school classrooms. *Journal of child psychology and psychiatry, and allied disciplines*, *51*(11), 1227–1234. https://doi.org/10.1111/j.1469-7610.2010.02289.x
- Rucklidge, J. R. (2009). Successful treatment of OCD with a micronutrient formula following partial response to cognitive behavioral therapy (CBT): A case study. *Journal of Anxiety Disorders*, 23(6), 836-840. DOI: 10.1016/j.janxdis.2009.02.012
- Ruggeri, S. (2010). *The Experience of Humour in Asperger's Syndrome* (unpublished doctoral thesis). University of Wolverhampton, UK.
- Russel, G. (2020). Critiques of the Neurodiversity Movement. In K. Kapp (Ed.), *Autistic Community and the Neurodiversity Movement* (pp. 220-232). Singapore: Springer Nature.
- Rutherford, M., Trivedi, N., Bennett, P., & Sekuler, A. (2020). Weak Central coherence Contributes to Social Perceptual Deficits in Autism. *Journal of Autism*, 7(2), 1-12. doi: 10.7243/2054-992X-7-2
- Rutter, M., LeCouteur, A., & Lord, C. (2003). *ADI-R. Autism Diagnostic Interview Revised. Manual.*Los Angeles: Western Psychological Services.
- Ryan, F. (2019, February). Casting a puppet as an autistic child is a grotesque step backwards. *The Guardian*. Retrieved from: https://www.theguardian.com/commentisfree/2019/feb/12/casting-puppet-as-autistic-child-step-backwards-new-play-row-other-actors-played-by-humans
- Ryu, S., & Sandoval, W. (2012). Improvements to elementary children's epistemic understanding from sustained argumentation. *Science Education*, 96(3), 488–526. DOI: 10.1002/sce.21006
- Sacco, G., Noublanche, F., Blazek, F., Hue, C., Carballido, L., Asfar, M...Annweiler, C. (2021). How to deal with the consent of adults with cognitive impairment involved in European geriatric living labs? *Philosophy, Ethics, and Humanities in Medicine, 16*(3). https://doi.org/10.1186/s13010-021-00101-1

- Safra, L., Ioannou, C., Amsellem, F., Delorme, R., & Chevallier, C. (2018). Distinct effects of social motivation on face evaluations in adolescents with and without autism. *Scientific Reports*, 8(10648). DOI: 10.1038/s41598-018-28514-7
- Sainsbury, C. (2000). *Martian in the Playground: Understanding the Schoolchild with Asperger's Syndrome*. Bristol: Lucky Duck Publishing.
- Sainsbury, C. (2009). Martian in the playground: Understanding the schoolchild with Asperger's Syndrome. London: SAGE.
- Salazar, F., Baird, G., Chandler, S., Tseng, E., O'Sullivan, T., Howlin, P...Simonoff, E. Co-occurring Psychiatric Disorders in Preschool and Elementary School-Aged Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, *45*, 2283–2294. https://doi.org/10.1007/s10803-015-2361-5
- Sallows, G., & Graupner, T. (2005). Intensive Behavioral Treatment for Children with Autism: Four-Year Outcome and Predictors. *American Journal of Mental Retardation*, 110(6), 417–438. DOI: 10.1352/0895-8017(2005)110[417:IBTFCW]2.0.CO;2
- Salmon, M. (2005). Script Training with Storybooks and Puppets: A social skills intervention package across settings for young children with autism and their typically developing peers (unpublished doctoral thesis). The Ohio State University, Ohio.
- Salomone, E., Bulgarelli, D., Thommen, E., Rossini, E., & Molina, P. (2019). Role of age and IQ in emotion understanding in Autism Spectrum Disorder: implications for educational interventions. *European Journal of Special Needs Education*, *34*(3), 383-392. DOI: 10.1080/08856257.2018.1451292
- Samson, A. C., Hardan, A. Y., Podell, R. W., Phillips, J. M., & Gross, J. J. (2014a). Emotion regulation in children and adolescents with Autism Spectrum Disorder. *Autism Research*, 8(1), 9-18. doi:10.1002/aur.1387
- Samson, A. C., Huber, O., & Ruch, W. (2013). Seven decades after Hans Asperger's observations: A comprehends study of humor in individuals with autism spectrum disorder. *International Journal of Humor Research*, 26(3), 441–460. DOI 10.1515/humor-2013-0
- Samson, A. C., Phillips, J. M., Parker, K. J., Shah, S., Gross, J. J., & Hardan, A. Y. (2014b). Emotion dysregulation and the core features of autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 44(7), 1766-1772. doi:10.1007/s10803-013-2022-5.
- Samson, A., & Hegenloh, M. (2010). Stimulus characteristics affect humor processing in individuals with Asperger syndrome. *Journal of Autism and Developmental Disorders*, 40(4), 438–447. https://doi.org/10.1007/s10803-009-0885-2
- Samson, A., Hardan, A., Lee, I., Philips, J., & Gross, J. (2015). Maladaptive Behavior in Autism Spectrum Disorder: The Role of Emotion Experience and Emotion Regulation. *Journal of Autism and Developmental Disorders*, 45, 3424-3432. DOI 10.1007/s10803-015-2388-7
- Samson, C. (2013). Humor(lessness) elucidated Sense of humor in individuals with Autism Spectrum Disorders: Review and Introduction. *Humor*, 26(3), 393-409. DOI: 10.1515/humor-2013-0027

- Sani-Bozkurt, S., & Bozkus-Genc, G. (2021). Social Robots for Joint Attention Development in Autism Spectrum Disorder: A Systematic Review, International Journal of Disability. *Development and Education*. DOI: 10.1080/1034912X.2021.1905153
- Santiesteban, I., Gibbard, C., Drucks, H., Clayton, N., Banissy, M., & Bird, G. (2021). Individuals with Autism Share Others' Emotions: Evidence from the Continuous Affective Rating and Empathic Responses (CARER) Task. *Journal of Autism and Developmental Disorders*, *51*, 391-404. https://doi.org/10.1007/s10803-020-04535-y
- Sapey-Triomphe, A., Sonié, S., Hénaff, M., Mattout, J., & Schmitz, C. (2018). Adults with Autism Tend to Undermine the Hidden Environmental Structure: Evidence from a Visual Associative Learning Task. *Journal of Autism and Developmental Disorders*, 48, 3061-3074. https://doi.org/10.1007/s10803-018-3574-1
- Sasson, N. J., & Touchstone, E. W. (2014). Visual attention to competing social and object images by preschool children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 44(3), 584–592. DOI: 10.1007/s10803-013-1910-z
- Scahill, L., Aman, M. G., Lecavalier, L., Halladay, A. K., Bishop, S. L., Bodfish, J. W....Dawson, G. (2015). Measuring repetitive behaviors as a treatment endpoint in youth with autism spectrum disorder. *Autism: An International Journal of Research and Practise*, *19*(1), 38–52. doi.org/10.1177/1362361313510069
- Scarpa, A., & Reyes, N. (2011). Improving Emotion Regulation with CBT in Young Children with High Functioning Autism Spectrum Disorders: A Pilot Study. *Behavioural and Cognitive Psychotherapy*, *39*(4), 495-500. doi:10.1017/S1352465811000063
- Scattone, D., Tingstrom, D., & Wilczynski, S. (2006). Increasing Appropriate Social Interactions of Children With Autism Spectrum Disorders Using Social Stories. *Focus on Autism and Other Developmental Disabilities*, 21(4), 211–222. https://doi.org/10.1177/10883576060210040201
- Scheeren, A., Banerjee, R., Koot, H., & Begeer, S. (2016). Self-Presentation and the Role of Perspective Taking and Social Motivation in Autism Spectrum Disorder. *Journal of Autism Developmental Disorder*, 46, 649-657. DOI 10.1007/s10803-015-2610-7
- Scheeren, A., De Rosnay, M., Koot, H. & Begeer, S. (2013). Rethinking Theory of Mind in high-functioning autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, *54*(6), 628-635. https://doi.org/10.1111/jcpp.12007
- Schensul, J., & DeCompte, M. (2013). *Essential Ethnographic Methods: A Mixed Methods Approach* (2nd ed.). United Kingdom: AltaMira Press.
- Schneider, C. (2009). Acting antics. London: Jessica Kingsley.
- Schohl, K., Van Hecke, A., Carson, A., Dolan, B., Karst, J., & Stevens, S. (2014). A Replication and Extension of the PEERS Intervention: Examining Effects on Social Skills and Social Anxiety in Adolescents with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 44(3), 532–545. DOI: 10.1007/s10803-013-1900-1
- Scholtens, M. (2019). Using Music to Encourage Joint Attention for Students with Autism Spectrum Disorder: Attention as a Reciprocal Relationship. *National Association for Music Education*, 105(4), 45-51. DOI: 10.1177/0027432119846954

- Schreibman, L., Dawson, G., Stahmer, AC., Landa, P., Rogers, S., McGee, G...Halladay, A. (2015). Naturalistic developmental behavioral interventions: Empirically validated treatments for autism spectrum disorder. *Journal of Autism and Developmental Disorders* 45(8), 2411–2428. doi: 10.1007/s10803-015-2407-8
- Schreier, M. (2012). Qualitative Content Analysis in Practice. London: SAGE Publications.
- Schultheis, S., Boswell, B., & Decker, J. (2000). Successful physical activity programing for students with autism. *Focus on Autism and Other Developmental Disabilities*, *15*(3), 159–162. https://doi.org/10.1177/108835760001500306
- Scott, F. (2013). The Development of Imagination in Children with Autism. In Taylor, M. (Ed.) *The Oxford Handbook of the Development of Imagination* (pp. 499-515). Oxford: Oxford University Press.
- Scott, F., & Baron-Cohen, S. (1996). Logical, analogical, and psychological reasoning in autism: a test of the Cosmides theory. *Development and Psychopathology*, 8, 235-246. DOI: 10.1017/S0954579400007069
- Scott, K. (2019). Teaching the Hidden Curriculum of Group Work for Student with Autism Spectrum Disorder. *Open Education Studies*, *1*, 122-137. https://doi.org/10.1515/edu-2019-0008
- Scott-Danter, H. (2006). Arts, creativity and mental health initiative. Reports from four arts therapies trial services. London: Mental Health Foundation.
- Scully, D., Lehance, P., & Scully, C. (2021). 'It is no longer scary': digital learning before and during the Covid-19 pandemic in Irish secondary schools. *Technology, Pedagogy and Education*, 20(1), 159-181. doi.org/10.1080/1475939X.2020.1854844
- Sellers, S. (2002). Testing Theory Through Theatrics. *Journal of Nursing Education*, 41(11), 498-512. https://doi.org/10.3928/0148-4834-20021101-10
- Semrud-Clikeman, M., Bennett, L., & Guli, L. (2003). Assessment of childhood depression. In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of psychological and educational assessment of children: Personality, behavior, and context* (pp. 259–290). New York: Guilford Press
- Senju, A. (2012). Spontaneous Theory of Mind and Its Absence in Autism Spectrum Disorders. *The Neuroscientist*, 18(2), 108-113. https://doi.org/10.1177/1073858410397208
- Shamay-Tsoory, S. (2008). Recognition of 'Fortune of Others' emotions in Asperger Syndrome and High Functioning Autism. *Journal of Autism and Developmental Disorders*, 38(8), 1451-1461. DOI: 10.1007/s10803-007-0515-9
- Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific Journal of Teacher Education*, 44(2): 142–155. https://doi.org/10.1080/1359866X.2015.1081672
- Sharp, J. (2012). Success with your Education Research Project (2nd ed.). California: SAGE Publications, Inc.
- Shaughnessy, N. (2013). Imagining Otherwise: Autism, Neuroaesthetics and Contemporary Performance. *Interdisciplinary Science Reviews*, 38(4), 321-334. https://doi.org/10.1179/0308018813Z.00000000062

- Sherratt, D., & Peter, M. (2002). *Developing Play and Drama in Children with Autistic Spectrum Disorders*. London: David Fulton.
- Sherratt, D., & Peter, M. (2002). *Developing Play and Drama in Children with Autistic Spectrum Disorders*. London: David Fulton Publishers Ltd.
- Shevlin, M., & Banks, J. (2021). Inclusion at a Crossroads: Dismantling Ireland's System of Special Education. *Education Sciences*, 11(4), 161. doi.org/10.3390/educsci11040161
- Shure, M. B. (1992). I can problem solve. Champaign, IL: Research Press.
- Shure, M.B. (2001). Raising a thinking preteen: The I Can Problem Solve program for eight-to-twelve-year-olds. New York: Owl/Holt.
- Silberman, S. (2016). NeuroTribes: The Legacy of Autism and How to Think Smarter About People Who Think Differently. New York: Allen & Unwin.
- Siller M., & Sigman, M. (2002). The behaviors of parents of children with autism predict the subsequent development of their children's communication. *Journal of Autism and Developmental Disorders*, 32(2), 77-89. doi: 10.1023/a:1014884404276.
- Siller, M., Hutman, T., & Sigman, M. (2013). A parent-mediated intervention to increase responsive parental behaviors and child communication in children with ASD: a randomized clinical trial. *Journal of autism and developmental disorders*, 43(3), 540–555. https://doi.org/10.1007/s10803-012-1584-y
- Silva, C., Da Fonseca, D., Esteves, F., & Deruelle, C. (2017). Seeing the funny side of things: Humour processing in autism spectrum disorders. *Research in Autism Spectrum Disorders*, 43–44, 8–17. https://doi.org/10.1016/j.rasd.2017.09.001
- Silva-Calpa, G., Raposo, A., & Suplino, M. (2018). CoASD: A Tabletop Game to Support the Collaborative Work of Users with Autism Spectrum Disorder. *International Journal of Human-Computer Interaction*, *37*(1), 15-35. https://doi.org/10.1080/10447318.2020.1801224
- Silver, M., & Oakes, P. (2001). Evaluation of a new computer intervention to teach people with autism or Asperger syndrome to recognize and predict emotions in others. *Autism*, *5*(3), 299–316. doi: 10.1177/1362361301005003007
- Silvey, R., & MacKeith, S. (1988). The paracosm: A special form of fantasy. In D. C. Morrison (Ed.), *Organizing early experience: Imagination and cognition in childhood* (pp. 173–197). Amityville, NY: Baywood.
- Sim, I. (2015). Humor intervention program for children with chronic diseases. *Applied Nursing Research*, 24(4), 404-412. https://doi.org/10.1016/j.apnr.2015.09.001
- Sim, L., Whiteside, S.P., Dittner, C.A., & Mellon, M. (2006). Effectiveness of a Social Skills Training Program with School Age Children: Transition to the Clinical Setting. *Journal of Child and Family Studies*, 15, 408–417. https://doi.org/10.1007/s10826-006-9049-6
- Simon, D., & Corbett, B. (2013). Examining associations between anxiety and cortisol in high functioning male children with autism. *Journal of Neurodevelopmental Disorders* 5(1), 32. https://doi.org/10.1186/1866-1955-5-32

- Simpson, K., Imms, C., & Keen, D. (2021): The experience of participation: eliciting the views of children on the autism spectrum, *Disability and Rehabilitation*, DOI: 10.1080/09638288.2021.1903100
- Simpson, R. L., Myles, B. S., Sasso, G., & Kamps, D. (1997). *Social skills for students with autism* (2nd ed.). Reston: Council for Exceptional Children.
- Sinclair, J. (1993). Don't Mourn for Us. *Autism Network International newsletter*, *Our Voice*, *1*(3). https://www.autreat.com/dont_mourn.html
- Singer, J. (1999). Why Can't You Be Normal for Once in Your Life? From a Problem with No Name to the Emergence of a New Category of Difference. In M. Corker (Ed.), Disability Discourse (pp.59–67). Buckingham: Open University Press.
- Singer, J. L., & Singer, D. G. (2013). Historical overview of research on imagination in children. In M. Taylor (Ed.), *The Oxford handbook of the development of imagination* (pp. 11–27). Oxford: Oxford University Press
- Sinzig, J., Bruning, N., Morsch, D., & Lehmkuh, G. (2008). Attention profiles in autistic children with and without comorbid hyperactivity and attention Problems. *Acta Neuropsychiatrica*, 20, 207–215. DOI: 10.1111/j.1601-5215.2008.00292.x
- Skinner, B. F. (1953). Science and human behaviour. New York: MacMillan.
- Skipp, A. (2021). Parents' perspectives: what we can learn from COVID crisis education for students labelled with SEND, in Learning from the COVID crisis for education children and young people with SEN/disabilities (p. 171-174). *Journal of Research in Special Educational Needs*, 21(2), 168-184. doi: 10.1111/1471-3802.1251
- Skogli, E., Andersen, P., & Isaksen, J. (2020) An Exploratory Study of Executive Function Development in Children with Autism, after Receiving Early Intensive Behavioral Training. *Developmental Neurorehabilitation*, 23(7), 439-447. DOI: 10.1080/17518423.2020.1756499
- Skorich, D. P., Gash, T. B., Stalker, K. L., Zheng, L., & Haslam, S. A. (2017). Exploring the cognitive foundations of the shared attention mechanism: Evidence for a relationship between self-categorization and shared attention across the autism spectrum. *Journal of Autism and Developmental Disorders*, 47(5), 1341–1353. https://doi.org/10.1007/s10803-017-3049-9
- Slade, P. (1954). Dramatherapy as an Aid to Becoming a Person. UK: Guild of Pastoral Psychology.
- Slaughter, V. (2015). Theory of Mind in Infants and Young Children: A Review. *Australian Psychologist*, *50*, 169-172. doi:10.1111/ap.12080
- Smilansky, S. & Shefatya, L. (1990). Facilitating Play: A Medium for Promoting Cognitive, Socioemotional and Academic Development in Young Children. England: Psychological and Educational Publications.
- Smithner, N. (2011). Creative Play, In Key Concepts in Theatre/Drama Education. In S. Schonmann (Ed.), *Key Concepts in Theatre/Drama Education* (pp. 221-225). Rotterdam: Sense Publishers.
- Snow, C. (2015). *Creativity and the Autistic Student: Supporting Strengths to Develop Skills and Deepen Knowledge*. New York: Teachers College Press.

- So, W., Cheng, C., Lam, W., Huang, Y., NG, K., Tung, H., & Wong, W. (2020). A Robot-Based Play-Drama Intervention May Improve the Joint Attention and Functional Play Behaviors of Chinese-Speaking Preschoolers with Autism Spectrum Disorder: A Pilot Study. *Journal of Autism and Developmental Disorders*, 50, 467-481. https://doi.org/10.1007/s10803-019-04270-z
- Sofronoff, K., Johann, E., Sheffield, J., & Attwood, T. (2011). Increasing the Understanding and Demonstration of Appropriate Affection in Children with Asperger Syndrome: A Pilot Trial. *Autism Research and Treatment*, 214317. doi:10.1155/2011/214317.
- Song, Y., Nie, T., Shi, W., Zhao, X., & Yang, Y. (2019). Empathy Impairment in Individuals with Autism Spectrum Conditions from a Multidimensional Perspective: A Meta-Analysis. *Frontiers in Psychology*, 10, 1902. doi: 10.3389/fpsyg.2019.01902
- Soppitt, R. (2020). Pathological/Extreme Demand Avoidance (PDA/EDA). In L. Peer & G. Reid (Eds.), Special Educational Needs A Guide for Inclusive Practice (3rd ed.) (pp. 287-299). London: SAGE Publications Ltd.
- Sorensen, C., & Zarrett, N. (2014). Benefits of Physical Activity for Adolescents with Autism Spectrum Disorder: A Comprehensive Review. *Journal of Autism and Developmental Disorders*, 1, 344-353. DOI 10.1007/s40489-014-0027-4
- Souliéres, I., Dawson, M., Gernsbacher, M., Mottron, L. (2011). The Level and Nature of Autistic Intelligence II: What about Asperger Syndrome? *PLOS ONE*, *6*(9), e25372. https://doi.org/10.1371/journal.pone.0025372
- South, M., Carr, A. W., Stephenson, K. G., Maisel, M. E., & Cox, J. C. (2017). Symptom overlap on the SRS-2 adult self report between adults with ASD and adults with high anxiety. *Autism Research*, 10(7), 1215–1220. DOI: 10.1002/aur.1764
- South, M., Ozonoff, S., & McMahon, W. M. (2005). Repetitive behavior profiles in Asperger syndrome and high-functioning autism. *Journal of Autism and Developmental Disorders*, 35(2), 145–158. doi: 10.1007/s10803-004-1992-8.
- Spain, D., Sin, J., Linder, K. B., McMahon, J., & Happé, F. (2018). Social anxiety in autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders*, 52, 51–68. https://doi.org/10.1016/j.rasd.2018.04.007
- Spindler, G., & Spindler, L. (1982). Do Anthropologists Need Learning Theory. *Anthropology & Education*, 13(2), 109124. https://doi.org/10.1525/aeq.1982.13.2.05x1828h
- Spradley, J. (1980). Participant Observation. New York: Holt, Rinehart and Winston.
- Spradley, J. (2016). The Ethnographic Interview. United States of America: Waveland Press.
- Stafford, L. (2017). What about my voice: Emancipating the voices of children with disabilities through participant-centred methods. *Children's Geographies*, *15*, 600–613. doi.org/10.1080/14733285.2017.1295134
- Stahmer, A. C., & Schreibman, L. (1992). Teaching children with autism appropriate play in unsupervised environments using a self-management treatment package. *Journal of Applied Behavior Analysis*, 25(2), 447–459. doi: 10.1901/jaba.1992.25-447

- Stahmer, A., Ingersoll, B., & Carter, C. (2003). Behavioral approaches to promoting play. *Autism*, 7(4), 401–413. https://doi.org/10.1177/1362361303007004006
- Steinbrenner, J., Hume, K., Odom, S., Morin, K., Nowell, S., Tomaszewski, B.......Savage, M. (2020). *Evidence-based practices for children, youth, and young adults with autism.* Chapel Hill: The University of North Carolina, Frank Port Graham Child Development Institute; National Clearinghouse on Autism Evidence and Practice Review Team. https://fpg.unc.edu/publications/evidence-based-practices-children-youth-and-young-adults-autism-spectrum-disorder-1.
- Stephens, C. (2008). Spontaneous imitation by children with autism during a repetitive musical play routine. *Autism*, 12(6), 645–671. https://doi.org/10.1177/1362361308097117
- Sticher, J., O'Connor, K., Herzog, M., Lierheimer, K., & McGhee, S. (2012). Social Competence Intervention for Elementary Students with Aspergers Syndrome and High Functioning Autism. *Journal of Autism and Developmental Disorders*, 42, 354–366. DOI: 10.1007/s10803-011-1249-2
- Stokes, T. F., & Baer, D. M. (1977). An implicit technology of generalization. *Journal of Applied Behavior Analysis*, 10(2), 349–367. https://doi.org/10.1901/jaba.1977.10-349.
- Stokes, T., & Osnes, P. (1989). An operant pursuit of generalization. *Behavior Therapy*, 20(3), 337-355. https://doi.org/10.1016/S0005-7894(89)80054-1
- Strain, P, Kohler, F., Storey, K., & Danko, C. (1994). Teaching pre-schoolers with autism to self-monitor their social interactions: An analysis of results in homer and school settings. *Journal of Emotional and Behavioral Disorders*, 2(2), 78–88. https://eric.ed.gov/?id=EJ484999
- Stuart, L., Grahame, V., Honey, E., & Freeston, M. (2020). Intolerance of uncertainty and anxiety as explanatory frameworks for extreme demand avoidance in children and adolescents. *Child and Adolescent Mental Health*, 25(2), 59-67. doi:10.1111/camh.123
- Su, P., Rogers, S., Estes, A., & Yoder, P. (2021). The role of early social motivation in explaining variability in functional language in toddlers with autism spectrum disorder. *Autism*, 25(1), 244-257. https://doi.org/10.1177/1362361320953260
- Sublette, V. A., & Mullan, B. (2012). Consequences of play: A systematic review of the effects of online gaming. *International Journal of Mental Health and Addiction*, 10(1), 3-23. DOI: 10.1007/s11469-010-9304-3
- Sukind, R. (2014). *Life, Animated: A Story of Sidekicks, Heroes, and Autism (Not Part of a) (ABC)*. England: Kingswell.
- Sundberg, M. (2018). Online gaming, loneliness and friendships among adolescents and adults with ASD. *Computers in Human Behavior*, 79, 105-110. https://doi.org/10.1016/j.chb.2017.10.020
- Swain, D., Scarpa, A., White, S., & Laugeson, E. (2015). Emotion Dysregulation and Anxiety in Adults with ASD: Does Social Motivation Play a Role? *Journal of Autism Developmental Disorder*, 45, 3971-3977. DOI 10.1007/s10803-015-2567-6
- Sweeney, M. & Staines, A. (2016). Autism Counts. Dublin: Irish Autism Action.

- Symes, W., & Humphrey, N. (2011). School factors that facilitate or hinder the ability of teaching assistants to effectively support pupils with autism spectrum disorders (ASDs) in mainstream secondary schools. *Journal of Research in Special Educational Needs*, 11(3), 153-161. https://doi.org/10.1111/j.1471-3802.2011.01196.x
- Szcytko, R., Carrier, S., & Stevenson, K. (2018). Impacts of Outdoor Environmental Education on Teacher Reports of Attention, Behavior, and Learning Outcomes for Students with Emotional, Cognitive, and Behavioral Disabilities. *Frontiers in Education*, *3*(46), 1-10. doi: 10.3389/feduc.2018.00046
- Tam, P. (2016). Children's creative understanding of drama education: A Bakhtinian perspective. *Thinking Skills and Creativity*, 20, 29-39. http://dx.doi.org/10.1016/j.tsc.2016.02.003
- Tanner, K., Hand, B., O'Toole, G., & Lane, A. (2015). Effectiveness of Interventions to Improve Social Participation, Play, Leisure, and Restricted and Repetitive Behaviors in People With Autism Spectrum Disorder: A Systematic Review. *The American Journal of Occupational Therapy*, 69(5), 6905180010p1–6905180010p12. https://doi.org/10.5014/ajot.2015.017806
- Taylor, C., & Ivinson, G. (2013). Material Feminisms: New Directions for Education. *Gender and Education*, 25(6), 665–670. https://doi.org/10.1080/09540253.2013.834617
- Taylor, M., & Carlson, S. M. (1997). The relation between individual differences in fantasy and theory of mind. *Child Development*, 68, 436–455. https://doi.org/10. 2307/1131670
- Taylor, M., Mottweiler, C. M., Naylor, E. R., Aguiar, N. R., & Levernier, J. G. (2020). Paracosms: The Imaginary Worlds of Middle Childhood. *Child Development*, 91(1), 164–178. DOI: 10.1111/cdev.13162
- Taylor, P., & Warnder, C. (Eds). (2006). *Structure and Spontaneity: the process drama of Cecily O'Neill*. England: Trentham Books Limited.
- Taylor, P., & Warner, C. (2006). Structure and Spontaneity: The Process Drama of Cecily O'Neill. England: Trentham Books Ltd.
- Teachman, G., & Gibson, B. (2013). Children and Youth with Disabilities: Innovative Methods for Single Qualitative Interviews. *Qualitative Health Research*, 23(2), 264-274. doi.org/10.1177/1049732312468063
- Teale Sapach, M. J., Carleton, R. N., Mulvogue, M. K., Weeks, J. W., & Heimberg, R. G. (2015). Cognitive constructs and social anxiety disorder: Beyond fearing negative evaluation. *Cognitive Behaviour Therapy*, 44, 63–73. https://doi.org/10.1080/16506073.2014.961539
- Tegano, D. W., & Moran, J. D. (1989). Developmental study of the effect of dimensionality and presentation mode on original thinking of children. *Perceptual and Motor Skills*, 68(3), 1275-1281. DOI: 10.2466/pms.1989.68.3c.1275
- Ten Eycke, K., & Muller, K. (2015a). Drawing links between the autism cognitive profile and imagination: Executive function and processing bias in imaginative drawings by children with and without autism. *Autism*, 22(2), 213-220. doi: 10.1007/s10803-014-2206-7.
- Ten Eycke, K., & Muller, U. (2015b). Brief Report: New Evidence for a Social-specific Imagination Deficit in Children with Autism Spectrum Disorder. *Journal of Autism Developmental Disorder*, 45(1), 213-220. DOI: 10.1007/s10803-014-2206-7_

- Tesfaye, R., Courchesne, V., Yusuk, A., Savion-Lemieux, T., Singh, I., Shikako-Thomas, K.,....Elsabbagh, M. (2019). Assuming ability of youth with autism: Synthesis of methods capturing the first-person perspectives of children and youth with disabilities. *Autism*, *23*(8), 1882-1896. doi.org/10.1177/1362361319831487
- The United Nations (2006). Convention on the Rights of Persons with Disabilities (CRPD). Treaty Series, 2515, 3/
- Thomas, E., & Magilvy, J. (2011). Qualitative Rigor or Research Validity in Qualitative Research. *Journal for Specialists in Paediatric Nursing*, 16, 151–155. https://doi.org/doi: 10.1111/j.1744-6155.2011.00283.x
- Thompson, B., & Winsler, A. (2018). Parent—teacher agreement on social skills and behavior problems among ethnically diverse preschoolers with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 48, 3163–3175. https://doi.org/10.1007/s10803-018-3570-5.
- Thomson, K., Burnham Riosa, P., & Weiss, J.A. (2015). Brief Report of Preliminary Outcomes of an Emotion Regulation Intervention for Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 45, 3487–3495. https://doi.org/10.1007/s10803-015-2446-1
- Tiernan, B. (2021). Inclusion versus full inclusion: implications for progressing inclusive education. *European Journal of Special Needs Education*. DOI: 10.1080/08856257.2021.1961197
- Tillmann, J., Toumainen, J., & Swettenham, J. (2021). The Effect of Visual Perceptual Load on Auditory Awarenss of Social vs. Non-Social Stimuli in Individuals with Autism. *Journal of Autism and Developmental Disorders*, *51*, 1028-1038. https://doi.org/10.1007/s10803-020-04587-0
- Toivanen, T., & Pyykko, A. (2012). Group Factors as a Part of Drama Education. *The European Journal of Social and Behavioural Sciences EJBS*, (2), 150-168. doi:10.15405
- Toivanen, T., Halkilahti, I., & Ruismaki, H. (2013). Creative pedagogy-Supporting children's creativity through drama. *The European Journal of Social & Behavioural Sciences*, 7, 1168-1179. https://doi.org/10.15405/ejsbs.96
- Torrado, J., Gomez, J., & Montoro, G. (2017). Emotional Self-Regulation of Individuals with Autism Spectrum Disorders: Smartwatches for Monitoring and Interaction. *Sensors*, *17*, 1359. doi:10.3390/s17061359
- Torrance, J. (2018). Therapeutic adventures with autistic children: connecting through movement, play and creativity. London: Jessica Kingsley.
- Travers, J. (2017). Does the New Model for Special Education Teacher Allocation in Ireland Reach the Equity Bar? *Reach Journal of Special Needs Education in Ireland*, *30*(2), 101-105. https://reachjournal.ie/index.php/reach/article/view/36
- Trimingham, M., & Shaughnessy, N. (2016). Material voices: intermediality and autism. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 21(3), 293-308. DOI: 10.1080/13569783.2016.1195121
- Trimmer, E., McDonald, S., & Rushby, J. A. (2017). Not knowing what I feel: Emotional empathy in autism spectrum disorders. *Autism: The International Journal of Research and Practice*, 21(4), 450–457. DOI: 10.1177/1362361316648520

- Tripathi, I., Estabillo, JA., Moody, CT., & Laugeson, EA. (2021). Long-Term Treatment Outcomes of PEERS® for Preschoolers: A Parent-Mediated Social Skills Training Program for Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 2. doi: 10.1007/s10803-021-05147-w. Epub ahead of print. PMID: 34302574.
- Trotman, D. (2008). Imagination and the adolescent lifeworld: Possibilities and responsibilities in the national secondary review. *Thinking Skills and Creativity*, *3*(2), 125-133. DOI: 10.1016/j.tsc.2008.04.002
- Trudel, C., & Nadig, A. (2019). A role-play assessment tool and drama-based social skills intervention for adults with autism or related social communication difficulties, *Dramatherapy*, 40(1), 41-60. DOI: 10.1177/0263067219834712
- Trull, T. J., & Ebner-Priemer, U. W. (2009). Using experience sampling methods/ecological momentary assessment (ESM/EMA) in clinical assessment and clinical research: Introduction to the special section [Editorial]. *Psychological Assessment*, 21(4), 457–462. doi:10.1037/a0017653
- Truman, C. (2021). *The Teacher's Introduction to Pathological Demand Avoidance: Essential Strategies for the Classroom*. Great Britain: Jessica Kingsley Publishers.
- Truman, C., Crane, L., Howlin, P., & Pellicano, E. (2021). The educational experiences of autistic children with and without extreme demand avoidance behaviours. *International Journal of Inclusive Education*. DOI: 10.1080/13603116.2021.1916108
- Tsai, K. (2012). Play, Imagination, and Creativity: A Brief Literature Review. *Journal of Education and Learning*, *1*(2), 15-20. http://dx.doi.org/10.5539/jel.v1n2p15
- Tsatsanis, K. D. (2005). Neuropsychological Characteristics in Autism and Related Conditions. In F. R. Volkmar, R. Paul, A. Klin, & D. Cohen (Eds.), *Handbook of autism and pervasive developmental disorders: Diagnosis, development, neurobiology, and behavior* (pp. 365–381). USA: John Wiley & Sons Inc.
- Tse, J., Strulovitch, J., Tagalakis, V., Meng, L., & Fombonne, E. (2007). Social Skills Training for Adolescents with Asperger Syndrome and High-Functioning Autism. *Journal of Autism and Developmental Disorders*, *37*, 1960–1968. DOI: 10.1007/s10803-006-0343-3
- Tseng, A., Biagianti, B., Francis, S., Conelea, C., & Jacob, S. (2020). Social Cognitive Interventions for Adolescents with Autism Spectrum Disorders: A Systematic Review. *Journal of Affective Disorders*, 274, 199-204. https://doi.org/10.1016/j.jad.2020.05.134
- Turkington, C., & Anan, R. (2007). *The Encyclopedia of Autism Spectrum Disorders*. New York: Infobase Publishing.
- Turner, M. (1999). Generating novel ideas: Fluency performance in high-functioning and learning disabled individuals with autism. *Journal of Child Psychology and Psychiatry*, 40, 189-201. https://pubmed.ncbi.nlm.nih.gov/10188701/
- Twomey, M. (2020). Can you hear me? Accessing the voice of the child with Autism and their parent. *Educação*, 43(1), 1-13. https://doi.org/10.15448/1981-2582.2020.1.35477
- Twomey, M., O'Síoráin, C., Shevlin, M., & McGuckin, C. (2021). Dinosaurs in the Classroom: Using the Creative Arts to Engage Young Children with Autism. *REACH Journal of Inclusive Education in Ireland*, *34*(1), 42-53. https://reachjournal.ie/index.php/reach/issue/view/42/3

- UNESCO (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. Adopted by the World Conference on Special Needs Education: Access and Quality. Salamanca, Spain: UNESCO.
- Ung, D., Boone, D., McBride, N., Howie, F., Scalli, G., & Storch, E. (2017). Parent and Teacher Agreement of Behavior Problems in Youth Diagnosed With and Without Autism Spectrum Disorders. *Journal of Child and Family Studies*, 26, 370-380. DOI 10.1007/s10826-016-0566-7
- Ustuk, O. (2015). Reconsidering Brechtian Elements in Process Drama. *Journal of Faculty of Educational Sciences*, 48(2), 19-36. http://dergiler.ankara.edu.tr/dergiler/40/2119/21919.pdf
- Vaismoradi, M., Jones, J., Turunen, H., & Snelgrove, S. (2016). Theme development in qualitative content analysis and thematic analysis. *Journal of Nursing Education and Practice*, 6(5), 100-110. http://dx.doi.org/10.5430/jnep.v6n5p100
- Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, *15*(3), 398-405. https://doi.org/10.1111/nhs.12048
- Van der Cruijsen, R., & Boyer, B. (2020). Explicit and implicit self-esteem in youth with autism spectrum disorders. *Journal of Autism*, 25(2), 349-360. DOI: 10.1177/1362361320961006
- Van der Graaff, J., Meeus, W., de Wied, M., van Boxtel, A., van Lier, P. A., Koot, H. M..B., & Ranje, S. (2016). Motor, affective and cognitive empathy in adolescence: interrelations between facial electromyography and self-reported trait and state measures. *Cogn. Emotion 30*, 745–761. doi: 10.1080/02699931.2015.1027665
- Van der Hallen, R., Evers, K., Boets, B., Steyaert, J., Noens, I., & Waremans, J. (2016). Visual Search in ASD: Instructed Versus Spontaneous Local and Global Processing. *Journal of Autism and Developmental Disorders*. DOI 10.1007/s10803-016-2826-1
- Van der Hallen, R., Evers, K., Boets, B., Steyaert, J., Noens, I., & Wagemans, J. (2016). Visual search in ASD: Instructed versus spontaneous local and global processing. *Journal of Autism and Developmental Disorders*, 46(9), 3023–3036. https://doi.org/10.1007/s10803-016-2826-1
- Van der Zee, E., & Derksen, J. (2017). Identifying Autism through Empathizing and Systemizing Abilities. *Social Sciences*, 6(4), 124. https://doi.org/10.3390/socsci6040124
- Van Eylen, L., Boets, B., Steyaert, J., Wagemans, J., & Noens, I. (2015). Executive functioning in autism spectrum disorders: influence of task and sample characteristics and relation symptom severity. *European Child and Adolescent Psychiatry*, 24, 1399-1417. DOI 10.1007/s00787-015-0689-1
- van Osch, Y., Zeelenberg, M., & Breugelmans, S. (2017). The self and others in the experience of pride. *Cognition and Emotion*, 32(2), 404-413. https://doi.org/10.1080/02699931.2017.1290586
- van Steensel, F., & Heeman, E. (2017). Anxiety Levels in Children with Autism Spectrum Disorder: A Meta-Analysis. *Journal of Child and Family Studies*, 26, 1753–1767. https://doi.org/10.1007/s10826-017-0687-7
- Vance, J., & Richmond, B. (1975). Cooperative and competitive behavior as a function of self-esteem. *Psychology in Schools, 12*, 225-259. https://eric.ed.gov/?id=EJ117258

- Vandewouw, M., Choi, E., Hammill, C., Arnold, P., Schachar, R., Lerch, J., Anagnostou, E., & Taylor, M. (2020). Emotional face processing across neurodevelopmental disorders: a dynamic faces study in children with autism spectrum disorder, attention deficit hyperactivity disorder and obsessive-compulsive disorder. *Translational Psychiatry*, 10(375). https://doi.org/10.1038/s41398-020-01063-2
- Vernon, T., Koegel, R., Dauterman, H., & Stolen, K. (2012). An Early Social Engagement Intervention for Young Children with Autism and their Parents. *Journal of Autism and Developmental Disorders*, 42, 2702–2717. DOI: 10.1007/s10803-012-1535-7
- Vernon, T., Miller, A., Ko, J., & Wu, V. (2016). Social Tools and Rules for Teens (the START Program): Program Description and Preliminary Outcomes of an Experiential Socialization Intervention for Adolescents with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 46(5), 1806–1823. DOI: 10.1007/s10803-016-2715-7
- Vickers, S. (2017). Drama Scripts For People with Special Needs. London: Routledge.
- Vincent, L., Openden, D., Gentry, J., Long, L., & Matthews, N. (2018). Promoting Social Learning at Recess for Children with ASD and Related Social Challenges. *Behaviour Analysis Practice*, 11, 19-33. DOI 10.1007/s40617-017-0178-8
- Vink, M., Gladwin, Y., Geeraerts, S., Pas, P., Bos, D., Hofstee, S., & Vollebergh, W. (2020). Towards an integrated account of the development of self-regulation from a neurocognitive perspective. A framework for current and future longitudinal multi-modal investigations. Developmental Cognitive Neuroscience, 45, 100829. https://doi.org/10.1016/j.dcn.2020.100829
- Vismara, L., Colombi, C., & Rogers, S. (2009). Can one hour per week of therapy lead to lasting changes in young children with autism? *Autism*, *13*(1), 93-115. doi: 10.1177/1362361307098516.
- Visuri, I. (2019). Varieties of Supernatural Experience: the Case of High-Functioning Autism (unpublished doctoral dissertation). Sodertorn University: Stockholm.
- Vogan, V., Leung, R., Safar, K., Martinussen, R., Smith, M., & Taylor, M. (2018). Longitudinal Examination of Everyday Executive Functioning in Children with ASD: Relations With Social, Emotional, and Behavioral Functioning Over Time. Frontiers in Psychology, 9(1774), 1-11. doi: 10.3389/fpsyg.2018.01774
- Voiskunsky, A. E. (2015). On the psychology of computer gaming. *Psychology. Journal of Higher School of Economics*, 12(1), 5-12. https://psy-journal.hse.ru/en/2015-12-1/147963491.html
- Volkmar, F. R., Carter, A., Sparrow, S. S., & Cicchetti, D. V. (1993). Quantifying social development in autism. *Journal of the American Academy of Child & Adolescent Psychiatry*, *32*(3), 627–632. https://doi.org/10.1097/00004583-199305000-00020
- Voltz, D., & Damiano-Lantz, M. (1993). Developing Ownership in Learning. *Teaching Exceptional Children*, 25(4), 18-22. https://doi-org.elib.tcd.ie/10.1177/004005999302500405
- Vong, K., Mak, K., Leung, S., & Chang, S. (2020). Age as the Most Prominent Predictor of Young Children's Creativity Performance and Challenges at Critical Turning Points Early in Life. *Creativity Research Journal*, 32(2), 192-197. DOI: 10.1080/10400419.2020.1768486

- Vygotsky, L. (1967). Plays and Its Role in the Mental Development of the Child. *Soviet Psychology*, 5(3), 6-18. https://doi.org/10.2753/RPO1061-040505036
- Vygotsky, L. S. (1978). Mind in society: *The development of higher psychological processes*. Massachusetts: Harvard University Press.
- Vygotsky, L. S. [y1930] (2004). Imagination and Creativity in Childhood. *Journal of Russian and East European Psychology*, 42(1), 7–97. https://doi.org/10.1080/10610405.2004.11059210
- Waddington, E., & Reed, P. (2016). Comparison of the effects of mainstream and special school on National Curriculum outcomes in children with autism spectrum disorder: an archive-based analysis. *Journal of Research in Special Educational Needs*, 17(2), 132-142. https://doi.org/10.1111/1471-3802.12368
- Waddington, H., van der Meer, L., Carnett, A., & Sigafoos, J. (2017). Teaching a Child With ASD to Approach Communication Partners and Use a Speech-Generating Device Across Settings: Clinic, School, and Home. *Canadian Journal of School Psychology*, 32(304), 228-243. DOI: 10.1177/0829573516682812
- Wade, M., Prime, H., Jenkins, J., Yeates, K., Williams, T., & Lee, K. (2018). On the relation between theory of mind and executive functioning: A developmental cognitive neuroscience perspective. *Psychon Bulletin & Review*, 25(6), 2119-2140. https://doi.org/10.3758/s13423-018-1459-0
- Wagner, J. (1999). *Dorothy Heathcote: Drama as a Learning Medium*. Maine: Calendar Islands Publishers LLC.
- Wahler, R., Berland, R., & Coe, T. (1979). Generalization Processes in Child Behvior Change. In B. Lahey & A. Kazdin (Eds.), *Advances in Clinical Child Psychology* (pp. 35-69). Boston: Springer.
- Walford, G. (2009). The practice of writing ethnographic fieldnotes. *Ethnography and Education*, 4, 117-130. DOI: 10.1080/17457820902972713
- Walker, A., Barry, T., & Bader, S. (2010). Therapist and Parent Ratings of Changes in Adaptive Social Skills Following a Summer Treatment Camp for Children with Autism Spectrum Disorders. *Child Youth Care Forum*, *39*, 305–322. DOI: 10.1007/s10566-010-9110-x
- Wallace, D., & Van Fleet, C. (2012). *Knowledge into Action: Research and Evaluation in Library and Information Science*. California: Library of Congaree Cataloguing.
- Walls, A., Deane, K., & O'Connor, P. (2016). "Looking for the blue, the yellow, all the colours of the rainbow": The value of participatory arts for young people in social work practice. *Aotearoa New Zealand Social Word*, 28(4), 67-79.
- Walsh, D. (2012). Doing ethnography. In C. Seale (Ed.), *Researching Society and Culture* (3rd ed.). London: SAGE Publications Ltd.
- Walters, S. (2017). *Critical Review: Is theatre an effective intervention method for people living with a communication disorder* (unpublished manuscript)
- Wang, A., Dapretto, M., Hariri, A., Sigman, M., & Bookheimer, S. (2004). Neural correlates of facial affect processing in children and adolescents with autism spectrum disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(4), 481490. doi:10.1097/00004583-200404000-00015

- Wang, X., Chen, L., Liu, P., Polk, R., & Feng, T. (2020). Orientation to and processing of social stimuli under normal and competitive conditions in children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 78(101614). https://doi.org/10.1016/j.rasd.2020.101614
- Wannenburg, N., & Niekerk, R. (2019). Re-witnessing the autistic imagination. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 24(2), 139-146. https://doi.org/10.1080/13569783.2018.1561256
- Wass, S., & Porayska-Pomsta, K. (2014). The uses of cognitive training technologies in the treatment of autism spectrum disorders. *Autism*, 18(8), 851–871. DOI: 10.1177/1362361313499827
- Watkins, L., O'Reilly, M., Kuhn, M., & Ledbetter-Cho, K. (2019). An interest based intervention package to increase peer social interaction in young children with Autism Spectrum Disorder. *Journal of Applied Behavior Analysis*, 1(52), 132-149. doi: 10.1002/jaba.514
- Watkins, L., O'Reilly, M., Kuhn, M., Gevarter, C., Lancioni, GE., Sigafoos, J., & Lang, R. (2015). A review of peer-mediated social interaction interventions for students with autism in inclusive settings. *Journal of Autism and Developmental Disorders*, 45(4), 1070-83. doi: 10.1007/s10803-014-2264-x.
- Watson, K., Miller, S., Hannah, E., Kovac, M., Damiano., Sabatino-DiCrisco, A...Dichter, G. (2015). Increased reward value of non-social stimuli in children and adolescents with autism. *Frontiers in Psychology*, 6(1026). https://doi.org/10.3389/fpsyg.2015.01026
- Way, B. (1967). Development through Drama. London: Longmans, Green and Co Ltd.
- Webb, B., Miller, S., Pierce, T., Strawser, S., & Jones, P. (2004). Effects of Social Skill Instruction for High-Functioning Adolescents with Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 19(1), 53–62. https://doi.org/10.1177/10883576040190010701
- Wegerif, R., & Dawes, L. (2004) *Thinking and learning with ICT: raising achievement in primary classrooms*. London, Routledge.
- Weimer, A., Burleson, C., Stegall, S., & Eisenman, R. (2020). Theory of mind and social competence among school-age Latino children. *Early Child Development and Care*, 190(6), 902-910. DOI: 10.1080/03004430.2018.1499625
- Weisberg, R. (1986). Creativity: Genius and other myths. New York: W H Freeman.
- Weiss, E., Gschaidbauer, B., Samson, A., Steinbäcker, K., Fink, A., & Papousek, I. (2013). From Ice Age to Madagascar: Appreciation of slapstick humor in children with Asperger's syndrome. *Humor: International Journal of Humor Research*, 26(3), 423–440. DOI: 10.1515/humor-2013-0029
- Weisz, J. R., Chorpita, B. F., Frye, A., Ng, M. Y., Lau, N., Bearman, S. K......Hoagwood, K. E. The Research Network on Youth Mental Health. (2011). Youth Top Problems: Using idiographic, consumer-guided assessment to identify treatment needs and to track change during psychotherapy. *Journal of Consulting and Clinical Psychology*, 79(3), 369–380. doi.org/10.1037/a0023307
- Wellman, H. (2018). Theory of mind: The state of the art. *European Journal of Developmental Psychology*, 15(6), 728-755. DOI: 10.1080/17405629.2018.1435413

- Werth, A., Perkins, M., & Boucher, J. (2001). Here's the weaver looming up' Verbal humour in a woman with high-functioning. Autism. *Autism*, 5(2), 111–125. DOI: 10.1177/1362361301005002002
- Wheeler-Brownlee, G. (1985) Imagination: the connection enigma. *The Journal of Creative Behavior*, 19(4), 255-269.
- White, S. W., Mazefsky, C. A., Dichter, G. S., Chiu, P. H.,...Richey, J. A., & Ollendick, T. H. (2014). Social-cognitive, physiological, and neural mechanisms underlying emotion regulation impairments: Understanding anxiety in autism spectrum disorder. *International Journal of Developmental Neuroscience*, 39, 22–36. https://doi.org/10.1016/j.ijdevneu.2014.05.012
- White, S., Hill, E., Happe, F., & Frith, U. (2009). Revisiting the strange stories: Revealing mentalizing impairments in autism. *Child Development*, 80(4), 1097-1117. https://doi.org/10.1111/j.1467-8624.2009.01319.x
- White, S., Keoing, K., & Scahill, L. (2007). Social Skills Development in Children with Autism Spectrum Disorders: A Review of the Intervention Research. *Journal of Autism and Developmental Disorders*, *37*, 1858–1868. doi: 10.1007/s10803-006-0320-x.
- White, S., Koenig, K., & Scahill, L. (2010). Group Social Skills Instruction for Adolescents With High Functioning Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 25(4), 209–219. https://doi.org/10.1177/1088357610380595
- Whyte, J. (2005). *Research with children with disabilities: guidelines and checklist for good practice.*Dublin: Children's Research Centre, Trinity College Dublin.
- Williams, D., Mazefsky, C., Walker, J., Minshaw, N., & Goldstein, G. (2014). Associations Between Conceptual Reasoning, Problem Solving, and Adaptive Ability in High-functioning Autism. *Journal of Autism Developmental Disorder*, 44, 2908-2920. DOI 10.1007/s10803-014-2190-y
- Williams, E., Gleeson, K., & Jones, B. (2017). How pupils on the autism spectrum make sense of themselves in the context of their experiences in a mainstream school setting: A qualitative metasynthesis. *Autism*, 23(1), 8-28. https://doi.org/10.1177/1362361317723836
- Wilmer-Barbrook, C. (2013). Adolescence, Asperger's and acting: can dramatherapy improve social and communication skills for young people with Asperger's syndrome? *Dramatherapy*, *35*(1), 43–56. https://doi.org/10.1080%2F02630672.2013.773130
- Winchell, N., Sreckovic, M., & Schultz, T. (2018). Preventing Bullying and Promoting Friendship for Students with ASD: Looking Back to Move Forward. *Education and Training in Autism and Developmental Disabilities*, *53*(3), 243-252. http://daddcec.org/Publications/ETADDJournal.aspx
- Wing, L., & Gould, J. (1979). Severe impairments of social interaction and associated abnormalities in children: Epidemiology and classification. *Journal of Autism Developmental Disorders*, 9, 11–29. https://doi.org/10.1007/BF01531288
- Winston, J. (2015). *Transforming the teaching of Shakespeare with the Royal Shakespeare Company*. London: Bloomsbury.

- Winstone, N., Huntington, C., Goldsack, L., Kyrou, E., & Millward, L. (2014). Eliciting rich dialogue through the use of activity-oriented interviews: Exploring self-identity in autistic young people. *Childhood*, *21*(2), 190-206. doi:10.1177/0907568213491771
- Wirth, J., & Klieme, E. (2003). Computer-based Assessment of Problem Solving Competence. Assessment in Education: Principles. *Policy & Practice*, 10(1), 329-345. https://doi.org/10.1080/0969594032000148172
- Wolfinger, N. (2002). On writing field notes: collection strategies and background expectancies. *Qualitative Research*, 2(1), 85–95. https://doi.org/10.1177/1468794102002001640
- Wood, J. J., Kuhfeld, M., Sturm, A., Cai, L., Wood, K. S., Cornejo Guevara, M. V..... Cho, A.-C., & Weisz, J. R. (2021). Personalized Autism Symptom Assessment With the Youth Top Problems Scale: Observational and Parent-Report Formats for Clinical Trials Applications. *Psychological Assessment*. Advance online publication. http://dx.doi.org/10.1037/pas0001065
- Wood, J.J., Drahota, A., Sze, K., Van Dyke, M., Decker, K., Fujii, C....Spiker, M. (2009). Brief Report: Effects of Cognitive Behavioral Therapy on Parent-Reported Autism Symptoms in School-Age Children with High-Functioning Autism. *Journal of Autism and Developmental Disorder*, 39, 1608-1612. https://doi.org/10.1007/s10803-009-0791-7
- Woods, R. (2017). Exploring how the social model of disability can be reinvigorated for autism: in response to Jonathan Levitt. *Disability & Society*, 32(7), 1090-1095. DOI: 10.1080/09687599.2017.1328157
- Woods, R. (2019). Demand avoidance phenomena: circularity, integrity and validity-a commentary on the 2018 National Autistic Society PDA Conference. *Good Autism Practice*, 20(2), 28-40. https://www.ingentaconnect.com/contentone/bild/gap/2019/00000020/00000002/art00004
- Woods, R. (2020). Pathological Demand Avoidance (PDA) in F. R. Volkmar (ed.), *Encyclopaedia of Autism Spectrum Disorders*. New York: Springer
- World Health Organisation (2019). *International statistical classification of diseases and related health problems* (11th ed.). https://icd.who.int/
- Wu, C., Tseng, L., An, C., Chen, H., Chan, Y., Shih, C., & Zhuo, S. (2014). Do individuals with auitsm lack a sense of humour? A study of humour comprehension appreciation, and styles among high school students with autism. *Research in Autism Spectrum Disorders*, 8, 1386-1393. doi:10.1016/j.rasd.2014.07.006
- Wüstenberg, S., Greiff, S., Vainikainen, M., & Murphy, K. (2016). Individual differences in students' complex problem solving skills: How they evolve and what they imply. *Journal of Educational Psychology*, *108*(7), 1028–1044. https://doi.org/10.1037/edu0000101
- Yakubova, G., & Taber-Doughty, T. (2017). Improving Problem-Solving Performance of Students with Autism Spectrum Disorders. *Focus on Autism and Other Developmental Disabilities*, 32(1), 3-17. DOI: 10.1177/1088357615587506
- Yakubova, G., & Zeleke, W. (2016). A Problem-Solving Intervention Using iPads to Improve Transition-Related Task Performance of Students With Autism Spectrum Disorder. *Journal of Special Education Technology*, 31(2), 77-86. DOI: 10.1177/0162643416650023

- Yergeau, M. (2013). Clinically Significant Disturbance: On Theorists Who Theorize Theory of Mind. *Disability Studies Quarterly*, *33*(4). http://dx.doi.org/10.18061/dsq.v33i4.3876
- Yin, R. (2014). *Case Study Research Design and Methods* (5th ed.). Thousand Oaks, California: Sage Publications Ltd.
- Yin, R. (2014). Case Study Research Design and Methods (5th ed.). California: SAGE Publications Ltd.
- Yoder, P., & McDuffie, A. (2006). Treatment of responding to and initiating joint attention. In T. Charman & W. Stone (Eds.), *Social & communication development in Autism spectrum disorders: Early identification, diagnosis, & intervention* (pp. 117–142). New York: Guilford Press.
- Yoo, H.-J., Bahn, G., Cho, I.-H., Kim, E.-K., Kim, J.-H., Min, J.-W., ... Laugeson, E. (2014). A Randomized Controlled Trial of the Korean Version of the PEERS Parent-Assisted Social Skills Training Program for Teens With ASD. *Autism Research*, 7, 145–161. DOI: 10.1002/aur.1354
- Young, K., Mannix McNamara., P., & Coughlan, B. (2017). Authentic inclusion-utopian thinking? Irish post-primary teachers' perspectives of inclusive education. *Teacher and Teacher Education*, 60, 1-11. http://dx.doi.org/10.1016/j.tate.2017.07.017
- Zager, D., Wehmeyer, M., & Simpson, R. L. (2012). Education Students with Autism Spectrum Disorders: Research Based Practices and Principals. New York: Routledge.
- Zane, E., Neumeyer, K., Mertens, J., Chugg, A., & Grossman, R. (2018). I think We're Alone Now:Golditary Social Behaviors in Adolescents with Autism Spectrum Disorder. *Journal of Abnormal Child Psychology*, 46(1), 1111-1120. DOI 10.1007/s10802-017-0351-0
- Zee, E., & Derksen, J. (2021). The Power of Systemizing in Autism. *Child Psychiatry & Human Development*, 52, 321-331. https://doi.org/10.1007/s10578-020-01014-4
- Zeedyk, S., Cohen, S., Eisenhower, A., & Blacher, J. (2016). Perceived Social Competence and Loneliness Among Young Children with ASD: Child, Parent and Teacher Reports. *Journal of Autism and Developmental Disorders*, 46(2):436–449. DOI: 10.1007/s10803-015-2575-6
- Zelazo, P., Jacques, S., Burack, J., & Frye, D. (2002). The relation between theory of mind and rule use: evidence from persons with autism-spectrum disorders. *Infant and Child Development*, 11(2), 171-195. https://doi.org/10.1002/icd.304
- Zhang, J., & Wheeler, J. (2011). A Meta-Analysis of Peer-Mediated Interventions for Young Children with Autism Spectrum Disorders. *Education and Training in Autism and Developmental Disabilities*, 46(1), 62–77. https://digitalcommons.brockport.edu/ehd_facpub/15?utm_source=digitalcommons.brockport.edu%2Fehd_facpub%2F15&utm_medium=PDF&utm_campaign=PDFCoverPages
- Zhang, Q. (2015). The voice of the child in early education research in Australia and New Zealand: A systematic review. *Australasian Journal of Early Childhood*, 40(3), 97–104. doi.org/10.1177/183693911504000313
- Zhang, Z., Peng, P., & Zhang, D. (2020). Executive Function in High-Functioning Autism Spectrum Disorder: A Meta-analysis of fMRI Studies. *Journal of Autism and Developmental Disorders*, 50, 4022–4038. https://doi.org/10.1007/s10803-020-04461-z

- Zhao, H., Swanson, A., Weitlauf, A., Warren, Z., & Sarkar, N. (2018). Hand-in-Hand: A Communication-Enhancement Collaborative Virtual Reality System for Promoting Social Interaction in Children with Autism Spectrum Disorders. *IEEE Trans Hum Mach Syst.* 48(2), 136–148. doi:10.1109/THMS.2018.2791562.
- Zheng, S., Kim, H., Salzman, E., Ankenman, K. & Bent, S. (2021). Improving Social Knowledge and Skills among Adolescents with Autism: Systematic Review and Meta-Analysis of UCLA PEERS for Adolescents. *Journal of Autism and Developmental Disorders*,) *51*, 4488-4503. https://doi.org/10.1007/s10803-021-04885-1

Appendices

Appendix A

Letter of Information and Assent Form: Fred



Letter of Information for Fred



What is research?

Research helps us to learn new things. In research we ask a question and try to find out the answer.

Why are we doing this research?

During the drama classes children learn about making friends and practising social skills. We want to see if you are able to use any of the things that you have learnt in drama at home or at school.

What happens if I join the research?

If you join the research I would go to school with you for two days, to see what school life is like for you and I would spend some time with you and your family at home also. I will ask your mum or dad and your teacher to fill out a form and have a chat with me about what you learn in drama and if you use this at home and at school. I will also have a chat with you about what you learn in drama, and if you use this at home and at school.

Important things to know

- · You get to decide if you want to take part
- You can say 'No' or you can say 'Yes'
- If you say 'Yes' you can always say 'No' later
- Nothing will change in drama class if you say 'Yes' or 'No'



Assent Form for Fred

	Yes √	N₀X
I have talked to Elaine and my mum or dad and		
understand what the research is about and what		
happens if I join the research.		
I want to join this research and am happy to		
have Elaine visit me at home and at school to see		
if the things I learn in drama are being used at		
home and at school.		
I understand that I can stop being in the		
research at any time I like.		

Name:		
Date:		

Letter of Information and Assent Form: Peadar



21/5/18

Dear Peadar,

As you know, in the drama classes we focus on making friends and developing our social skills. We know in drama all the young people are really good at interacting, making friends and using social skills. We want to see if the things we do in drama help people in social interactions at school and at home.

The Research Project

To learn more about social skills and interactions outside the drama class, I would like your permission to spend some time with you and your family. It is hoped that I would spend four days in total with you. The first two days would be during the week when you are at school / college and attending other activities. The next two days would be at a weekend or a holiday time, when you are not at school. I would be with you and your family for the whole day. Another part of this research would be interviewing people that are important in your life, such as your parents and teachers. I will be asking them about your social skills and interactions with others. I would also like to interview you, to get your thoughts on where you feel most comfortable socialising and why. All interviews will be audio recorded so that I can listen to them again later. I hope that through spending time with you, I will be able to understand more about what makes the social drama work and what helps you best socialise and interact with other people.

If you agree to participate in this research, I will ask you to do the following:

- Sign a form saying that you understand what the study is about and that you are happy to be involved.
- Allow me to spend time with you at home, in school and during other extracurricular activities.
- · Participate in an interview with me about your social skills and interactions.
- Allow me to interview people that are important in your life such as your parents and teachers

Participation in this study is voluntary and you can leave at any time, and nothing will change in drama classes.

If you have any more questions, we can have a chat and I will answer them as best I can.

Thanks,

Elaine

Assent Form for Peadar

	Yes√	NoX
I have talked to Elaine and my mum or dad and		
understand what the research is about and what		
happens if I join the research.		
I want to join this research and am happy to have Elaine		
visit me at home and at school to see if the things I		
learn in drama are being used at home and at school.		
I am happy for Elaine to interview my parents, teachers		
and me. I understand that these interviews will be		
audio recorded.		
I understand that I can stop being in the research at any		
time I like.		
I agree to take part in this research		

Name:_		
Date:_		

Appendix B

Social Drama Assessment Tool (SDAT)

© Prof Carmel O'Sullivan, School of Education, Trinity College Dublin

Social Drama Assessment Tool

Social Drama Assessment Tool (SDAT)

Researcher's name:	Participant's name:
Date and time of observation:	

Categories		ircle	Comment	
Categories		= poor /		Comment
		= excel		
	_	ways		
Self confidence	1	2	3	
		4	5	
Self esteem (perception of self in	1	2	3	
group)		4	5	
Personal well being	1	2	3	
(happiness/ contentment)		4	5	
General anxiety levels	1	2	3	
		4	5	
Level of concentration	1	2	3	
		4	5	
Problem solving ability	1	2	3	
		4	5	
Turn taking	1	2	3	
		4	5	
Volunteering answers to questions	1	2	3	
		4	5	
Willingness to work in pairs/groups	1	2	3	
		4	5	
Initiation of interaction (whole	1	2	3	
group/peers)		4	5	
Participation	1	2	3	
		4	5	
Competitiveness	1	2	3	
		4	5	
Expression of feelings	1	2	3	
		4	5	
Use of humour	1	2	3	
		4	5	
Literal use of language	1	2	3	
		4	5	
Recognition of non-verbal cues	1	2	3	
		4	5	
Use of appropriate body language?	1	2	3	
		4	5	
				<u> </u>

Categories	Please Circle	Comment
Categories	1 = poor / never	Comment
	5 = excellent /	
Makes relevant / irrelevant comments	always 1 2 3	
makes relevant / Irrelevant comments	4 5	
Monopolise activities/discussion	1 2 3	
Monopolise activities/discussion	4 5	
Passive during sessions/lessons	1 2 3	
	4 5	
Ability to adapt to change	1 2 3	
	4 5	
Listen to others and respond	1 2 3	
appropriately	4 5	
Appropriate eye contact	1 2 3	
	4 5	
Use of vocal expression	1 2 3	
	4 5	
Use of facial expression	1 2 3	
	4 5	
Enjoyment of session	1 2 3	
	4 5	
Commitment to the drama (fictional	1 2 3	
world)	4 5	
Empathy	1 2 3	
	4 5	
Body contact	1 2 3	
	4 5	
Gross motor skills/gait/movements	1 2 3	
	4 5	
Drama skills	1 2 3	
	4 5	
Imagination	1 2 3	
	4 5	
Differentiation between fiction and	1 2 3	
reality	4 5	
Executive functioning (ability to take	1 2 3	
in information, update, and respond)	4 5	
Flexibility	1 2 3	
	4 5	
Ability to make a friend	1 2 3	
	4 5	
Cognitive ability	1 2 3	
	4 5	

-

Theory of mind (understand another's	1	2	3	
perspective)		4	5	

D	c		
Progress	rrom	previous	session:

Areas to work on:

Overall evaluation of session:

Appendix C

Psychological Assessments Mapped onto S-DAT

ASSP: Autism Social Skills Profile (Bellini, 2006)

SCQ: Social Communication Questionnaire (2003)

Anxiety Disorders Interview Schedule for DSM-IV: Parent Interview (for child version) (Silverman & Albano)

BASC3: The Behaviour Assessment System for Children (Reynolds & Kamphaus) (Parent rating scales) (12-21)

BASC3: The Behaviour Assessment System for Children (Reynolds & Kamphaus) (Parent rating scales) (6-11)

BASC3: Teacher rating scales (2-5)

BASC3:The Behaviour Assessment System for Children (Reynolds & Kamphaus) (Teacher rating scales) (6-11)

SRS-2: Social Responsiveness Scale Second Edition (School Age)

The Asperger Syndrome (and high-functioning autism) Diagnositic Interview (ASDI) (Gillberg, 2001)

Vineland-11 (Parent/Caregiver Rating Form) (Sparrow, Cicchetti & Balla) (2005)

DAT	Anxiety Disorders Interview Schedule	BASC3: Parent rating scales (12-21)	BASC3: Parent rating sca	BASC3: Teacher rating scales (2-5)	BASC3: Teacher rating scales (6-	SBS-2 (School Age)	The Asperger Syndrome (and I	Vineland
elf confidence						11) Has good self confidence	[allu l	1
elf esteem (perception of self in group						· · · · · · · · · · · · · · · · · · ·		i .
ersonal well being (happiness / conter				1		T .		1
General anzietą levels		20) is fearful 32) is easily stressed 135) Worries about things that cannot be changed 133) Says. The airfact of will make a mistake' 183) Says Tiget nervous during tests' or Tests make me nervous'	mistake'	8) is fearful [5) is easily stressed 29) Has panic attacks 64 is nervous 59 is one and a raidd i vill make a mistake" 89) Vorines about things that cannot be changed 70) Vorines about parents 91) is nervous around new people 99) is nervous	8) Is fearful 196) Vorries 196 Vorries 196 Vorries 206 Vorries 206 Vorries 206 Vorries 206 Vorries 207 Vorries 207 Vorries 208 Vorries 2			5) Refuses to fo to school or work because of fear, feelings of rejection or isolation etc. (5) Is overilly amoust or nervous:
evel of concentration				1) Pays attention		T.		t .
Problem solving ability		173) Finds a way to solve problems	99) Finds was to gale problems	17) Finds way to solve problems 58) Gives good suggestions for solving problems	17) Finds ways to solve problems 148) Analyzes the nature of a problem before starting to solve it 101) Overcomes problems 54) Gives good suggestions for problem			V 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
roblem solving ability		173) Finds a way to solve problems	83) Finds ways to solve problem	i baj Gives good suggestions for solving problems	solving			6) Plaus cooperatively with one or more child
Turn taking		14) Cannot wait to turn take 23) Talks over others 177) Inturupts others when they are speaking	36) cannot wait to turn take 121) Interupts others when they are speaking.	30) Speaks our of turn during class 88) Cannot wait to take turn 90) Speaks our of turn during class	30) Speaks out of turn during class 1281 Cannot wait to take turn	13) is awkard in turn-taking interactions with peers for example doesn't seem to understand the give-and-take of conversations).		to program cooperatively with one of more only for up to 5 million when asked while playing games or sport. 7) Plays cooperatively with more than one ohld for more than 5 milliones. The form one than 5 milliones without interrupting or being rude.
		177) inturrupts others when they are speaking	are speaking	30) Speaks out or turn during class	126) Cannot wait to take turn			
Yolunteering to answer questions				1		51) Has difficulty answering questions direct	ly and ends up talking around the subjec	
		i i		1		E.		
		1		Language		į.		i.
Villingness to work in pairs∤groups				7]) Quickly joings group activities	118) Starts conversations	20) Does not join group activities unless told to do so. 727) Avoids starting social interactions with	difficulties interacting with peers? If so, in what way? 2) Does he/she exhibit a low degree of concern or seeming lack of interest in making friends or interacting	behaviour with others the same age (for example sags 'Do you want to play?' or takes another child be the hand, etc.) 5) Chooses to play with other children (for example does not stag on the edge of a group or avoid others). 14) Seeks out others for play or companionship (for example, invites others home, goes to another's home, plays with
Initiation of interaction (whole group / p		101) Starts conversations		144) Quicly joins group activities	127) Shows interests in others' ideas	peers or adults	with peers? If so, please specify	others on the playground etc.)
						C.		E
Participation						î:		T.
Competitiveness								
Expression of feelings		142) is able to describe feelings accurately	139) Is able to describe feelings accurately 131) Shows feelings that do not fit the situation	99) IS able to describe feelings accurately	89) Is able to describe feelings accurately 136) Shows basic emotions clearly	12) is able to communicate his or her feeling 48) Has a sense of humour, understands jokes.	is to others	19) Uses words to express own emotions (for example Tm happy. Tm soared 'eto.' 20) Shows understanding hat gentle teasing with family and friends can be a form of humour
			-	ł		47) IS too silly or laughs inappropriatley.	4	numour
Literal use of language						(10) Takes things too literally and doesn't ge	t me real meaning of a conversation	indirect oues in conversation (for example knows that yawns may mean "I'm bored" or a quick change of subject may mean, I don't want to talk about that 'etc'] [6-23] Refains from entering group when nonverbal cues indicate that he or she is not welcome

Appendix D

School Questionnaire



1.	Please	e state	your re	elationship with the child:		
			□ s _l	lass Teacher pecial Education Teacher pecial Needs Assistant		Principal Facilitator of Extra Curricular Activity Home School Community Liaison
		Othe	er. Plea	se state:		
2.	rate h	ow ofte	en the	ocial skills which the child may exhibit during child exhibits each skill/behaviour indepen lines to rate the behaviour:	_	
		Circl	e S if the O if t	he child never or almost never exhibits the ne child sometimes or occasionally exhibit he child often or typically exhibits the skill he child very often or always exhibits the	s the skill or or behaviou	behaviour ir
	focusi		who is p	f Description' section to provide additiona present when the behaviour is exhibited, w		
dII/I	Behavi	our: Ta	kes tu	rns during activities and games		
low	Often	/Frequ	ency	Context Please tick all that apply		Brief Description
N	(§)	0	V	☐ Small Group setting ☐ Whole Class setting		easier to turn take in structured card/board games completed
1	2	3	4	☐ One-to-one with peer ☐ Free play setting (e.g. yard)	during reso	purce with the teacher present), than iring free-play with his peers (e.g. in
				Other. Please state:		

Never/Almost Never	Sometimes/Occasionally	Often/Typically	Very Often/Always
N	S	0	V

Please complete

Skill/						
	Behavi	our: Ta	ikes tu	rns during activities and games		
How	Often	/Frequ	ency	Context	Brief Description	
				Please tick all that apply		
N	S	0	٧	☐ Small Group setting		
				☐ Whole Class setting		
1	2	3	4	☐ One-to-one with peer		
				Free play setting (e.g. yard)		
				Other. Please state:		
Skill/	Behavi	our: In	itiates	interactions with peers		
				Context	Brief Description	
How Often/Frequency			ciicy	Please tick all that apply	bilei bescription	
N	S	0	V	☐ Small Group setting		
			١ ٠	☐ Whole Class setting		
1	2	3	4	One-to-one with peer		
-	-		1	☐ Free play setting (e.g. yard)		
				Tree play setting (e.g. yara)		
				Other. Please state:		
				other. Hease state.		
Skill/	Behavi	our: Pa	erticipa	ites in whole group activities		
				ites in whole group activities Context	Brief Description	
	Behavi Often,			Context	Brief Description	
				Context Please tick all that apply	Brief Description	
How	Often	/Frequ	ency	Context Please tick all that apply Small Group setting	Brief Description	
How	Often	/Frequ	ency	Context Please tick all that apply Small Group setting Whole Class setting	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard)	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard)	Brief Description	
How	Often,	/Frequ O	ency V	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard)	Brief Description	
N 1	S 2	O 3	V 4	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state:	Brief Description	
N 1	Often, S 2	O 3 our: Is	V 4	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state:		
N 1	S 2	O 3 our: Is	V 4	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context	Brief Description Brief Description	
N 1 Skill/I	S 2 Behavi Often,	O 3 our: Is	V 4 willing	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply		
N 1	Often, S 2	O 3 our: Is	V 4	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply Small Group setting		
N 1 Skill/How	S 2 Behavi Often,	O 3 our: Is /Frequ	V 4 willing	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply Small Group setting Whole Class setting		
N 1 Skill/I	S 2 Behavi Often,	O 3 our: Is	V 4 willing	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer		
N 1 Skill/How	S 2 Behavi Often,	O 3 our: Is /Frequ	V 4 willing	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply Small Group setting Whole Class setting		
N 1 Skill/How	S 2 Behavi Often,	O 3 our: Is /Frequ	V 4 willing	Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer Free play setting (e.g. yard) Other. Please state: to work as part of a group/pair Context Please tick all that apply Small Group setting Whole Class setting One-to-one with peer		

Skill/	Behavi	our: Vo	oluntee	ers to answer questions, when not direct	ly asked to him/her
How Often/Frequency		ency	Context	Brief Description	
				Please tick all that apply	
N	S	0	V	☐ Small Group setting	
1	2	3	4	One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Behavi	our: Ca	an expr	ess feelings verbally and appropriately t	o peers and adults
	Often			Context	Brief Description
			,	Please tick all that apply	2
N	S	0	٧	☐ Small Group setting	
	-	_		☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
culii/i	Pobová	ouri H		renriate ave centact	
				oropriate eye contact Context	Print Description
now	Often,	/Frequ	ency	Please tick all that apply	Brief Description
N	S	0	V	☐ Small Group setting	
IN	3	0	v	☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
-	-	3	7	Free play setting (e.g. yard)	
				Enrec play setting (e.g. yara)	
				Other. Please state:	
				other. Hease state.	
61 tu ti					
				nour appropriately	Briof Document
How	Often,	/Frequ	ency	Context Please tick all that apply	Brief Description
N	S	0	V	☐ Small Group setting	
14	J	0	٧	☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
-	-	,	, T	Free play setting (e.g. yard)	
				Tree play setting (e.g. yara)	
				Other, Please state:	
				State Floor	

Skill/	Behavi	our: Re	ecognis	ses non-verbal-cues (e.g. gestures, facial	expressions)
How Often/Frequency			ency	Context	Brief Description
				Please tick all that apply	
N	S	0	٧	☐ Small Group setting	
1	2	3	4	One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Behavi	our: De	emons	trates appropriate body language	
	Often			Context	Brief Description
			,	Please tick all that apply	
N	S	0	٧	☐ Small Group setting	
				☐ Whole Class setting	
1	2	3	4	☐ One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Rehavi	our: M	onono	lises or 'takes over' discussions and/or a	ctivities
	Often			Context	Brief Description
HOW	Oiteil	/ ri equ	ency	Please tick all that apply	bilei bescription
N	S	0	V	☐ Small Group setting	
	,		٠	☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
-	-	_		Free play setting (e.g. yard)	
				Tree play setting (e.g. yara)	
				Other. Please state:	
cuin/	Dabaui	ouer le		e in a group	
				Context	Brief Description
How Often/Frequency			ency		brief bescription
	Official			Diagra tick all that apply	
		0	V	Please tick all that apply	
N	S	0	٧	☐ Small Group setting	
N	S		_	☐ Small Group setting ☐ Whole Class setting	
		0	V 4	☐ Small Group setting ☐ Whole Class setting ☐ One-to-one with peer	
N	S		_	☐ Small Group setting ☐ Whole Class setting	
N	S		_	☐ Small Group setting ☐ Whole Class setting ☐ One-to-one with peer	
N	S		_	☐ Small Group setting ☐ Whole Class setting ☐ One-to-one with peer ☐ Free play setting (e.g. yard)	
N	S		_	☐ Small Group setting ☐ Whole Class setting ☐ One-to-one with peer ☐ Free play setting (e.g. yard)	

Skill/	Behavi	our: Ac	dapts v	vell to change (e.g. in routine, or expecte	ed outcome of game/task)
How Often/Frequency			ency	Context	Brief Description
L .				Please tick all that apply	
N	S	0	٧	☐ Small Group setting	
				☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
				☐ Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Behavi	our: Lis	stens to	o others and responds appropriately	
	Often			Context	Brief Description
			•	Please tick all that apply	•
N	S	0	V	☐ Small Group setting	
				☐ Whole Class setting	
1	2	3	4	One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Behavi	our: Us	ses app	propriate facial expressions	
	Often			Context	Brief Description
	O recin,	rrequ	ciicy	Please tick all that apply	brief bescription
N	S	0	V	☐ Small Group setting	
	_	_	•	☐ Whole Class setting	
1	2	3	4	☐ One-to-one with peer	
				Free play setting (e.g. yard)	
				Other. Please state:	
Skill/	Behavi	our: De	emons	trates empathy towards others	
	Often			Context	Brief Description
	J. Cen	, cqu	Liney	Please tick all that apply	oner ocompani
N	S	0	V	☐ Small Group setting	
"	_	_		☐ Whole Class setting	
1	2	3	4	☐ One-to-one with peer	
_	_	_		Free play setting (e.g. yard)	
				Other. Please state:	

3.		ld engages more easily with peers when: tick all that apply)
	□He/sh □The to □There	e has selected the game/activity themselves ie is participating in a technology based game/activity opic of conversation is of interest to him/her is an adult supporting him/her during the interaction e is participating in role-play/make believe play
		Other. Please state:

Thank you very much for taking the time to compete this survey.

Please do not hesitate to contact me at clotwoe@tcd.ie or 086-3769030 if you have any questions, or if you would like further information on this study.

Appendix E

Letters of Information and Consent Forms: School



Scoil an Oideachais School of Education

Information Letter for Principal

17/2/18

Dear Principal,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in the drama class which Fred attends on a Saturday. The Social drama classes which Fred is currently attending have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of Fred's life beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used at home and at school. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with Fred over a number of days, in a variety of places such as at home, school and other clubs or activities in which he is involved. With parental permission, we are requesting your permission to observe Fred in school for two days. These days would be agreed in advance with Fred's family and the school board of management to accommodate the family and the school schedule.



Scoil an Oideachais

Your part in this research

This research would involve those working in school with Fred (e.g. class teacher, Special Needs Assistant) completing a questionnaire about Fred's social skills and interactions before the two observation days, and, where possible, being interviewed about Fred's social skills. All interviews will be audio recorded so that I can listen to them again later.

Participation in this study is entirely voluntary and all participants can withdraw from the research at any time without a reason and without any consequence. All information that staff share during interviews is confidential, and anything that is observed by me is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. Anonymised information will be used for research publications and presentations, which means that names will not be associated with any information written about any person. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

All staff working with Isobel will receive information about this study, and they will be asked to email me their consent forms to let me know if they agree to participate. Please do not hesitate to contact me if you have any questions relating to this research.

I look forward to hearing from you soon.

Yours sincerely,

Elaine Clotworthy

PhD Researcher



Information Letter for Teachers

27/2/18

To whom is may concern,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in the drama class which Fred attends on a Saturday. The Social drama classes which Fred attends have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of Fred's life beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used in other settings, such as at home, school and during extra-curricular activities. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with Fred over a number of days, in a variety of places such as at home, school and other clubs or activities in which he is involved. With parental permission, we are requesting your permission to observe Fred in your classes for two days. These days would be agreed in advance with Fred's family and the school board of management to accommodate the family and the school schedule.



Your part in this research

Another component of this research would involve you completing a questionnaire about Fred's social skills. If you are agreeable to this, a link to the questionnaire about Fred's social skills will be sent to you via email. If, however, you do not wish to complete the questionnaire but are happy to have Fred observed in your class, we would also be most grateful. If you were agreeable to an interview to further discuss Fred's social skills, it would also be really helpful to the research.

Participation in this study is entirely voluntary and you can withdraw from the research at any time without a reason and without any consequence. All information that you share during your interview is confidential, and anything that is observed by me is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. Anonymised information will be used for research publications and presentations, which means that names will not be associated with any information written about any person. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

Please email me at clotwoe@tcd.ie to let me know if you agree to participate in this study, and please do not hesitate to contact me if you have any questions relating to this research.

I look forward to hearing from you soon.

Yours sincerely,

Elaine Clotworthy

PhD Researcher



Information Letter for SNAs

2/3/18

To whom is may concern,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in the drama class which Fred attends on a Saturday. The Social drama classes which Fred attends have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of Fred's life beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used in other settings, such as at home, school and during extra-curricular activities. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with Fred over a number of days, in a variety of places such as at home, school and other clubs or activities in which he is involved. We have received permission from Fred's parents, the school board of management and Fred's call teacher for observations to take place in the school setting.



Consent Form for Teachers & SNAs

Research Title: Examining the generalisability of 'Social Drama' for young people with Autism Spectrum Disorders to environments outside of the drama room

Researcher: Elaine Clotworthy, School of Education, Trinity College Dublin, clotwoe@tcd.ie, 0863769030

Please read the statements below and tick the relevant boxes:

Statement	Yes	No
I have read and understood the information provided about the research.		
I understand that the researcher will be audio-recording an interview with me.		
I understand that the researcher might include quotes from the interview in the research.		
I understand that the researcher will be observing the participant in the educational setting in which I work/teach.		
I understand that I will remain anonymous, that identities and research records will be kept confidential, and that no real names of children, parents, teachers, school principals, special needs assistants, home tutors, preschools, or primary schools will be used in the research.		
I understand that all information collected will be securely stored during the research and destroyed when it is no longer needed for the research.		
I understand that the research might be presented at conferences and published in academic journals and educational magazines.		
I understand that it is okay for me stop taking part in the research at any time without explaining why.		
My participation in the research is entirely voluntary.		
I agree to take part in the research.		
Signature:		

Print Name:				
Date:				

Appendix F

Home Questionnaire



Examining the generalisability of 'Social Drama' for young people with Autism Spectrum Disorders to environments outside of the drama room: Home Settings

Researcher

My name is Elaine Clotworthy. I am a PhD Candidate at Trinity College Dublin where I am conducting research on the generalisability of social skills for young people with Autism Spectrum Disorders from the Social Drama space to other environments such as the home and educational settings.

Purpose of Questionnaire

The purpose of this questionnaire is to ask those who know young people with Autism Spectrum Disorders if they observe specific social skills being demonstrated, how frequently and in what context these social skills are demonstrated.

When completing this questionnaire, you will be asked to:

- a) rate the frequency of social skills demonstrated
- b) identify the context / settings in which these social skills occur
- give a brief description of where, when and with whom the young person would typically demonstrate this social skill

Questionnaire Use

This questionnaire is part of a doctoral study which is being conducted at the School of Education Trinity College Dublin.

Confidentiality

All information gathered in questionnaires is confidential and no names or identifying features will be used in the write up of this research. The research adheres to the ethical guidelines of the School of Education, Trinity College Dublin.

Contact Details

If you require any further information please do not hesitate to contact me via email: clotwoe@tcd.ie



Examining the generalisability of 'Social Drama' for young people with Autism Spectrum Disorders to environments outside of the drama room: Home Settings

1. Please state your relationship to the young person:	
Parent	
Grandparent	
Aunt / Uncle	
Child Minder	
Other	

The following are social skills which the young person may demonstrate during social interactions or in social situations. Please rate how often the young person demonstrates each skill / behaviour independently, without assistance from others and in what context / setting.

Please use the following guidelines to rate the behaviour:

Never or almost never demonstrates the skill or behaviour Sometimes or occasionally demonstrates the skill or behaviour Often or typically demonstrates the skill or behaviour Very often or always demonstrates the skill or behaviour

For example, the first question below (question 2), will ask you to rate the young person's ability to take turns in the following settings: a small group setting (e.g. with a sibling and parent), large group setting (e.g. family gatherings / parties), one-to-one with a peer, one-to-one with an adult and during free play / unstructured activities. You are also asked to give details about who is present, what activities are taking place and where exactly turn taking is demonstrated.

Thank you in advance for taking the time to complete this questionnaire. You perspective and insights are invaluable in assessing the generalisability of 'social drama' for young people with Autism Spectrum Disorders to environments outside of the drama room.

* 2. Takes turns during activities and games

	Small group setting	Large group setting	One-to-one with peer	One-to-one with an adult	Free play / Uns
Takes turns during activities and games.	*	\$		•	
Please give det	alls of specific people present, activi	ties undertaken and exact location v	where turn taking is demonstrated.		

* 3. I	Initial	tes ir	ntera	ection	ıs witl	h peers.

Initiates Interactions with peers		*	•	•	•
Please give de	talls of specific people present,	activities undertaken and exact location	on where interactions with peers are ini	tiated.	
4. Participate	es in large group activities. Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play /
Participates in large group activities		•	•	•	\$
Please give del	tails of specific people present,	activities undertaken and exact location	on where participation in large group ac	tivities takes place.	
5. Is willing to	o work as part of a group /	pair.	One-to-one with a peer	One-to-one with an adult	Free play / Unstr
ts willing to work					
as part of a group / pair	*	*	•	\$	

	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play
15-1	oman group setting	Large group setting	One-to-one with a peer	One-to-one with all addit	rice play
Volunteers to answer					
questions.					
when not	‡	‡	\$	‡	
directly					
asked to					
him / her					
Please give detail	s of specific people present, activi	ties undertaken and exact location when	re volunteering to answer questions is	demonstrated.	
			*		
7. Can express	feelings verbally and approp	oriately to peers and adults.			
	Small group setting	Large group setting	One-to-one with a peer	Free play / Unstructured activities	
Can express					
feelings					
verbally and	\$	\$	\$	\$	
appropriately to peers and					,
adults					
Please give detail	s of specific people present, activi	ties undertaken and exact location when	re feelings are expressed appropriately	r_	
,			•		
B. Uses approp	riate eye contact (e.g. make	s eye contact when speaking to s	someone).		
	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play
Uses	- 1				
appropriate					
eye contact					
-		the conductation and condition in the			
-	s of specific people present, activi	ties undertaken and exact location whe	re appropriate eye contact is demonstra	ated.	
-	s of specific people present, activi	ties undertaken and exact location when	re appropriate eye contact is demonstra	sted.	

O Hene burn	nur annomiatoly (e.e. makes inte	res appropriate to the easts of			
e. Uses nunk	our appropriately (e.g. makes jok Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free pla
Uses humour		,.,,			
appropriately (e.g. makes					
jokes				\$	
appropriate to the					
context)					
rease give ueu	на от вреше реорге резень, остине	s undertaken and exact location where	пином в изеи арргоричесту.		
10. Recognis	es and responds to non-verbal o	cues (e.g. gestures and facial ex Large group setting	pressions). One-to-one with a peer	One-to-one with an adult	Free play
Recognises					
non-verbal cues		\$			
Demonstrates appropriate	Small group setting	e (e.g. high five with a peer, shak Large group setting	ing hands when meeting some One-to-one with a peer	One-to-one with an adult	Free p
body language				•	
	alis of specific people present, activitie	is undertaken and exact location when	e appropriate body language is demo	nstrated.	
	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free pla
Monopolises or takes					
over' discussions	‡	\$	‡	*	
and / or activities					
Please give det	alls of specific people present, activitie	s undertaken and exact location when	e Taking over' of discussions / activitie	es is demonstrated.	

ls passive	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play / Ur
assive					
_	\$	\$	\$	\$	
a					
			rre passive behaviour is demonstrated.		
. Adapts we	ll to change (e.g. in routine, o	or expected outcome of game / ta	ask).		
	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play / U
dapts		<u> </u>	-11	-11	
rell to					
ange					
se give detai	is of specific people present, activ	ties undertaken and exact location wh	ere adapting well to change is demonstr	ated.	
stens to	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free p
hers and			\$		\$
sponds ppropriately					
-hydronny					
	is of specific people present, activ	ties undertaken and exact location wh	ere listening and responding to others a	ppropriately is demonstrated.	
ise give deta					
ise give detai					
ase give detai					
ase give detai					
ase give detai					
ase give detai					
ase give deta					
ase give detai					
		g. smiling when hearing happy n			
. Uses appr	opriate facial expressions (e. Small group setting	g. smiling when hearing happy n Large group setting	ews). One-to-one with a peer	One-to-one with an adult	Free pi
. Uses appr				One-to-one with an adult	Free pi
. Uses appr		Large group setting	One-to-one with a peer		
. Uses appr lses ppropriate	Small group setting	Large group setting	One-to-one with a peer		Free pi
. Uses appr lsos ppropriata	Small group setting	Large group setting	One-to-one with a peer		
Uses approses	Small group setting	Large group setting	One-to-one with a peer		
Uses approved to the second se	Small group setting	Large group setting	One-to-one with a peer		
ises apprises propriete cital social appreciations	Small group setting	Large group setting	One-to-one with a peer		
Uses approvises propriete acid special	Small group setting	Large group setting	One-to-one with a peer		
	Small group setting	Large group setting	One-to-one with a peer		Free plu
Uses approvises propriete cital approximate cital approximate appr	Small group setting	Large group setting	One-to-one with a peer		
Uses approved to the second se	Small group setting	Large group setting	One-to-one with a peer		
Uses approvises propriete cital approximate cital approximate appr	Small group setting	Large group setting	One-to-one with a peer		

Sempany tomards outers (e.g	g. comorting a peer mile is saa,	•		
Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play
•	•	•		
of specific people present, activities	undertaken and exact location where	empathy is demonstrated.		
	Small group setting	Small group setting Large group setting	Small group setting Large group setting One-to-one with a peer	Small group setting Large group setting One-to-one with a peer One-to-one with an adult

18. Makes irrelevant comments (e.g. says things that have nothing to do with the conversation taking place / topic being discussed).

	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play / U
Makes irrelevant comments	•		\$	•	\$]
Please give deta	ils of specific people present, activ	ities undertaken and exact location	where irrelevant comments are made		

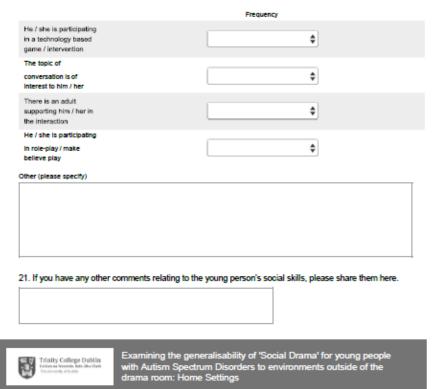
19. Makes relevant comments (e.g. makes points that are relevant to the topic being discussed).

	Small group setting	Large group setting	One-to-one with a peer	One-to-one with an adult	Free play
Demonstrates empathy towards others	•	•	*	*	

Please give details of specific people present, activities undertaken and exact location where relevant comments are made

_	
•	

* 20. The young person engages more easily with peers when:



Appendix G

Letters of Information and Consent: Home



Scoil an Oideachais School of Education

Information Letter for Parents

2/2/18

Dear Parent,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in the drama class which Fred attends on a Saturday. As you may be aware, the Social drama classes which your child is currently attending have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of your child's life beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used at home and at school. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with Fred over a number of days, in a variety of places such as at home, school and other clubs or activities in which he is involved. We would welcome your permission to accompany Fred to school, to spend time with him at home and during other extra-curricular activities in which he participates. It is intended that I would spend four days in total with Fred. The first two days would be during the week when he is at school and attending other activities. The next two days would be at a weekend or a holiday time, when he is not at school. These days would be agreed in advance with you to accommodate you and your family's schedule, and also with the relevant school board of management.



Scoil an Oideachais School of Education

Your part in this research

Another component of this research would involve me interviewing you about Fred's social skills. With your permission, I would like to interview your child and other important people in your child's life such as yourself, teachers and SNAs about generalisation of social skills. All interviews will be audio recorded so that I can listen to them again later.

I would welcome your permission to allow Fred to take part in this research, and to allow me to spend time with him for a total of four days at home and at school. If you give permission for Fred to take part, we will discuss my visits and the different places in which I will spend time with him.

Participation in this study is entirely voluntary and you can withdraw from the research at any time without a reason and without any consequence. All information that you share during your interview is confidential, and anything that is observed by me in your child's school or home is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. Anonymised information will be used for research publications and presentations, which means that names will not be associated with any information written about any person. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

Please do not hesitate to contact me if you	ı have any questions	relating to this	research. I can
be contacted via email: clotwoe@tcd.ie.			

Yours sincerely,

Elaine Clotworthy

PhD Researcher



Scoil an Oideachais School of Education

Consent Form for Parents

Research Title: Examining the generalisability of 'Social Drama' for young people with Autism Spectrum Disorders to environments outside of the drama room

Researcher: Elaine Clotworthy, School of Education, Trinity College Dublin, clotwoe@tcd.ie.

Please read the statements below and tick the relevant boxes:

Statement	Yes	No
I have read and understood the information provided about the research.		
I understand that the researcher will be interviewing me and key figures in my child's life such as teachers and SNAs		
I understand that the researcher will be audio-recording interviews with me and key figures in my child's life.		
I understand that the researcher will be distributing questionnaires to me and key figures in my child's life, such as teachers, Special Needs Assistants and facilitators of extracurricular activities.		
I understand that the researcher might include quotes from the questionnaire and interviews in the research.		
I understand that the research will be interviewing my child in the family home		
I understand that the researcher will be spending time with my child at home, in their educational setting and in other settings in which he/she engages in social interaction.		
I understand that I will remain anonymous, that identities and research records will be kept confidential, and that no real names of children, parents, teachers, siblings, schools or organisations will be used in the research.		
I understand that all information collected will be securely stored during the research and destroyed when it is no longer needed for the research.		
I understand that the research might be presented at conferences and published in academic journals and educational magazines.		
I understand that it is okay for me stop taking part in the research at any time without explaining why.		
My participation in the research is entirely voluntary.		
I agree to take part in the research.		
Signature:		
Print Name:		
Date:		
Contact Email and Phone:		

Appendix H

Parent Interview Guides

Fred

Fred Mum Interview 1st February 2019

Before the interview starts

- Explain recording device(s)
- Explain structure of interview-rating Fred's social skills, then chat about Fred and his
 interactions and social skills based on observations and conversations that we had
 over the four days observations

Thoughts: I might link the questions below, that directly relate to the SDAT, and ask them after we have done the rating (Self-esteem-felxibility). In teacher interview I found that there was some repetition, I feel that this would avoid that.

- 1) SDAT
- Questions (note-with teacher interview some questions got answered when filling out the SDAT-allow for this flexibility-don't have repetition as unfair on participant)
- · Topics discussed in informal interviews/conversations during observation days:
- Themes arising from the data-mums perspective on these, more examples and clarification where possible
- · Benefits of the drama from mums perspective

Self-Esteem

 When I was over in the house you mentioned your concerns to me about Fred's selfesteem, how he often said things about hating himself. Could you tell me a little bit more about that?

Anxiety

- We spoke a little bit about Fred's anxiety, and you expressed that it was a real
 concern. Can you tell me a little bit about how anxiety manifests itself for Fred? Can
 you think of any examples?
- Do you find that Fred's anxiety is worse in different places or around different people? Are there any other factors you can think of that impact Fred's levels of anxiety?

Competitive

We saw some examples of Fred being competitive when I was at the house (e.g.
racing in the park and wanting to win, or with David when they were discussing
tigers and he couldn't accept that he was incorrect). Do you find Fred is often
competitive when participating in games, races etc.? Is he competitive just with
some people? Any other examples you can think of where Fred would generally be
competitive?

Expression of feeling

 Does Fred find it easy or difficult to express his emotions? Is there a difference in his ability to express different types of emotions? E.g. is it easier for him to express when he is happy then when he is angry or sad?

Monopolising/Need to control

- When Fred asking us to race each other, you commented that this is an example of
 Fred's need to control. Could you tell me a little bit more about that? What other
 examples of this spring to mind. Are there any people he does this more with? Are
 there any places you see Fred doing this more (e.g. park vs home, other people's
 houses etc.).
- When Jessie and Luca were over, and the children were playing hide and seek (and it was time to go home), when they were found Fred shouted 'I say she is not there which means she is not', and you commented that you thought this was because he knew when Claire found them they would have to leave. I also observed this, what I call Fred 'narrating', describing what is going to happen. Can you think of any other examples of this?
- One day in the house when dad came home, and they were all playing trapped, Fred
 threw a tissue to try and gain dads attention and distract form Claire. You
 commented that Fred tried to distract when the attention is on Claire, and not him,
 and that he does it so discreetly that you wouldn't even notice. Is it only with Claire
 this takes place? Is it more with certain people (e.g. dad) or is it common to all?
- I have noticed that when Fred doesn't get his own way he sometimes uses language
 like 'I'll get mad' (if he is not allowed watch a dino video) or 'I'm going to get evil
 again'. Would Fred often use language like this if he doesn't get his own way? Again,
 is there any patter in relation to people, place or situation?

Passive

I have noticed that Fred can sometimes appear to not be listening (e.g. when we
were in Granny's house and we were talking about the earthquake in Bali. Fred
appeared disengaged but joined in the conversation asking about the earthquake.
He sometimes appears to dip in and out of conversations). Do you notice this often
in Fred? Is there a particular time/place/with particular people that this happens
with?

Game/Topic of Interest

• I noticed that Fred is very good at initiating games or conversations when they are of interest to him (e.g. dino games on trampoline). Another example is when David was over to play and Fred wanted to do a dino quiz, David wanted to play the fishing rod game Fred said 'We can't find it' so David did the quiz. He appears to have a good knowledge of getting his peers to play the games he wants, on his terms. Is this something you have noticed with Fred? Does he find it difficult if Claire or peers do not want to play his game? How does he generally respond?

Setting himself impossible tasks

• When we were in the park one day, Fred was trying to get up close to the seagulls and became very frustrated when they were flying away. When we had a chat about this you commented that he sometimes sets impossible tasks for himself, just so that he can say it didn't work. Can you tell me more about this? Any other examples that you can think of? You have mentioned that you do not see a pattern emerging with this behaviour-that there are no specific times or places, or people present, when this takes place. Why do you think Fred might do this?

Empathy (very good sometimes but not always-explore any pattern, specific people etc.)

 I have seen Fred demonstrate some excellent empathy both at home and at school (e.g. sympathising with Claire when she was talking about falling at school). Would you say Fred is generally empathetic? Are these certain situations in which he demonstrates more empathy? Do the people involved mater?

Socio-dramatic play and use of his imagination

• When I spent time with Fred, I noticed that he used his imagination lots in games (e.g. the dino games on the trampoline) and also participated in lots of sociodramatic play (e.g. the spy game, pretending the take photos of Jessie etc.). You also mentioned that you remember Fred from a young age playing pets on the stairs with Claire. I was just wondering if this is something you notice Fred doing a lot? Would he use his imagination often? Do you see him incorporating it into interactions with his peers or family members often?

Hiding emotions/self-regulation

You spoke with me about a trip to the park a while ago, where Fred became very agitated in the playground when another child came along. You were saying that when you asked him why he doesn't do that in school he said 'I am so afraid that this will happen in school and I don't know what to do'. Do you think he regulates himself like this in other environments/with particular people? (Delve into this). I also noticed when we were in the playground and Claire fell, and he didn't want her to cry in front of me. Does he try and hide how he is feeling in front of people? Any other examples of this?

Accepting others opinions

Over the time I spent with Fred at home, I noticed that sometimes he found it very
difficult to accept that he might be wrong, or that someone might have a different
opinion to him (e.g. universe conversation with Claire one morning before school),
however other times he could accept this with ease (e.g. when David commented
that he couldn't back tumble he said 'Yes that is something I need to work on'). Have

you seen examples of either or these? Is he more accepting of some people's opinions and not others?

Flexibility

Do you find Fred is flexible? If he wins/loses does he handle this well? Or if he is not
getting his way? (Share my observations if I see fit and probe based on these e.g.
often when there is logic involved he will demonstrate flexibility-David cant squirt
me until my shoes are on)

Drama & Fred

- After you watched myself and Fred and Claire playing on the trampoline, you
 mentioned that after the first drama session Fred would come home and draw ideas
 for what would happen next in the story and where the story might go. You
 mentioned that you really felt this 'tapped into something'. Can you tell me a little
 but more about that?
- I also observed Fred taking on many characters over the time I spent with him-both in school and at home. I know you discussed briefly if this was always an aspect which Fred enjoyed, or if it developed when he joined the drama. You and Mary mentioned a memory of Fred when he was 4 dressed as a dark character-where he put his hood up and remained in role for some time. Does he take on a role/character often? When he does like to play by himself in role or interact with others?
- In general, what would you say has been the biggest benefit of the drama classes for Fred? What challenges has he faced within the drama classes?

Peadar

Peadar Mum & Dad Interview: 1st October 2019

- Explain recording device(s)
- Explain structure of interview-rating Fred's social skills, then chat about Fred and his interactions and social skills based on observations
 and conversations that we had over the four days observations

Strong sense of justice	 In drama, when Peadaris in role we see a strong sense of justice and right / wrong, in the decisions he makes and the way he interacts with TinR. I know that John mentioned before that he has a real sense of justice, is this something that you would see often? When would you see this with Jack? (any examples you can think of?) 										
Patience & tolerance	 Over the years in drama Peadar's patience/tolerance of others who might irritate him has improved hugely. I was wondering at home, and in situations in which you would see him, how does he respond when people annoy him or with people he is not that fond of? 										
Initiates interactions with adults (over peers)	Would you say that Peadar would choose to interact with adults over peers? Does it depend on the peers/adults in question? starts a conversation with a peer, invites peers to join in activities, joins peers games / activities / conversations willingly										
	Initiation of interaction (whole 1 2 3 4 5 group/peers)										
Willingness to participate &Initiation of interaction (whole group/peers)	 The last time I was here you told me about the time when Peadar went to a party in Rory's house, where Peadar was out of his comfort zone and he didn't settle, in comparison to a time he went to a party in jump zone, and participated. 										

	In group settings (family gatherings with cousins, sib participate usually? Does it depend on the setting and people present? Are there any other factors that could influence this?		c.) wou	uld Peac	lar cho	ose to e	ngage and
	Willingness to work in pairs/groups	1	2	3	4	5	
Use of humour to initiate (and respond to) interactions	 John mentioned before that he worked on humour vis great humour in the house in general. Would Peadar use humour often when he is interact Do you feel Peadar's humour, and his use of humour 	ing with	n peers	s/sibling	s?	,	
	Use of humour	1	2	3	4	5	5/ 3IDIIIIB3 :
Impact of lack of social stimulus/motivator & Activities with and without structure and the impact this has	 You mentioned when we chatted the last day that Peand that when you are in South East Ireland (and the that he has no interest in social media. You also men 'hang out' but if he has something to do (like lego) h You mentioned previously that when Peadar is hang doing?' and if he was outside for a few hours he would you say that Peadar needs something specific lego, xbox etc.)? Or does it depend on the peers in questions the series a structure to the activity? What kind of structure to the activity? What kind of structure to support him in interacting with his peers/sibling: 	ere is no ationed to e intera ing out to aldn't kn ato do, a uestion	xbox) that in cts mu with p now wl a focus Poo y nave yo	that he Wexfor uch bett eople he hat to d s, to inte	will us rd Peac er. e will a o. Is th eract w Peadar	e the ch lar finds sk 'what is still th rith his p interact	at app, but it difficult to are we e case? eers (like s best when
Expressing emotions/feelings to peers & adults	 You mentioned to me before that Dad and Peadar had in the car more so than in the house. Would you say to you both? To his siblings/other peers you would so If he is upset by something in other settings e.g. school expressing his opinion to an adult in those settings? In relation to peers, how is he at expressing himself actions? 	that Pe ee him ool, soci	adar fi with? al eye:	inds it e s, drama	asy to o	express l	his emotions

	Expression of feelings 1 2	3	4	5						
Anxiety	 When we spoke before, Mum mentioned that language can be a 	trigger	for anxie	ty for Peadar (e.g.						
	You did/didn't do this) and the three cs (confrontation, criticism, correction)-and that for Peadar it									
	was always one of the three cs that trigged his anxiety. You also r	nentior	ned that i	when Peadar resist						
	something it can be anxiety, and it can be hard to figure out whe	n it is te	eenage ei	mbarrassment or						
	anxiety.									
	Would you say Peadar is anxious often? Are there any particular	_								
	anxious in? Or certain people that he is around that make him me	ore/less	s anxious	?						
	General anxiety levels 1 2	3	4	5						
Self-Regulation Tactics	When Peadar is upset or angry, have you noticed anything he doe	es to ma	ake hims	elf feel better/caln						
	himself down?									
	 Any self-regulation tactics that you have noticed? 									
Avoidance strategies	 When I was here before school, Peadar claimed he couldn't go to 	school	as he co	uldn't find his tie,						
	but then Dad found it for him. Dad commented that he always tr	_								
	Mum mentioned that he will often resist doing what he is asked,	but tha	it he wou	ıldn't wear you						
	down unless it was something x-box related.									
	 So, when Peadar is saying no or trying to get out of doing things, 	what do	oes he do	o? Have you notice						
	any strategies that he uses?									
Concentration/Focus	 How would you say his concentration is when he is completing ta 	sks like	homewo	ork, or listening to						
	instructions etc?									
	Level of concentration 1 2	3	4	5						
Imagination	 Would you say that Peadar has a strong, active imagination? 									
	Would you see him using his imagination much at home or when		eers, sibli							
	Imagination 1 2	3	4	5						
Observation skills	 In drama Peadar is very observant, in particular in role, noticing of 	letails e	tc. Also,	when I was out wit						
	him in school he was making comparisons between me and some		no works	in social eyes, and						
	noticed that he was very observant commenting on mannerisms									
	 Would you say that Peadar is observant in this sense? Does he no 	tice thi	ings abοι	ıt people or						
	situations often?									

Supporting Others	 In drama, Peadar would generally be very supportive of his peers, praising their good news like exam results, when they share good ideas for the drama story etc. Would you see many examples of this with Peadar at home with family/peers?
Other	 You mentioned before that Peadar would often have people over to the house, however he would rarely be in other people's houses, and that this was an issue as Peadar doesn't have the chance to interact in other settings. I know we touched on this before, but how do you feel that not having this opportunity hinders Jack? How do you think it could benefit him to interact in different spaces?
Drama	What would you say have been the benefits of the drama class for Jack? And yourselves? What challenges has Peadar faced within the drama classes?
	 Obviously, Peadar has been attending drama classes for a long time, so a lot of changes would have taken place for Peadar over the years. Could you say you have seen a change in Peadar/growth due to the drama? Any other comments about the drama?
Final	Any other comments about the drains: Any other comments in relation to Peadar social skills that you would like to share?

Social Drama Assessment Tool

Parent SDAT Interview Tool

Self confidence	1	2	3	Trusting/secure in his own abilities and judgements
		4	5	
Self esteem (perception of	1	2	3	Sense of self, how he perceives himself in a group
self in group)		4	5	setting
Personal well being	1	2	3	Does he appear to be a 'happy child'. Is he content?
(happiness/ contentment)		4	5	
Problem solving ability	1	2	3	Finds a way to solve problems, gives good suggestions
		4	5	for problem solving, analyses the nature of a problem before starting to solve it
Turn taking	1	2	3	Waits to take his / her turn when playing games, takes
		4	5	turns speaking when having conversations with others- allowing others the opportunity to speak)
Volunteering answers to	1	2	3	When questions are not directed at him, he volunteers
questions		4	5	to answer them
Participation	1	2	3	Responds when peers invite him to join them in
		4	5	activities, participates in whole group activities
Competitiveness	1	2	3	Is he competitive with others?
		4	5	
Literal use of language	1	2	3	Takes things literally and often doesn't understand
		4	5	figures of speech
Recognition of non verbal-	1	2	3	Gestures such as nod / shake of head, facial
cues		4	5	expressions such as happy / sad
Appropriate body	1	2	3	High five with a peer, shaking hands when meeting
language?		4	5	someone, maintaining appropriate physical distance when interacting with peers
Relevant comments	1	2	3	Makes points that are relevant to the topic being
		4	5	discussed
Irrelevant comments	1	2	3	Says things that have nothing to do with the
		4	5	conversation taking place / topic being discussed
Monopolise	1	2	3	Will talk continuously about their own interests or
activities/discussion		4	5	experiences, will talk over others in discussions).
Passive	1	2	3	Does not actively respond to what is happening around
		4	5	him
Adapt to change	1	2	3	In routine such as new teachers, surroundings or when
	-	4	5	plans which have been made change)
		•	-	
Listen to others and	1	2	3	Responds to greetings, talks about / acknowledges the
respond appropriately		4	5	interests of others
Appropriate eye contact	1	2	3	Makes eye contact when speaking to someone,
				I.

		4	5	maintains eye contact during conversations
Use of vocal expression	1	2	3	Speaks with appropriate volume in conversations,
		4	5	changes level of voice depending on location or situation such as library, modulates tone of voice)
Use of facial expression	1	2	3	Smiling when hearing happy news, expressions match
		4	5	what he / she is saying
Empathy	1	2	3	Comforting a peer who is sad, uses actions to show
		4	5	happiness or concern for peers such as a hug).
Body contact	1	2	3	Does he respond appropriately to body contact or can
		4	5	overreaction take place (e.g. someone bumping into him by mistake).
Differentiation between	1	2	3	Does he move easily between reality and fiction (e.g.
fiction and reality		4	5	reading a story, watching TV, imaginative play). Does he confuse real with make believe?
Executive functioning (take	1	2	3	Ability to plan, remember instructions etc.
in, update, and respond)		4	5	
Flexibility	1	2	3	Compromises with peers during activities / games,
		4	5	handles winning and losing well
Ability to make a friend	1	2	3	Does he have any particular friends/best friend? Does
		4	5	he make new friends easily/is this difficult for him? Does he avoid making new friends? Is he interested in making new friends?
Cognitive ability	1	2	3	Mental abilities and processes
		4	5	
Theory of mind (understand	1	2	3	Can he understand that other people have different
another's perspective)		4	5	thoughts/ideas/feelings than his own?

Appendix I

Teacher Interview Guide: Fred

Interview with Fred Teacher 6th November 2018

TRYING TO ESTALISH CONTEXT AROUND BEHAVIOURS

Start with a 'Grand Tour' question (Spradley, 1979) 'ask respondents to give a verbal tour of something they know well' (e.g. tell me about Jack, personality and social skills?)

Before the interview starts

- · Sign consent form
- Explain recording device(s)
- Explain structure of interview-rating Fred's social skills, then chat about Fredand his
 interactions and social skills based on the survey,

'Could you describe Fred's general interactions with his peers in his class?'

Survey

- You mentioned that Fred finds compromise tricky. Could you tell me a little bit more about that? (Probes: examples-if needs more probing, compromising with adults or peers, what happens if he does not get his way?)
- 2) In relation to turn taking, you mentioned that Fred can be dominant with his peers in an unstructured setting and can boss the other children etc. Can you give me an example of this? Is this with all children in the unit or some more than others? Adults?

(If certain children)

- a) Are these children Fred would feel more or less comfortable with? When and where.
- You mentioned that he gets agitated if his peers don't listen to him or react correctly-how does Fred demonstrate this? (e.g. lashing out, storming off etc)
- 4) You mentioned that while Fred listens well, he often brings the conversation back to what he wants to talk about. Does he allow peers much time to talk before he brings the conversation around? Is there a particular topic he always comes back to it does it vary? Is this with his peers only or adults also?
- 5) Tolerating Pair work: You mentioned that this has improved greatly since September, is he more willing with specific peers/adults?
- 6) Answering skills dependent on mood and concentration levels: Are there specific things that impact his mood? Are his concentration levels impacted by the topic? Does his volunteering to answer questions depend on the topic/subject in questions? Time of day?

- 7) Expressing emotion in mainstream class. You mentioned that Fred will usually wait until he returns to the unit to discuss any issues he may have had in the mainstream class. Why do you think this might be?
- 8) Off topic. You said that Fred often goes off topic and talk about a seemingly random thing. Could you give an example of this? Is the random thing usually an area of interest for Fred or of an event that has taken place? Does this occur regardless of what topic is being discussed? (e.g. if the conversation is a topic that is of interest to him does he make more relevant comments?)
- 9) Replays something, he has seen or heard rather than playing pretend games. Can you give an example of this? Have you ever seen Fred 'pretending' for example in small world play (with cars) or in soft play area? Would he ever pretend to be someone else for a game/joke?
- 10) Break time: You mentioned that Fred does not play with the others on yard, but does so in the unit. Why do you think this might be?
- 11) Initiating Interactions with peers-You mentioned that in the small group setting he does this with easy, however in the yard he finds this difficult and would do this more with adults. Why do you think this is?
- 12) Has Fred ever mentioned the drama that he does outside of school?

Fred Teacher rating 6th November 2018 1.45

Categories	Plea	se Rate		Example to stimulate thought
	1 = poor or never			
	5 = e	xcellent	or	
Self confidence	always 1 2	3		Trusting/secure in his own abilities and judgements
	4	5		The state of the s
Self esteem (perception of	1 2			Sense of self, how he perceives himself in a group
	-	_		setting
self in group)	4	5		
Personal well being	1 2	3		Does he appear to be a 'happy child'. Is he content?
(happiness/ contentment)	4	5		
General anxiety levels	1 2	3		Is easily stressed, is afraid to make a mistake, worries
	4	5		about what other people think, is overly anxious or nervous
				nervous
Level of concentration	1 2	3		Pays attention, can sustain/maintain concentration
	4	5		levels,
Problem solving ability	1 2	3		Finds a way to solve problems, gives good suggestions
	4	5		for problem solving, analyses the nature of a problem before starting to solve it
				before starting to solve it
Turn taking	1 2	3		waits to take his / her turn when playing games, takes
Turn taking	4	5		turns speaking when having conversations with others-
	-	3		allowing others the opportunity to speak)
Volunteering answers to	1 2	3		
questions	4	5		When questions are not directed at him, he volunteers to answer them.
				to answer triem.
Willingness to work in	1 2	3		willingly participates in structured group / pair work to
pairs/groups	4	5		complete tasks assigned by teacher
Initiation of interaction	1 2	3		starts a conversation with a peer, invites peers to join
(whole group/peers)	4	5		in activities, joins peers games / activities / conversations willingly
				conversacions miningly
Participation	1 2	3		Responds when peers invite him to join them in
raidicipation	4	5		activities, participates in whole group activities
	4	3		
Competitiveness	1 2	3		Is he competitive with others?
	4	5		
Expression of feelings	1 2	3		is able to describe feelings accurately, uses words to
Expression or reenings	4	5		express his / her own emotions such as 'I'm happy' or
	"	3		'I'm sad'
Use of humour	1 2	3		understands jokes made by others) and uses humour
	4	5		appropriately (e.g. makes jokes appropriate to the
				context).

Literal use of language	1	2	3	Takes things literally and often doesn't understand
		4	5	figures of speech
Recognition of non verbal-	1	2	3	
cues		4	5	gestures such as nod / shake of head, facial expressions such as happy / sad
Appropriate body	1	2	3	high five with a peer, shaking hands when meeting someone, maintaining appropriate physical distance
language?		4	5	when interacting with peers
Relevant comments	1	2	3	makes points that are relevant to the topic being discussed
		4	5	uiscusseu
Irrelevant comments	1	2	3	says things that have nothing to do with the
		4	5	conversation taking place / topic being discussed
Monopolise	1	2	3	will talk continuously about their own interests or
activities/discussion		4	5	experiences, will talk over others in discussions).
Passive during lessons	1	2	3	does not actively respond to what is happening around
		4	5	him
Adapt to change	1	2	3	in routine such as new teachers, surroundings or when
		4	5	plans which have been made change)
Listen to others and	1	2	3	responds to greetings, talks about / acknowledges the
respond appropriately		4	5	interests of others
Appropriate eye contact	1	2	3	makes eye contact when speaking to someone,
		4	5	maintains eye contact during conversations
Use of vocal expression	1	2	3	speaks with appropriate volume in conversations,
		4	5	changes level of voice depending on location or situation such as library, modulates tone of voice)
Use of facial expression	1	2	3	smiling when hearing happy news, expressions match
		4	5	what he / she is saying
Empathy	1	2	3	comforting a peer who is sad, uses actions to show
		4	5	happiness or concern for peers such as a hug).
Body contact	1	2	3	Does he respond appropriately to body contact or can
		4	5	overreaction take place (e.g. someone bumping into him by mistake).
Gross motor	1	2	3	
skills/gait/movements		4	5	
Imagination	1	2	3	plays pretend / make believe games, is imaginative
		4	5	and good at pretending, engages in imaginative games with peers
Differentiation between	1	2	3	Does he move easily between reality and fiction (e.g.

Social Drama Assessment Tool

fiction and reality		4	5	reading a story, watching TV, imaginative play). Does he confuse real with make believe?
Executive functioning (take	1	2	3	Ability to plan, remember instructions etc.
in, update, and respond)		4	5	
Flexibility	1	2	3	compromises with peers during activities / games,
		4	5	handles winning and losing well
Ability to make a friend	1	2	3	Does he have any particular friends/best friend? Does
		4	5	he make new friends easily/is this difficult for him? Does he avoid making new friends? Is he interested in making new friends?
Cognitive ability	1	2	3	Mental abilities and processes
		4	5	
Theory of mind (understand	1	2	3	Can he understand that other people have different
another's perspective)		4	5	thoughts/ideas/feelings than his own?

Appendix J

SNA Interview Guide: Peadar

Interview with Colm: May 2018

SDAT Also

Anxiety	 Would Peadar often be anxious in school? How does he show his anxiety/how do you know when he is anxious? Are there times he appears more anxious than others (e.g. certain classes, times of day etc.) RATE
Avoidance strategies	 If Peadar doesn't want to do something-will he try and get out of it? How? Can he be 'talked around?' Can he be easily won over?
Friends	 Would you say Peadar has specific friends at school? How did he form those friendships? Does Peadar interact with lads in the class that are not in the resource space? When do you see him do this (e.g. certain classes, corridor etc.) RATE
Peers VS Adults	 In school, does Peadar tend to chat to adults more than peers? For example in the resource room would he rather chat to you or the other lads? Does this depend on what peers/adults are present?
Use of humour	 I know in the questionnaire you mentioned that Peadar uses humour very often in all settings. Does it matter to Peadar the response he gets from peers/adults when he tells jokes? Does he use humour more with certain peers? Why do you think Peadar uses humour? Do you think it helps him to socialise and interact with his peers? RATE
Social Stimulus	 Is there anything that you have noticed which helps Peadar to socialise with his peers? Particular activity, topic of conversation etc?

	(If he has specific friends in school) Do they share a common interest?					
Imagination	 In the questionnaire you said that you wouldn't see Peadar using his imagination in school. IS there much opportunity to use imagination in school? Is it that he doesn't have the chance or chooses not to? RATE 					
Expressing his emotions	 In the questionnaire when asked about Peadar expressing his feelings, you said he did so well in with an adult, and sometimes in a small group with peers. If Peadar is annoyed or frustrated (e.g. with a peer) what would his typical response be? What does he do? RATE 					
Self-Regulation Tactics	If Peadar is upset or frustrated, is there anything he does to make himself feel better/calm down?					
Group/Pair Work Establish: If much takes place-when it does-how does Peadar respond	 Does group/pair work take place much in school? Does Peadar like participating in it? Would it be mainly with the lads from the resource room or the other lads? Does Peadar mix with the lads that aren't in the resource room much? 					
Concentration/Focus	 How is Peadar when it comes to concentrating on a task in class? Does it depend on the task/subject? Any other factors? RATE 					
Empathy	 Questionnaire: Very often (small group & with an adult) Does it matter who is needing the empathy? E.g. in small group, would he empathise more with certain people over others? How does he show empathy? (E.g. what would he typically say/do?) 					

Interview with Peadar SNA (Anna) April 2020

Zoom

Peadar IS NOW IN 5[™] YEAR

Notes for me: follow on from rating, so you said that J is a 5 out of 5 for humour...examples

- Thanks etc. and explain being recorded
- A bit about the study: Looking at his social skills in drama, home and school-so trying to get a
 picture of what he is like in school.
- Explain:
 - I am going to ask you to rate Peadar in a few areas of his social skills from 1-5 (1 being he finds it really tricky and 5 being he finds it easy or is good at it).
 - o And ask you a few questions just about how he is at school, with his peers etc.
 - Don't worry if you can't think of examples or how he is in different situations, that's ok! Every little helps!
 - o No right or wrong answers

General Questions:

- How long have you worked with Peadar for?
- Everyday-all classes etc?

Group Work/ Pair Work

- · Does it take place much in school?
- Does Peadar like participating in it?
- · Does he mind who he participates in group work with?
- · Would it be mainly with the lads from the resource room or the other lads?
- . Does Peadar mix with the lads that aren't in the resource room much?
- If given the choice between pair/group and individual, which would he generally choose?
- · RATE: Willingness to work as part of a pair/group

Participation in Whole Class activities

- RATE
- Any factors which influence this (e.g. if he likes the subject/teacher, peers that are present etc.)

Volunteers to answer questions

- Without being asked
- o RATE
- Again-anything difference here? (might be same as above)

Friends

 Would you say Peadar has specific friends at school? (E.g. that he chooses to have lunch with etc.) (if yes who, what class are they in, resource room etc.)

- · Would Peadar choose to interact with the lads in the resource setting?
- Would he choose to interact with lads in the mainstream class setting? (what do you think helps him to do this? E.g. the specific subject, activities, peers that are there)
 - When I was in with Peadar in third year I didn't see this....
- When I was in school with Peadar he used to have lunch with two peers from the mainstream setting, is this still the case?
- Would he interact with lads from the resource room in mainstream classes they share/? Or in the corridor?
- Do you know what Peadar talks about with his peers?
- Rate: ability to make a friend (1-5)

Social Stimuli

- Is there anything that you have noticed which helps Peadar to socialise with his peers?
 Particular activity, topic of conversation, common interest, comfort levels with peers etc?
- Basically, is there anything that encourages him to interact, or supports him in these interactions.

Peers VS Adults

- Would you say Peadar spends more time talking to adults (SNA, teachers etc), than peers?
 Or peers over adults? Or similar amounts of time?
- Does it depend on the specific people present?

Concentration/Focus

- How is Peadar when it comes to concentrating on a tasks in class? Does it depend on the task/subject? Any other factors? (e.g. structured task vs unstructured, mood, time of day, interest level, or vs written tasks etc)
- RATE

Anxiety

- Would Peadar often be anxious in school?
- How does he show his anxiety/how do you know when he is anxious?
- · Any examples of Peadar being anxious you can think of?
- Scale of 1-5 how anxious would you say Peadar is at school generally?

Avoidance Strategies

- · If Peadar doesn't want to do something-what usually happens?
- Will he try and get out of it? How? Can he be 'talked around?'
- . Can he be easily won over-are there any strategies which you have found effective

Humour

- Does he use humour with adults and peers?
- · Does it matter to Peadar the response he gets from peers/adults when he tells jokes?
- · Does he use humour more with certain peers (aka his friends)
- Why do you think Peadar uses humour?

- Do you think it helps him to socialise and interact with his peers? Is it a two way street or does he care about the response he gets?
- Rate

Expressing his Emotions

- · How is Peadar at expressing how he is feeling to adults?
- How is Peadar at expressing how he is feeling to peers? Does it matter if these are peers he
 considers friends/knows well or not?
- If Peadar is annoyed or frustrated (e.g with a peer in class annoying him) what would his typical response be? What does he do?
- RATE

Self-Regulation

- · If Peadar is upset, or annoyed, is there anything he does to make himself feel better?
- · If prompts needed- move away from group etc.

Empathy: Understanding and sharing the feelings of others: E.g. comforting a peer who is upset

- RATE
- How does he show empathy?
- Does it matter who is involved? E.g if a friend is sad and needs cheering up might he engage with this more than someone he does not know?

Imagination: When we talk about imagination we mean coming up with new ideas, and these can be based on things that have been seen / heard (Eg. TV show)

- · Would you see Peadar using his imagination often in school?
- · Are there many opportunities for this? Or maybe with all the study etc. it isn't really possible?
- · Does anything impact it? E.g. subject he is participating in etc.
- RATE

Problem Solving

- Can occur in class (like maths problems etc.) or in real life-a situation occurs and he has to figure out what to do, for example if someone annoys him or he doesn't want to do something)
- Are there many opportunities for problem solving in school (both in classes and real world problems?)
- Any examples that you can think of?
- Have you seen Peadar in role or a fictional world
- If so-did you see him solving any problems?
 DISSUCSS AROUND THIS IF POSSIBLE
- RATE

GENERAL RATINGS (and any other comments!)

General:

- In school where is he most comfortable (resource room, specific classroom, lunch area etc.)
 or is there one specific area? (Trying to identify environmental factors/environments in
 which he feels most comfortable)
- Turn Taking
 - o Able to wait his turn, or does he find this difficult?
- · Initiation of Interactions
 - o Going up to peers and starting conversation-him deciding to do it etc.
- Competitiveness
 - o Is Peadar competitive?
- · Taking over activities/discussions
 - For example talking over other people, bringing the topic of conversation around to what he wants to talk about etc.
- Passive
 - o Does not actively get involved in what is going on around him
 - o For example watching rather than getting involved
- Flexibility
 - When we say flexibility we are referring to compromise really.
- · Adapting to change of routine
 - o E.g. if a teacher is out, or the timetable changes suddenly, does this bother him?
- · Listen and responds to others appropriately
- · Eye contact
- Facial expression
- Self-confidence
 - o his beliefs in his own abilities
- Self-esteem
 - o how he thinks others perceive him
- Relevant comments
- · Irrelevant comments

· Executive function

o Ability to listen to instructions, plan things and carry out a plan

• Cognitive ability

 General brain work (comprehension skills, problem solving and planning) all of these fall under here! How generally able is his with his school work

· Personal wellbeing & happiness

o Would you say that he is happy in himself generally?

Appendix K

Drama Teacher Interview Guides (Fred & Peadar)

Drama Teacher One Interviews

General Social Drama Model

- · Under lying principals of the SD model
- · Overall aims of the Social Drama Model
- · Fictional World: How does it work for young people with ASD & PDA
- · Environment created in SD setting

General Comments

Fred

Peadar

Drama Teacher Two Interview: August 2021

Zoom

Explain:

- · Here today to get an overview of Fred and Peadar
- We will have a general chat about them, and then discuss them in line with SDAT and any relevant examples you might have
- · Permission to record interview

Fred

- · General demeanour in drama classes (happy, enthusiastic, enjoying drama etc.)
- Motivation levels
 - o What are they?
 - o What motivated him in the setting?
- What do you think helps him to feel comfortable in the space?
- SDAT
- Any other comments?

Peadar

- · General demeanour in drama classes (happy, enthusiastic, enjoying drama etc.)
- Motivation levels
 - o What are they?
 - o What motivated him in the setting?
- · What do you think helps him to feel comfortable in the space?
- SDAT
- Any other comments?

Appendix L

Fred Interview Guide

Interview with Fred: February 2019

Today Fred I want to find out your thoughts on lots of different things. I was hoping to do this by us acting in scenes, some of them based on real things that happened when I was at your house and school before, and some of them based on our drama stories. Is that ok? Do you have any questions before we start?

I am going to be recording what we say, because otherwise when I go home I will forget everything we did!

Resources needed:

- Cars
- Dinosaurs
- Note book & Pen
- Recorder & Ipad

1) Game/topic of Interest

Home

SCENE 1

We played lots of trampoline games when I was here before-so we are going to go back and pretend we are playing one of them again now. So in this game I will be Claire and you will be Fred. Do you remember the game we played where Claire was the unicorn (Candyfloss), Elaine was a dragon and Fred was a dinosaur? So Fred told the story, and then the unicorn and the dragon had to fight off the dino-but the dino always won! So we are going to play the game again, this time I will be Claire and you will be Fred. What dino will it be about this time?

So you will tell us what we are doing before the dino arrives, and then we will have out battle-but something might be a little bit different this time..

P: Narrates

Do the 'fight'

C: But in this one Candyfloss defeats the dino!

(See what Fred comes back with-push back and try and narrate the story and see how this works)

Q: Why do we like telling the story? Would it be fun to act out Claire's story? Would it be fun to act out someone else's story and not know what would happen next? Why/Why not?

SCENE 2

I am going to pretend to be David, and you are going to be Fred. So in this scene, David didn't want to do a dino quiz, but Fred did, so when David said he wanted to play the fishing rod game, Fred said 'We can't find it' So we are going to start that all over again and let's see what happenslet's start with Fred asking David to do the dino quiz.

D: No I don't want to play. Can we play the fishing rod game?

F: We can't find it

D: Well can we play something else-can we play cars?

See what he responds with and offer a few other suggestions (see how he negotiates-and keep pushing-then give in) (chasing, football, stuck in the mud).

Then FREEZE

Q: Why do you want David to do the dino quiz? Why would you not play cars? What is the best way to get people to play what we want?

School (Edward is the social motivator)

So Fred, when I was in school with you in your classroom I saw you playing with the cars. Sometimes you played by yourself with the cars and sometimes you and Edward played with the cars together. You did lots of great things with the cars! We are going to do a little scene now. So I am going to pretend to be Edward and you are going to pretend to be Fred.

Elaine as Edward: Playing with cars-racing them-not socio-dramatic play.

(If Fred offers socio-dramatic play engage-if not keep playing in parallel)

Q: Do you like playing with cars? If you could pick between cars and dinos which would you pick? Does Edward like playing with dinos? Is it more fun to play cars with Edward or dinos by yourself? Would you ever play cars at home? Or with Claire or David?

Drama

You know the way in drama Carmel makes up the stories, and sometimes we like them and sometimes we might want to change things. Remember the story of Greenwood forest? And we were all animals and we met Ranger Maeve? Did you like that story? Do you remember when we had to save all the creatures from Darkwood forest? They needed the animals of Greenwood forest to help them. So in this scene we will make a plan of how to save the animals and act it out.

Fred and Elaine make a plan and act it out

Question: Did you like that scene? What did you like the most about it? Did Carmel ever make up a drama story that you didn't like? Do you ever want to quit the drama stories? Why?

Imagination/Use of role & character/socio-dramatic play

Home

Remember when Jenny and her sister came to visit, and you were playing spy games and lots of different games? I remember when Jenny said she wanted you to take a picture so you pretended to have a camera and (act it out) and this 'Say cheese' 'oh that's a lovely picture' – oh no I deleted it, I broke the camera' etc. (Fred in role as himself-me as Jenny)-let the scene/play develop a bit further.

Elaine as Jenny ask for more pictures, I am going on a trip, do you want to come with me etc.

Run straight into school one (soft play area)

School

Do you remember when I was in school with you and we got to go to the soft play room? Well I remember when we were there and you were doing lots of cool things. You made up a story, that you were the king and you were wearing a cape and you were burying the cape in the cave. And all the soft things were armour and you and Edward were running into all the soft things. There was also an evil character you made up with pointy ears and green eyes.

I love the stories you make up! So, in this scene you can make up another story if you like, or you can use the same one, but let's pretend we are in the soft play area, and I will be Edward and you will be Fred and we have just arrived in the soft room to play and we have just taken off our shoes. (see if he initiates interaction and makes up the story)

As Edward-if Fred makes up a story, go with it. If he does not just keep playing

Drama

Do you remember a while ago we did a story and it was set in another galaxy (Andromeda Galaxy) on a planet called Petulia. The Petulians (who lived on Petulia) had their own language and they mix well with humans.

On this planet there was a black hole, and sometimes the Drolkans (baddies) would come through this black hold and the Petulians would have to fight them. I remember in this drama one day in the battle with the Drolkans you were pretending to be a Droklan with the teachers, and you put on a brilliant voice. Let's think now-if we had to do that battle again. What special powers might we have that could help the Drolkans to win? Excellent idea! So now we are going to pretend to use those powers, and I will be a Petulian and you will be a Drolkan and let's see how it goes!

Q: Is it fun when we pretend to be characters and play? Why is more fun-playing as ourselves or playing as characters? Why? In the soft play area-if you didn't pretend to be X and do X-what would you play instead? Do other people like playing with you when you are pretending to be the characters? When you are in drama-what do you like most about pretending to be a character? Do you like being the goodies or the baddies? Why? (Generally probe). Why he likes being in character and what it helps him to achieve.

Monopolising

Home

SCENE 1

So remember when I was here over the summer you loved watching dino videos? Do you still love watching them? Well back then you really did...So in our next scene I am going to pretend to be mum and you are going to be Jack. And let's pretend that you really want to watch a dino video-so we will start off with you asking mum

F: Can I please watch a dino video Mum: Not now Fred, maybe later

See how this plays out.

If Fred accepts this and says sure no problem/fine-test the waters a bit more.

'Ok so let's pretend you really want to watch it-it's the only thing in the world you want to do-how could we convince mum to let us watch it?' Rewind to start and play-let's see what happens!

Q: does that usually work? Why do you think it works? What if mum didn't let you-how do you feel then?

SCENE 2

Do you remember when we went to the park? And we were doing lots of racing? Elaine was racing Fred and Claire, and then Elaine and Fred were racing and then Fred got mum and Elaine to race. So in this scene, I am going to be mum and Fred is going to be Fred. So Fred, You are going to start our scene by telling mum 'I want you two to race against each other'

F: 'I want you two to race against each other'

M: No Fred I am too tired today...(see what he comes back with and keep persisting)...my foot is too sore...my leg is stiff...In the end give in and race

See how he responds to this (saying no)

Q: Why do we love watching other people race? Do we like to see who wins and looses? Do you decide before the race happens who you think might win? Are you always right?

SCENE 3

Remember when we went to the park and we were doing all the races? And one time Elaine won, and sometimes Fred won? Well in this next scene I am going to pretend to be Claire, and you are going to pretend to be Fred and let's pretend that we have been racing-and Claire has just won....so let's start at the end of the race!

Claire : Yes-I won! Fred: See his response

If: Well done Claire etc....ask him-do you always feel happy when someone else wins the race? How do you feel when other people win the race? How does it feel when Claire wins the race? Do you want to show me?

School

When I was in school with you the classes were a bit different weren't they? Pauk, John and Edward were all in your class, but now it is a little bit different. When I was in school with you I saw you playing lots with Edward and John. Do you still play with them at break time? Do you remember the day we went to the park? Well I remember you were playing lots with the boys and doing lots of different things.

In this scene you will be Fred and I will be Edward or John-who would you like me to be? Decide then brief: So in this scene it's the time in the park where Edward asks you to go on a slide but you want to go on a different one. So I will start off:

Edward: Fred let's go on this slide over here Fred:...

See how this plays out. (In actual scene, Edward just agrees with Fred. Give push back-don't go at first-see does Fred go by himself or how does he convince him?).

Q: Is it tricky to get Edward to do what we want? How do we convince him?

Drama

Do you remember we did a story set in Jollywood? And in the drama everyone was really...Jolly! And they are all cartoon characters. Except for this one guy, who is super old and everyone calls him 'Mr. Boring'. We had to pretend to be detectives and make sure that Mr Boring didn't take over Jollywood. We had to pretend to be our favourite cartoon characters to get into Jollywood and we got on a plane and flew there! It was a great story wasn't it? Now I am going to tell you a little bit about when we were on the plane and see if you remember...

We all made the plan together and some people decided to be the people that work on the plane. Someone was the pilot and some other kids were showing people where to sit, and Liam was the captain. You were someone on the plane, but I remember that you wanted to make the announcement. What could we do about this? What might happen next?

Emotions

Home

Remember when we were in the park and we were in the playground? And you and Claire were playing and Claire fell and hurt herself? We are going to act this one out-but this time you get to be me, and I am going to be Claire and it's going to be a little bit different. Do you remember when Claire hurt herself and you said 'Do not cry in front of Elaine, do not'? Well this time I am going to be Claire and you are going to be Elaine, and let's see what happens when Claire falls.

C: Falls, crying I hurt myself etc.

Elaine: See how Fred responds as me when he sees Claire crying..trying to identify why he is so afraid of showing emotion, through this lens.

There may not be a need for questions based on what arises from this.

School

This time we are just going to talk a little bit about something I saw in school and see what you think. On one of the days that I visited your school I saw you and Edward playing with cars, and Edward broke a car and he got upset. You were very kind to him and told the teacher that he broke the car by accident. You were very kind to your friend. You got a little bit upset because you wanted to get the car fixed but Ms Smith said it was an old car and that it couldn't be fixed. I noticed that you were a bit upset, and a little bit cross. But you were just upset by yourself-you didn't tell Ms Smith you were sad.

Q: Why do you think you didn't tell Ms Smith you were sad? Is it ok to feel sad at school? What do we do if we feel sad or angry at school? Show me / draw what it looks like when you feel sad at school?

Drama

What about drama? Do you ever feel sad in drama? Is it ok if we feel sad in drama? What would you do if you felt sad in drama? What about if we got cross-or if something didn't go the way we wanted it to? What could we do?

Physical Environment & Play

School

EXAMPLE 1

When I was in school with you, and you were in Senior Infants, I got to see you doing Aistear-do you remember that? You were playing with dinosaurs in Ms Cassidy's classroom. So in this scene, let's pretend we are back in Ms. Cassidy's classroom and it is during Aistear. So in this scene, you are going to be Fred-playing with dinos, and I will be another boy in the class. Do you know any of the other boy's names? Ok well I will be X

Scene: Fred and X playing dinos. Nothing happens (see if Fred initiates contact) (give this time-let him get into a rhythm with his play)

Then X initiate contact with him 'Can I play with you?'

Q: Depend on what happens in the scene. If he says he does not want to play So X was playing with dinos too-why did you decide not to play with him?

If he asks him to play

I see that you asked X to play. Is it more fun playing with someone else? When you are in 1st class do you like playing with the other boys and girls in the class? Is it always more fun playing with the others or is there sometimes that it is more fun playing by ourselves

EXAMPLE TWO

(Example of him playing by himself (e.g. on slide in yard or cars in class last year or scooter in yard this year) in scenario have someone interjecting-wanting to join in and see what happens? (Be a few different people-at one point maybe James/friend, then freeze, then be a person from 1st class etc.)

Let's pretend we are in the playground you got to go into last year-with the slide and the climbing frame-do you remember that one? Yes it was so good. So in this scene you are going to be Fred, and I will just be another kid playing in the yard. (Establish with Fred what will be pretend is the slide etc.) So when I was visiting your school and I saw you on this yard, you loved the slide. You were going up and down and up and down for the whole break. So let's pretend we are back there let's pretend its break time.

Let Fred go up and down slide a few times (I run around-make some noise etc.) Then approach him and queue behind him. Do this a few times (this is what took place).

Q: Do you love the slide? Do you mind the other boys and girls playing on the slide? Is it ever fun to play with them on the playground break? Or is it more fun to play by yourself? Why?

Drama

In drama we have done loads of stories, and in all the stories you are excellent in role, you have been so many different characters. What was your favourite one? (Oh yes I loved that story etc.). And you give amazing ideas to help the story. You know the way sometimes in Aistear or the yard you like to play by yourself? We all do sometimes, don't we? I remember one day in the Greenwood forest story, and we all made our passports (and you were Shrek), and yours was excellent. And then we travelled to meet Ranger Maeve. I think you were a bit tired at the end of drama when we met ranger Maeve, but you asked lots of great questions and got loads of really important information for the team, and you worked really well with Peter, you seemed to be having lots of fun together.

QUESTIONS: In drama, is it more fun to do the story by yourself or with other people? Why? (compare to school). Could these kinds of stories work in school? Like if we had a story in Aistear-would it be better?

Impossible Tasks

Home

Remember when we had our picnic in the park and there were lots of seagulls around? Well I remember that Fred wanted to have a look at the seagulls and get close to them, but the seagulls were being a bit tricky-when Fred was sneaking up on them, they kept flying away!

Questions: Can you show me how you felt when they were flying away? Why did you want to see the seagulls? With our detective hats on what could we do to see them up close?

Accepting others opinions

Home

Remember when David came over play? You might not remember-but you and David were talking about tigers, and David asked 'Can a tiger camoflague?' and Fred didn't think so so said no..so this time you are going to be Fred and I am going to be David and lets see how it goes!

D: Can a tiger camoflague?

J:

D: I think they can...I think you are wrong...etc.

See how Fred responds (it will be interesting to see if he makes similar comment to what happened)

Q: What did it feel like when David didn't agree with you? Does it make you cross?

Drama

Do you remember the story about superheroes in drama? Yes that's right your character was dip and then you changed to spinosarous and we all had superpowers and we were in a boarding school (with Mrs. Boring), trying to fight the bad guys. So I remember at the start of the drama we were all trying to decide on where we wanted to the drama to be set. And it was a bit tricky as everyone had different opinions of where the drama was going to be set. We then had to decide on where it would go and do you remember what happened? Well we all had to vote, and the most people picked Hollywood and that the school would be called 'HollyWood High' I remember they didn't' pick Liam's group or Colm's group, or your group. I remember everyone was a bit sad, and you went to the door, but you didn't go outside the door

QUESTION: What do you think made you decide to stay in the drama room? When you went to the door-what might you have been thinking about? Show me what you might have been feeling.

Scary

Drama

Sometimes the stories in drama can be a bit scary, and a little bit dark. Can you think of any of the dramas we have done that have been a little bit spooky/scary? What do you do when you feel scared in drama? What does that look like?

Fred Rating

So Fred we have done loads of scenes today! Now we are going to have a look at a few different things. We are going to think about different things we do all the time, at school, home and drama, and I want you to think about these and if these are easy or tricky for Fred to do.

Categories	Please Rate		Example to stimulate thought
	1 = poor or nev 5 = exceller		
	always		
Self confidence		3	Do you ever have to make decisions? Like in school about what game you want to play? Or at home when
	4	5	you are deciding what park to do to? Is it easy to
			make decisions or is it a little bit tricky?
			Trusting/secure in his own abilities and judgements
Self esteem (perception of	1 2	3	What do you think John thinks of you? Does he think you are a silly billy, funny, great? (I sometimes think
self in group)	4	5	'does Carmel think I'm a good teacher' and you know
			what, I think she thinks I am)
			Sense of self, how he perceives himself in a group
			setting
Level of concentration	1 2	3	So, let's think about when we are at school and we
	4	5	have our thinking cap on (pretend to put it on and turn it on). When we are doing our work at school and we
			have to try and pay attention, and concentrate really
			hard on what Ms Smith is saying.
			Is that easy to do? Or can it be a bit tricky? How easy
			would you say it is for Fred to concentrate when he has his thinking cap on? (rate)
			Pays attention, can sustain/maintain concentration levels,
Problem solving ability	1 2	3	You know the way in drama we are often working as
	4	5	detectives, looking for clues and trying to solve problems? Do you like when we do that? Like
			remember in the drama where we were spies, and we
			had to figure out who the robber was without him knowing that we were spying on him? That's right!
			When you have your detective hat on, how good are
			you at solving mysteries? (rate)
			Finds a way to solve problems, gives good suggestions for problem solving, analyses the nature of a problem
			before starting to solve it
Turn taking		3	You know when you are in school and you are playing a game with Edward and John? What kind of games do
	4	5	you like to play? So let' saying you are playing (insert
			what game he selected) do you have to wait your turn? Is that easy or tricky? Is it hard to hold it in
			when you are bursting for your turn?! (rate)
			waits to take his / her turn when playing games, takes turns speaking when having conversations with others-
			allowing others the opportunity to speak)

Volunteering answers to questions	1	2 4	3 5	You know the way sometimes in school Ms MSmith might ask you questions? What kinds of questions might she ask you? (Get him to pretend to be Ms Smith and show me). Well when she asks these questions-do you like to answer? So let's say you and all the boys are sitting down and Ms Smith asks (insert question), do you put up your hand to answer? (rate) When questions are not directed at him, he volunteers to answer them.
Willingness to work in pairs/groups	1	2 4	3 5	You know the way in drama we do lots of work as a team. Like remember when we were the Petulians and we had to plan a way to keep the Drolkan's from attacking us? We had to work in groups and make a plan. And sometimes we have to work with one other person like one time in drama you and Peter worked together to think of questions for Mrs Boring. Do you like working with another person? (rate) willingly participates in structured group / pair work to complete tasks assigned by teacher
Initiation of interaction (whole group/peers)	1	2 4	3 5	You know when you are playing in school, let's say in the yard or in the first class room. If you see some boys playing, is it easy to go up to them and start playing with them-or is it a little bit tricky. Do you want to show me what you might do? (Enact this then rate 'If I was to ask you how easy it is would you say 5') starts a conversation with a peer, invites peers to join in activities, joins peers games / activities / conversations willingly
Participation	1	2 4	3	You know when you are playing cars in school? So let's pretend that you are playing cars and Edward is playing cars. If he asks you to play do you like to play with him? Or if there are a group of the boys in first class playing cars and they ask you to play with them, would you? (rate) Responds when peers invite him to join them in activities, participates in whole group activities
Competitiveness	1	2	3 5	We talked about racing before, and I know that you love to play lots of games. Do you like winning? How much do you like winning? (rate) Is he competitive with others?
Expression of feelings	1	2	3	You know the way we sometimes feel happy? Can you tell me about a time you felt happy? Great! And sometimes we feel sad, or excited, or angry (do all the

				voices). Is it easy to tell people how we are happy? What about when we are angry or sad? (rate)
				is able to describe feelings accurately, uses words to express his / her own emotions such as 'I'm happy' or 'I'm sad'
Use of humour	1	4	3 5	So, let's think about jokes. Do you like making jokes? That's right I have heard you make so many jokes (like a joke machine!). Do you like hearing jokes? How funny do you think you are?! (rate 1-5)
				Understands jokes made by others) and uses humour appropriately (e.g. makes jokes appropriate to the context).
Passive during lessons	1	4	3 5	You know sometimes in school, when Ms Smith is talking, or she is asking people to do things-sometimes is it nicer to sit and watch what is happening? Or do you always like to do what everyone else is doing in the class (rate)
				does not actively respond to what is happening around him
Adapt to change	1	2	3	Let's have a think. Can you think of a time that you ever had a plan and then it changed? So I can think of one day when I was in school with you and we arrived and Ms Smith told us that we were going to the park instead of doing what usually happens on a Friday! Do you mind when things change like that? Does it feel good or bad? Is it easy to do the new thing? (rate)
				in routine such as new teachers, surroundings or when plans which have been made change)
Empathy	1	4	3 5	You know when Claire or David are feeling sad. What can we do to help them feel better? If Cathy hurt her foot playing on the trampoline what might help her? Is it easy to help people when they are feeling sad? (rate)
				Comforting a peer who is sad, uses actions to show happiness or concern for peers such as a hug).
Imagination	1	2	5	I have seen you playing lots and lots of games. On the trampoline, in the soft play room at school, in the park, lots and lots! I have seen you using your imagination in these games. Do you like using your imagination? How amazing do you think your imagination is? (rate)-Refer back to scenes we did earlier
				plays pretend / make believe games, is imaginative and good at pretending, engages in imaginative games with peers

	$\overline{}$			
Differentiation between fiction and reality	1	2	3 5	So in drama we have lots of different stories. What has been your favourite story so far? Oh yes that is a great one! I have a little question for you-does it every get a bit tricky remembering where the story ends and Jacks real life is? Do you ever get them mixed up? (Rate) Does he move easily between reality and fiction (e.g. reading a story, watching TV, imaginative play). Does he confuse real with make believe?
Flexibility	1	4	3 5	You know when sometimes we are doing races in the park, or playing a game at school and sometimes we win and sometimes we don't win. How does it feel when we win? How does it feel when we don't win? What do we do if we win? What do we do if we lose? (NOT RATING) compromises with peers during activities / games, handles winning and losing well

Appendix M

Peadar Interview Guide

Peadar Interview October 2019

Role play frame it-l get a little bit bored just sitting talking-could you help me out? Can we do a bit of acting with it rather than just talking about it? Explain rating piece and justification

Intro (15 minutes)

Recording device

Then explain

- Questions & ratings
- Fun drama bits too!

Theme	Areas to develop questions from
1) Drama	So, Carmel has asked me to see how people who come to drama are getting on in other places, like at home and at school, because we know that you guys are doing pretty well in drama, and we want to know-is this happening in school. So I am working with you and another guy who is in primary school. So I was just going to start with talking a bit about drama if that's ok with you?
	 Did you like the drama classes? Why do you like them? What is the best thing about them? Do you miss the drama classes? Is there anything you would change about the drama classes?
	So do you remember who was in your class when you started the drama? A long time ago now! Jerry was I think, and Betty, anyone else? Have you noticed any difference in them since they started coming to drama? Have they changed at all? Do you think that you might have changed at all?
	In role Do you like being a character in the drama stories? Why / Why not? Do you like it when the teachers are characters/pretend to be someone in the drama? Why / Why not?

	Do you like talking to people in role?? Why/why not?					
Initiates Interactions with adults & peers	mool (can give examples of times he chatted to Colm or other teachers, or when walking to PE chatting to me) member when I was in school with you I saw you chatting to loads of people, to Colm the first time I was in, Mary, non and Danny, lots of people. I just want you to think for a second Is it more fun to chat to Colm or the lads in the resource room? Why? What about Conor or Simon and Danny? Why? Do you like talking to some of the teachers and SNAs? Who is it easier to chat to, the lads (Simon and Danny, lads in resource settings and lads in other classes) or the adults in school? Why do you think that is? Is there anything that would make it easier to talk to the lads in class?					
	Prama I've noticed in drama you chat lots with Betty and Sam, and Jerry when he used to come to drama Do you prefer talking to the teachers in drama or the lads? Why? Is it easy to talk to the lads in drama? Why do you think that is? Is it easier to talk to Betty and Sam and the other guys than the lads in school (specify; Simon and Danny, lads in resource and lads in class) or is it the same?					
	Initiation of interaction (whole group/peers) 1 2 3 You know when you are in school, or social eyes on Saturday, do you like going up and starting a conversation with whoever is there? Like in the resource room at school, is it easy to go up and start talking to the lads? MAYBE link to conversation we had in school					

	'because of drama and social club I'm being more social. I'm more willing to give it a try and speak to people, so usually I'll watch, and then try talking to them and see if I like it'. 'I try and mostly stay out of socialising but I don't mind if it happens'				
	starts a conversation with a peer, invites peers to join in activities, joins peers games / activities / conversations willingly				
Use of humour to initiate (and	(ME: I am REALLY bad at telling jokes, like really bad, but I love hearing them)				
respond to) interactions	I've noticed in school, and drama and at home you are very funny. • Do you like telling / making jokes? Do you like listening to jokes? Why do you like jokes so much?				
	Do you like telling / making jokes? Do you like listening to jokes? Why do you like jokes so much? School				
	 At school I have noticed that you joke with the lads and the SNAs, making jokes about the lad's hair, pretending to steal Simon's food at lunch time, loads of joking! I want you to imagine for a minute that yo lived in a world with no jokes (dun, dun dun!). So let's say at lunch time with Simon and Danny, if jokes die exist-what would you do? What would you talk about? Is joking a fun way of being social? Do you think it helps when you are trying to get to know people? How/Why? 				
	Use of humour 1 2 3 4 5				
	Drama (e.g. cabbage!!) ROLE PLAY Imagine a world without jokes (get input: will we pretend that jokes were illegal and banned, or just that we didn't know they existed?-will I be? Who do you want to be)				

	So we were talking about if there was a world with no jokes, what you might do with Simon and Danny. Will we see what that might look like? So who will I be? (Let him decide who we will each be and how to position ourselves). Do we have our phones etc.? Do interaction (be led by him) If just sitting in silence not talking-would it be quiet if we didn't have jokes? See what happens with it. (Make small talk and see if he engages)
Impact of lack of social stimulus/motivator	So sometimes there are things that help us to hang out with other people, and kind of encourage us to be social, Like with my friends we love this board game 'Settlers' so we play that, and while we play we talk too. For example, if we are hanging out and playing a game on the Xbox (get an example from him) the game helps us to socialise and interact with each other. Can you think of any other examples of stuff you do with your friends when hanging out? In school, is there anything that helps you guys to hang out?
	Like at lunch time with Simon and Danny-what do you guys do? Is there anything that would be cool in school to help you hang out with the other lads and get to know them? Anything that might make it easier to socialise? (using his language here) Or anything the teachers or SNAs could do to help?
	Is there anything the teachers could do to help you get to know the lads that aren't in the resource room, like the lads in your History class?
	ROLE PLAY PLAN: suggestion he has of what might help in school, try with Danny and Simon, with Ciaran and then lads from history class (ask Jack, do you know the name of any of the lads in your history class? Ok I'll be) (or maybe just skip to lads from History class?) Who would you like to be teacher or the lads? Who will I be?
	Show what it might look like if he suggests something (e.g. if he suggests Xbox at lunch-ok so what might that look like-lets jump up and pretend that we are doing this at school) (if I am in role as lads in history class-talk to him, see how he responds)
	In drama, the drama story is what we use to help us to socialise, it is the thing that helps us all to interact with each other. Do you think that works well? Why/why not? Is it easier when we have something like the drama story to help us interact? Could we use stories like we do in drama at school or in other places? Why/why not?
	Q: Is it hard to hang out with someone that doesn't like the same things that we do?

	Q: On Xbox, you can chat to other people as you play the game right? My husband's nephew is always on the Xbox and I thought that he never talked to his friends but he told me that he was chatting to them all the time! Do you prefer playing the Xbox when you can chat to people? Why/why not?
Activities with and without	Do you prefer hanging out with people when you have something to do, like Xbox, Lego etc.? Which is better?
structure and the impact this	
has	Do you remember when I was in school with you, and kick boxing was cancelled so you had to go to rounders? You were telling me you didn't like itthat was like something to do with people wasn't it? But why was that so bad?
Expressing emotions/feelings to peers & adults &	Does anyone every annoy you? Like at school, or drama or social eyes? What do you do? Is it easy or hard to tell them how you are felling? Does Damian ever annoy you? Or Danny? What do you usually do? Does it help?
Patience & Tolerance	Role play:
	Someone annoying Peadar select roles (playful and fun)
	Could role play this if I felt necessary-I could be the annoying person and Peadar could be himself-or the other way around-I be Peadar and react in different ways-if we do this see what he wants to do with it and be playful with it.
	Social club In social club if people are annoying or upsetting you, do you tell them? How do you tell themWhy / why not?
	Drama
	Let's say for example Betty did something to really annoy you in drama-what might you do?
	Are there certain people it is easier to tell how you are feeling?
	If he has not yet mentioned adults:
	Adults
	(if he has not mentioned adults)
	At school if someone annoys you do you tell someone I remember when I saw you in school and you were not feeling well you told the SNAs

		Expression of feelings		1	2	3	4	5	
Self-Regulation Tactics	,	If you get upset, or angry or annoyed, what do you do? Is there anything you do, or could do, to help yourself to feel better?							
Avoidance strategies	Scho	ol & home							
	that i really	Let's imagine there was something you really didn't want to do, can you think of anything you might not want to do that mum and dad would want you to? (If he can't think of anything use example of PE or going to social club). If you really, really (drama voice) don't want to go, what do you do? What works? What doesn't work? (show me-role play) Drama (generally under table but gets lured into the story-ask him)							
	In drama, if there was a story you didn't like what would you do? If it was a really boring story and you thought it was just crap-what might happen?								
	Role Play: Peadar comes up with scenario-what is he being asked to do that he doesn't want to?								
	Peadar chooses role (who is Dad who is Peadar etc.) (Ensure Peadar gets to play Dad-what could dad do that would work?)								
	of thi	Ok so let's say dad wanted you to do X, but you didn't want to. So I'll pretend to be dad-help me out here, what kinds of things does dad say to encourage you? (get his feedback and bring this in and also improvisation). Let interaction go on-point is to see how he negotiates or what he does. (Also be dad based on what I have observed-use humour etc.)							
	At the end: Summarise-would that usually work?								
Concentration/Focus	think	Do you ever find it hard to pay attention in class? Sometimes when I am in lectures I kind of zone out, and start thinking about other things. Does that ever happen to you? Would you say it happens really often, a little bit, or not much?							
		might make it easier to pay attention? In school, are the makes it easier?	ere certain cla	sses i	n which	it is eas	ier to pa	y attention?	

	Level of concentration	1 2 3 4 5	Do you find it easy to concentrate on things in school? When you are doing you work, or homework or things like that? Would you say you find it really easy, really hard or somewhere in between?		
Behaviour of others in school and how it makes him feel	When I was with you in school you mentioned that there is a lot of messing in some classes, and sometimes the whole class gets punished. How do you feel when the lads are messing in Geography? Why? Role Play Ok so: Let's make this a bit more interesting. Let's pretend we are in a class where the lads mess loads. Ok will I be the teacher and you be the lads? What kinds of things would they be at? (Pretend to teach 'Ok lads so today I want you to open your books to page 5. Today we will be looking at this poem). Then summarise/recap-so they would be X, Y, Z. After that. Ok now, I will be you in the class, how do you sit in class when the lads are all kicking off? (Get him to physically direct how I am sitting) What is going through my head? So what would I be thinking?				
Willingness to participate	You know the way in drama we used to do lots of work in teams and pairs. You used to work with Betty lots, sometimes Sam, and Jerry when he was there. Do you like working as part of a pair/team in drama? Do you ever work in pairs or little groups at school? What subjects do you do this in? Which do you prefer, working by yourself, or with others or does it depend? (Probe) When do you like to work with others? When do you like to work by yourself? Do you prefer to work with Keith and the lads in the resource room, or would you ever work with any of the other lads, that aren't in the resource room? Why/Why not? If I was to ask you how much do you like working with others, what would you say? (rate) Willingness to work 1 2 3 in pairs/groups 4 5				

	Do you do this at home with your brothers? Or at school with the lads? Does it depend on the person?									
Supporting Others	So in drama, the teachers are always noticing things, and one thing that everyone noticed about you was that you were really supportive to everyone in the class. Like you were saying things like 'Good job' when people shared their news about passing an exam, or praising people's good ideas for the drama. So you like supporting the guys?									
C	Imagination 1 2 3 4 5									
	I see you use your imagination in drama all the time, and when I was with you at social club, I saw you lead the others in a great story, do you remember that (remind him if he does not). Do you get to do this at school? Would you like to do this with Simon and Danny? Why/why not? Is it fun making up stories and having other people in them? Do you think they would like it? Would it be fun to do with them at lunch time? Is it easy or hard to make up stories? Would it work in school? Roly Play: What would this look like in school? Like in the lunch room? Let's try it out! Who do you want to be? Who will I be? Ok so you direct me									
Imagination	Role play: If working with others in school-what would this look like (exploring if he feels it would or wouldn't work) could do it with lads in History class-what would this look like? (If Mr X wanted to get you guys all working together-what would he do? What might it look like? Peadar pick the roles). Do you like using your imagination? Do you get to use it much? Would you say it is good etc. Would you like to be able to use it more in school?									
	sometimes Sam. Do you ever work in pairs or little groups at school? What subjects do you do this in? Which do you prefer, working y yourself, or with others or does it depend? (Probe) If I was to ask you how much do you like working what would you say? (rate)									
	You know the way in drama we used to do lots of work in teams and pairs. You used to work with Betty lots,									

	Do you do that in school to? And in social eyes?
Friends	Talk to me about your friends at schoolwhen I was in with you at lunch time you were hanging out with Simon and Danny. Would you say they are your best friends in school? Why do you like them? What is the best thing about being friends with them?

Peadar October 2019

In general-everywhere in life, school, or home, or drama, or social club

Categories	Please Rate		Example to stimulate thought		
	1 = poor or never				
	5 = excellent or				
215 1 6 11 5	always				
Self esteem (perception of	1 2	3	What do you think Danny and Simon think of you? Do		
self in group)	4	5	they think that you are funny? Kind? (I sometimes wonder what Carmel and Lesley think of me, like do		
			they think I am good at drama, and I think they think		
			I am)		
Problem solving ability	1 2	3	You know the way in drama we often have to try and		
	4	5	solve mysteries, and use clues to try and solve		
	-		problems? Do you enjoy that kind of work? It is		
			problem solving really, isn't it? How good would you		
			say you are/how easy do you find it to solve problems?		
			Really easy, a little easy		
			Finds a way to solve problems, gives good suggestions		
			for problem solving, analyses the nature of a problem		
			before starting to solve it		
Turn taking	1 2	3	You know when you are chatting to people, or doing a		
	4	5	game, is it easy to wait your turn or can it be a little		
		_	bit tricky. I know for me, I can wait my turn fine when		
			I am playing a game, but if I am talking to someone		
			and I am bursting to tell them something, I find it hard to wait until they have finished talking. What do you		
			think? Is it really easy, a little bit easy, sometimes		
			hard		
			Tid C		
			waits to take his / her turn when playing games, takes		
			turns speaking when having conversations with others-		
Valuata sina ana usua ta	1 2	3	allowing others the opportunity to speak) You know in school when the History teacher (remind		
Volunteering answers to			me of his name again?) that's right when Mr X asks		
questions	4	5	the class a question, do you like answering? What		
			about when the geography teacher (what was her		
			name again?) that's right, when Ms. X asks the class a		
			question, do you like putting your hand up to answer?		
			How much would you say you like it?		
			When questions are not directed at him, he volunteers		
			to answer them.		
Participation	1 2	3	If Danny and Simon are having a conversation, or the		
	4	5	lads in the resource room, is it easy to go up and join		
	7		in? Or if they ask you too?		
			Barrando sub an arana institutiva ta data thanas		
			Responds when peers invite him to join them in activities, participates in whole group activities		
Competitiveness	1 2	3	So, let's say when you are playing xbox, or doing kick		
Co.//pediavelless			boxing or sports day at school, do you like winning?		
	4	5	How does it feel when you win? How does it feel if you		
			don't win? How important would you say winning is to		
			you? (really important, a little important)		
			Is he competitive with others?		
Passive during lessons	1 2	3	Do you ever find it hard to pay attention in class?		
			Sometimes when I am in lectures I kind of zone out.		
	4	5	Does that ever happen to you? Would you say it		
			happens really often, a little bit, or not much?		

				does not actively respond to what is happening around him
Adapt to change	1	2	3 5	Can you think of a time when a plan has changed at the last minute? I know when I was with you at school certain teachers were away so you didn't have those classes, that was a change. And when rounders was on instead of kickboxing. Do you mind when things change last minute? Does it bother you? A lot, a little bit or not at all? (Also depending on answers explore does it matter what the thing is-school based activity based) in routine such as new teachers, surroundings or when
				plans which have been made change)
Empathy	1	4	3 5	At school if Simon or Danny or even Colm is feeling down or sad, or just having a bad day, is there anything we can do to help them? Do you find it easy to help people feel better? What kinds of things can we say or do? How easy would you say it is to do this? A little bit easy
				comforting a peer who is sad, uses actions to show happiness or concern for peers such as a hug).
Differentiation between fiction and reality	1	2 4	3 5	So you play lots of xbox, which is fiction, and also in drama we work in stories, which are also fiction. Do the stories ever get confusing with real life? Like is it
				ever confusing where the story ends and real life starts? (rate)
				Does he move easily between reality and fiction (e.g. reading a story, watching TV, imaginative play). Does he confuse real with make believe?
Flexibility	1	2	3	Do you ever have a disagreements with Simon or Danny or any of the lads? Has there ever been a time
		4	5	that they want to do one thing, and you want to do another thing? Tell me about it (if not example give my own: So one time in the drama Carmel asked Lesley and I to make up the drama story, and I had a brilliant ideabut Lesley thought that where I wanted to set it wasn't very good). It was tricky because I
				really wanted it to be set on this planet. What could we do in that situation? (see if he comes up with compromise-joining ideas etc.) If he does ask: Is this easy to do at school? How easyfF he doesn't-yes it is really tricky isn't it(rate)-if appropriate compromises with peers during activities / games,
				handles winning and losing well

Appendix N

Observation Instrument

Social Skills	People Present	Time	Setting
Turn taking	Mum	7.00-7.15	Garden
Initiate interactions with peer	Dad	7.15-7.30	Kitchen
Participates in whole group activitiy	Brother	7.30-7.45	Living Room
Pair/group work (willingly)	Sister	7.45-8.00	Car
Answer question (not directly asked)	Friend	8.00-8.15	Other
Verbal expression of feelings (appropriate)	Dog	8.15-8.30	
Eye contact (appropriate)	Other	8.30-8.45	
Humour (appropriate)		8.45-9.00	Coridoor
Recognises non-verbal cues	Class teacher	1.00-1.15	SEN Room
Body language (appropriate)	SEN teacher	1.15-1.30	Yard
Taking over (discussion/activity)	SNA	1.30-1.45	Canteen
Passive in group	Peer	1.45-2.00	CR Eng
Facial expression (appropriate)	Subject Teacher	2.00-2.15	CR Maths
Empathy (demonstrates)	Principal	2.15-2.30	CR Irish
	Deputy Principal	2.30-2.45	CR Hist
		2.45-3.00	CR Geog
		3.00-3.15	CR Science
		3.15-3.30	CR Art
		3.30-3.45	CR Drama
		3.45-4.00	CR Music
		4.00-4.15	CR SPHE
		4.15-4.30	Hall PE
		4.30-4.45	Hall Drama
		4.45-5.00	
		5.00-5.15	
		5.15-5.30	
		5.30-5.45	
		5.45-6.00	
		6.00-6.15	
		6.15-6.30	
		6.30-6.45	

	-	-	<u>-</u>	-
Social Skill	People Present	Time	Setting	Context
				The boys were having an afterschool snack and A
				He was upset about something which had happen
				listening to this and he made a sad face when Ada
Facial expression (appropriate)	▼ other & Mum	2.45-3.00	Kitchen	'He shouldn't have done that' about the indcident
Participates in whole group activitiy	^			
Pair/group work (willingly) Answer question (not directly asked)				
Verbal expression of feelings (appropriate)				
Eye contact (appropriate)				
Humaour (appropriate) Recognises non-verbal cues				
Body language (appropriate)	~			

Appendix O

Extract from Reflective Research Journal

Reflexive Research Journal-Extract

Date: 18th April 2018

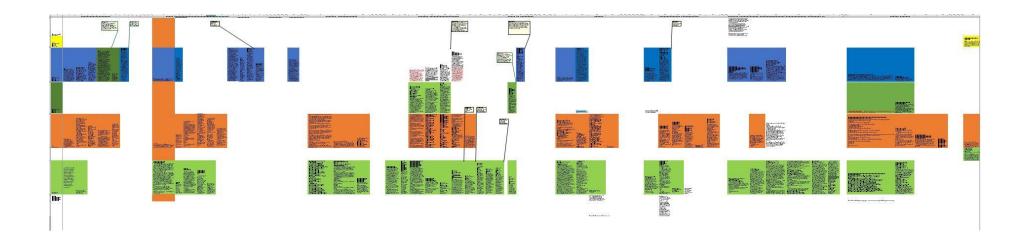
Reflecting on today's observations

School

- Fred seems very happy and this space, and enjoys interactions with those he considers peers. Teacher and SNA speak very highly of his academic abilities, and he appears to want to please them.
- Have not seen any examples of pair/group work, whole class activity (in structured setting (watch for this on next observation day to see if more occurs)
- Fred expresses his feelings well when he is happy (e.g. I am excited)
- Teacher commented on his self-regulation-see what this is like on next observation day in school and in general at home
- Teacher and SNA very willing to share information and participate in informal conversations
- Didn't interact with peers in mainstream setting (no SNA support) or on yard (unless boys from his class present). Monitor to see if this is an emerging theme
- Engaged with toys outside areas of interest (cars) with peers he appeared to like spending time with, again monitor this in school and at home.
- Very enthusiastic for everything in school
- Overy hard not to overly involve myself (e.g. in free play when Fred was playing in isolation). I think a challenge will be finding that balance. When Fred wants me to be involved that is fine, but resisting the urge to do what we do in drama and encourage social interactions is a challenge I was not expecting, and must ensure I resist that urge to have valid data.

Appendix P

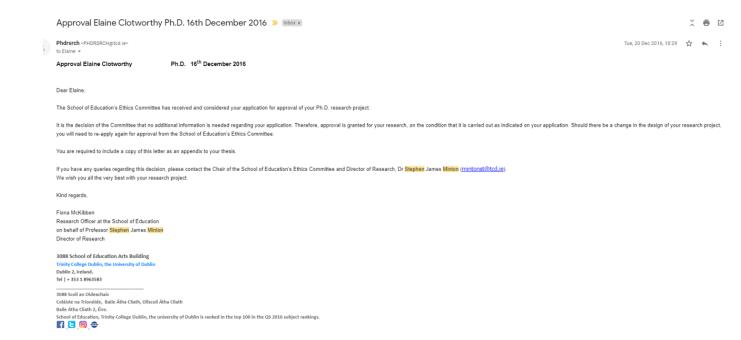
Data Analysis Sample



		Initiates Inte	ractions with Adults Over Pe	eers			*	Use of Humour to inititate and response			
			Elaine. Mised mainly interacting viribut responded to peers tive. This is in school content b, place in local park-just goo	ce during the 60mins at physically took		Elaine: He wanted to go h so perhaps this w. reason? His reason his reason his reason his reason his w.	could				
earcher notes											
servational Data ne											
food break some with others but in food and stayed room "(good cha boy in other roon going over to wh were chatting an	: During CORIDOOR When P was netreaction waiting outside with the into tother with one specific to another member with one should be a more sharp with the specific work of the continued with his peers more and they did not alternpt to interact with him.	HST: Written work teacher told the class that they could work with a pair, he was sitting beside SNA and worked solo with her support while other boys who were sitting of bythernselves moved there was not initiating of this from P or teacher (no other boys from unit	then one sky rockets' then X asked what are you saying about me and he told him. P also said to X when X had sunglasses tose the sunglasses to deflect the ball'. He commented on lack of rules etc. saying to me. You see now why saying to me. You see now why	On the way to the park P chatted to the SNA and me [TD] and the the chatted the the chatter of t	were chatting and laughing (2 and X)			banter 'greatest show man' / thorwin out of window. Lots of banter with SNA (initiating interactions and with humour)	During food breek some interaction with others but mainty took food and steyed in other room. (good chats with one boy in other room), Was going ower to where SNA's were challing and bantering with them more than his peers		

Appendix Q

Confirmation of Ethical Approval



Appendix R

Application for STAY



Scoil an Oideachais School of Education

Direct email: carmel.osullivan@tcd.ie

3rd September 2021

Re. Requesting a stay on Elaine Clotworthy's PhD thesis

Dear Dean,

I am writing to support my PhD student's request to place a stay on her thesis, specifically the data presentation and discussion chapters (Chs. 4, 5 and 6).

Elaine Clotworthy's study is an in-depth ethnographic case study involving two child participants who have a diagnosis of autism. Elaine adopted a highly innovative quasi-ethnographic methodology which meant she spent time gathering data in the participants' family homes, schools, social clubs and other social settings with family members and friends. Although the identity of the participants and all respondents in the study has been anonymised and appropriate steps taken to protect against identification, the community who participated in the wider Social Drama classes which is at the centre of this study, is quite small and therefore we feel it is important to request putting a stay on the findings and discussion chapters.

Thank you very much for considering this request.

Yours sincerely,

Carmel O'Sullivan Supervisor

Appendix S

Pilot Study: Letters of Information



Scoil an Oideachais School of Education

Letter of Information: Pilot Study



What is research?

Research helps us to learn new things. In research we ask a question and try to find out the answer.

Why are we doing this research?

During the drama classes children learn about making friends and practising social skills. We want to see if some children are using the things they have learnt in drama at home or at school.

What you are invited to do

As a researcher, I need to practice to make sure I am ready. To do this, I need to practice spending time with children and their families. If you join this practice research, which we call a 'pilot' study, I would go to school with you for a while, to see what school life is like for you and I would spend some time with you and your family at home also. I will ask your mum or dad and your teacher to fill out a form and have a chat with me about what you learn in drama and if you use this at home and at school.

Important things to know

- You get to decide if you want to take part
- You can say 'No' or you can say 'Yes'
- If you say 'Yes' you can always say 'No' later
- Nothing will change if you say 'Yes' or 'No'



Assent Form: Pilot Study

	Yes √	N₀X
I have talked to Elaine and my mum or dad and		
understand what the pilot study research is		
about and what happens if I join		
I want to join and am happy to have Elaine visit		
me at home and at school		
I am happy for Elaine to talk to my Mum and		
teacher		
I understand that I can stop being in the pilot		
study at any time I like.		

Name:		
Date:		
υατε:		



Date
Dear,
In drama classes we focus on making friends and developing our social skills. We know in drama all the young people are really good at interacting, making friends and using social skills. We want to see if the things we do in drama help people in social interactions at school and at home.
The Pilot Study
To learn more about social skills and interactions outside the drama class, I need to spend time with young people and their families in school and at home. I need to practice spending time with young people and taking notes. I am inviting you to join the pilot study of this project, to help me practice my skills for the research project. I would like your permission to spend some time with you and your family, at home and at school.
If you agree to participate in this pilot study I will ask you to do the following:
 Sign a form saying that you understand what the pilot study is about and that you are happy to be involved. Allow me to spend time with you at home, in school and during other extracurricular activities. Allow me to interview people that are important in your life such as your parents and
teachers.
Participation in this study is voluntary and you can leave at any time, and nothing will change in drama classes.
If you have any more questions, we can have a chat and I will answer them as best I can.
Thanks,
Elaine



Assent Form for Pilot Study

	Yes√	NoX
I have talked to Elaine and my mum or dad and		
understand what the research is about and what		
happens if I join the pilot study.		
I want to join this research and am happy to have Elaine		
visit me at home and at school.		
I am happy for Elaine to interview my parents and		
teachers.		
I understand that I can stop being in the pilot study at		
any time I like.		
I agree to take part in this pilot study		

Name:			
Date:			



Information Letter for Parents: Pilot Study

Date

Dear Parent,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in Social Drama classes for young people with Autism Spectrum Disorders (ASD), which have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of children's lives beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used at home and at school. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

The Pilot Study

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with participants over a number of days, in a variety of places such as at home, school and other clubs or activities. The purpose of the pilot study is to try out the research instruments (e.g. the observation schedule, interview questions and questionnaires), take on board any feedback that is given, and adapt the instruments based on this feedback.

We would welcome your permission to observe your child in school, and in the home setting. We would also be most grateful if you could fill out an online questionnaire (apx. 30minutes) and participate in a follow up interview based on this.



Participation in this pilot study is entirely voluntary and you can withdraw at any time without a reason and without any consequence. All information that you share during your interview is confidential, and anything that is observed by me in your child's school or home is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

Please do not hesitate to contact me if you have any questions relating to this research. I can be contacted via email: clotwoe@tcd.ie.

Yours sincerely,

Elaine Clotworthy

PhD Researcher



Information Letter for Principal: Pilot Study

Date

Dear Principal,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in Social Drama classes for young people with Autism Spectrum Disorders (ASD), which have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of children's lives beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used at home and at school. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

The Pilot Study

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with participants over a number of days, in a variety of places such as at home, school and other clubs or activities. The purpose of the pilot study is to try out the research instruments (e.g. the observation schedule, interview questions and questionnaires), take on board any feedback that is given, and adapt the instruments based on this feedback.

We would welcome your permission to observe (*insert child's name*) in his/her classroom and the school yard, which his/her parents have granted permission for this to occur. We would also ask his/her class teacher to fill out an online questionnaire (apx. 30minutes) and participate in a follow up interview based on this



Participation in this pilot study is entirely voluntary and anyone can withdraw at any time without a reason and without any consequence. All information that you share during interviews and questionnaires is confidential, and anything that is observed by me in the school setting is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

All staff working with Isobel will receive information about this study, and they will be asked to email me to let me know if they agree to participate. Please do not hesitate to contact me if you have any questions relating to this research.

I look forward to hearing from you soon.

Yours sincerely,

Elaine Clotworthy

PhD Researcher



Information Letter for Teachers: Pilot Study

Date

To whom is may concern,

The Research Project

My name is Elaine Clotworthy, and I am a teacher / researcher in Social Drama classes for young people with Autism Spectrum Disorders (ASD), which have been running since 2004. This social skills intervention called 'Social Drama' was developed by Trinity College Dublin with Aspire. Research already carried out shows the success of the 'Social Drama' approach for developing and using social skills in the drama class, however less information is available in relation to whether these skills are used in other areas of children's lives beyond the immediate setting of the drama classroom.

The literature highlights that it can be difficult for people with Autism Spectrum Disorder to generalise skills from one environment to another (Brown, Odom & McConnell, 2008; Silton, 2014). Because of this, we are now looking to assess if the social skills which are developed and used in the social drama classes are being used at home and at school. We hope to compare the social skills we see used at home and at school with those that we see in drama class to help learn more about what makes the drama classes successful. Funding to support this doctoral study has been provided by the Dormant Accounts Fund, and this study is being supervised by Dr Carmel O'Sullivan.

The Pilot Study

This proposed research is assessing social skills in a variety of different settings. The most effective way for this to take place is by me spending time with participants over a number of days, in a variety of places such as at home, school and other clubs or activities. The purpose of the pilot study is to try out the research instruments (e.g. the observation schedule, interview questions and questionnaires), take on board any feedback that is given, and adapt the instruments based on this feedback.

We would welcome your permission to observe (insert child's name) I your classroom, which his/her parents have granted permission for this to occur. We would also be most grateful if you could fill out online questionnaire (apx. 30minutes) and participate in a follow up interview based on this.



Participation in this pilot study is entirely voluntary and you can withdraw at any time without a reason and without any consequence. All information that you share during your interview is confidential, and anything that is observed by me in your child's school or home is confidential. All personal details will be stored securely, not shared with anyone and seen only by me. The School of Education in Trinity College Dublin have strict guidelines for ethical research. These guidelines state that information gathered must be destroyed after a certain period of time. This study will follow these guidelines.

Please email me at <u>clotwoe@tcd.ie</u> to let me know if you agree to participate in this study, and please do not hesitate to contact me if you have any questions relating to this research.

I look forward to hearing from you soon.

Yours sincerely,

Elaine Clotworthy

PhD Researcher