



# Language & Communication Profiles of Children with a primary diagnosis of AD(H)D

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## Clinical Speech and Language Studies

# Outline



- Background
- Inspiration for project
- What are we talking about this evening?
- Quantitative Analysis
- Qualitative Analysis (e.g. narratives)
- Conclusions & Way forward (or *‘What do I do in the clinic on Monday’* ?)



# CAMHS Multidisciplinary Team

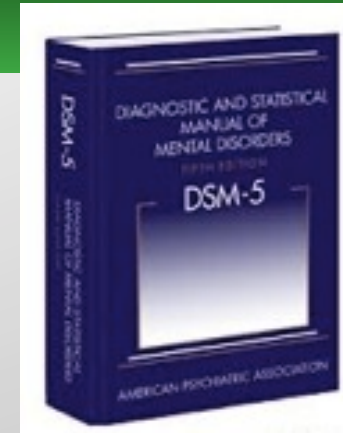


- The Family
- Psychiatrist
- Psychologist
- Social Worker
- Speech & Language Therapist
- Occupational therapist
- Play therapist
- Nurse



## Clinical Speech and Language Studies

# Attention-Deficit/Hyperactivity Disorder



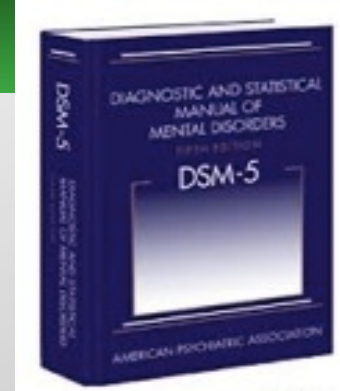
- diagnostic criteria DSM-5 similar to those in DSM-IV.
- same 18 symptoms are used ; continue to be divided into 2 symptom domains (inattention and hyperactivity/impulsivity), of which at least 6 symptoms in one domain are required for diagnosis.

Several changes in DSM-5:

- 1) Examples added to criterion items to facilitate application across life span
- 2) Cross-situational requirement strengthened to “several” symptoms in each setting
- 3) Onset criterion changed from “symptoms that caused impairment were present before age 7 years” to “several inattentive or hyperactive-impulsive symptoms were present prior to age 12”



## Clinical Speech and Language Studies



# Attention-Deficit/Hyperactivity Disorder

- 4) Subtypes replaced with ‘presentation specifiers’ that map directly to prior subtypes
- 5) Co-morbid diagnosis with ASD now allowed
- 6) A symptom threshold change made for adults, to reflect their substantial evidence of clinically significant ADHD impairment, with the cutoff for ADHD of five symptoms, instead of six required for younger persons, both for inattention and for hyperactivity and impulsivity.



## Clinical Speech and Language Studies

# LI & children with ADHD

- can present with an array of SLCNs (Tetnowski 2004), may go undetected in behaviourally disturbed children (Cohen 1996,1998).
- some language difficulties viewed as integral to diagnosis of ADHD (Westby and Cutler 1994; Mc Innes et al. 2003) and/or as associated co-morbidly as a diagnosed LI (Cohen et al. 2000; Kadesjo and Gillberg 2001).
- oral language problems & some pragmatic language deficits (e.g. Westby and Cutler 1994; Bruce, Thernlund, and Nettelbladt 2006; Mathers 2006; Im-Bolter and Cohen, 2007).
- some report impairments are more likely to be related to expressive language difficulties such as impaired aspects of verbal fluency in relation to timing of responses (e.g. Hurks et al. 2004) and difficulty on tasks requiring the recall or formulation of complex sentences (Kim and Kaiser 2000).



## Clinical Speech and Language Studies

# LI & children with ADHD

- Mc Grath et al. (2008) - interesting associations between speech sound disorders (SSD), specific language impairment (SLI) and ADHD symptoms.
- Reading difficulties also widely reported (Bruce et al. 2006) in the region of 25-40% (Rucklidge and Tannock 2002; Willcutt and Pennington 2000).
- Finally, SLCNs have been investigated to discriminate profiles of children with SLI, language impairment (LI) and autistic spectrum disorders (ASD) from those with typical development (e.g. Mc Grath et al. 2008; Geurts and Embrechts 2008; Redmond, Thompson, and Goldstein 2011).
- Such discrimination difficult as many children with ADHD have secondary diagnoses of other psychiatric presentations which can further complicate the clinical presentation (Westby and Watson 2010).



## Inspiration for project: 3 main catalysts

1. Previous study looking at language & communication skills of children attending Lucena Clinic
  - Children with AD(H)D of particular interest
  - Needed closer analysis of profiles
2. MSc thesis (MacEivilly, 2008): *‘An exploration of the lived experience of AD(H)D’*
3. Growing awareness in the literature (& clinically) of the complexity of language & communication presentations among this group





# What are we talking about this evening?

- Data on 40 children, referred by teams
- Primary diagnosis of AD(H)D
- Aged between 9-12 years
- Some demographic information
- Findings on testing
- Discourse sample analysis (e.g. narrative)



## Clinical Speech and Language Studies



- **Goals of overall project**

- assessment of the child's speech, language & communication skills & needs (SLCNs), via formal & informal means
- engagement in social conversation to explore conversational skills & enhance communication confidence

- **Materials**

- children assessed on a battery of formal language assessments as well as some informal activities (e.g. narrative elicitation)





## Clinical Speech and Language Studies

Table 1: Test Battery

<b>LANGUAGE AREA ASSESSED</b>	<b>TEST USED</b> (administered and scored according to test guidelines with a score at or below -1 SD from the mean as deeming impairment)
Language comprehension and expression	Clinical Evaluation of Language Fundamentals: CELF 3 (Semel, Wiig & Secord, 1993 and CELF 4 UK (Semel & Wiig, 2006); (CELF 3 administered to 14 children) & CELF 4 administered to 26 children)
Vocabulary comprehension	British Picture Vocabulary Scales II (BPVS II) (Dunn, Dunn, Whetton & Burley, 1997) (administered to 36 of the 40 children).
Reading comprehension & accuracy	Neale Analysis of Reading Ability II (NARA II) (Neale, 1997)
Language & communication	Children's Communication Checklist 2 (CCC-2) (Bishop, 2003) (35 out of 40 returned for analysis with one incomplete).
Other e.g. discourse, narrative	Discourse Analysis (some analysis of this data has been presented elsewhere e.g. see Walsh, Scullion, Burns, MacEivilly & Brosnan, 2011)



## Clinical Speech and Language Studies



### Procedure

- \*all children with a primary diagnosis of AD(H)D referred to research team (across a 2-year period approx)
- SLTs & students administered all tests
- each child assessed individually over 3 x 1 hour assessment sessions
- multiple ‘breaks’ given during sessions; ‘reward’ at end of assessment (i.e. certificate)
- all sessions audiorecorded & transcribed (amounting to 120 hours approx)

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## Clinical Speech and Language Studies

# Focus in on:

## 1. *QUANTITATIVE ANALYSIS & FINDINGS*

*-highlights 'impairment'*

Demographic & language profiles

## 2. *QUALITATIVE ANALYSIS & (SOME) FINDINGS*

*- highlights 'competency'*

Narrative profiles

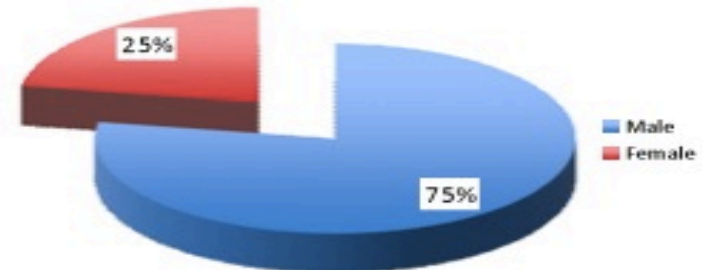


## Clinical Speech and Language Studies

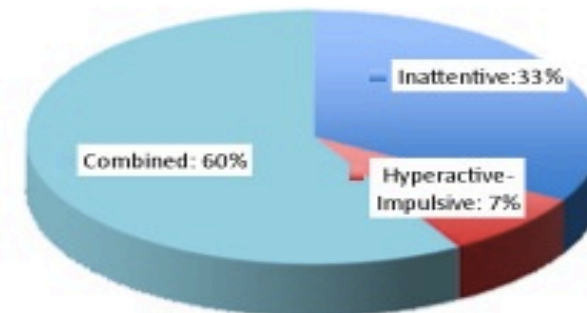
### Some demographics

Mean age 10.2 years  
All native speakers of English (Hiberno-English)

#### 1. Gender (n=40)



#### 2. AD(H)D Subtypes (n=40)



#### 3. Cognitive Functioning (n=28)

70% of the children had a cognitive assessment and 6 of these (21%) were found to be functioning at the borderline level or below.



# Cognitive assessment

- At the time of data collection:
  - 70% (n=28) had a cognitive assessment completed
  - majority functioning within the average or above average range
  - 21% (n=6) of those assessed functioning within borderline range of ability or mild learning disability



## Clinical Speech and Language Studies



Table 2: Range of diagnostic categories and numbers of children with specific diagnoses among the 29 (72.5%) children who presented with a secondary diagnosis

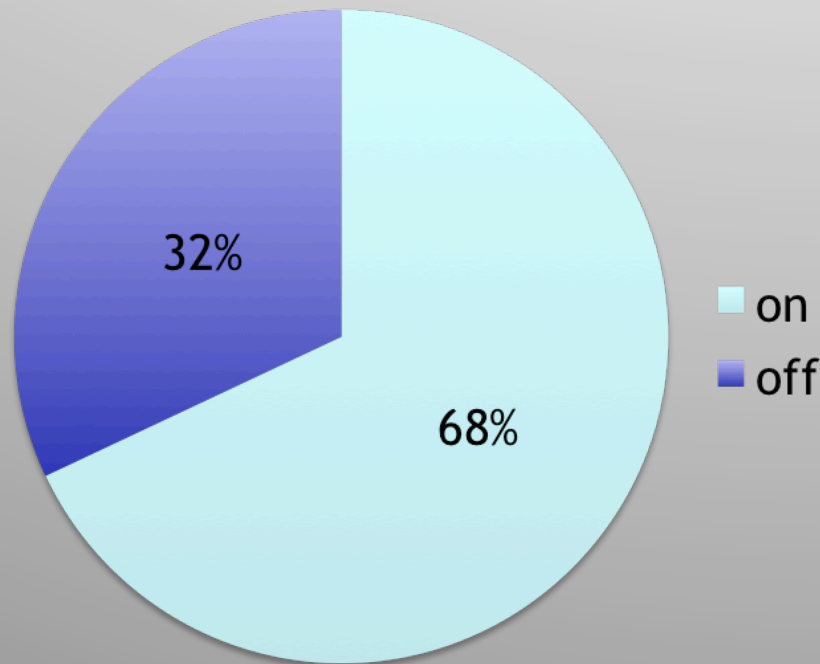
<b>Secondary Diagnosis</b>	<b>Number of children</b>
Autistic Spectrum Disorder (ASD)	6
Dyslexia	6
Oppositional Defiant Disorder (ODD)	4
Borderline Learning Disability	4
Mild Learning Disability	2
Dyscalculia	2
Anxiety Disorder	1
Specific Language Impairment (SLI)	1
Dyspraxia	1
Pervasive Developmental Disorder (PDD)	1
Multiple secondary & tertiary diagnoses	1



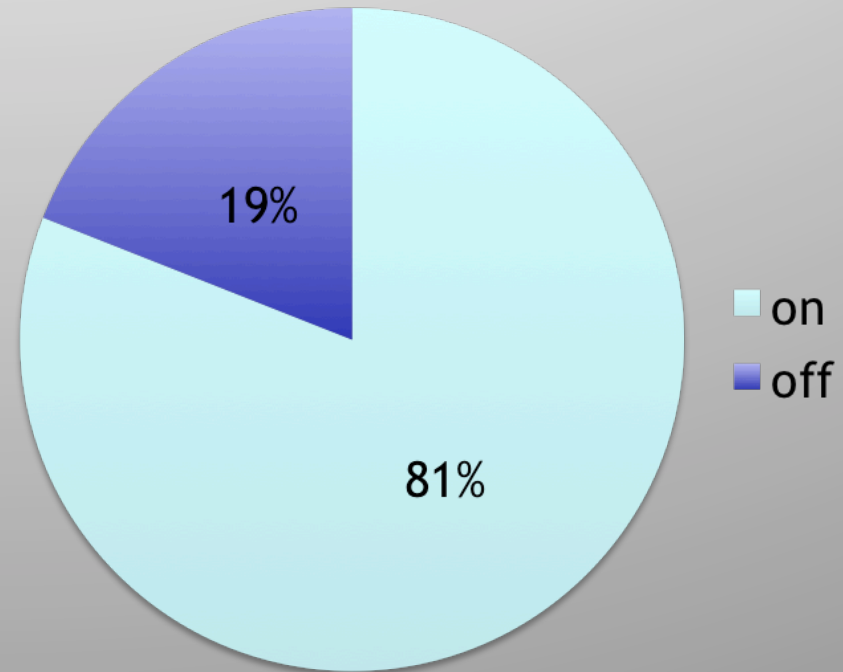


# Medication (n=40)

In general

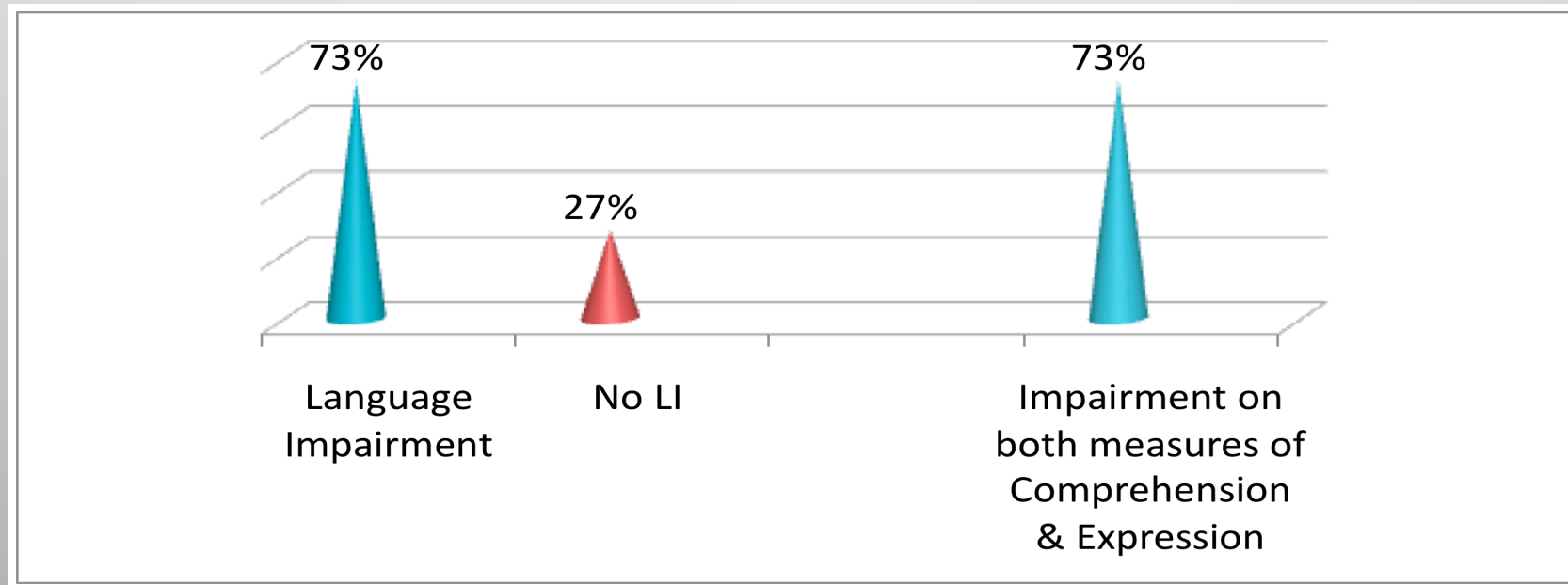


At time of testing





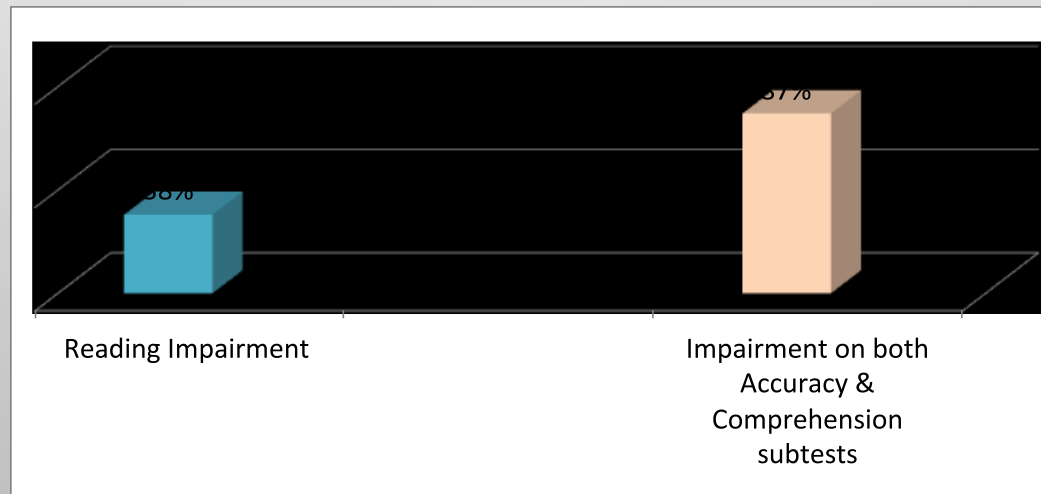
## Language Impairment (LI) on Testing (n=40)



1. Mean *Total Language Score* on the CELF 3 was 83 (with a range of 70-125, based on 14 children)
2. Mean *Core Language Score* on the CELF-4 was 87 (with a range of 52-120, based on 26 children)
3. Among the LI group as a whole, a predominance of receptive language impairment was evident (90%) over expressive LI (83%)
4. Of those with no LI (27%; n=11), just 6 children scored above a standard score of 100 on both measures of receptive and expressive language.



## % Reading impairment (n=40)



Standard scores ranged from:

- <70 to 116 on measures of *accuracy*, suggesting a mean standard score of 89
- <71 to 116 on measures of *comprehension*, suggesting a mean standard score of 90
- similar percentages had reading accuracy difficulties (37.5%) & reading comprehension difficulties (32.4%) – while 87% had both
- recall 15% (n=6 diagnosis of dyslexia)



## Clinical Speech and Language Studies

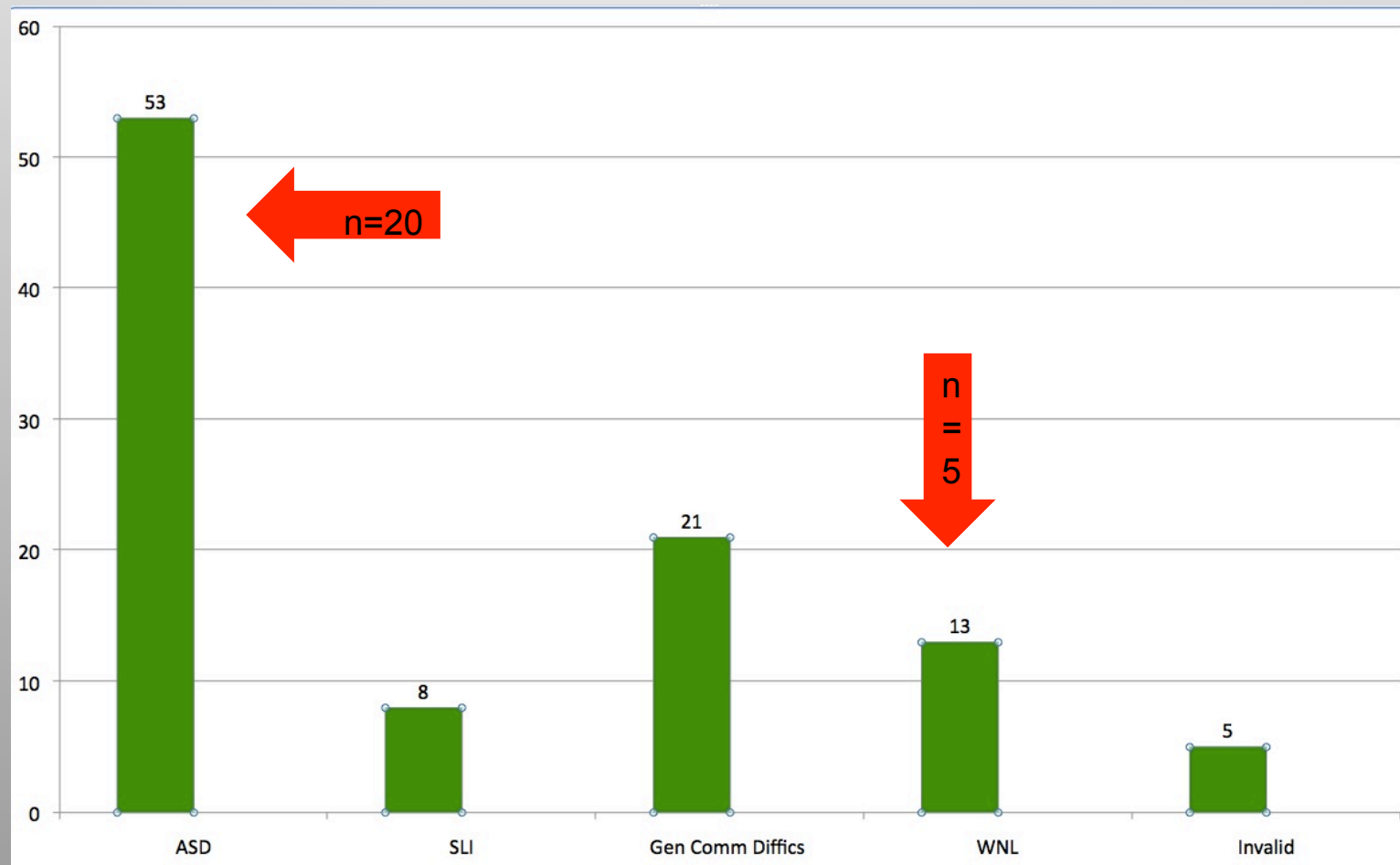


- Receptive Vocabulary (BPVS-II)
  - 6/36 , i.e. 17% showing impairment
- Speech-sound difficulties
  - 4/40, i.e. 10%, based on clinical judgment



## Clinical Speech and Language Studies

# ‘Suggested’ communication profiles on CCC-2 (%)



All 6 of those with a diagnosis of ASD showed that profile on CCC2- but 14 more had a profile ‘suggestive’ of ASD on this measure



## Clinical Speech and Language Studies

Relative 'weaknesses' reported by parents; rated as 'frequently' occurring behaviors

Area	Item no/ descriptor	How many parents reported this?
Inappropriate initiation	35. 'It's difficult to stop him/her from talking'	49%
Interests	26. 'Moves conversation to favourite topic even if others don't seem interested'	49%
Inappropriate initiation	5. 'Talks repetitively about things no-one is interested in'	45%
Context	28. 'Ability to communicate varies from situation to situation- e.g. may cope well when taking one-to-one with a familiar adult, but have difficulty expressing him/herself in a group of children'	43%
Social Relations	33. 'Hurts or upsets other children without meaning to''	40%



## Clinical Speech and Language Studies

### Relative strengths reported by parents

Area	Item no/ descriptor	How many parents reported this?
Stereotyped language	62. 'You can have an enjoyable interesting conversation with him/her'	80%
Social relations	57. 'Shows concern when other people upset'	77%
Social relations	67. 'Talks about his/her friends; shows interest in what they do and say'	74%
Non-verbal communication	65. 'Smiles appropriately when talking to people'	69%
Speech	58. 'Speaks fluently and clearly, producing all speech sounds accurately and without any hesitation'	69%



## So what are parents saying about their children, in general?

In the ‘majority’ of cases

⇒ *reasonably good with social relations, NV communication, & speech*

In ‘some’ cases (less of a majority),

⇒ *may be more likely to have difficulties with attending to context and with inappropriate initiations*





## So what?

- These conclusions not as clearly evident in scaled scores for group (i.e. as compared to norms)
- Highlights importance of item analysis ( i.e. individual profiles) for clinical use
- Importance of parental perceptions & judgements
- But what else is there?



## Clinical Speech and Language Studies

# Summary of quantitative findings

1. 75% male
2. Predominance of *combined* subtype of AD(H)D
3. > 70% had 2<sup>o</sup> diagnosis; ASD & dyslexia most common
4. Most functioning in average range of ability
5. Most on medication at time/day of testing
6. >70% LI on testing with > 70% both Rec & Exp
7. >33% literacy difficulties with > 85% both accuracy & comp
8. Small numbers with vocabulary difficulties & SSD
9. Strong positive correlations across tests - valid battery  
=> Pervasive LI with complex language & communication profiles



## 2. *QUALITATIVE ANALYSIS & (SOME) FINDINGS* *highlight ‘competency’*

Narrative profiles (& CCC2 profiles)





## Clinical Speech and Language Studies

# Our narrative elicitation

- Adapted from [Mc Cabe & Peterson \(1991\)](#)

### Trip to Doctor's office

- 'Guess what?'
- *'I went to the doctor's office the other day. I had to wait 3 hours to see him. There were twin brothers about 5 years olds waiting too. They kept trying to read magazines. But every time one brother picked out a magazine, the other brother wanted to read the same magazine. They would start fighting and their mother would take the magazine away from them. They went through the whole pile of the magazines and didn't get to read any of them'*
- 'Do you have any brothers or sisters?'
- 'Do they fight or argue?'
- **Other:** Visit to hospital?



## Clinical Speech and Language Studies

# 3 features to discuss

- 1. Conversational narratives?
- 2. ‘Certainty’ in narrative telling?
- 3. ‘Sparkle’ in narrative telling?



## Clinical Speech and Language Studies

# 1. CONVERSATIONAL NARRATIVES?



## Clinical Speech and Language Studies



### Narrative 1 : ‘I drank too much Calpol’

1. C: I drank too much Calpol [3] my Gran was- do you wanna hear the story?
2. S: *aw I do go on*
3. C: okay my m=
4. S: *= you started it so you have to finish*
5. C: okay my Mum and Dad went off to this hotel
6. S: *yeah*
7. C: So my Gran was in charge and my sister was asleep alright? So she’s just
8. watching TV for a bit thinking I was ok I sneak down and I go and drink
9. the Calpol...the whole bottle...mainly...eh eh then eh she comes in she finds
10. me drinking it...she thinks I drink it all...which I did actually...and eh she
11. goes and calls my parents...eh but she asks for Murphy yeah and the hotel says
12. there’s no Murphy here there’s no Murphy here...okay...but...they were meant t
13. to be under the party of Byrne.
14. S: *oh right yea they*
15. C: so my Gran had to take me to hospital so the got the neighbour [3]

**Abstract**

**Orientation**

**Orientation**

**Complicating  
Action**



Clinical Speech and Language Studies



**Narrative 1 (contd.)**

- 16. like the neighbour what was the name of that man who died the
- 17. singer...eh in Dublin
- 18. S: *this one just the other day*
- 19. C: yea
- 20. S: *Ben Storm*
- 21. C: that was the younger one the children from the house next door
- 22. S: *oh really?*
- 23. C: we my Mom knew Ben Storm
- 24. S: *okay*
- 25. C: so eh so so eh the Dad alright stayed eh crying with my Nan we went to
- 26. hospital my sister stayed with the neighbours went to hospital my Mom
- 27. and Dad come home and find me not there
- 28. S: *oh my goodness*
- 29. C: so they stayed there and wait til I came home but...the doctor said I was
- 30. fine ( )
- 31. S: *mhh*
- 32. C: just to keep me away from the medicine from now on

Side  
sequence



Resolution  
Evaluation

Coda





## Clinical Speech and Language Studies

### Narrative 2: ‘I wouldn’t like twin brothers’

ST: ...EVERY time one brother picked up a magazine the OTHER brother wanted to read it...so...he picked it up and the other fella would just come in and want to read it and take it from him ok? [abstract/orientation]

C: ==but what so it was like “I want it I want it I want it” [mimes pulling back and forth] [elaboration; dialogue]

ST:EXACTLY don’t fall off the chair ok? EXACTLY==

C: “I want it. I want it”== [elaboration; reported dialogue]

ST: that’s exactly what they’d do they’d start fighting and it was really terrible and their mother would have to get up and take the magazines off them- she did the to get up about three times to take the magazines off them ok?==

C: did they just keep going for one another? [clarification]

S: you’re absolutely right they did they went through the WHOLE pile==

C: no so so em say they were fighting == [reinforcement/clarification]

S: ==yeah?

C: and then the mother came put it- then the boy said “Mammy Mammy Mammy Mammy” [elaboration; dialogue]

S: yeah exactly

C: and yeah she kept picking them up again

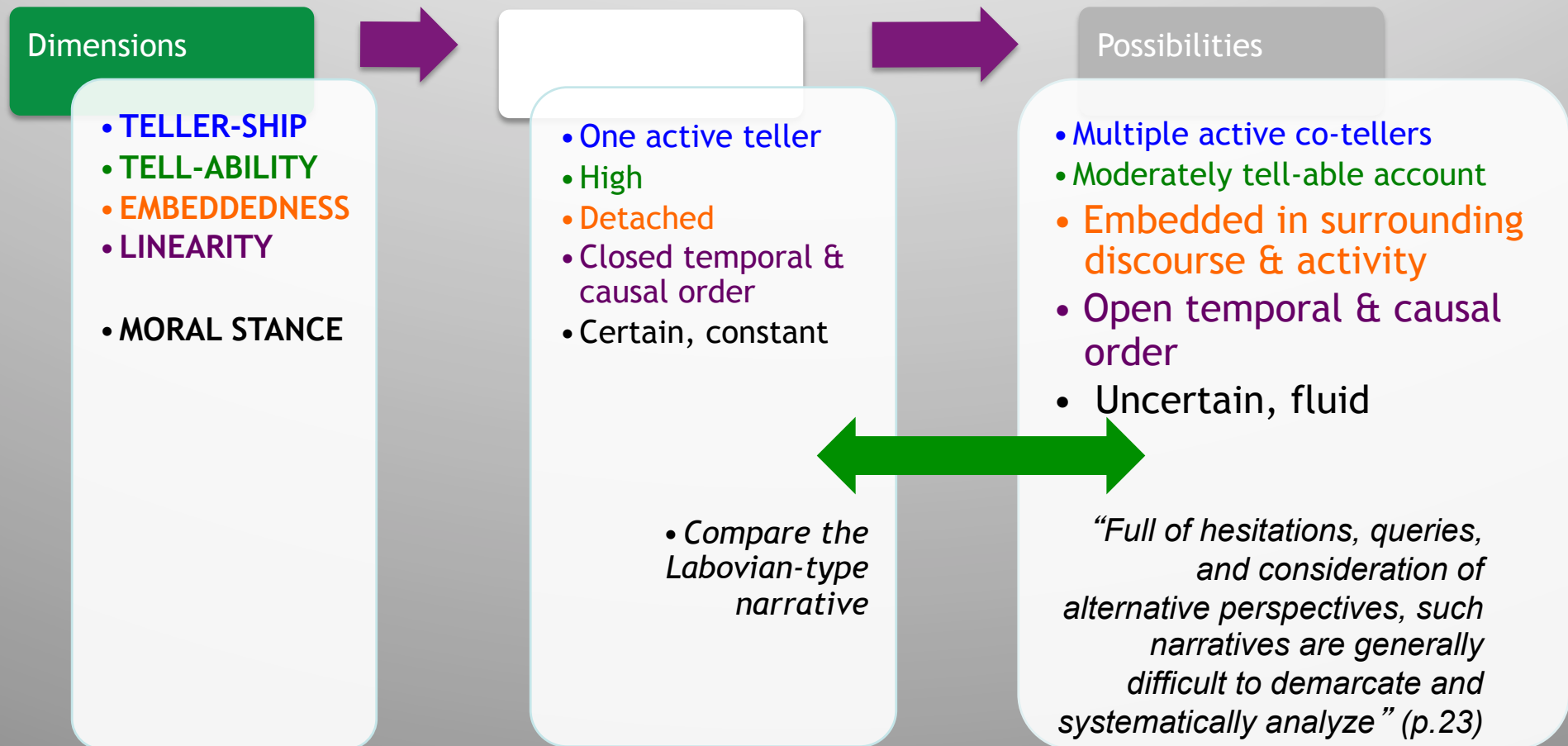
S: yeah these two twin brothers ...they did they went through the whole pile of magazines the two brothers were fighting all the time

C: I wouldn’t like twin brothers [back to present; coda]



## Clinical Speech and Language Studies

# Narrative dimensions & possibilities (adapted from Ochs & Capps, 2001; 20)

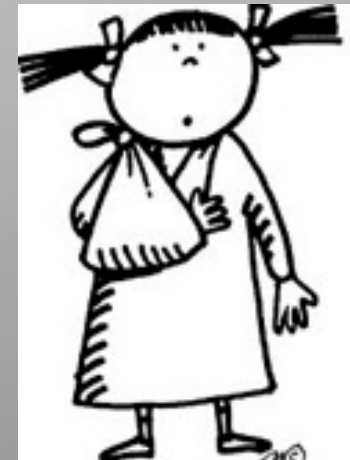
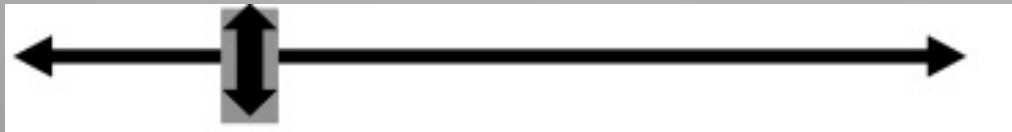




# Narrative Telling and Analysis in Children with AD(H)D

## Narrative 3:

- This example focuses on a type of narrative whose dimensions cluster predominantly **at the left hand side of the continuum**
- Narrative 3 is about ‘an accident resulting in a broken arm’.





# Clinical Speech and Language Studies

## Example 1

Narrative

3

(IW4 Com 3:00-3:15) d Am Extract 1 (Narrative Probe), Session 3 - 24'00 – 26'16 (narrative 4))

1. SLT: and have you ever have you ever hurt yourself like have you ever broke yuno cut your
2. //arm or \*
3. C: //my brother\* broke his arm
4. SLT: did he
5. C: yeah=
6. SLT: =what was that like
7. C: it was a bit sore for him
8. SLT: oh what happened how did he break it
9. C: [be]cause my friend me and my friend he was a boy and he we were bouncing on the
10. trampoline the two of us and there was another and his brother were em (.) were out
11. on the trampoline and my eh (1.0) my friend he was a boy he eh squished my brothers
12. arm and one of his em (.) bones popped out
13. SLT: oh my goodness=
14. C: =put it didn- popped out like=
15. SLT: =no I know=
16. C: =he was it was just like broken //like that\*
17. SLT: //broken\* yeah and were they able to fix it
18. C: mm yeah it took about three or four or two weeks
19. SLT: hhh my goodness and did they put a plaster on it?
20. C: yeah it was like an arm thing=
21. SLT: =an arm thing //a sling?\*
22. C: //and a\* big hard.=
23. SLT: =yeah
24. C: thing and it would be rotten when ye take //took it off \*
25. SLT: //oh was it\*
26. C: but he took a shower and it was all clean
27. SLT: oh good. so it all ended up okay
28. C: then he went then before the other week that he broke his after the other week that he
29. broke his arm he em had to get another one on he's he didn't break it again it just
30. SLT: oh okay=
31. C: = it was just soft one just to help him again=
32. SLT: =just to give it support
33. C: yeah
34. SLT: alright=
35. C: =then he was better
36. SLT: okay my goodness

Table 3.2: Narrative 3 and its dimensions plotted on the proposed CNA

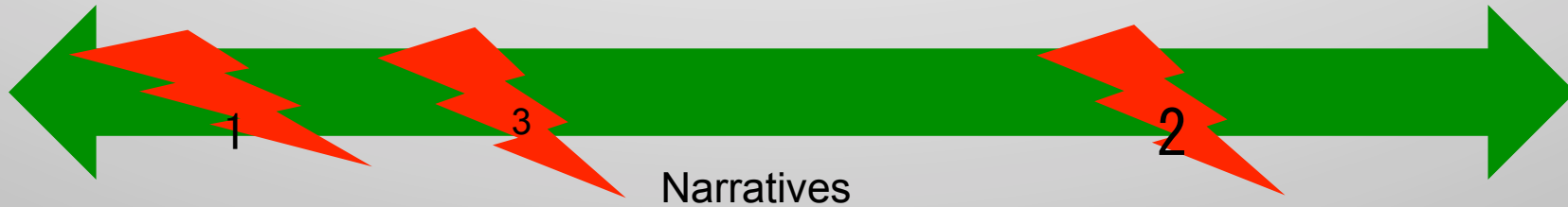


Dimensions	Point 1	Point 2	Point 3
Tellership		x	
Tellability	x		
Linearity	x		
Moral Stance	x		

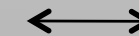
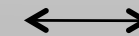
i.e. two co-tellers, high tellability, clear linear order, certain moral stance



# Narrative dimensions: Continuum of narrative activity



- *One active teller*
- *High tellability*
- *Detached embeddedness*
- *Closed temporal and causal order*
- *Moral stance is certain & constant*



*Multiple active co-tellers*

*Low tellability*

*Embedded*

*Open temporal*

*& causal order*

*Moral stance is uncertain &*

*fluid*



(Fine, 2006)

## 2. CERTAINTY IN DISCOURSE?



## Clinical Speech and Language Studies



1. SLTS: and one of the young boys would pick up the magazine you see and the other young boy
2. Child: = is it is it there they think they're I think they're Rhys and Myles
3. SLTS: you think they're what
4. Child: I think they're Rhys and Myles
5. ...
6. SLT: Rhys and Myles
7. SLTS: Rhys and M:yles oh why who are Rhys and Myles?
8. Child: what did they look about like eight
9. SLTS: no I think these were about five
10. Child: = no because Rhys is eight and Myles is about eight too
11. SLTS: are they twins
12. [3]
13. Child: well no well there I think ya I think they're either (.) brothers : they're not twins like=
14. SLTS: =right=
15. Child: =same



Newman & Mc Gregor (2006)

### **3. “SPARKLE” LACKING IN NARRATIVES OF LI CHILDREN?**

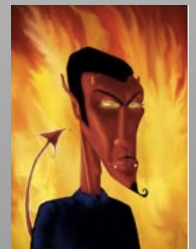




## Clinical Speech and Language Studies

### Features adding ‘sparkle’ : ‘Elaboration’ Devices

- **Dramatic effect**
  - *‘Squished my brother’s arm and one of his em (.) bones popped out’*
- **Enacted dialogue**
  - ( *‘he said...she said’* or acting out dialogue; animated)
- **Repetition**
  - *“No I want it. No I want it.”* (DME21)
- **Exaggeration & use of similes:**
  - *“I was as white as a ghost coming off it”* (DME 21)
  - *“My whole mouth was as red as the devil’s skin”* (IW4)





## Well...

Our study cohort, of 40 children, many with secondary diagnoses:

(i) revealed some complex language profiles on testing

(ii) showed some obvious ‘ability amid this disability’ in communication, when evaluated via different lenses

(iii) demonstrated the need for better appreciation of ‘real world’ presentations of AD(H)D as it presents in the clinic, taking into account the diagnostic, familial and personal context of its manifestation



## Narrative & children with ADHD?

- 1) Surprised at **number, nature & richness** of narratives when looked at in this way i.e. conversationally constructed, personal event narratives
- 2) Allowed us to view child's (language &) communication skills through a different lens; **room for 'solo' interpretations but why not 'social'?**
- 3) Allowed **'child-as-story-teller'** to emerge; communication personalities evident; real **'sparkle'** present; pragmatic and discourse skill required (& hence assessed); online processing - 'in the moment'; **certainty-> confidence!**
- 4) **Personal event narrative**, greater validity & a lot more motivating
- 5) **Scaffolding?** Yes- to a greater or lesser extent- but a natural part of conversational behavior & worked both ways
- 6) Important **theoretical & clinical implications for assessment & intervention**



## Clinical Speech and Language Studies

# ‘WHAT DO I DO IN THE CLINIC ON MONDAY’ ?

- Be open about assessment
- Choose a wide & varied set of assessment tools, tapping into a wide variety of language skills
- Assess over a number of sessions
- Get parental perception of presentation
- Get child’s perception of how it is for him/her
- Assess narrative



# ‘WHAT DO I DO IN THE CLINIC ON MONDAY’ ?

- Think more broadly about narrative & its dimensions and possibilities
- Audio- record session; attend to talk going on around tasks
- Review then roughly transcription snippets of ‘narrative activity’ without worrying re use of transcription conventions or need to transcribe full session
- Consider aspects like *tellership*, *tellability*, *linearity*, *emdeddedness*, *moral stance*, etc - map onto a continuum; allows full description & later comparison- comment in diagnostic/assessment reports
- Consider levels of ‘jointness’
- Consider levels of pragmatic/discourse ability involved



## ‘WHAT DO I DO IN THE CLINIC ON MONDAY ?’

- Use narrative elicitors - but balance with allowing naturally emerging examples to be heard
- Have a few stock phrases (*Guess what happened to me at the weekend? Did that ever happen to you? etc.*)
- Encourage a personal event focus- not so difficult as tests often trigger a personal event narrative (e.g. visit to Mc Donalds’ in TNL)
- Consider cultural differences and emphases: topic, value of ‘story’, and monologues or dialogues? (see e.g. Michaels, 1991; Minami & Mc Cabe, 1993; Gutierrez-Clellan & Quinn, 1993; Chang, 2004; Bliss & Mc Cabe, 2008)
- Consider use of silence!



## Clinical Speech and Language Studies

# Last words- This Project

- A clinically motivated investigation
- Carried out in the main by clinicians
- Important clinical implications
- A real ‘clinical’ cohort -not a ‘lab’ -based one
- Enabled a re-construing of ‘impairment’ to reveal ability also...

“Although I can appreciate that children can some- times engage in difficult and confusing behavior and that medicine can sometimes help, I have found that pathologizing and medicalized conversations can limit possibilities for change, particularly when these conversations are privileged above other possible conversations one can engage in regarding children with ADHD” (Kindsvatter 2005 interview with Nylund p.503).



## Clinical Speech and Language Studies

## Some References

- American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders*. (5<sup>th</sup> ed.) Washington DC:APA.
- Bishop, D.V.M. 2003. *The Children's Communication Checklist 2*. London: Psychological Corporation.
- Dunn, L., L. Dunn, C. Whetton, and J. Burley. 1997. *The British Picture Vocabulary Scale-II*. Windsor UK: NFER-Nelson.
- Fine, J. 2006. *Language in Psychiatry*. London: Equinox.
- Neale, M. D. 1997. *Neale Analysis of Reading Ability II*. Windsor: NFER-Nelson.
- Newman, R.M., & McGregor, K.K. 2006. Teachers and laypersons discern quality differences in narratives produced by children with or without SLI. *Journal of Speech, Language and Hearing Research*, 49, 1022-1036.
- Ochs, E., & Capps, L. 2001. *Living Narrative*. London: Harvard University Press.
- Semel, E.M, E.H. Wiig, and W. Secord. 1995. *Clinical Evaluation of Language Fundamentals-3*. San Antonio Texas: The Psychological Corporation Harcourt Brace Jovanovich.
- Semel, E.M and E.H. Wiig. 2006. *Clinical Evaluation of Language Fundamentals 4- UK*. London: Pearson Education Ltd.
- Walsh, I.P., S. Burns, M.Scullion, G.Brosnan, and D. MacEville. 2011. 'Social not solo' : Narrative telling among children with AD(H)D. *Paper presented at the Annual Convention of the American Speech & Hearing Association*. San Diego, CA, USA. (November, 2011).
- Walsh, I.P., Harkins, E., Greene, B., Scullion, M., Burns, S. Mac Eville, D., Brosnan, G. (2010, November). *Challenging the disorder paradigm in communications profiles of children with AD(H)D*. Paper presented at the American Speech & hearing Association Annual Convention, Philadelphia, USA.

See also additional references on  
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