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A Study of the Structure and Determinants of the Behavioural Component of Social Attitudes in Ireland

E. E. DAVIS

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General Summary

RESEARCH in Ireland on social attitudes has until recently been quite limited. Elsewhere, considerable attention has been focused on the influence of attitudes on the organisation of our lives and society. However, in order to carry out any worthwhile investigation of attitudes, the researcher must first ensure that his methods or instruments are valid (i.e., that they really measure what they set out to measure) and that they are reliable (i.e., that they will measure accurately on any number of successive occasions). Since an instrument developed in one country or culture may not be valid and reliable in other countries or cultures, it should therefore be adapted to the country in which it is to be eventually used. This study set out to do just that with an instrument originally devised in the US, known as the Behavioural Differential.

This particular way of measuring attitudes focuses on the person's expressed "readiness to respond" to something or someone. Measures of this behavioural component of a person's attitudes can predict the person's actual behaviour better than do measures of other aspects of his attitudes. Hence, we have adapted this method for use in an Irish context.

In the initial phase of the study, 100 people from the Dublin area, acting as "judges", were asked to suggest some behaviours which they felt were "likely to occur in this culture" between various sorts of people. These "persons" were described in a number of different combinations of characteristics, such as age, sex, religion, social status, etc. For example, subjects were asked what sorts of behaviours are likely to occur between an "English Protestant Company Director" and "an Irish Catholic Manual Worker"; suggestions included "have a drink with this person" and "tend to avoid this person in social situations". The total number of suggested behaviours (4,593) was analysed and reduced to a smaller number (41) which still retained a very wide variety of behaviours. Several behaviours which were used in previous studies were added to this list, so that some cross-cultural comparisons could be made. The final total number of behaviours was 53.

In the main phase of the study, 170 people from the Dublin area completed a questionnaire, in which they were asked to indicate to what extent they themselves would, or would not, engage in these behaviours with a number of different kinds of people. The "persons" were again described in terms of systematically varied combinations of age, sex, social status and so on. Each page of the questionnaire described at the top a particular "person", for example, an English female doctor who is Protestant, and beneath that a wide range of possible behaviours in which the respondent might engage with that "person". Each respondent rated on a seven-point scale (ranging from

"definitely would" at one end to "definitely would not" at the other), the extent to which he would engage in the given behaviours with the given "persons".

Statistical analyses were carried out on the data thus collected. Part of the analysis helped us to see which of the behaviours "went together" with which others; we could thus get an idea of the patterns underlying the ways in which people think about other people, and, more specifically, underlying the ways in which they would behave towards these other people. By means of this analysis, the rather large mass of data could be reduced to a few factors or clusters of salient behaviours. It has been found in previous studies that the sorts of factors obtained vary according to the characteristics of the "persons" used; the fact that we used different "persons" than were used before (for example, we used religion and social status as two of our "person" characteristics, whereas other studies have used such characteristics as race) and still managed to obtain most of the factors found in previous studies points to a certain cross-cultural generality. At the same time, some other factors emerged in this study which may be particular to the Irish culture.

Further analysis enabled us to see which characteristics of the "persons" produced which sorts of responses, for example, whether the social status of the "person" was more important than, say, the age, in determining in what way the respondent would behave towards that person. We found, in fact, that social status was the most important feature of the "person" in determining how the subjects would behave towards that person. Since the study was primarily methodological in nature we did not use a large, completely representative, sample. One would normally use such a sample if one wanted to generalise this kind of finding to the entire population. However, the overwhelming effect of social status in this study allows us to feel rather confident about generalising this finding to Irish society as a whole. Another characteristic which significantly determined the subjects' response in most cases was that of religion. Although this finding was statistically significant, it was not as overwhelmingly important as social status, and thus we would await further research before generalising this finding to the rest of the culture.

By means of these analyses, it was possible to discover which behaviours and which characteristics of "persons" would be most useful in future attempts to assess attitudes in Ireland. The findings of the study should not be taken as *the* Behavioural Differential which can be used in any, or all, circumstances, but rather as basic material from which to proceed, and as an illustration of the procedures to use. Since much of the material involves various kinds of social acceptance or rejection, a number of possibilities of future applications suggest themselves: one area could be that of community relations; another field might be that of worker-management relations.

MARY O'NEILL.

I. Introduction and Background

THE present study is concerned with the development of a technique for the measurement of social attitudes. More particularly, it focuses on the measurement of what we shall call the "behavioural" component of social attitudes in an Irish sample. The study seeks to adapt a technique, the basic framework of which was devised in the US (Triandis, 1964) and subsequently used in other cultures (for a partial review, see Triandis, 1967; Triandis, Vassiliou, Tanaka, and Shanmugam, 1971), for use in an Irish context. In so doing, it does not purport to give any definitive findings on "Irish" attitudes; rather, it describes the development of an instrument specifically for use in Ireland. Although the present study does present some substantive findings of interest, given certain limitations of generalisability, the real benefit of the study is to provide a basis for further studies in Ireland which will be primarily of a substantive, rather than a purely methodological, nature. It is hoped that the study will incidentally make some contribution to the cross-cultural study of social attitudes.

In a previous paper (Davis, 1973), which discusses some recent developments in the conceptualisation and measurement of social attitudes, we have discussed definitional questions at some length. For purposes of the present paper, we should just like to emphasise that most of the definitions which we reviewed previously emphasise a "readiness to respond" to the attitude object in question as a central theme. More generally, attitudes are regarded as consisting of three primary components, namely, cognitive, affective, and conative (or behavioural). The cognitive component of attitudes refers to the perceptions, beliefs and expectations which the subject holds with respect to the attitude object. The affective component of attitudes refers to the fact that, in addition to cognitions concerning the attitude object, attitudes usually involve feelings toward such objects as well. The conative or behavioural component of attitudes refers essentially to the salient feature described above as being common to most definitions of attitude, namely, that they involve a "readiness to respond" to the attitude object in question.

We shall deal here briefly with the development of measures of the behavioural component of social attitudes, since it is this component which is the focus of the present study.

Although the tripartite view of attitudes as consisting of cognitive, affective,

and conative (or behavioural) components has a very long and distinguished history in psychology and philosophy, dating back at least to Aristotle (cf. Allport, 1935; 1954), most pioneering work on attitude measurement in the 1920s (e.g., Thurstone and Chave, 1929), the 1930s (e.g., Likert, 1932) and later (e.g., Guttman, 1944, 1950; Lazarsfeld, 1950) has regarded the notion of attitude as an unidimensional construct. Indeed, this view has prevailed until fairly recently (cf. Davis, 1973).

Not only have attitudes been seen primarily as unidimensional in nature, in terms of the tripartite view of attitudes, the dimension seen as being the most important, or indeed sole dimension, was the affective dimension. Edwards (1957, p. 2) follows the lead of Thurstone (1946)—the towering giant of attitude measurement for some decades—in defining attitude as "the degree of net positive or negative affect associated with some psychological object". Even the Semantic Differential technique developed by Osgood *et al.* (1957), which has become perhaps the most widely used attitude measuring technique in the past decade and a half, focuses on the affective component of attitude, and many writers, such as Fishbein (1967) and others, regard Semantic Differential affective measures as *the* operational definition of attitude.

What is the significance of taking a unidimensional *vs.* a multidimensional view of attitudes? What difference does it make if we focus on the affective component of attitudes and ignore the behavioural component? The answer is that it makes a great deal of difference if we want to understand and predict behaviour.

In spite of some studies that show a fair correspondence between the various components of attitudes (e.g., Campbell, 1947), other studies have shown that such a correspondence does not always hold. For example, Triandis and Triandis (1962) had white American male undergraduate students rate the stimulus "Negro Physician" on a number of scales. In their ratings of this stimulus on Semantic Differential evaluation scales (e.g., good–bad, clean–dirty, etc.) roughly 90 per cent of the subjects rated the stimulus on the positive side of the neutral point; on the other hand, approximately 75 per cent of the same subjects rated the same stimulus on the negative (or rejecting) side of the neutral point on statements measuring the behavioural component of attitudes, such as "would exclude from my neighbourhood". Thus the Semantic Differential judgements, presumed to be a measure of the affective component of attitudes, would have been very poor predictors of behaviour relating to inter-racial neighbourhoods. Similar findings have been reported by Davis and Triandis (1965), Naidoo (1966) and others.

It is true that the comparison here is not only between the evaluative (affective) and behavioural components of attitudes, but also that different degrees of *specificity* are involved. This means that ratings of stimuli on scales

may not only differ in the dimension being tapped, but also in the *situational context* in terms of which the rating is made. However, it might be pointed out that evaluative scales, by their very nature, tend to be general rather than specific, i.e. they tend to involve ratings along a global positive-negative continuum. Scales tapping the behavioural component of social attitudes, on the other hand, tend to vary in their degree of specificity, i.e. the extent to which they specify the situational variables in the context of which the judgements are made. It is interesting to note, however, that those "behavioural" scales which most closely resemble evaluative scales do not tend to specify a particular situation, whereas those scales which more directly tap the behavioural component of social attitudes (e.g., "would exclude from my neighbourhood") tend to be more situation-specific. For a discussion of the importance of situational variables, cf. Goldstein and Davis (1972).

In general, measures of the behavioural component of attitudes have been found to be more highly predictive of behaviour than other measures. Wicker (1969) has pessimistically suggested that "only rarely can 10 per cent of the variance in overt behavioural measures be accounted for by attitudinal data (p. 65)". However, in a later article (Wicker, 1971) he cites certain exceptions, including the study by Davis and Triandis (1965), which made use of measures of the behavioural component of social attitudes.

Perhaps the sole exception of the early preoccupation with the unidimensional measurement of attitudes along an affective dimension was the Bogardus (1925) Social Distance Scale. The concept of "social distance" is usually traced back to the sociologist R. E. Park in the early part of this century (Park, 1923; Park and Burgess, 1921). Shortly afterwards a pupil of Park's, the social psychologist E. S. Bogardus, developed a scale which yielded a quantitative index as a measure of Park's concept of social distance. This scale was a rather unique development among early measurement techniques, since it focused on what may be called the conative or behavioural component of social attitudes.

In the original Bogardus Social Distance Scale, subjects were asked to respond to a variety of nationalities and other ethnic groups on a scale consisting of seven statements expressing varying degrees of social distance. The subject was asked whether he would or would not engage in certain behaviours with the designated stimulus persons. These behaviours ranged from "would accept as close kin by marriage", as the most intimate acceptance, to "would exclude from my country" as the most extreme form of rejection.

Bogardus (1928) was able to show a certain validity of his scale by demonstrating that the highly discriminatory quotas contained in the US immigration laws at that time were almost a direct mirror reflection of the degrees of social acceptance or rejection expressed by his (largely white, Anglo-Saxon Protestant)

subjects towards various nationalities and other groups. In a word, it was shown that important legislation was a direct reflection of popular prejudice! However, in spite of the early development of this measure of the behavioural component of social attitudes and its obvious relevance for real world phenomena, the Bogardus Social Distance Scale, although continuing to be widely used, was largely eclipsed by other developments in attitude measurement which not only took a unidimensional view of social attitudes, focusing primarily upon the affective component, but largely ignored the behavioural component.

It was not for some decades that any further significant development in the measurement of the behavioural component of social attitudes took place. Triandis and Triandis (1960), utilising a Thurstone-scaled version of the Bogardus Social Distance Scale (Sartain and Bell, 1949), presented white American subjects with complex stimuli varying in combinations of race, religion, occupational status and nationality. The advantage of this procedure over the original Bogardus technique was that instead of presenting subjects with a simplex stimulus designated by a single characteristic such as race, nationality or religion, Triandis and Triandis (1960) presented subjects with complex stimuli involving every possible combination of these characteristics. The elements of these complex stimuli constituted a factorial design which allowed the use of analysis of variance, thus permitting the assignment of weights, in terms of percentages of variance accounted for, to each of the stimulus characteristics as determinants of the dependent variable of social distance responses. There followed a number of cross-cultural studies using this basic technique, e.g., Triandis and Triandis (1962), who compared responses of Greek and American subjects, and Triandis, Davis and Takazawa (1965), who compared the responses of German, American and Japanese subjects.

It very soon became apparent, however, that the behavioural component of attitudes was itself multidimensional. That is to say, if instead of just a few statements expressing greater or lesser degrees of acceptance or rejection, one were to take a large number of statements of behavioural intentions, one would find that they do not all fit along the same dimension of acceptance or rejection but, rather, there would seem to exist acceptance or rejection along a number of different dimensions.

With the development of multidimensional statistical techniques, such as factor analysis, and particularly with the advent of access to high speed computers which came about in the late 'fifties and early 'sixties, it became possible to test this assumption. Triandis (1964), in what has now become a classical study, obtained some 700 behaviours from a random sampling of 80 American novels written after 1850, and by means of facet analysis (Guttman, 1959) reduced these to a final sample of sixty-one behaviours.

Using a modification of the Semantic Differential (Osgood, *et al.* 1957) format, Triandis had subjects respond on a 9-point scale of behavioural intentions, ranging from "would" to "would-not", to a number of complex person stimuli. A factor analysis of the resulting 61×61 correlation matrix of statements of behavioural intentions resulted in five factors which may be briefly characterised as follows:

Factor I: Respect (e.g., "would admire the ideas of this person")

Factor II : Marital Acceptance (e.g., "would marry this person")

Factor III: Friendship Acceptance (e.g., "would accept this person as an intimate friend")

Factor IV: Social Distance (e.g., "would exclude this person from my neighbourhood")

Factor V: Subordination–Superordination (e.g., "would treat this person as a subordinate")

Numerous subsequent factor analyses of statements of behavioural intentions, utilising a variety of stimuli and a variety of subjects, have shown the relative stability of most of these factors; this technique has become known as the Behavioural Differential (BD). An example of the format of this technique is given in Table 1.

Subsequent research involving a series of cross-cultural studies has shown two things with respect to the cross-cultural generalisability of the factor structure of statements of behavioural intentions: (1) If the same behaviours (or directly translated versions thereof) and the same stimuli are used, the factor structures which emerge from subjects from different cultures tend to be extremely similar; in other words, it would seem that differences in subjects do not make very much difference; or, looked at in another way, this technique, with the limitations mentioned, bears a similarity to Osgood's Semantic Differential results in its cross-cultural generalisability; however, (2) If the same behaviours are not used but, instead, behaviours are developed from within the culture, and particularly if different stimuli are used, somewhat different factor structures are likely to emerge. Thus, the question of the cross-cultural generalisability of the factor structure of statements of behavioural intentions still remains the topic of further research. In the course of carrying out cross-cultural studies, techniques have been developed for minimising cultural bias and retaining, as far as possible, the unique characteristics of the culture being studied. The latest developments in these techniques were employed in the present study.

TABLE 1: *An illustration of the format of the Behavioural Differential**

a white college student who strongly favours civil rights legislation

†would ——:——:——:——:——:——:——:——:——: would not admire the ideas of this person	Respect
would ——:——:——:——:——:——:——:——:——: would not admire the character of this person	
would ——:——:——:——:——:——:——:——:——: would not ask for the opinions of this person	
would ——:——:——:——:——:——:——:——:——: would not marry this person	Marital
would ——:——:——:——:——:——:——:——:——: would not fall in love with this person	
would ——:——:——:——:——:——:——:——:——: would not go on a date with this person	
would ——:——:——:——:——:——:——:——:——: would not eat with this person	Friendship
would ——:——:——:——:——:——:——:——:——: would not gossip with this person	
would ——:——:——:——:——:——:——:——:——: would not accept this person as intimate friend	
would ——:——:——:——:——:——:——:——:——: would not exclude this person from my neighbourhood	Social Distance
would ——:——:——:——:——:——:——:——:——: would not accept this person as a close kin by marriage	
would ——:——:——:——:——:——:——:——:——: would not invite this person to my club	
would ——:——:——:——:——:——:——:——:——: would not treat this person as a subordinate	Super-ordination
would ——:——:——:——:——:——:——:——:——: would not command this person	
would ——:——:——:——:——:——:——:——:——: would not obey this person	

*Modified from Triandis (1971).
†In the actual application of these scales the directionality of the "would-would not" response is randomly varied; the scoring is, thus, reversed where appropriate.

The present study, then, was designed to develop a set of behavioural differential scales for use with Irish subjects and to investigate the structure (in the factor analytic sense) as well as the determinants (in an analysis of variance sense) of statements of behavioural intentions in this sample.

II. Method

A. *Elicitation Phase*

1. Purpose

THE purpose of this phase of the study was to obtain a large pool of behaviours which Irish subjects, acting as judges, felt were "likely to occur in this culture" between persons who differed in such characteristics as age, sex, occupation, religion, nationality, urban–rural background, etc.

2. Subjects

A total of 100 subjects (Ss) were utilised in the elicitation phase of the project. However, the Ss used in this phase of the study were not really Ss in the normal sense of the word but, rather, were being asked to act as *judges* in that they were being asked to describe "the kinds of behaviour which were likely to occur in this culture" between people of certain designations, rather than being asked how they themselves would behave *vis-à-vis* such persons.

In this phase of the study 15 of the Ss were asked to act as judges in a pilot form of the elicitation instrument which was designed to determine the clarity of the instructions and the approximate amount of time that would be required to complete the elicitation task. A further 85 Ss were used as judges in the actual elicitation phase of the study.

About two-thirds of the Ss used as judges in this phase of the study were students of both sexes at University College, Dublin. The remaining one-third of the judges was recruited from among adults of both sexes taking various training courses at the Institute of Public Administration, Dublin. All subjects were unpaid volunteers.[1]

The question of why a larger and/or more "representative" sample of Ss was not used might arise in some readers' minds. It will be remembered, however, that the Ss involved in this phase of the study were being used as judges. The task of the judges required a certain degree of articulateness; hence the use of Ss with a reasonable level of education seemed appropriate. Also, much research has shown that in this kind of task the selection of judges is not really critical, as long as they are from the same culture. Triandis, Davis

[1]We should like to express our great appreciation of all Ss who volunteered their time to participate in this phase of the study, and in particular our colleagues at the ESRI, many of whom were kind enough to act as pilot Ss, giving us valuable feedback concerning instructions and format of the instrument.

and Takazawa (1965) have shown that, when judges from different cultures are asked to rate social distance statements, the results can be quite different; however, within the same culture the results are quite comparable.

3. Instruments

Based on the results of the pilot test, the number and degree of complexity of the complex person stimuli which could be presented in a reasonable period of time, in order to elicit the pool of behaviours which was the purpose of this elicitation phase, was determined. A total of twenty complex person stimuli was employed.

Six different forms, involving different combinations of these 20 stimuli, were used. Exhibit A1 in Appendix A presents a portion of Form 1 of the elicitation instrument, illustrating the instructions and format (page one is presented; the other four pages are similar); the other five forms represent combinations and permutations of this basic form. A synopsis of the six forms follows:

Form 1—In this form the "anchor" stimulus person (i.e., "a twenty-year old Irish person of the same sex as yourself"), which is the stimulus person most like the Student Ss who acted as judges in the elicitation procedure, was always presented as person A, and a random ordering of the total of twenty stimulus persons was presented in position B.

Form 2—This form presented the same "anchor" stimulus person in position A (i.e., "a twenty-year old Irish person of the same sex as yourself") with the *reverse* order of the randomised list in position B (in order to counteract possible ordering or fatigue effects).

Form 3—This form presented a reversal of Form 1, i.e., the first randomised order of the stimulus persons in position A, combined with the "anchor" stimulus person in position B.

Form 4—This version provided a reversal of Form 2, i.e., the reversed randomised order of the twenty stimulus persons presented in position A with the "anchor" stimulus person presented in position B.

Form 5—This version dropped the notion of an "anchor" stimulus person and presented a random order of all twenty stimulus persons in position A combined with a random order of all stimulus persons in position B.

Form 6—This form was identical to Form 5 with the exception of interchanging the stimulus persons in position A and position B.

Thus the six different forms provided twenty different combinations each, or a total of 120 combinations which were presented to the judges for the

elicitation of behaviours. Given that some Ss provided fewer than the maximum of three behaviours for each combination, the total pool of behaviours for consideration in further analyses consisted of 4,593 behaviours.

4. Analysis and Selection of Behaviours

As in the original work by Triandis (1964), there arose a necessity for reducing this mass of data in some way before proceeding to use it in further research. Since the earlier work on facet analysis by Guttman (1959), further developments have taken place using this technique, especially in cross-cultural studies. In particular Foa (1964), Osgood (1966), and Triandis *et al.* (1968) have made valuable contributions to the application of facet analysis in cross-cultural research.

Recent re-analyses of Osgood's and Triandis' data (unpublished) have revealed a pattern of intercorrelations among facets which would seem to suggest a more parsimonious facet design than previously used. It is this most recent design, which was used in the present study.[2]

The facets used in the present design are as follows:

(*a*) Dissociative–Associative

(*b*) Superordinate–Co-ordinate–Subordinate

(*c*) Intimate–Informal–Formal

(*d*) Overt Action–Feeling

These facets form a $2 \times 3 \times 3 \times 2$ design resulting in thirty-six cells. The 4,593 behaviours obtained from the elicitation phase were then categorised along the above facet dimensions and placed in the appropriate cells. Table 2 gives a schematic representation of this design, with an example of one behaviour corresponding to each of the thirty-six cells. Table 2*a* presents the distribution of the 4,593 behaviours in the thirty-six cells of the design.

As an inspection of Table 2*a* reveals, there is a very uneven distribution of the behaviours in the 36 cells of the facet design. This is not surprising when one considers the differential probability in reality of the occurrence of different behaviours represented by the combinations of facet characteristics. Thus, associative, overt behaviours, which are co-ordinate in nature, obviously represent the most common, day-to-day kinds of interactions between people.[3]

[2]The author would like to particularly acknowledge his gratitude to Professor H. C. Triandis, University of Illinois, as well as to Professor C. E. Osgood, University of Illinois, and Professor Uriel Foa, Temple University, Philadelphia, for their advice and assistance.

[3]This combination of facets is represented by cell 19. However, it should be noted that the behaviours listed in Table 2 are merely illustrative of the cell involved. Thus, although "to have a drink with this person" was one of the most frequent behaviours in this cell, it did not occur 1,208 times; this number is, rather, the total number of associative, overt, co-ordinate behaviours which were elicited.

TABLE 2: *Examples of behaviours in facet cell design resulting from elicitation phase for Irish behavioural differential scales.*

		Dissociative		*Associative*	
		Overt action	*Feeling*	*Overt action*	*Feeling*
Superordinate	*Intimate*	1. Exclude this person from my close circle of friends	2. Find this person's social behaviour offensive	3. Give guidance to this person	4. Be concerned about this person's welfare
	Informal	5. Tend to avoid this person in social situations	6. Feel in certain ways superior to this person	7. Give advice to this person	8. Feel sorry for this person
	Formal	9. Criticise this person	10. Disapprove of some of this person's views	11. Be willing to employ this person	12. Consider this person competent to serve on a jury
Co-ordinate	*Intimate*	13. Argue with this person	14. Distrust this person	15. Invite this person to my home for dinner	16. Fall in love with this person
	Informal	17. Try to ignore this person's presence	18. Find it difficult to communicate with this person	19. Have a drink with this person	20. Find this person's company enjoyable
	Formal	21. Disagree with this person on important issues	22. Find this person irritating	23. Discuss current affairs with this person	24. Avoid offending this person
Subordinate	*Intimate*	25. Feel inhibited in this person's presence	26. Envy this person	27. Ask this person's advice on personal problems	28. Under certain circumstances feel emotionally dependent on this person
	Informal	29. Be hesitant to seek out this person's company	30. Feel in some respects inferior to this person	31. Ask a favour of this person	32. Be impressed by this person
	Formal	33. Resent working under this person	34. Feel threatened by this person in certain situations	35. Accept this person as chairman of a committee of which I am a member	36. Respect this person

TABLE 2a: *Distribution of behaviours in facet cell design resulting from elicitation phase for Irish behavioural differential scales.*

Total: 4,593 (*Repetitions included*)		*Dissociative*		*Associative*	
		Overt action	*Feeling*	*Overt action*	*Feeling*
Superordinate	*Intimate*	1. / 51	2. / 14	3. / 2	4. / 1
	Informal	5. / 258	6. / 152	7. / 137	8. / 9
	Formal	9. / 59	10. / 31	11. / 235	12. / 4
Co-ordinate	*Intimate*	13. / 104	14. / 47	15. / 545	16. / 40
	Informal	17. / 100	18. / 179	19. / 1,208	20. / 120
	Formal	21. / 64	22. / 30	23. / 560	24. / 14
Subordinate	*Intimate*	25. / 26	26. / 52	27. / 6	28. / 2
	Informal	29. / 13	30. / 54	31. / 135	32. / 48
	Formal	33. / 5	34. / 8	35. / 246	36. / 34

Such behaviours are particularly common on an informal level, but are also quite common on an intimate as well as a formal level. On the other hand, associative, overt behaviours which are on either the superordinate or subordinate ends of that particular continuum are considerably less common—one might even say relatively rare—at the intimate level; subordination–superordination would seem to imply a certain degree of formality. It will be noted that this design did not encounter the difficulties of the one used by Triandis *et al.* (1968), in that only one cell was populated by fewer than two behaviours and only two further cells had as few as two behaviours. It would seem, then, that this facet design served the general purpose of providing an initial *a priori* framework for the categorisation of human behaviours so as to optimise variety with minimum overlap of categories.

On the basis of the facet analysis alone, forty-one behaviours were selected; to these twelve additional behaviours, taken from previous factor analytic work with behavioural differential scales, were added. Since these were representative of factors already identified, they thus served as "marker" variables for purposes of cross-cultural comparison. Thus, a total of fifty-three behaviours were selected for use in further analysis.

Table 3 presents a list of the fifty-three behaviours which were selected. These can be accounted for as follows: Items 1–36 in Table 3 represent one example each of the thirty-six cells of the facet design illustrated in Table 2. In each case the behaviour chosen was the one most typical (i.e., most frequent) of the facet cell involved. Some minor editing was sometimes necessary in order to put the statement into the format of a Behavioural Differential scale; however, in no case was the essence of the statement altered in any way. Item 37 represents an over-sampling of cell 1. Even though this cell was not over-populated, it was felt that it was the closest representation of "classical" social distance and therefore should be appropriately represented in the final list of behaviours. An inspection of Table 2*a* reveals a very high representation of behaviours in cells 15, 19 and 23, which we have commented upon before. Thus, item 38 in Table 3 represents an over-sampling by one additional behaviour of cell 15, items 39 and 40 represent over-sampling by an additional two behaviours of the heavily populated cell 19, and item 41 represents over-sampling by one behaviour of cell 23.

In general, we were concerned that the list not be too strongly biased towards positive (associative) behaviours, but should also contain a sufficient number of negative (dissociative) behaviours. As Wrightsman (1972, p. 279), in a recent text, has put our position: "Triandis and Davis (1965) argue that prejudice involves negative behaviours as well as the lack of positive behaviours; thus, they built into their study measures that could more pointedly reflect active rejection, rather than simply lack of acceptance." There is a great deal of evidence to indicate that some variation of "accepting as a next door neighbour" is a critical determinant of more generalised social distance (Bogardus, 1925). Although we included one item from among the "marker" variables (i.e., "exclude from my neighbourhood" (Item 48)), we wanted to include an additional item of this type which had emerged from the elicitation procedure. For these reasons, item 37 was chosen from cell 1 of the design.

Items 42–53 of Table 3 are "marker" variables which represent two items each from Triandis' (1964) classical five factors and from Davis' (1966) Co-operation factor. Thus, while the majority of items selected emerged from the elicitation procedure, and are thus "Irish" behaviours, a number of "marker" variables were included in order to allow for a certain degree of cross-cultural comparability.

TABLE 3: *Final list of behavioural statements for use in Irish BD study*

1. Exclude this person from my close circle of friends.
2. Find this person's social behaviour offensive.
3. Give guidance to this person.
4. Be concerned about this person's welfare.
5. Tend to avoid this person in social situations.
6. Feel in certain ways superior to this person.
7. Give advice to this person.
8. Feel sorry for this person.
9. Criticise this person.
10. Disapprove of some of this person's views.
11. Be willing to employ this person.
12. Consider this person competent to serve on a jury.
13. Argue with this person.
14. Distrust this person.
15. Invite this person to my home for dinner.
16. Fall in love with this person.
17. Try to ignore this person's presence.
18. Find it difficult to communicate with this person.
19. Have a drink with this person.
20. Find this person's company enjoyable.
21. Disagree with this person on important issues.
22. Find this person irritating.
23. Discuss current affairs with this person.
24. Avoid offending this person.
25. Feel inhibited in this person's presence.
26. Envy this person.
27. Ask this person's advice on personal problems.
28. Under certain circumstances feel emotionally dependent on this person.
29. Be hesitant to seek out this person's company.
30. Feel in some respects inferior to this person.
31. Ask a favour of this person.
32. Be impressed by this person.
33. Resent working under this person.
34. Feel threatened by this person in certain situations.
35. Accept this person as chairman of a committee of which I am a member.
36. Respect this person.
37. Be reluctant to buy a house next door to this person.
38. Go to a dance with this person as your partner.
39. Go to a film with this person.
40. Chat with this person.
41. Work with this person on a committee.
42. Admire the ideas of this person.
43. Vote for this person.
44. Marry this person.
45. Go on a date with this person.
46. Accept this person as an intimate friend.
47. Eat with this person.
48. Exclude this person from my neighbourhood.
49. Accept this person as close kin by marriage.
50. Obey this person.
51. Be commanded by this person.
52. Participate in a discussion with this person.
53. Co-operate with this person on a community project.

B. Main Study

1. Purpose

THE purpose of the main study was to obtain responses from an Irish sample on the 53 Behavioural Differential scales selected from the elicitation phase to a large number of complex person stimuli with a view to (*a*) factor analysing the scale responses in order to determine the *structure* of the statements of behavioural intentions in this culture, and (*b*) performing analyses of variance on the overlapping factorial designs which were embedded in the characteristics of the complex person stimuli as a way of saying something about the *determinants* of statements of behavioural intentions in this sample.

As we shall show, the N of Ss seemed to be large enough to allow us to place a fair amount of confidence in the basic structure (with minor variations) of statements of behavioural intentions in this culture. The analyses of variance were performed with smaller N's and thus greater caution must be exercised in interpreting these results.

2. Subjects

A total of 200 paid volunteers acted as Ss. It was arranged to have them come to the Institute in group sessions to fill out a rather lengthy questionnaire, which will be described in greater detail below. A minimum of 160 Ss was the target; of the 200 Ss who attempted the task, 170 completed the task satisfactorily. This rate of 15 per cent "spoiled" questionnaires was not surprising in light of the complexity of the task, as will be described below, and in light of the apparent unfamiliarity of some Ss with paper-and-pencil tasks of this sort.

The Ss were recruited in the following manner: Ten Dublin areas which were deemed to be predominantly middle class (the reason for this deliberate bias will be explained below) were initially selected. Within these areas a total of 1,000 names (100 from each of 10 areas) were selected from the Electoral Register on a purely random basis. Initially a random two-thirds (667 persons) were then sent a mimeographed letter requesting their co-operation in the study. A specimen of this letter is reproduced as Exhibit A2 in Appendix A.

The remaining one-third of the names was held in reserve, in case the initial response was not sufficient to fill our quota. However, to our pleasant surprise, the response was quite good and the remaining one-third of the selected names was not used.

Table B-1, Appendix B, shows the distribution of the demographic characteristics of the 170 Ss compared with Census data for Dublin. As may be seen from Table B-1*a*, the breakdown by sex of our Ss corresponds almost precisely to that of the Census breakdown. The breakdown by marital status (Table B-1*b*) is also quite similar to that of the Census; the fewer number of widowed persons probably reflects the fact that many of these are elderly and would not be as likely to volunteer for such an experiment because of poor health, limited mobility, etc. Table B-1*c* shows that our sample is somewhat skewed towards the younger age groups; however, this really only manifests itself in the youngest and oldest groups since the representation in the 30–39, 40–49, 50–59 age groups in our sample is very close to that in the population as a whole. The 18–29 age group represents a fair number of students, who might be expected to volunteer for this kind of study; the fewer number of those in the age category 60 + is understandable in light of the reasons cited above (although one subject was 78 years of age, and, as may be seen, some ten subjects were 60 years or older).

Table B-1*f*, showing the distribution by social status, as measured by the Hall-Jones index, reflects the deliberate skewing towards the middle and upper middle classes which our sampling technique brought about. Table B-1*d*, showing educational levels, reflects, undoubtedly, both the skewing of social status and the slight skewing toward a younger age group. Table B-1*e*, showing the distribution of religion of our sample compared with the 1961 Census, shows a slight under-representation of Catholics; however, if the category "not practising religion", which accounts for nearly 6 per cent, is assumed to contain primarily "nominal" Catholics, then the deviation from census data is not as great as it would appear.

An examination of the demographic characteristics of the 30 "rejects" reveals essentially no noteworthy differences in any of the characteristics, the major exception being in education, where 33 per cent of this group had only primary level education compared with 6 per cent in our sample. This is quite understandable since educational level would largely determine the ability to complete a reasonably complex paper-and-pencil task. (On the other hand, it might be noted that 33 per cent of our rejects had secondary school education and 14 per cent of them had university education; thus, although there was some skewness, it is quite clear that even those with secondary or university education are quite capable of misunderstanding instructions or otherwise failing to adequately complete a paper-and-pencil task.) The age distribution of rejects was also slightly skewed toward the older group, as might be expected. Interestingly, the social status distribution of the rejects was not markedly different from that of the total sample. Thus, even though status and education are moderately correlated, it is clearly education and not social status *per se*

which would seem to be the determinant of the ability to successfully complete a task of this sort.

We have clearly implied the reason why a predominantly middle class sample was chosen for this methodological study. Because of the difficulty and duration of the task (see sections below) it was necessary to have a self-administering instrument, using subjects with a reasonable degree of verbal fluency who could be expected to complete the task satisfactorily. Although this procedure may have introduced a certain bias in some of the results, we feel that for the primary purpose of the study, namely, the determination of the factor structure of statements of behavioural intentions in an Irish sample, this distortion was not serious. We shall discuss this point at greater length below.

3. Instruments

There were altogether eight forms of the instrument in which the Ss responded on Behavioural Differential scales to a large number of complex person stimuli in various combinations and ordering. These can best be described under the following headings:

(a) Stimuli

For factor analytic purposes it was desirable to have approximately twice as many stimuli (observations) as scales (variables). Thus, we initially decided to have 96 complex person stimuli. However, pilot testing of a portion of this initial version of the instrument revealed two things: (i) 24 was about the maximum number of stimuli that a given person could be expected to respond to (even this involved, after all, making $53 \times 24 = 1{,}272$ judgements), and (ii) the maximum number of characteristics or elements in the total stimulus to which the subject could readily respond seemed to be about four; this corresponds with our experience in other cultures where we have used only a maximum of four characteristics in a complex stimulus at one given time.

For the above reasons it was decided to break up the complex stimuli into four overlapping factorial designs containing four stimulus elements each and 24 combinations each. These four designs and their component parts can be summarised as follows:

Design 1. This design consisted of all possible combinations of the following stimulus elements:

Nationality (Irish–English)
Sex (Male–Female)
Religion (Catholic–Protestant–Jewish)
Occupational Status (Doctor–Manual Worker)

This formed a $2 \times 2 \times 3 \times 2 = 24$ cell design of complex person stimuli. The 24 stimuli resulting from all combinations of these elements may be worked out logically but are listed in their factorial design order in Exhibit A3, Appendix A. (The factorial design order of Designs 2, 3 and 4 may be generated in similar fashion.)

Design 2. This design consisted of all possible combinations of the following stimulus elements:

Age (50 year old–25 year old)
Sex (Male–Female)
Religion (Catholic–Protestant–Jewish)
Occupational Status (Doctor–Manual Worker)

This formed a $2 \times 2 \times 3 \times 2 = 24$ cell design of complex person stimuli.

Design 3. This design consisted of all possible combinations of the following stimulus elements:

Age (50 year old–25 year old)
Religion (Catholic–Protestant–Jewish)
Sex (Male–Female)
Geographic Origin (Urban–Rural Background)

This formed a $2 \times 3 \times 2 \times 2 = 24$ cell design of complex person stimuli.

Design 4. This design consisted of all possible combinations of the following stimulus elements:

Nationality (Irish–English)
Religion (Catholic–Protestant–Jewish)
Sex (Male–Female)
Belief (Favours–Opposes Relaxation of Censorship Laws)

This formed a $2 \times 3 \times 2 \times 2 = 24$ cell design of complex person stimuli.

It may be argued that the above described designs still do not give the subject sufficient information about the stimulus person in order to make an appropriate judgement. For instance, the subject may desire to know whether the stimulus is physically attractive or unattractive, has positive or negative personality traits, and a host of other characteristics which might be considered in expressing social acceptance or rejection. Obviously any of such additional characteristics could be added to factorial designs of this sort if it is the purpose of the investigator to study the effect of these characteristics. But lest the reader be concerned that the subject was unable to make judgements because of lack of sufficient information, two points should be emphasised. One obvious point is, of course, the fact that, given the nature of factorial designs, there is a limit

to the number of characteristics one can use to describe a stimulus, since the addition of each characteristic doubles the number of complex stimuli in such designs. Apart from this practical consideration, however, the fact of the matter is that Ss *are* able to make judgements on the basis of the information given, even though other information is lacking, and such judgements form meaningful statistical patterns. In the instructions, subjects are told that the stimulus is not described in all possible characteristics and they are to imagine "average" or "typical" persons with the characteristics described. Both in previous research and in the present study, Ss seemed to have no difficulty in complying with this task.

(b) Scales

The scales, on which the Ss indicated the probability with which they would or would not engage in certain behaviours with the indicated stimulus persons, were BD scales constructed from the 53 behaviours selected from the elicitation procedure. The general format of the scales, using Stimulus Person 1 from Design 1, looks approximately as follows:

Irish, Male, Catholic, Doctor.

would:———:———:———:———:———:———:———: would not discuss current affairs with this person

The use of a 7-point scale is based on a great deal of evidence in the psychological literature that seven is the optimal number of categories which Ss can deal with in a variety of perceptual tasks (cf. Osgood, *et al.*, 1957).

A portion of one of the eight forms of the instruments actually used in the study is contained in Exhibit A4, Appendix A, showing the instructions (which were common to all forms) and the presentation of Stimulus Person 1 for Design 1 with the 53 scales, which span over three pages (page one only is shown in Exhibit A4). The instrument then continues with Stimulus Person 2 and the 53 scale responses to that stimulus person, etc.

(c) Forms of the Instrument

There were four basic forms of the instrument representing the 24 complex person stimuli of each of the four designs. For Forms 1–4, the stimuli in these four designs of complex stimulus persons were presented in a random order. Forms 5–8 merely represented the reversal of the randomised orders of Forms 1–4 in order to counteract ordering or fatigue effects. Since the Forms were handed out in each session in sequential fashion, the probability of each of the forms being appropriately represented was equal. The 170 Ss filled out the four basic forms in the following distribution:

Design 1: N=44
Design 2: N=41
Design 3: N=42
Design 4: N=43

For each of the four basic forms approximately one half of the Ss filled out variation 1 of the form involving the randomised order 1–24 (as indicated in Exhibit A in Appendix A) and the remaining half filled out the same form in the reverse randomised order.

4. Data Collection Procedures

As was indicated above in the discussion of the subjects involved in the study, 667 names with corresponding addresses were selected at random from the Electoral Register for the ten selected Dublin districts. In the form letter which these potential Ss received they were asked to 'phone within the next day or two to make an appointment to participate in the study if they were interested. It was stated that the filling out of the questionnaire would take approximately three hours and that refreshments would be served. It was furthermore stated that a payment of £3 per subject would be made (cf. Exhibit A2, Appendix A).

The scheduling of the Ss, as well as the initial sampling, mailing, etc., was carried out by the ESRI Survey Unit.[4]

Approximately 60 Ss were scheduled for each of four sessions which took place in the Institute on three Saturday mornings and one Wednesday evening during the month of June 1973.[5] Of the 60 Ss scheduled to appear for each session an average of 50 appeared for each session. There were minor fluctuations in the N which appeared for each session (a not insignificant factor being the state of the weather on the particular day).

When the 50 or so Ss were assembled for a particular session, verbal instructions were given to the group as a whole, which were essentially an elaboration of the written instructions contained in the self-administering instrument (see Exhibit A4, Appendix A). During each session approximately one-eighth of the subjects received each of the eight forms of the instruments (i.e., one-quarter of them received one of the basic four forms of the instruments, with one half each receiving them in reversed randomised order) so that no systematic effect, such as external circumstances or manner of presentation of the experimenters, etc. would have affected any one particular form of the instrument in any systematic way. The completion time for the instrument, which

[4]We would like to express our great appreciation to the ESRI Survey Unit for their assistance in all phases of data collection in this project.
[5]We are very indebted to Mrs M. Dempsey for her expert advice and assistance in co-ordinating all arrangements for the data collection procedures. We should also like to thank members of the staff who helped implement the arrangements.

required, as indicated above, 1,272 responses, varied from one hour and thirty minutes to three hours, with a median time (excluding tea-break) of two hours and twenty minutes; however, in one session one subject continued for three hours and ten minutes and was still far from completion—he was dismissed at this point and his questionnaire was considered invalid.

The reaction of the Ss to the task varied from enthusiasm, or at least interest, to occasional expressions of irritation, mostly relating to the rather lengthy and repetitive nature of the task; this was not unexpected. However, it must be emphasised that virtually all subjects completed the task with complete co-operation and it was the feeling of the experimenters that nearly all of the Ss took the task seriously and performed in a completely conscientious fashion.

III. Analyses and Results

A. Factor Analysis of Scales: The Structure and Dimensions of Statements of Behavioural Intentions

THE major purpose of this study was to select a representative sample of statements of behavioural intentions from an Irish sample and subject the resulting scales to factor analysis in order to determine the structure and dimensions of statements of behavioural intentions in such a sample. As those familiar with the technique of factor analysis will know, there are many ways in which one can go about factor analysing a set of data; thus, a note concerning the procedure used in the present study is in order.

In previous studies with the Behavioural Differential, we have computed the Ss' mean responses to a set of stimuli and considered these mean responses to stimuli as the observations over which to intercorrelate the BD scales (variables). This was the technique which was used by Triandis (1964) as well as by a number of other investigators within the Illinois group (for a partial summary, see Triandis, 1967). The reasoning behind this procedure is that the essential variation lies in the differences in the stimuli and that subject variance can be safely reduced through obtaining mean responses of Ss to stimuli on the scales to be intercorrelated.

Most of these studies, however, were conducted in the US, where stimulus variables such as race, as well as social status and other variables, were used. It would seem that such variables, within the context of that society, are powerful enough to tease apart very differentiated factor structures of BD scales. An attempt to use this same technique within the context of the present culture led to the conclusion that an insufficient number of the stimulus characteristics used in the present design were "powerful" enough to tease apart the variables in the differentiated fashion revealed in the US studies.

As Osgood (1962, p. 12) has pointed out, the kind of data generated by Semantic Differential (and Behavioural Differential) judgements represents "a three-way correlational and factorial problem . . . that is to say, . . . a cube of data is generated within which there are three potentially independent sources of variation in factor structure—scales, subjects, and concepts". More recent work has factor analysed Behavioural Differential data in two or three modes simultaneously (e.g., Davis and Triandis, 1965; Davis and Grobstein,

1967), and Semantic Differential data in three modes (e.g., Osgood, 1969; Levin, 1965; Tzeng, 1972). However, the purpose of the present study was somewhat more modest, being limited to an attempt to determine the factor structure of BD scales in an Irish sample, treating subjects and stimuli in the most parsimonious manner possible. Osgood (1962) and other researchers dealing with Semantic Differential scales, and particularly more recent developments of this technique known as Personality Differential scales (e.g., Warr and Haycock, 1970), have not collapsed subjects' responses to yield mean responses and correlated over stimuli but, rather, have stacked subjects and stimuli end on end, as it were, and factored the scales over this combined set of observations. After unsatisfactory results using the original technique for factoring BD scales, it was decided to adopt this latter procedure.

As was described earlier, a total of 170 Ss responded to a total of 96 complex person stimuli in the present study, whereby approximately a quarter of the Ss responded to a sub-set of 24 complex person stimuli. Thus, we treated each S's response to a given stimulus as an observation, for a total of $170 \times 24 = 4{,}080$ observations over which the 53 BD scales were intercorrelated. The resulting 53×53 correlation matrix was subjected to a Principal Components factor analysis and the resulting Principal Axis factor matrix was rotated orthogonally to simple structure, using Kaiser's (1958) Varimax criterion.

An eight factor solution seemed optimal; fewer than eight factors seemed to collapse otherwise interpretable factors and nine or more factors produced high loadings on single items (isolates) which were no longer true factors. The complete factor analytic results of this solution, presenting the loading of each of the 53 items on each of the eight Varimax rotated factors, are contained in Table B-2 of Appendix B. Table 4 presents a summary of the factor analytic results of the 53 BD scales, presenting selected high-loading scales from each of the eight Varimax rotated factors. As may be seen from Table 4, the 8 factors accounted for approximately 52 per cent of the total variance. Although with different types of data this might not be considered a sufficiently large amount of the variance to account for, with attitudinal type items a factor solution which accounts for this amount of variance is considered quite satisfactory. The items presented in Table 4 constitute an interpretative selection of scales, with a tentative name attached to each of the eight factors. The items were selected on the basis of both the magnitude of their loading and their interpretability. Specifically, items with a loading of 0·50 or above were selected for the first five factors and items with a loading of 0·40 or above were selected for factors six to eight.

All items were scored on a seven point scale with the highest scale value being associated with the "would" end of the "would–would not" continuum. Thus the differences in signs reflect the phrasing of the item and, as may be seen,

TABLE 4: *Results of factor analysis of* 53 *BD scales*

Selected behaviours from 8 *Varimax rotated factors based on the responses of a Dublin sample to* 96 *complex person stimuli.*
(N=170)

Behaviours	*Varimax rotated loadings*
FACTOR I: INTIMATE SOCIAL ACCEPTANCE *vs.* CLASSICAL SOCIAL DISTANCE	
Invite this person to my home for dinner	·63
Ask this person's advice on personal problems	·57
Be hesitant to seek out this person's company	—·73
Go to a film with this person	·67
Exclude this person from my close circle of friends	—·71
Accept this person as an intimate friend	·63
Tend to avoid this person in social situations	—·59
Find this person's company enjoyable	·56
Find it difficult to communicate with this person	—·52
Pct. variance: 11·78. *Cum. pct. variance:* 11·78.	
FACTOR II: MARITAL–SEX ATTRACTION *vs.* REJECTION	
Go on a date with this person	·91
Marry this person	·90
Fall in love with this person	·93
Go to a dance with this person	·91
Pct. variance: 6·92. *Cum. pct. variance:* 18·70.	
FACTOR III: BENEVOLENT CONCERN *vs.* LACK OF CONCERN	
Give advice to this person	·80
Give guidance to this person	·83
Be concerned about this person's welfare	·57
Pct. variance: 4·83. *Cum. pct. variance:* 23·53.	
FACTOR IV: DEFERENCE WITH ANXIETY *vs.* NON-DEFERENCE	
Envy this person	·62
Feel inhibited in this person's presence	·62
Feel threatened by this person in certain situations	·50
Feel in some respects inferior to this person	·71
Pct. variance: 4·62. *Cum. pct. variance:* 28·15.	
FACTOR V: RESPECT *vs.* NON-RESPECT	
Distrust this person	—·53
Admire the ideas of this person	·63
Respect this person	·65
Be impressed by this person	·50
Pct. variance: 6·59. *Cum. pct. variance:* 34·74.	

TABLE 4—*continued*

Behaviours	*Varimax rotated loadings*
FACTOR VI: PUBLIC SOCIAL ACCEPTANCE *vs.* PUBLIC SOCIAL DISTANCE	
Discuss current affairs with this person	·46
Work with this person on a committee	·48
Chat with this person	·57
Co-operate with this person on a community project	·68
Try to ignore this person's presence	—·46
Be reluctant to buy a house next door to this person	—·43
Be willing to employ this person	·50
Have a drink with this person	·47
Consider this person competent to serve on a jury	·48
Participate in a discussion with this person	·58
Exclude this person from my neighbourhood	—·53
Eat with this person	·56
Pct. variance: 8·54. *Cum. pct. variance:* 43·28.	
FACTOR VII: SUBORDINATION *vs.* SUPERORDINATION	
Be commanded by this person	·64
Obey this person	·67
Resent working under this person	—·41
Accept this person as a chairman of a committee of which I am a member	·43
Pct. variance: 4·34. *Cum. pct. variance:* 47·62.	
FACTOR VIII: BELIEF ACCEPTANCE *vs.* REJECTION	
Argue with this person	·66
Disagree with this person on important issues	·75
Criticise this person	·67
Disapprove of some of this person's views	·66
Pct. variance: 4·06. *Cum. pct. variance:* 51·68.	

are quite consistent with each other. In general the factor has been named in such a way that the first part of the bi-polar name of the factor is phrased in a "positive" (accepting) direction.

Some comments on the similarities—and differences—between these factors and factors obtained from previous work with the Behavioural Differential would seem to be in order.

Before proceeding to make any comparison between the present results and the previous BD research, it is important to bear in mind that, in this

study, we did not merely replicate an American BD study, i.e., we did not simply apply American BD scales with an Irish sample to see if the factors were the same or similar. As Triandis (Triandis, Tanaka, and Shanmugam, 1966; Triandis, 1967) has pointed out, when this is done (and especially when the stimulus persons remain the same) the results from subjects from very different cultures tend to be quite similar. In order to avoid the introduction of cultural bias, we have gone to great lengths to elicit behaviours from an Irish sample in this study (while using some "marker" variables from previous studies); also we have used somewhat different stimulus persons. As Triandis *et al.* (1968, p. 3) have stated

> when the stimulus persons are changed (Triandis, Fishbein and Hall, 1964) the factor structures of the behaviours do change. For example, the social distance factor is particularly relevant when American white subjects judge stimulus persons who include Negroes and whites. When race is not included in the study, the social distance factor merges with other factors. This has been encountered with both Semantic and Behavioural Differential work, and has been referred to by Osgood (1962) as the concept/scale interaction phenomenon.

Thus, in this study we have not only changed the behaviours—using primarily behaviours elicited from an Irish sample—but we have also changed the stimulus persons. In particular, no stimulus characteristic such as race, which is so salient for white American Ss, was included in this study. Thus any similarities which appear between the present factor structure and factor structures obtained from the previous BD studies in the US and other cultures should be seen as indicative of a certain cross-cultural generality of factor structures of BD scales. And, in general, similarities and differences must be seen not in terms of particular items alone but rather in terms of the interpretation of the general factors which may be common (or slightly different) between this and other studies.

Factor I has been tentatively designated as "Intimate Social Acceptance *vs.* Classical Social Distance". Though some of the "Classical Social Distance" items of the type found by Triandis (1964), Davis (1966), and others seem to be lacking, this may be the closest thing to this type of factor within this culture (given the limitations of behaviours and stimulus persons utilised). Many of the items with high loadings on this factor seem to be characterised on the one hand, by face-to-face "intimate" interactions such as "ask this person's advice on personal problems" and "find this person's company enjoyable". On the other hand, high loading items such as "invite (or not) this person to my home for dinner", "be hesitant (or not) to seek out this person's

company" and "exclude (or not) this person from my close circle of friends" all seem to imply a social frame of reference. As Goldstein and Davis (1972) have shown, this is a major characteristic of the classical social distance factor. An interesting item on this factor is that of "accept this person as an intimate friend", especially in light of the fact that no separate Friendship Factor seems to emerge in this analysis. One could make an interpretation suggesting cultural differences because of the loading of this item on "Intimate Social Acceptance", whereas in the Triandis (1964) analysis it loads on a separate Friendship Factor together with such "less intimate" items as "drink with", "gossip with", "be partners with in an athletic game", etc. However, in other factor analyses of American BD scales (e.g., Davis, 1966), a separate Friendship Factor has failed to emerge and the "accept this person as an intimate friend" item has loaded together with the Social Distance Factor.

Factor II, "Marital–Sex Attraction *vs.* Rejection", is a very clearcut factor which emerges in all cultures which have been studied so far, and it would seem to require very little further elaboration.

Factor III, which we have tentatively called "Benevolent Concern *vs.* Lack of Concern", groups three items together which logically go together, although the precise interpretation of the meaning of this factor remains a bit obscure. The question arises whether this is "real" concern or some sort of "condescending" or "paternalistic" type of concern (hence our designation "benevolent" concern). The emergence of a factor such as this illustrates the oversimplicity of the typical interpretations along the line of some unidimensional continuum of "acceptance–rejection", and perhaps we must simply accept the fact that this is a dimension of behavioural intentions which is quite real, but which simply does not lie along this axis.

Factor IV may illustrate to an even greater degree this difficulty, which we have expressed in our tentative labelling of "Deference with Anxiety *vs.* Non-Deference". Whereas to "envy this person" may be seen as relatively positive, expressions such as "feel inhibited in this person's presence" and "feel in some respects inferior to this person" would seem at best ambivalent if not, indeed, negative. Again, perhaps this factor is quite real but simply does not lie along a simple positive–negative dimension.

Factor V, which we have labelled "Respect *vs.* Non-Respect", would seem to be quite clearly interpretable. Although this factor would seem to vary along some sort of positive–negative dimension, it is by no means a general "acceptance–rejection" factor. Rather, it would seem to connote acceptance or rejection along a very particular dimension, which is clearly designated in the title chosen to describe the factor. This factor corresponds quite closely to Triandis' (1964) original Factor I ("Formal Social Acceptance . . .") and especially to later refinements of this factor developed by Triandis and his

co-workers (cf. Triandis, 1967; 1971; Davis and Triandis, 1971) which has usually been labelled simply "Respect". It may also be noted that this factor consists of "behaviours" which, in the facet analysis design described in Table 2 (p. 18), are really verb designations of "feeling" as opposed to "overt behaviour" (the same holds, by the way, for the "behaviours" which characterise Factor IV, described above). The close similarity (in the sense of empirically determined high correlations) between this BD factor and the Semantic Differential factor of "Evaluation" has been noted by a number of authors (e.g., Fishbein, 1964; Davis, 1966). However, as was indicated earlier, any attempt to keep a particular measurement technique "pure", in the sense of measuring one and only one (heuristically determined) component of social attitudes, would, of necessity, be rather sterile. By including "feeling" as a facet classification of "behaviours" which emerge from the generic technique which has come to be known as the "Behavioural Differential Technique", we have explicitly recognised that we may be able to measure, in this manner, components other than the purely behavioural component of social attitudes. Thus, if we have developed a technique which will measure *both* behavioural *and* evaluative components of social attitudes, then so much the better. It would be highly desirable if other attitude measurement techniques (e.g., the Thurstone technique) which purport to measure one component of social attitudes only, were to be treated in a multidimensional fashion, so as to include factors which may tap the "behavioural" and other components of social attitudes.

Factor VI, which we have designated as "Public Social Acceptance *vs.* Public Social Distance", is one of the more interesting factors identified in the present study. As we have already indicated, some of the factors do not seem to lie clearly along a simple dimension of acceptance–rejection, especially those containing items which are verbs expressing "feelings" rather than "overt behaviours". However, even among those behavioural intentions elicited in the present study which imply some sort of generalised "social acceptance *vs.* social rejection" there would seem to be different dimensions involved. The high loading items on this factor, which is factor analytically orthogonal to Factor I, illustrate this difference. As opposed to the high loading items on Factor I, all of which involved behaviours of a face-to-face nature, involving either one-to-one relationships or relationships including close reference groups, the high loading items on Factor VI seem, for the most part, to imply a "public" dimension. On the one hand, this factor would seem to bear close resemblance to Davis' (1966) Co-operation Factor in that it includes the two marker variables from this factor, namely, "co-operate with this person on a community project" and "participate in a discussion with this person", as well as related items solicited from an Irish sample such as "work with this person

on a committee" and "discuss current affairs with this person". However, at the same time, it would seem to be broader than this factor in that it contains other items which involve social acceptance or rejection of a "public" nature, e.g., "consider this person competent to serve on a jury" and "be willing to employ this person".

It is also interesting to note that the "accept as a neighbour" type of behaviour loads on this factor (i.e., "exclude this person from my neighbourhood"—a marker variable, and "be reluctant to buy a house next door to this person"—an elicited item); such items have typically loaded on the classical social distance factor (which includes such items as "would accept as close kin by marriage") in American studies. Although direct comparisons are not possible, since this study was not, strictly speaking, a cross-cultural comparison, these findings suggest that these sorts of behaviours (e.g., acceptance as next door neighbour) involve a different kind of social acceptance or rejection in the Irish culture than they do in the American culture.

In light of the failure of any clear cut "Friendship Acceptance–Rejection" Factor to emerge in this analysis it is not surprising that items from Triandis' (1964) Friendship Factor (e.g., "eat with this person") and Goldstein and Davis' (1972) Acquaintance Acceptance–Rejection Factor (e.g., "chat with this person") load on this factor. It is furthermore interesting to note that the item "have a drink with this person" loads on this factor. It would seem that this behaviour connotes a certain public character. On the other hand, as an inspection of Table B2, Appendix B indicates, this item also has a relatively high loading on Factor I and would thus seem to be ambiguous in its interpretation. This is not surprising in light of the fact that this behaviour (or some variation thereof) was one of the most frequent behaviours to emerge from the elicitation process. Lacking a basis for comparison, we shall decline to speculate as to the significance of this fact within the framework of the Irish culture.

Factor VII, which we have labelled "Subordination *vs.* Superordination", would seem to be clearly interpretable. The high loading items on this factor have in common the sort of relationship indicated by the title and this factor is clearly a replication of Triandis' (1964) original Factor V.

Factor VIII, which we have labelled "Belief Acceptance *vs.* Rejection", would seem to be highly specific, although all of the high loading items on this factor seem to form a very consistent and quite interpretable Gestalt. As we shall see later, this factor probably emerged primarily because of the inclusion of attributed beliefs to the stimulus persons in one of the factorial designs. However, even though this factor is quite specific, it might be useful in situations where one is seeking to measure this kind of acceptance or rejection among persons who differ in beliefs (cf. Triandis and Davis, 1965; Goldstein and Davis, 1972).

In summary, this study has utilised the combined experience of a number of researchers involved in the cross-cultural measurement of the behavioural component of social attitudes. Techniques have been developed so as to optimally avoid cultural bias with a view to developing a set of behaviours—or more precisely, a set of statements of behavioural intentions—uniquely applicable to the Irish culture. The factor analytic structure of such statements of behavioural intentions, in the form of Behavioural Differential scales, has been examined. The study also permits some comparisons with a view to examining the cross-cultural generality of the structure of behavioural intentions *vs.* the cultural specificity of the structure and content of the behavioural component of social attitudes. We can, therefore, briefly summarise the similarities and differences between the results of the present study and previous results involving the Behavioural Differential.

As a basic frame of reference we might compare the structure and composition of Behavioural Differential scales in Table 4 of the present study with the modified version of the original Triandis (1964) results presented in Table 1 (Triandis, 1971). In the following we shall list the original factors (from Table 1) and compare these with our present results:

Factor I: RESPECT. This factor is clearly replicated in Factor V of the present study.

Factor II: MARITAL ACCEPTANCE. This factor is clearly replicated in the form of Factor II of the present study.

Factor III: FRIENDSHIP ACCEPTANCE. In the present study no factor corresponding to this factor clearly emerges. Instead, items originally loading on this factor in the American studies are divided between Factor I of the present study ("Classical Social Distance") and Factor VI ("Public Social Distance"). It is of interest to note that one of the original items which defined the "Friendship" factor, namely, "accept this person as an intimate friend" loads on Factor I in the present study (an "intimate" factor). This may be indicative of cultural differences in the meaning of "accept as intimate friend". On the other hand, there have been studies with American Ss (e.g., Davis, 1966) where a clear-cut "Friendship" factor did not emerge and this item loaded on the "Social Distance" factor. Thus caution should be exercised in making generalisations about cultural differences with regard to this particular item. Other items which loaded on Triandis' original "Friendship" factor loaded in the present study on Factor VI ("Public Social Distance"). Other items loading on Factor VI of the present study seem to reflect Davis' (1966) Co-operation Factor; however, the present Factor VI seems to be more generalisable than Davis' factor.

Factor IV: SOCIAL DISTANCE. Since the basic origins of the Behavioural Differential technique lie in the Bogardus Social Distance Scale, it would have been rather distressing if this "classical" factor of social distance had not been replicated in the present study. An inspection of Table 4 reveals that this factor is indeed replicated but is differentiated into two factors which we have tentatively called "Intimate Social Acceptance *vs.* Classical Social Distance" (Factor I) and "Public Social Acceptance *vs.* Public Social Distance" (Factor VI). Considering the two "marker" variables from this original factor (Triandis, 1964, 1971), we have noted above that the "exclude this person from neighbourhood" item (together with the elicited item of "be reluctant to buy a house next door to this person") loads on the "Public Social Distance" factor; we have speculated about the possible cultural differences in the meaning attached to the general notion of "accepting as next door neighbour". Although the second "marker" variable from this factor, namely, "accept this person as close kin by marriage" does not appear in the selected behaviours presented in Table 4, an inspection of the complete factor analytic results presented in Table B-2 (Appendix B) reveals that this item does have a relatively high loading on Factor I of the present study. This fact plus previous findings indicating that, in general, "classical" social distance involves the most intimate dimension of statements of behavioural intentions (e.g., Davis and Triandis, 1965; Triandis and Davis, 1965; Goldstein and Davis, 1972), led us to designate Factor I as we have. More generally, the differentiation of social distance factors in the present study (i.e., Factors I and VI) may represent a new and potentially important differentiation of the factor structure of Behavioural Differential scales which may have significance beyond the present study; this differentiation may alert future researchers to the existence of differentiated dimensions of Behavioural Differential items which may be of potential significance.

Factor V: SUBORDINATION–SUPERORDINATION. This factor is clearly replicated by Factor VII in the present study, the interpretation of which is quite clear.

Thus, it may be said that the five original BD factors were either completely replicated in the present study or replicated with some differentiation and realignment of items in the context of the factors obtained in the present study. The differentiation of the "classical" social distance factor into two factors of "Intimate Social Acceptance" and "Public Social Acceptance" would seem to constitute a further insight into the structure of statements of behavioural intentions which could have implications for future research both in this culture and in other cultures.

In addition to the replication of the five original BD factors, the existence of some additional specific factors (e.g., Factors III, IV, and VIII in Table 4) would seem to suggest further dimensions which should be taken into account and which may be of value under certain circumstances.

The question might arise as to why we did not use a larger and/or more representative sample in this study. A major consideration obviously had to do with the difficulty, as well as time and cost, involved in getting Ss to fill out a rather complicated questionnaire of 72 pages involving a total of 1,272 responses. However, this does not mean that the Behavioural Differential technique is intrinsically unwieldy and could not be used easily in a variety of field situations. It must be emphasised that the present study was *methodological* in nature, in that we endeavoured to first elicit, and then discover the factor structure of, statements of behavioural intentions in an Irish sample. Future studies can utilise far fewer scales, selecting high loading items from selected factors which may be of interest, and most probably utilising less complex person stimuli, depending upon the purpose of the study.

An example of the wide applicability of the BD technique is shown in the study by Triandis, Vassiliou and Thomanek (1966) who presented a set of BD scales to a representative sample of Greater Athens, Greece. An analysis of the responses from this sample showed the factor structure of BD statements to be essentially identical with that obtained from a sample of University of Athens students. The representative sample of Greater Athens contained a substantial number of illiterate subjects. However, it was found quite possible to obtain BD responses from these Ss by using appropriate instructions and presenting them with cards containing a graphic format, whereby they could point to the response which they wished to make. Thus, although it might be slightly more cumbersome to collect data from certain types of subjects, the technique clearly has wide applicability.

In addition to the above findings, an obvious response to the question of whether the sample size used in the present study was sufficiently large would lie in an examination of the *stability* of the factor structure obtained. In other words, if the 170 Ss were randomly divided into two groups and factor analyses of the 53 BD scales were performed separately for each group, would the resulting factor matrices be comparable? We have systematically explored this question. The sample was randomly split into two sub-samples, which may be referred to as "odds" and "evens", and separate factor analyses, involving an eight factor Varimax solution, were performed for each group. An inspection of the two sets of factors revealed a very high degree of similarity between the two factor structures. Obviously, a more systematic comparison is necessary and we employed the technique developed by Tucker (1951) and Wrigley and Neuhaus (1955) for computing the *coefficient of congruence* to measure the

degree of *factorial similarity* between two sets of factor coefficients (Harman, 1967).

Table 5 presents the results of comparisons between the two sub-samples with the total sample and with each other. Table 5*a* presents the coefficients of congruence between factors from the total sample and the "even" sub-sample. As may be seen from an inspection of the *diagonal* elements of this non-Gramian matrix, this comparison is outstandingly good, with coefficients ranging from 0·94 to 0·99 (the fact that the order of the factors for the two samples is slightly different is due to random variation; in order to make an inspection of the matrix easier, columns were matched with rows in accordance with the factors which actually corresponded with each other).

Table 5*b* presents the coefficients of congruence between factors from the total sample and the "odd" sub-sample. An inspection of the diagonal elements of this matrix shows that seven of the eight original factors are replicated with coefficients of congruence ranging from 0·92 to 0·99. Obviously an eight factor solution was not optimal for the "odd" sub-sample since the eighth factor does not correspond neatly with any one of the original eight factors. Instead, as often happens when one more factor is extracted and rotated than is optimal, this factor becomes a "shadow" factor which is closely related to the two main social distance factors in the original sample. This is indicated by coefficients of congruence of 0·85 and 0·76 with Factors VI and I, respectively, of the original factors from a total sample. An inspection of the *rows* (corresponding to the original factors of the total sample) is necessary to determine which factor did not hold up. This turns out to be Factor VII of the original factor structure presented in Table 4, i.e., Subordination *vs.* Superordination. The fact that this factor should break down in one of the two sub-samples is not surprising when one considers that, as an inspection of Table 4 indicates, this factor is made up primarily of the two marker variables; the other two items in this factor, which were elicited, had much lower loadings. Although this factor may be seen to be less than completely stable in the present analysis, since it did emerge in the total sample and in the "even" sub-sample quite clearly, and since it has emerged quite clearly in numerous other factor analytic studies of BD scales, it should not be disregarded completely. Instead, it should be noted that this factor may be particularly applicable in situations involving relationships that clearly imply subordinate–superordinate relations. Such relations may be involved (whether we like it not) in studies involving groups such as pupils and teachers, workers and supervisors, etc.

Table 5*c* presents the coefficients of congruence between factors from the "odd" sub-sample and "even" sub-sample. Since this comparison is between two completely independent samples, the fact that seven out of the eight factors hold up with coefficients of congruence ranging from 0·87 to 0·99 is quite

TABLE 5: *Comparison of factor structures from split samples*

(*a*) *Coefficients of congruence between factors from the total sample and the "Even" sub-sample*

	Original factors	I	II	IV	III	VI	VIII	VII	V
Total sample	I	[·99]	·34	·21	—·21	·68	·49	—·45	—·15
	II	·35	[·99]	·14	·02	·22	·09	—·12	—·08
	III	·19	·12	[·98]	—·03	·16	·12	—·06	—·03
	IV	—·18	·03	·02	[·98]	—·13	—·25	—·08	·10
	V	·59	·17	·19	—·17	[·97]	·60	—·44	—·28
	VI	·74	·15	·06	—·26	·53	[·94]	—·35	—·02
	VII	—·47	—·11	—·09	—·09	—·51	—·39	[·97]	·13
	VIII	—·09	—·06	—·02	·08	—·22	—·12	·11	[·97]

(*b*) *Coefficients of congruence between factors from the total sample and the "Odd" sub-sample*

	Original factors	I	II	IV	III	VII	VI	VIII	V
Total sample	I	[·96]	·41	·42	·00	—·67	·64	—·76	—·10
	II	·31	[·99]	·13	·07	—·21	·15	—·26	—·05
	III	·15	·12	[·95]	·07	—·27	·07	—·19	·08
	IV	—·29	·02	—·11	[·92]	·27	—·26	·21	·17
	V	·63	·22	·36	·08	[—·96]	·68	—·41	—·21
	VI	·63	·20	·32	—·10	—·61	[·93]	—·85	—·02
	VII	—·65	—·14	—·30	—·41	·38	—·63	·16	·19
	VIII	—·11	—·07	—·01	·06	·25	—·05	·03	[97]

(*c*) *Coefficients of congruence between factors from the "Odd" sub-sample and the "Even" sub-sample*

	Original factors	I	II	IV	III	VII	VI	VIII	V
"Even" sub-sample	I	[·93]	·40	·38	·01	—·63	·68	—·82	—·08
	II	·23	[·99]	·13	·07	—·19	·13	—·24	—·04
	III	·14	·15	[·90]	·09	—·24	·01	—·14	·07
	IV	—·28	·01	—·12	[·87]	·28	—·23	·23	·14
	V	·69	·26	·33	·11	[—·90]	·64	—·39	—·21
	VI	·46	·11	·27	—·09	—·60	[·88]	—·70	—·11
	VII	—·60	—·12	—·24	—·40	·36	—·55	·14	·18
	VIII	—·15	—·09	—·05	·04	·28	—·07	—·00	[·89]

encouraging. Since the "even" sub-sample corresponded closely with the total sample, essentially the same pattern emerges in this comparison as in the comparison in Table 5*b*.

In general, the results of comparing the factor structures independently obtained from randomly chosen sub-samples, would seem to indicate a rather high degree of stability of the factor structures obtained. Thus, the use of a larger N would, in all probability, not have produced significantly different results. The implication of these findings, together with the previously cited findings of Triandis *et al.* (1966), is that, although different samples might be expected to vary in absolute level of response to a given item, the *co-variation* of responses and, hence, the resulting factor structures, remain fairly stable, at least when the samples are drawn from the same culture.

Of course, the above results do not mean that it would not be desirable (if time and expense were no consideration) to have a completely random representative sample of the population as respondents on the basis of which to base the foregoing results. However, while the results presented in Table 5 do not completely substitute for the lack of a representative, unbiased sample, they do indicate the relative stability of factor structures obtained from the sample which we used.

B. Analyses of Variance: The Determinants of Statements of Behavioural Intentions

The results of the factor analysis of the 53 BD scales, as summarised by the selected high loading behaviours from eight Varimax rotated factors presented in Table 4, permit the computation of mean composite scores for each subject on each factor. Thus each S's responses on the 53 BD scales were reduced to eight mean composite scores ranging from 1 (maximum "rejection") to 7 (maximum "acceptance"). These eight composite scores for each subject in response to each stimulus person were then treated as dependent variables for purposes of further analysis. This procedure of using selected high-loading items (i.e., those presented in Table 4) as a basis for composite scores has been found to yield more meaningful results than so-called factor scores based on the loadings of all items on a given factor which could be derived from Table B2.

As will be recalled from the method section, the stimuli to which the Ss responded consisted of four overlapping factorial designs of stimulus characteristics. Each of the classificatory elements of the stimulus characteristics in each of the designs can thus be seen as a "treatment" or independent variable, whose contribution as a determinant of the variance in the dependent variables can be assessed by the use of analysis of variance.

Since the stimulus elements, or independent variables in each of the four factorial designs, varied somewhat in their composition (even though there was some overlap) it would seem best to describe the results separately for each design.

Design 1: As will be recalled from the method section above, this design consists of all possible combinations of the following stimulus elements:

Nationality (Irish–English)
Sex (Male–Female)
Religion (Catholic–Protestant–Jewish)
Occupational Status (Doctor–Manual Worker)

A summary of the analysis of variance results for this $2 \times 2 \times 3 \times 2$ factorial design is presented in Table 6a, which gives the sums of squares and F-ratios for the main effects of the independent variables for eight separate analyses of variance performed on each of the dependent variables consisting of composite scores on the eight BD factors. Since essentially none of the interaction effects

were significant, only the sums of squares (SS), degrees of freedom (df) and F-ratios for the four main effects are listed; in addition the df and SS for the residual are listed. As the reader familiar with analysis of variance (ANOVA) knows, the F-ratio is a measure of the statistical significance of a given effect. The F-ratio is computed by dividing the mean square (MS) for a given effect (which is the SS over the df) by the mean square error (which is obtained by dividing the SS of the residual by its df). Significance levels for the F-ratios are indicated in footnotes in terms of probability distributions.

As an inspection of Table 6a reveals, for BD Factor I (Intimate Social Acceptance) Status is overwhelmingly the most important variable. Table B3a (Appendix B) presents a summary of the source level means derived from the ANOVA results of this design. As would be expected, the overwhelmingly significant effect of Status in this design is determined by pronounced preference (i.e., greater acceptance) for the *high* status stimulus person (Doctor) over the *low* status stimulus person (Manual Worker).

Further inspection of the ANOVA results in Table 6a for Factor I indicates that Religion is the second most important determinant of this dependent variable. Although this variable is important for this factor ($p < .01$), it would seem to be considerably less important than Status. A preliminary inspection of the source level means in Table B 3a for the total sample would seem to indicate that Catholic and Protestant stimulus persons were approximately equally preferred (indeed Protestant stimulus persons appeared to be marginally preferred over Catholic stimulus persons) and Jewish stimulus persons least preferred. However, since this result did not seem terribly logical for a predominantly Catholic sample, separate analyses were carried out for Catholic Ss only. The source level means from these analyses are presented in parentheses after total sample results. These source level means clearly indicate that Catholic stimulus persons are preferred, Protestant stimulus persons are slightly less preferred and Jewish stimulus persons are markedly less preferred.

A preliminary inspection of these results would seem to indicate that, although religion is a statistically significant factor in determining acceptance or rejection for these Ss on this factor, the absolute magnitude of rejection of non-Catholic stimulus persons on the part of our Catholic Ss is not very great. However, a word of caution should be interjected at this point. There is considerable evidence that many Ss manifest what has been called a "social desirability response set" (Crowne and Marlowe, 1964), especially when responding to "sensitive" stimuli. Thus, in the context of the present socio-political situation in Ireland, it may be considered socially unacceptable to endorse, to any great extent, statements indicating a rejection of Protestants. Similarly, it may be considered "not nice" to endorse statements which might be construed as anti-Jewish. Therefore, the results presented here most likely

TABLE 6a: *Summary of Analysis of Variance Results for Design 1*

Sums of squares and F ratios for main effects based on the dependent variables of composite scores of 8 BD factors
(N=44)

Source of variance		*Factor I* *Intimate social acceptance* vs. *Classical social distance*		*Factor II* *Marital-sex attraction* vs. *Rejection*		*Factor III* *Benevolent concern* vs. *Lack of concern*		*Factor IV* *Deference with anxiety* vs. *Non-deference*		*Factor V* *Respect* vs. *Non-respect*		*Factor VI* *Public social acceptance* vs. *Public social distance*		*Factor VII* *Subordination* vs. *Superordination*		*Factor VIII* *Belief acceptance* vs. *Rejection*	
	df	SS	F§	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F
Nationality	1	4·63	2·14	·08		4·87	1·62	·01		4·22	3·50	3·79	3·93*	·63		3·62	2·76
Sex	1	3·52	1·63	154·96	30·49***	7·06	2·35	1·43	1·11	·65		1·17	1·21	4·45	2·29	·94	
Religion	2	22·16	5·13**	11·16	1·10	2·58		·97		5·03	2·08	3·13	1·62	2·37		1·29	
Status	1	336·31	155·71***	158·42	31·17***	44·84	14·96***	35·01	27·10***	125·30	103·71***	118·80	123·02***	738·33	380·19***	·02	
Residual	1,032	2,228·9		5,245·3		3,094·1		1,333·0		1,246·8		996·56		2,004·2		1,355·2	

* = significant at the 0·05 level
** = significant at the 0·01 level
*** = significant at the 0·001 level
§ F ratios less than 1·00 omitted

represent the *lower bounds* of the degree of rejection (or relative non-preference) *vis-à-vis* "out-groups". A further factor that must be pointed is that middle to upper middle class and better educated Ss (which is the direction in which our sample is biased) tend to have a "liberal" bias (at least on paper and pencil measures) relative to the population as a whole. For both these reasons, therefore, the present results very probably understate the degree of "prejudice" toward out-groups which exists in the population as a whole. These considerations must be borne in mind in interpreting the statistical results which follow.

Turning our attention further to Table 6a, it may be seen that Sex is an important determinant of the variance in the dependent measure represented by Factor II (Marital–Sex Attraction). Actually this result is an artifact of the slight imbalance in the distribution of sex of the Ss; if they had been perfectly balanced this effect would have cancelled itself out since each sex would prefer the opposite sex on this dimension. Separate analyses of variance for male and female Ss which were carried out reveal, as might be expected, an overwhelming effect for Sex on this factor. Status also appears as a very significant determinant of the variance on this factor. This finding is not surprising and is consistent with other results relating to this factor (e.g., Davis and Grobstein, 1967). However, we were slightly surprised that Religion did not appear to be a significant determinant of the variance on this factor. Further consideration reminded us that the score on this factor was a composite of not only the item "would marry this person" but also of items such as "would go on a date with this person". In such a composite score, Religion, in fact, appears as an insignificant determinant of variance on this factor for our sample. However, since common sense told us that in considering marriage, Religion is likely to be an important factor in this culture, we performed separate analyses of variance for the item "would marry this person" alone. For this item Religion does show up as a significant determinant ($F = 5{\cdot}26$; $p < {\cdot}01$). An examination of the source level means for these ANOVA results shows a clear-cut preference for Catholic stimulus persons, a slightly reduced preference for Protestant simulus persons, and a markedly lower acceptance for Jewish stimulus persons on this item.

On Factor III (Benevolent Concern), Status is again the most important determinant of behavioural intentions. This factor, as we have mentioned before, seems to lie along a somewhat different dimension than the usual acceptance–rejection dimension and would seem to involve an element of "paternalism", inasmuch as the high-rated stimulus person (i.e., the one toward whom greatest "concern" is expressed) is, in this case, the "low" status stimulus person.

Factor IV (Deference with Anxiety), although again perhaps not easy to interpret, shows Status as the most important determinant, with greater

deference being expressed toward "high" status stimulus persons, as may be seen by an inspection of the source level means in Table B3a.

Factor V (Respect) would seem to be quite clear in its interpretation and, here again, Status shows up as the overwhelmingly (and only) important determinant. The source level means show, as might be expected, greater "Respect" expressed toward "high" status stimulus persons.

Factor VI (Public Social Acceptance) commands our attention because of its obvious relevance for intergroup relations. Whereas it might be argued that it is all right to be "prejudiced" on Factor I (i.e., to be free to choose whomever one would like to "invite to one's home", "go to a film with", "accept as an intimate friend", etc.), "Public Social Acceptance" of the type represented by the items which are high-loading on Factor VI (e.g., "work with this person on a committee", "co-operate with this person on a community project", "consider this person competent to serve on a jury", "exclude this person from my neighbourhood", etc.) cannot be considered appropriate to be left to personal decision since such behaviours impinge upon the entire social structure. In this context it is interesting to note that here, too, Status is the overwhelming determinant of variance. It is also of some interest to note that Nationality is a significant determinant of variance on this factor ($p < \cdot 05$), and, as might be expected, an inspection of the source level means presented in Table B3a shows that our Irish subjects give preference to interactions with Irish stimulus persons over English stimulus persons.

Factor VII (Subordination) again shows, not surprisingly, an overwhelming effect of Status.

For Factor VIII (Belief Acceptance) none of the four independent variables controlled a significant amount of variance.

Design 2: This design consists of all possible combinations of the following stimulus elements:

Age (50 year old–25 year old)
Sex (Male–Female)
Religion (Catholic–Protestant–Jewish)
Occupational Status (Doctor–Manual Worker)

A summary of the ANOVA results of this $2 \times 2 \times 3 \times 2$ factorial design is contained in Table 6b, which presents the sums of squares and F-ratios for the main effects for the eight BD factors.

As was the case in Design 1, Status is of overriding importance on most of the dimensions. On Factor I (Intimate Social Acceptance) Status is by far the most important determinant of the behavioural intentions which make up this factor. The seeming importance of Age as a determinant of behavioural

TABLE 6b: *Summary of analysis of variance results for design II*

Sums of squares and F ratios for main effects based on the dependent variables of composite scores of 8 BD factors
($N = 41$)

Source of variance	df	*Factor I* *Intimate social acceptance* vs. *Classical social distance*		*Factor II* *Marital-sex attraction* vs. *Rejection*		*Factor III* *Benevolent concern* vs. *Lack of concern*		*Factor IV* *Deference with anxiety* vs. *Non-deference*		*Factor V* *Respect* vs. *Non-respect*		*Factor VI* *Public social acceptance* vs. *Public social distance*		*Factor VII* *Subordination* vs. *Superordination*		*Factor VIII* *Belief acceptance* vs. *Rejection*	
		SS	F§	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F
Age	1	59·33	26·32***	208·78	56·19***	69·72	23·73***	·28		·29		3·64	4·74*	16·85	8·82**	2·71	1·50
Sex	1	·30		18·32	4·93*	10·56	3·59	·08		·13		1·71	2·23	8·11	4·25*	1·68	
Religion	2	41·55	9·22***	32·79	4·41*	15·83	2·69	1·08		14·56	5·51**	6·89	4·48*	7·79	2·04	8·04	2·23
Status	1	371·99	165·02***	81·54	21·95***	136·14	46·33***	64·93	45·10***	95·61	72·33***	82·44	107·32***	708·99	371·25***	2·56	1·42
Residual	960	2,164·1		3,567·2		2,820·7		1,382·2		1,269·0		737·47		1,833·3		1,731·0	

* = significant at the 0·05 level
** = significant at the 0·01 level
*** = significant at the 0·001 level
§ F ratios less than 1·00 omitted

intentions on this factor is to some extent an artifact of the sample composition. As may be remembered from a description of the demographic characteristics of the subjects (Table B1, Appendix B), the sample was biased toward a younger age group. An inspection of the source level means derived from the ANOVA results for this design, contained in Table B3b, indicates that the variance attributable to Age is determined by a preference for the younger stimulus persons. Since it may be assumed that, to the extent that any preference would be expressed, it would be expected to be in the direction of people preferring to interact with persons of the same age group, this result is not surprising. Thus, had the sample been more evenly balanced between older and younger Ss, this effect would probably have been cancelled out. It is notable that, for this factor, Religion is an even more important determinant in this design than in the previous one ($p < \cdot001$). An inspection of the source level means in Table B3b shows the expected pattern of Catholic stimulus persons being most preferred, Protestant stimulus persons next preferred and Jewish stimulus persons least preferred. This tendency is accentuated when considering a separate analysis of the sub-sample of Catholic Ss only.

For Factor II (Marital–Sex Attraction), Age appears as an important determinant, but again this result is probably an artifact of the age-bias of the sample. An inspection of the source level means indicates a preference for younger stimulus persons; however, since people generally probably prefer persons of their own age group on this dimension, this is most likely an artifact of the sampling bias towards a younger age group. As we discussed earlier, if the sample had been evenly balanced with respect to the sex of the Ss the effect of Sex would have cancelled out. Again separate analyses of variance for male and female Ss show an overriding importance of Sex as a determinant of behavioural intentions on this factor, as might be expected. Apart from Age and Sex, however, it is interesting to note that Status is once again a highly important determinant of responses on this continuum. Religion also emerges as an important determinant on this dimension; moreover, when a separate ANOVA for the marriage item alone is performed, the significance level increases ($F = 8{\cdot}31$; $p < \cdot001$).

As in Design I, on Factor III (Benevolent Concern) Status emerges as the most important determinant of behavioural intentions. Again, however, one might suspect an aspect of paternalism in that it is the lower status person toward whom "concern" is expressed, as evidenced by an inspection of the source level means in Table B3b. The significant effect due to Age on this factor is due to a greater "concern" being expressed *vis-à-vis* younger stimulus persons, a fact probably determined primarily by the responses of older Ss.

On Factor IV (Deference with Anxiety), Status is again the overriding (and sole) determinant of responses on this continuum. Needless to say, greater

deference is expressed towards high status stimulus persons, as an examination of the source level means reveals.

The variance on Factor V (Respect) is again controlled overwhelmingly by Status. However, there is also a significant effect for Religion ($p < \cdot 01$). Again, an analysis of the source level means (Table B3b) reveals the usual pattern, whereby separate ANOVA results for Catholic Ss accentuate this trend. The lack of a significant effect for Age on this factor could lead to the speculation that not only do the younger Ss show a preference for stimulus persons of their own age (e.g., on Intimate Social Acceptance and Marital–Sex Attraction), but they also do not appear to express any differential respect for 50 year old stimulus persons over 25 year old stimulus persons; this same interpretation might also hold for Factor IV (Deference with Anxiety).

On Factor VI (Public Social Acceptance) we again see a predominating effect of Status. The other significant variable, apart from Age, is Religion, whereby the source level means reveal the previous pattern, which is accentuated in the ANOVA results for Catholic Ss only.

In Factor VII (Subordination) we again see the overwhelming importance of Status. The significant effect due to Age reflects a tendency for the Ss generally to subordinate themselves more *vis-à-vis* the older stimulus persons, as may be seen from an inspection of the source level means in Table B3b. The effect due to Sex reflects a slight (but not terribly significant) tendency for Ss to be more willing to subordinate themselves to male stimulus persons. ANOVA's carried out separately for male and female Ss do not reveal any differences; thus both sexes would appear to manifest a slight tendency to subordinate themselves more to males than to females.

Once again Factor VIII (Belief Acceptance) shows no significant effects for any of the four independent variables.

Design 3: This design consists of all possible combinations of the following stimulus elements:

Age (50 year old–25 year old)
Religion (Catholic–Protestant–Jewish)
Sex (Male–Female)
Geographic Origin (Urban–Rural Background)

The summary of the ANOVA results for this $2 \times 3 \times 2 \times 2$ design is contained in Table 6c.

For Factor I (Intimate Social Acceptance) Age again shows a significant effect, as it does on several other factors. Our comments regarding the reasons for the effect shown by Age in the previous design hold largely for its effect in this design and we shall not repeat these comments here. Otherwise, the

TABLE 6c: *Summary of analysis of variance results for design III*

Sums of squares and F ratios for main effects based on the dependent variables of composite scores of 8 BD factors
(N = 42)

Source of variance	df	*Factor I* *Intimate social acceptance* vs. *Classical social distance*		*Factor II* *Marital-sex attraction* vs. *Rejection*		*Factor III* *Benevolent concern* vs. *Lack of concern*		*Factor IV* *Deference with anxiety* vs. *Non-deference*		*Factor V* *Respect* vs. *Non-respect*		*Factor VI* *Public social acceptance* vs. *Public social distance*		*Factor VII* *Subordination* vs. *Superordination*		*Factor VIII* *Belief acceptance* vs. *Rejection*	
		SS	F§	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F
Age	1	94·56	52·43***	315·85	73·52***	43·62	19·75***	2·90	2·44	·62		6·04	10·69**	28·00	15·72***	·50	
Religion	2	29·82	8·27***	37·19	4·33*	30·49	6·90**	4·16	1·75	1·23		4·10	3·63*	10·77	3·02*	5·88	1·76
Sex	1	1·37		107·88	25·11***	·44		·99		·27		·01		16·78	9·42**	1·50	
Background	1	2·15	1·19	1·65		·96		·55		·32		·37		·93		1·39	
Residual	984	1,774·6		4,227·6		2,173·3		1,170·5		1,063·7		555·73		1,752·7		1,640·5	

* = significant at the 0·05 level
** = significant at the 0·01 level
*** = significant at the 0·001 level
§ F ratios less than 1·00 omitted

most important characteristic for this factor is Religion ($p < \cdot001$). If we remove Status, as is the case in this design, and also Age (because of the artifactual nature of the latter), then Religion becomes one of the most significant determinants of acceptance or rejection. As an inspection of the source level means in Table B3c reveals, the previously noted pattern holds, except that in this case the difference between the lower level of acceptance of Jewish stimulus persons and the higher level of acceptance of both Christian stimulus persons seems to be greater than in previous cases. It is interesting to note that the characteristic Urban *vs.* Rural Background controls no significant amount of variance on either this factor or any of the other seven factors used as dependent variables in the analysis of variance design. It would appear that for our urban, and largely middle class, sample this characteristic is just not salient as a determinant of behavioural intentions.

For Factor II (Marital–Sex Attraction), apart from Age and Sex, Religion again would appear to have a significant effect. Once again separate ANOVA results for the marriage item in this design show the effect of Religion to be even greater ($F = 9{\cdot}58$; $p < \cdot001$).

On Factor III (Benevolent Concern) Age again has a significant effect, with greater concern being expressed for the younger stimulus persons. Apart from Age, however, Religion has a significant effect on this factor ($p < \cdot01$). However, the rôle of Religion on this factor, which was not significant in the previous two designs where Status was involved, is somewhat different than the rôle played by Status in the previous two designs. Whereas in the previous two designs, Benevolent Concern was shown toward the otherwise less preferred stimulus person (i.e., the low status manual worker), in this case greater concern is shown for the otherwise preferred stimulus persons, i.e., Catholics. This is true to a slightly lesser extent *vis-à-vis* Protestants; however, a relative lack of concern is shown toward Jewish stimulus persons. In other words, whereas one would be less inclined to socialise (e.g., Factors I and VI) with stimulus persons of low occupational status, one would, nevertheless, express benevolent concern toward them. However, with respect to Jews, there would appear to be a tendency both to socialise less with them and also not to express concern for them. The data taken together could lead to speculation concerning the meaning of this stimulus characteristic for this sample.

On Factor IV (Deference with Anxiety) and V (Respect) no significant main effects appear, in contrast to the previous designs involving Status.

On Factor VI (Public Social Acceptance), apart from Age, there is a slightly significant effect for Religion ($p < \cdot05$). As the source level means in Table B3c indicate, it is Jewish stimulus persons who are least accepted on this dimension.

Factor VII (Subordination) shows, in addition to a significant Age effect and a marginally significant Religion effect, a relatively significant effect for

Sex ($p < \cdot 01$). ANOVA's performed separately for male and female Ss reveal that this effect is due solely to male Ss who would be quite significantly prepared to subordinate female stimuli ($F = 19{\cdot}22$; $p < \cdot 001$), whereas female Ss do not express a tendency to subordinate either male or female stimuli.

Factor VIII (Belief Acceptance) again shows no significant main effects in this design.

Design 4: This design consists of all possible combinations of the following stimulus elements:

Nationality, (Irish–English)
Religion (Catholic–Protestant–Jewish)
Sex (Male–Female)
Belief (Favours–Opposes Relaxation of Censorship Laws)

The analysis of variance results for this $2 \times 3 \times 2 \times 2$ factorial design are presented in Table 6d.

The ANOVA results from this fourth design are of interest in that both Status, which took up a major share of the variance in the two designs in which it was present, and Age, which controlled a significant amount of variance for reasons which we have described, are lacking in this design. Although it cannot quite be said that the investigators were able to predict all of the results in advance, nevertheless an effort was made to form combinations of stimulus persons into designs which would allow each element some opportunity to manifest variance—to see if Ss made discriminations on the basis of the characteristic involved. As an examination of Table 6d reveals, in the absence of Status and Age, Religion turns out to be overall the most significant determinant of variance. This is particularly true on Factor I (Intimate Social Acceptance) where it is the most significant determinant of the variance in Ss' responses ($p < \cdot 001$). Of course, it will be recalled that Religion was also a significant determinant of variance on this factor in all the other designs. Sex also turns out to be a significant determinant of variance on this factor, whereby an inspection of the source level means reveals a preference for female stimulus persons. This is most likely an artifact of the slight skewness in the sample (55 per cent female—45 per cent male) which could account for this result if each sex preferred its own sex on this dimension. The significance of the variance could have been heightened by an interpretation on the part of some male Ss of a heterosexual component to some of the statements making up this factor (e.g., "would go to a film with this person"). Interestingly, belief (as operationalised by attitudes toward censorship) controls a small, but statistically significant, amount of variance on this factor ($p < \cdot 05$). The source level means reveal that the preference is in the direction of those who favour relaxation of censorship laws. In conventional terms this would tend to indicate that

TABLE 6d: *Summary of analysis of variance results for design IV*

Sums of squares and F ratios for main effects based on the dependent variables of composite scores of 8 BD factors
($N = 43$)

Source of variance		*Factor I* *Intimate social acceptance* vs. *Classical social distance*		*Factor II* *Marital-sex attraction* vs. *Rejection*		*Factor III* *Benevolent concern* vs. *Lack of concern*		*Factor IV* *Deference with anxiety* vs. *Non-deference*		*Factor V* *Respect* vs. *Non-respect*		*Factor VI* *Public social acceptance* vs. *Public social distance*		*Factor VII* *Subordination* vs. *Superordination*		*Factor VIII* *Belief acceptance* vs. *Rejection*	
	df	SS	F§	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F	SS	F
Nationality	1	·35		·19		2·63		·15		1·07		·08		·12		·68	
Religion	2	48·92	15·12***	68·70	6·19**	9·59	1·70	3·73	1·98	9·66	3·14*	5·44	6·79**	9·49	3·76*	8·10	2·68
Sex	1	11·70	7·23**	64·01	11·53***	·36		1·80	1·92	·21		·35		7·73	6·12*	·63	
Belief	1	9·95	6·15*	1·72		·03		·39		·05		·18		·02		12·88	8·52**
Residual	1,008	1,630·7		5,595·3		2,844·3		947·76		1,548·1		403·55		1,273·2		1,524·1	

* = significant at the 0·05 level
** = significant at the 0·01 level
*** = significant at the 0·001 level
§ F ratios less than 1·00 omitted

our middle-to-upper-middle class sample has a "liberal" bias. If it is accepted that this is the case, this makes the significantly lesser preference for Jewish stimulus persons expressed by these Ss all the more interesting. Since it has been shown that there is generally an inverse relationship between general attitudes of "liberalism" and relative rejection of Jews (e.g., Adorno *et al.*, 1950) it could be inferred that a more "illiberal" sample (at least in so far as this particular issue is concerned) might express an even greater non-preference for Jewish stimulus persons.

Factor II (Marital–Sex Attraction) shows, in addition to the expected Sex effect, a significant effect for Religion. Again, a separate analysis of male and female Ss shows, as expected, an overwhelming effect for Sex but, in addition, the significance of Religion is retained, whereby it is at approximately the same level for males as in the total sample, but considerably greater for females ($F = 15{\cdot}96$; $p < {\cdot}001$).

Factors III (Benevolent Concern) and IV (Deference with Anxiety) showed no significant main effects in this design.

Factor V (Respect) shows a slight effect for Religion ($p < {\cdot}05$) with the source level means (Table B3d) showing the usual pattern.

For Factor VI (Public Social Acceptance) the only significant effect is for Religion ($p < {\cdot}01$). An inspection of the source level means shows that even in the analysis for Catholic Ss only there is virtually no difference between Catholic and Protestant stimulus persons, the effect being due almost solely to relative rejection of Jewish stimulus persons on the part of both Catholic and Protestant Ss. Again we should point out that this factor involves behaviours of a "public" nature, and thus this finding may have some relevance for community relations.

Factor VII (Subordination) shows some effect for Religion ($p < {\cdot}05$) with the source level means showing the same pattern as in other designs. Also significant is Sex ($p < {\cdot}05$), whereby separate analyses for male and female Ss again reveal that males show a slightly significant tendency to subordinate females, whereas female Ss do not show a tendency to subordinate either male or female stimulus persons.

Factor VIII (Belief Acceptance) shows, for the first time, a significant main effect for an independent variable; as might be expected the independent variable involved is the Belief of the stimulus person. One could dismiss this finding as trivial, since it would be fairly obvious that this independent variable should have an effect on this particular dependent variable; another view, however, would say that the development of appropriate response continua (dependent variables) permits one to obtain significant results for independent variables which might otherwise determine no significant variance on more global dependent measurement variables.

IV. Summary and Conclusions

THE major purpose of the present study was to contribute to the development of measures of the behavioural component of social attitudes in Ireland. As we have pointed out, with very little exception (notably Bogardus, 1925), the history of attitude measurement has until comparatively recently, been characterised by a view of attitude as a unidimensional construct, with the emphasis on measures presumed to be tapping affect. Our continuing interest in measures of the behavioural component of social attitudes does not, however, arise from a purely theoretical preoccupation; rather it is because such measures have been shown in previous research to be highly predictive of behaviour (e.g., Davis, 1964; Davis and Triandis, 1965, 1971). Triandis (1967), in a review of the Davis and Triandis research on black-white negotiations, has estimated that in these studies, attitude measures accounted for approximately 31 per cent of the variance in the behavioural criterion; this compares quite favourably with Wicker's (1969) pessimistic assessment that attitudes only rarely account for more than 10 per cent of the variance in behavioural measures. Triandis (1967) furthermore points out that measures of the affective component of attitudes accounted for the smallest portion of the total variance, with measures of the behavioural component accounting for more than twice as much of the variance.

Since the behavioural component of social attitudes has itself been shown to be multidimensional (Triandis, 1964), one of the major aims of the present investigation was to explore the *dimensionality* (in the sense of the factor structure) of statements of behavioural intentions in an Irish sample. An eight factor solution seemed optimal, with all eight factors being quite interpretable. A comparison of the factors which emerged from the present study with the original factor structure obtained by Triandis with an American sample (see Table 1, p. 14) showed that most of the original factors were fairly well replicated in the present study. Some factors emerged in the present study which had not emerged in previous studies with the Behavioural Differential; in addition, some of Triandis' original factors were differentiated into more than one factor in the present study. In particular, the present analysis yielded two clearly interpretable and differentiable Social Distance factors. One of these was called "Intimate Social Distance" and the other one "Public Social Distance". In addition to this splitting up of the Social Distance factor, items originally

loading on Triandis' Friendship factor split between the two above-named factors and no separate Friendship factor emerged. The greater differentiation of factor structure in the present study is probably due to the techniques employed in this study, which were developed out of the combined experience of the author and several of his colleagues, to whom he wishes to reiterate his appreciation for their kind co-operation.

In the light of the relatively small number of Ss used in obtaining the ratings on which the factor analysis was based (N = 170), which was due to the practical considerations earlier described, we raised the question as to the stability of the factor structure obtained. The total sample was split into two random sub-samples and separate factor analyses involving eight factor solutions were performed for each of the sub-samples. Coefficients of congruence were then computed between the sub-sample factor matrices and the total sample factor matrices and between the two sub-samples. In one of the comparisons extremely high coefficients of congruence were obtained for all eight factors; in a second comparison very high coefficients were obtained for seven out of the eight factors. We concluded that the factor structure was relatively stable and that one would not expect significantly different results had one used a much larger sample.

Using the highest loading items on each factor as representative of the factor, mean composite scores were obtained for each subject's responses to each stimulus person. Thus each S's 53 responses were reduced to eight mean composite scores. These composite scores then could be seen as constituting dependent variables, variations in which could be seen as a function of the characteristics of the stimuli being responded to. The complex person stimuli constituted four overlapping factorial designs of stimulus elements, permitting the use of analysis of variance to determine the relative weights which could be assigned to each independent (classificatory) variable, in the sense of the significance level associated with it.

Many interesting ANOVA results were obtained and these were discussed in some detail. However, the general pattern which emerged from these results can be summarised fairly briefly. *Status* emerged as by far the most significant determinant of variance on almost all dimensions. Our sample, at least, does not seem to represent anything like a classless society—quite the contrary! The implications of this finding for understanding phenomena within the society are quite obvious. Apart from a largely artifactual finding of the significance of Age, due to the fact that our sample was skewed toward a younger population, the next most important variable was *Religion*. Indeed, in designs where Status was removed, Religion became the *most* significant variable. An inspection of the source level means (Tables B3a–d) revealed that for the total sample, which had a slight over-representation of Protestant Ss compared with census

figures, Catholic and Protestant stimulus persons seem to be just about equally accepted, with Jewish stimulus persons being consistently less accepted. However, an inspection of the source level means for ANOVAs performed for Catholic Ss only shows a clear linear pattern, with Catholic stimuli being most accepted, Protestant stimuli somewhat less accepted, and Jewish stimuli consistently least accepted. Thus, there seems to be evidence for relative non-preference of Jewish stimulus persons among this sample. However, it must be remembered that we are talking about *relative* degrees of acceptance or rejection among various groups of stimulus persons. Thus, for example, the absolute level of rejection of Jewish stimulus persons is not particularly great. An inspection of the source level means in Tables B3a–d reveals that the absolute level of acceptance of stimulus persons on, for instance, Factor I (Intimate Social Acceptance), is relatively positive, being around five (slightly more or less) on a 7 point scale—in other words clearly on the accepting side of the theoretical middle point. For Factor VI (Public Social Acceptance), the means vary in the vicinity of 6.5 on the 7 point scale, thus showing a fairly high level of acceptance in absolute terms. It is just that within the variation around these means, Jewish stimulus persons in particular are relatively less preferred. Thus the differences are small in absolute terms, even though they are statistically significant, sometimes at fairly high levels of significance.

Whether stimulus persons were described as being from urban or rural backgrounds did not seem to constitute a salient characteristic for this sample, since this independent variable did not control any significant amount of variance on any of the dimensions.

A word of caution must be said about the generalisability of the findings of this study. The factor analytic results were based on the responses of 170 Ss. The analysis of coefficients of congruence between split samples demonstrated the relative stability of the factor structure obtained. Based on this and our previous experience concerning the relative stability of factor structures across different samples within the same culture, we can be reasonably confident that this factor structure would hold up with a larger representative sample, and probably even with various sub-samples within the culture. However, much greater caution must be exercised in generalising concerning the analysis of variance results. First of all, ANOVA results are by their very nature more susceptible to variations in the Ss making the responses. Secondly, since only approximately one quarter of the total sample responded to any given one of the four overlapping factorial designs of stimulus persons, the N in each case was considerably smaller than was the case in the factor analysis. Therefore, the ANOVA results should be taken as suggestive and illustrative of a technique for gaining information from a sample, rather than as being definitive or generalisable to the population as a whole. For example, although urban–rural

background was not a significant variable for our middle-class urban population, it could well be significant for, let us say, a rural population or a population in a smaller urban centre elsewhere in the country. This and other findings suggest hypotheses which should be tested in further research.

With all due emphasis on the limitations of the generalisability of the present ANOVA findings, we would put forward a couple of hypotheses which, of course, must be tested in further research before they can be fully accepted. First, the overwhelming significance of Status, as evidenced in Tables 6a and 6b, makes it very unlikely that, within the framework of the stimulus design used in the present study, the significance of this variable would disappear or be altered appreciably if a nationwide representative sample were used. We would even hypothesise that at least a significant effect for Status would hold for most (although not necessarily all) sub-groups within this culture. Second, the significant effect of Religion, although not nearly as great as that of Status, consistently shows up in all four designs, that is to say, when combined with a wide variety of other stimulus elements. Thus, this finding must be taken more seriously than if it had only been significant in one or two instances. Also, since we have evidence that the present sample may have been biased in a "liberal" direction, we would not expect the level of relative non-acceptance of Jewish stimulus persons to be less in a larger, more representative sample. We would, therefore, hypothesise that this effect would show up if the present design were applied to a larger, more representative, sample. However, it must be emphasised that this remains a hypothesis until it has been adequately tested.

In summary, this study was intended to make a contribution to the measurement of the behavioural component of social attitudes in Ireland. However, the Behavioural Differential technique is a generic technique, and the main purpose of the present study was to illustrate its use. The present findings should not be taken as *the* Irish Behavioural Differential which can be used in any or all circumstances. In particular, when dealing with very different classes of stimuli one should pre-test and re-factor the scales being used. However, the scales elicited in the present study can serve as basic material from which to proceed and the factor structures obtained in the study may be used as guidelines in selecting scales to be re-examined for use in differing circumstances. Finally, the analysis of variance results must be seen as suggestive rather than definitive. The purpose was to illustrate a general technique for obtaining information about the significance of the determinants of behavioural intentions in any given sample.

APPENDIX A

*Exhibit A*1

Form I of the Elicitation Phase of Irish Behavioural Differential Study

May 1973

This study is the initial stage of a more major investigation into people's attitudes, particularly with regard to the effect of certain attitudes on people's behaviour. Similar studies have been carried out in various other parts of the world; this, however, is the first of its kind to be done in Ireland. In order, therefore, to select appropriate pieces of behaviour for inclusion in the study, we would like to ask your co-operation in suggesting some different kinds of behaviour that might be likely to occur in the Irish culture between various specified people.

On the following page there are instructions which describe and give examples of what we want you to do. Completing the entire form should take less than one hour. If, after reading the instructions, you have any doubts as to exactly what it is that we would like you to do, please do not hesitate to ask questions. All forms are of course completely anonymous.

Thank you very much for your co-operation.

Please turn to the next page now, read the instructions carefully, and begin the task as soon as it is clear to you what has to be done.

Exhibit A1—continued

Instructions

On the following pages, you will find descriptions of people in terms of such characteristics as age, sex, occupation, etc. The persons are always presented in pairs, in which the first person is called A and the second is called B. We want you to give us your opinion as to what kinds of behaviours are likely to occur in this culture between two such people. This can be done by completing a sentence of the type:

"A might ....."

The blank should be filled in by a verb or phrase which describes a behaviour which is likely to occur between A and B. Note that person A is always the subject in the sentence, so that behaviour described should in all cases refer to some activity A might engage in with respect to B (and *not* what B might do *vis-à-vis* A; for these two sets of behaviour are not necessarily the same). For each pair of persons, please list three items of behaviour which you think describe accurately three ways in which they might interact. In order to vary your answers, try to imagine three different sorts of situations in which the two people under consideration might find themselves. Remember that we are not concerned with what you yourself might do in relation to the people described, but rather what person A in each case might do in relation to person B. The behaviours which you list can be of any kind, positive or negative, and can be expressed in any way you wish, however colloquially. Obviously, there may be some overlap between suggested items, but do try to think of as many different behaviours as possible, while at the same time choosing those which might be particularly likely to occur between the particular persons being described.

If in some cases you have difficulty in finding *three* behaviours for each pair of persons, then two or even one will suffice; try to ensure that you have managed to give at least one suggestion in each case. If a situation in which the pair might interact does not readily come to mind, then simply put down whatever you think most likely to happen between the people described, even if you have to use your imagination.

Below are some examples of the kind of task involved:

A—A 19 year old male college student.
B—A 19 year old male worker.

1. A might play football with B.
2. A might exclude B from a Society dinner.
3. A might go for a drink with B.

A—A 16 year old skinhead.
B—A 35 year old policeman.

1. A might avoid B.
2. A might provoke B.
3. A might let the air out of B's tyres.

A—An Irish housewife.
B—A 40 year old female doctor.

1. A might go to B for treatment.
2. A might babysit for B's children.
3. A might have B to dinner.

These examples are purely hypothetical, and are designed merely to illustrate the *form* your answers should take. Note that, where one of the pair of persons has a profession, suggested behaviours may include, but are *not* limited to, professional interaction. If there are no questions, please turn the page and begin.

Exhibit A1—continued

1. A—A 20 year old Irish person of the same sex as yourself.
   B—An Irish Catholic doctor.
   1. A might.....
   2. A might.....
   3. A might.....

2. A—A 20 year old Irish person of the same sex as yourself.
   B—A commerce student of rural background, same sex as yourself.
   1. A might.....
   2. A might.....
   3. A might.....

3. A—A 20 year old Irish person of the same sex as yourself.
   B—A 50 year old English person of the same sex as yourself.
   1. A might.....
   2. A might.....
   3. A might.....

4. A—A 20 year old Irish person of the same sex as yourself.
   B—A 20 year old English person of the same sex as yourself.
   1. A might.....
   2. A might.....
   3. A might.....

Exhibit A2

Copy of letter soliciting co-operation of paid volunteers in main behavioural differential study

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DUBLIN 4

Telephone: 60115 (5 lines)

9 July 1973

Dear Sir/Madam,

The Economic and Social Research Institute is carrying out some studies designed to adapt tests for measuring people's attitudes, which were originally constructed in other countries, for use in Ireland. Our objective in developing these tests is to enable us to study attitudes in Ireland with greater accuracy. Only the help of many people like yourself makes this work possible.

Your name was included in a sample of names taken at random from the Electoral Register. We would greatly appreciate if you *and/or* any member of your family aged 18 years or over would participate in this study.

You may do so by coming to this Institute for any *one* of the following sessions, each of which will last for about 3–3½ hours.

Saturday	July 21st at 9.30 a.m.
Wednesday	July 25th at 6.30 p.m.
Saturday	July 28th at 9.30 a.m.

Refreshments will be provided during the testing sessions.

The information which you will give is of course completely confidential and will be used only for statistical purposes. The task does not involve an interview, but merely completing a questionnaire. Since it will take longer to complete this questionnaire than is usual, and we must therefore ask you to come to the Institute, we will arrange a payment of £3 per person to cover expenses. This will be made in cash at the time of testing.

If it is possible for you or any member of your family to take part, please phone Miss Mary Judge (60115 Ext. 31) within a *day or two* between the hours of 9.30–1.00 and 2.30–5.00. It is quite important that you phone as soon as possible in order that we may schedule sessions appropriately.

Thank you for your co-operation.

Yours sincerely,

E. E. DAVIS,
Research Professor.

Exhibit A3

Complex stimulus persons used in main behavioural differential study

Design 1

R.*	O.**		F.D.***
01	01	Irish, Male, Catholic, Doctor.	1111
20	02	Irish, Male, Catholic, Manual Worker.	1112
22	03	Irish, Male, Protestant, Doctor.	1121
08	04	Irish, Male, Protestant, Manual Worker.	1122
12	05	Irish, Male, Jewish, Doctor.	1131
18	06	Irish, Male, Jewish, Manual Worker.	1132
17	07	Irish, Female, Catholic, Doctor.	1211
02	08	Irish, Female, Catholic, Manual Worker.	1212
19	09	Irish, Female, Protestant, Doctor.	1221
16	10	Irish, Female, Protestant, Manual Worker.	1222
09	11	Irish, Female, Jewish, Doctor.	1231
07	12	Irish, Female, Jewish, Manual Worker.	1232
14	13	English, Male, Catholic, Doctor.	2111
11	14	English, Male, Catholic, Manual Worker.	2112
06	15	English, Male, Protestant, Doctor.	2121
13	16	English, Male, Protestant, Manual Worker.	2122
05	17	English, Male, Jewish, Doctor.	2131
15	18	English, Male, Jewish, Manual Worker.	2132
03	19	English, Female, Catholic, Doctor.	2211
10	20	English, Female, Catholic, Manual Worker.	2212
23	21	English, Female, Protestant, Doctor.	2221
04	22	English, Female, Protestant, Manual Worker.	2222
24	23	English, Female, Jewish, Doctor.	2231
21	24	English, Female, Jewish, Manual Worker.	2232

*Randomised Number
**Original Number
***Factorial Cell Design of Stimulus Person

Exhibit A4

Instructions and format of instrument used in main behavioural differential study

Instructions

Every society is organised. This means that people order themselves and others with respect to other people. For instance, they feel closer to their relatives and friends than to strangers. They feel willing to do certain things with one person but not with another.

In this study we want to find out how you feel about other people. In the questionnaire that follows you will find the description of a person at the top of each page. Underneath is a number of statements describing things you might do with this person. You are asked to indicate whether you consider it likely or unlikely that you would do these things with this person, if the opportunity should present itself. In some cases you may have some difficulty in thinking of a situation in which you might meet the particular person described. If this does happen, simply put down whatever you think you would be most likely to do, even if you have never met such a person before.

Here is how you use these scales: If you feel that it is *very likely* that you would do what the statement indicates with this person, you should place an × as follows:

Person: Irish, Male, Student.

would : —×— : ——— : ——— : ——— : ——— : ——— : would not
Talk to this person

Or, if you feel that this was *highly unlikely* for you to do, your answer sheet would look like this:

would : ——— : ——— : ——— : ——— : ——— : —×— : would not
Talk to this person

On the other hand, if you feel that you *might* do this, you may mark something like the following:

would : ——— : ——— : —×— : ——— : ——— : ——— : would not
Talk to this person

Or if you feel that you would be *less likely* to do this, you might mark as follows:

would : ——— : ——— : ——— : ——— : —×— : ——— : would not
Talk to this person

In some cases the direction of the scales will be from left to right, that is "would . . . would not". In others it will be from right to left, that is "would not . . . would". The direction in which you mark will depend upon the direction of the scales. Therefore, if you feel that you would be *less likely* to do this, you might also mark as follows:

would not : ——— : —×— : ——— : ——— : ——— : ——— : would
Talk to this person

The information you give here is confidential. The data will only be used for statistical and experimental purposes. Please express yourself freely in responding to the questionnaire.

Exhibit A4—continued 01.1111.1:1

PERSON 1:

Irish, Male, Catholic, Doctor.

would :———:———:———:———:———:———:———: would not
discuss current affairs with this person

would not :———:———:———:———:———:———:———: would
work with this person on a committee

would :———:———:———:———:———:———:———: would not
feel sorry for this person

would :———:———:———:———:———:———:———: would not
feel in certain ways superior to this person

would not :———:———:———:———:———:———:———: would
invite this person to my home for dinner

would :———:———:———:———:———:———:———: would not
envy this person

would :———:———:———:———:———:———:———: would not
chat with this person

would :———:———:———:———:———:———:———: would not
co-operate with this person on a community project

would not :———:———:———:———:———:———:———: would
try to ignore this person's presence

would not :———:———:———:———:———:———:———: would
ask a favour of this person

would not :———:———:———:———:———:———:———: would
vote for this person

would :———:———:———:———:———:———:———: would not
distrust this person

would not :———:———:———:———:———:———:———: would
be reluctant to buy a house next door to this person

would :———:———:———:———:———:———:———: would not
go on a date with this person

would :———:———:———:———:———:———:———: would not
argue with this person

would :———:———:———:———:———:———:———: would not
be commanded by this person

would :———:———:———:———:———:———:———: would not
feel inhibited in this person's presence

would not :———:———:———:———:———:———:— —: would
under certain circumstances feel emotionally
dependent on this person

APPENDIX B

TABLE B1: *Demographic characteristics of subjects used in main phase of Irish behavioural differential study*

(a) *Sex**

	1966 *Census* %	*Sample* %
Male	44·44	45·3
Female	55·55	54·7
Base†	369,741	170

(b) *Marital status**

	1966 *Census* %	*Sample* %
Married	56·96	58·8
Single	33·62	39·4
Widowed	9·4	1·2
Other		0·6
Base	369,741	170

(c) *Age**

	1966 *Census* %	*Sample* %
20–29 years	24·96	40·6
30–39 years	18·81	19·6
40–49 years	18·11	20·1
50–59 years	16·45	14·4
60 years+	21·64	6·0
Base	369,741	170

*Sample included a number of 18 and 19 year olds; comparable figures were unobtainable from Census data; sample percentage in the 20–29 years category therefore includes these younger subjects.

†Census data are for Dublin County Borough and Dún Laoghaire.

(d) *Education*

	*1966 *Census* %	*Sample* %
Primary	55·14	5·9
Vocational	11·98	8·3
Secondary	24·71	55·3
University	5·05	20·0
Still at University		10·6
Other	3·10	
Base	409,911	170

*Total over 14 years whose full time education has ceased.

TABLE B1: continued

(e) *Religion*

	1961 *Census* %	*Sample* %
Catholic	90·99	77·6
Church of Ireland	6·12	13·5
Presbyterian		1·8
Methodist		0·6
Jewish		0·6
Other Religious Denominations	2·82	
Not Practising Religion		5·9
Base	353,822	170

(f) *Social Status*

Census	*Hall Jones*	*1966 *Census* %	*Sample* %
Higher and Lower Professional	1	9·51	18·1
Employers and Managers	2	4·14	23·5
Salaried Employees	3	2·34	17·6
Intermediate Non-Manual Workers	4	26·11	13·5
Other Non-Manual Workers	5	15·60	20·6
Skilled Manual	6	19·18	2·9
Semi-Skilled	7	15·37	1·2
Unskilled	8	7·60	0·6
Other	Other	0·10	1·8
Base		249,527	170

*Percentages have been calculated on the basis of male and female persons who are gainfully occupied in Dublin County Borough and Dún Laoghaire.

TABLE B2: *Factor analysis of 53 BD scales correlated over complex person stimuli*

Behaviours	*Loadings on 8 Varimax rotated factors*							
	I	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*
1. Discuss current affairs with	·37	·04	·10	—·07	·08	·46	·04	·15
2. Work with on a committee	·10	·03	·03	—·18	·04	·48	·24	—·02
3. Feel sorry for	—·30	—·04	·32	·36	—·01	—·04	—·20	·08
4. Feel in certain ways superior to	—·38	—·05	·34	·29	—·11	—·20	—·38	·09
5. Invite to my home for dinner	·63	·07	·15	—·02	·15	·34	·05	—·02
6. Envy	·03	·02	·01	·62	·04	—·03	·17	·02
7. Chat with	·27	·01	·08	—·07	·17	·57	—·21	·08
8. Co-operate with on a community project	·07	—·00	·09	—·10	·25	·68	·09	—·05
9. Try to ignore his presence	—·29	—·01	·01	·21	—·28	—·46	·04	·07
10. Ask a favour of	·47	·02	·32	—·03	·23	·17	·22	—·04
11. Vote for	·16	·02	·05	·02	·45	·38	·35	—·04
12. Distrust	—·12	—·02	—·07	·27	—·53	—·24	—·07	·11
13. Be reluctant to buy a house next door to	—·48	—·05	·24	—·02	—·09	—·43	—·22	·04
14. Go on a date with	·16	·91	·03	—·01	·03	·06	—·01	·02
15. Argue with	·13	·05	·05	—·08	—·08	·20	·12	·66
16. Be commanded by	·14	—·00	·21	·27	·09	·05	·64	—·04
17. Feel inhibited in his presence	—·18	·02	—·13	·62	—·15	—·12	·04	—·03
18. Under certain circumstances feel emotionally dependent on	·35	·36	·11	·28	·19	—·06	·05	—·05
19. Disagree with on important issues	—·08	—·05	—·06	·00	—·01	·00	—·14	·75
20. Give advice to	·15	·06	·80	—·08	—·01	·05	·11	·04
21. Feel threatened by in certain situations	—·02	—·02	·04	·50	—·15	—·25	—·09	·28
22. Be willing to employ	·05	·05	·22	—·13	·30	·50	·10	—·03
23. Find his social behaviour offensive	—·29	—·04	·02	·11	—·44	—·23	—·21	·08
24. Admire the ideas of	·28	·04	·04	·15	·63	·07	·12	—·08
25. Criticise	—·11	—·01	·12	·14	—·17	·02	·08	·67
26. Marry	·14	·90	·02	—·00	·06	·02	·03	—·04
27. Disapprove of some of his views	—·04	—·03	—·06	·04	—·03	—·07	—·12	·66
28. Feel in some respects inferior to	—·06	·03	—·12	·71	·07	·02	·11	—·03
29. Ask his advice on personal problems	·57	·09	·27	·09	·24	·08	·30	—·05
30. Be hesitant to seek out his company	—·73	—·11	—·03	·12	—·20	—·14	—·10	·04
31. Go to a film with	·67	·28	·12	·01	—·04	·25	·02	—·01
32. Exclude from my close circle of friends	—·71	—·11	—·05	·12	—·22	—·22	—·08	·01
33. Have a drink with	·48	·10	·08	·03	—·03	·47	—·11	—·04

TABLE B2: continued

Behaviours	*Loadings on 8 Varimax rotated factors*							
	I	*II*	*III*	*IV*	*V*	*VI*	*VII*	*VIII*
34. Consider competent to serve on a jury	·09	·00	—·11	·00	·34	·48	·33	·03
35. Participate in a discussion with	·27	·02	·11	—·03	·19	·58	·05	·16
36. Find him irritating	—·30	—·08	—·01	·25	—·47	—·12	—·09	·23
37. Respect	·15	·04	·07	—·06	·65	·25	·03	·04
38. Accept as an intimate friend	·63	·18	·15	—·04	·25	·15	·10	—·02
39. Give guidance to	·14	·07	·83	—·10	·04	·06	·10	·02
40. Obey	·19	·02	·24	·17	·14	·07	·67	—·06
41. Tend to avoid in social situations	—·59	—·08	—·01	·22	—·31	—·30	—·13	·06
42. Find his company enjoyable	·56	·14	·05	—·06	·49	·17	·09	—·02
43. Find it difficult to communicate with him	—·52	—·05	—·17	·29	—·25	—·14	—·02	·01
44. Be concerned about his welfare	·15	·00	·57	—·03	·22	·11	·03	—·06
45. Fall in love with	·13	·93	·03	·03	·05	·03	·03	—·02
46. Be impressed by	·34	·14	·10	·26	·50	—·00	·22	—·04
47. Go to a dance with	·15	·91	·01	·00	·02	·07	—·01	—·02
48. Exclude from my neighbourhood	—·35	—·04	·21	—·04	—·08	—·53	—·15	·03
49. Eat with	·44	·08	·08	·03	—·06	·56	—·05	—·05
50. Resent working under	—·41	·02	·23	·10	—·20	—·30	—·41	—·06
51. Accept as close kin by marriage	·42	·18	—·08	·05	·12	·24	·25	·00
52. Avoid offending	·06	—·02	·14	·09	·37	·17	—·15	—·23
53. Accept as a chairman of a committee of which I am a member	·29	·03	—·12	·03	·35	·46	·43	·02

TABLE B3a: *Summary of source level means from analyses of variance for design I*

	Factor I *Intimate social acceptance* vs. *Classical social distance*			*Factor II* *Marital-sex attraction* vs. *Rejection*			*Factor III* *Benevolent concern* vs. *Lack of concern*			*Factor IV* *Deference with anxiety* vs. *Non-deference*			*Factor V* *Respect* vs. *Non-respect*			*Factor VI* *Public social acceptance* vs. *Public social distance*			*Factor VII* *Subordination* vs. *Superordination*			*Factor VIII* *Belief acceptance* vs. *Rejection*		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
A. Nationality	5·07	4·94		2·92	2·94		4·90	4·77		2·08	2·08		5·27	5·14		6·20	6·08		4·05	4·00		3·22	3·10	
B. Sex	4·95	5·06		2·55	3·31		4·75	4·92		2·11	2·04		5·18	5·23		6·18	6·11		4·09	3·96		3·13	3·19	
C. Religion	5·07 *(5·11)	5·14 (4·99)	4·80 (4·84)	3·04 (3·13)	2·97 (2·90)	2·79 (2·84)	4·90 (4·89)	4·83 (4·69)	4·78 (4·78)	2·10 (2·16)	2·04 (2·13)	2·09 (2·15)	5·30 (5·38)	5·18 (5·11)	5·14 (5·21)	6·18 (6·20)	6·19 (6·13)	6·07 (6·07)	4·06 (4·06)	4·05 (3·95)	3·95 (3·94)	3·19 (3·24)	3·17 (3·05)	3·11 (3·05)
D. Status	5·57	4·44		3·32	2·54		4·63	5·04		2·26	1·90		5·55	4·86		6·48	5·81		4·86	3·19		3·16	3·16	

*Figures in parentheses represent the corresponding source level means for religion for the sub-sample of *Catholics only*.

Key: A. Nationality: 1 = Irish, 2 = English.
B. Sex: 1 = Male, 2 = Female.
C. Religion: 1 = Catholic, 2 = Protestant, 3 = Jewish.
D. Status: 1 = Doctor, 2 = Manual Worker.

TABLE B3b: *Summary of source level means from analyses of variance for design II*

	Factor I *Intimate social acceptance* vs. *Classical social distance*			*Factor II* *Marital-sex attraction* vs. *Rejection*			*Factor III* *Benevolent concern* vs. *Lack of concern*			*Factor IV* *Deference with anxiety* vs. *Non-deference*			*Factor V* *Respect* vs. *Non-respect*			*Factor VI* *Public social acceptance* vs. *Public social distance*			*Factor VII* *Subordination* vs. *Superordination*			*Factor VIII* *Belief acceptance* vs. *Rejection*		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
A. Age	4·54	5·03		1·82	2·74		4·35	4·88		2·10	2·06		5·34	5·37		6·12	6·24		4·40	4·14		2·99	2·89	
B. Sex	4·77	4·80		2·42	2·15		4·51	4·72		2·07	2·09		5·37	5·34		6·22	6·14		4·36	4·18		2·90	2·98	
C. Religion	4·99	4·86	4·51	2·45	2·38	2·03	4·76	4·64	4·45	2·10	2·10	2·03	5·50	5·35	5·21	6·26	6·21	6·07	4·34	4·33	4·14	3·01	3·00	2·81
	*(5·07)	(4·70)	(4·48)	(2·61)	(2·32)	(2·08)	(4·85)	(4·59)	(4·49)	(2·23)	(2·22)	(2·18)	(5·61)	(5·26)	(5·23)	(6·33)	(6·13)	(6·05)	(4·39)	(4·25)	(4·14)	(3·10)	(2·88)	(2·86)
D. Status	5·40	4·17		2·57	2·00		4·25	4·99		2·34	1·82		5·67	5·04		6·47	5·89		5·12	3·42		2·99	2·89	

*Figures in parentheses represent the corresponding source level means for religion for the sub-sample of *Catholics only*.

Key: A. Age: 1 = 50 year old, 2 = 25 year old.
B. Sex: 1 = Male, 2 = Female.
C. Religion: 1 = Catholic, 2 = Protestant, 3 = Jewish.
D. Status: 1 = Doctor, 2 = Manual Worker.

TABLE B3c: *Summary of source level means from analyses of variance for design III*

	Factor I *Intimate social acceptance* vs. *Classical social distance*			*Factor II* *Marital-sex attraction* vs. *Rejection*			*Factor III* *Benevolent concern* vs. *Lack of concern*			*Factor IV* *Deference with anxiety* vs. *Non-deference*			*Factor V* *Respect* vs. *Non-respect*			*Factor VI* *Public social acceptance* vs. *Public social distance*			*Factor VII* *Subordination* vs. *Superordination*			*Factor VIII* *Belief acceptance* vs. *Rejection*		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
A. Age	5·01	5·63		1·94	3·06		4·92	5·34		1·99	1·88		5·37	5·42		6·35	6·51		4·94	4·61		2·80	2·76	
B. Religion	5·47 *(5·43)	5·41 (5·28)	5·08 (5·01)	2·70 (2·71)	2·56 (2·47)	2·24 (2·21)	5·28 (5·28)	5·22 (5·16)	4·88 (4·88)	1·84 (1·96)	1·96 (2·12)	1·99 (2·16)	5·42 (5·34)	5·42 (5·35)	5·35 (5·27)	6·49 (6·43)	6·46 (6·39)	6·34 (6·27)	4·89 (4·86)	4·80 (4·73)	4·64 (4·56)	2·69 (2·64)	2·87 (2·76)	2·78 (2·70)
C. Sex	5·28	5·36		2·82	2·17		5·11	5·15		1·96	1·90		5·38	5·41		6·43	6·43		4·90	4·65		2·74	2·82	
D. Background	5·37	5·27		2·54	2·46		5·16	5·10		1·96	1·91		5·41	5·38		6·45	6·41		4·81	4·74		2·82	2·74	

*Figures in parentheses represent the corresponding source level means for religion for the sub-sample of *Catholics only*.

Key: A. Age: 1 = 50 year old, 2 = 25 year old.
B. Religion: 1 = Catholic, 2 = Protestant, 3 = Jewish.
C. Sex: 1 = Male, 2 = Female.
D. Background: 1 = Urban, 2 = Rural.

TABLE B3d: *Summary of source level means from analyses of variance for design IV*

	Factor I *Intimate social acceptance* vs. *Classical social distance*			*Factor II* *Marital-sex attraction* vs. *Rejection*			*Factor III* *Benevolent concern* vs. *Lack of concern*			*Factor IV* *Deference with anxiety* vs. *Non-deference*			*Factor V* *Respect* vs. *Non-respect*			*Factor VI* *Public social acceptance* vs. *Public social distance*			*Factor VII* *Subordination* vs. *Superordination*			*Factor VIII* *Belief acceptance* vs. *Rejection*		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
A. Nationality	5·49	5·45		3·11	3·14		4·59	4·49		1·82	1·85		5·13	5·06		6·54	6·52		4·28	4·26		2·84	2·79	
B. Religion	5·61 *(5·79)	5·64 (5·60)	5·16 (5·29)	3·35 (3·51)	3·27 (3·24)	2·77 (2·79)	4·64 (4·79)	4·56 (4·64)	4·41 (4·54)	1·76 (1·73)	1·90 (1·88)	1·84 (1·83)	5·16 (5·22)	5·17 (5·06)	4·96 (4·94)	6·57 (6·60)	6·59 (6·57)	6·43 (6·46)	4·32 (4·48)	4·35 (4·37)	4·13 (4·24)	2·87 (3·06)	2·88 (2·99)	2·89 (2·80)
C. Sex	5·37	5·58		3·38	2·88		4·52	4·55		1·88	1·79		5·11	5·08		6·51	6·55		4·35	4·18		2·84	2·79	
D. Belief	5·57	5·37		3·17	3·09		4·54	4·53		1·81	1·85		5·10	5·09		6·51	6·54		4·27	4·26		2·93	2·70	

*Figures in parentheses represent the corresponding source level means for religion for the sub-sample of *Catholics only*.

Key: A. Nationality: 1 = Irish, 2 = English.
B. Religion: 1 = Catholic, 2 = Protestant, 3 = Jewish.
C. Sex: 1 = Male, 2 = Female.
D. Belief: 1 = Favours relaxation of censorship laws.
2 = Opposes relaxation of censorship laws.

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