

**Sectarianism and Subtle Prejudice in Northern Ireland:  
A Technical Report on a Survey of the Adult Population  
Commissioned by BBC Northern Ireland**

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**Background**

Attitude measurement has a long and chequered history in social psychology and sociology. Measuring prejudice has become increasingly difficult over the last generation, as expressions of blatant prejudice have become less socially acceptable. Consistent with this increasing 'political correctness' has been a decrease in self-reported levels of prejudice against other religious, racial, gender and political groups. However most contemporary observers in this field argue that though blatant prejudice is reduced, a more subtle form of out-group prejudice has emerged. Whilst blatant prejudice (the traditional form) is close, active and direct, subtle prejudice can be characterised as being more passive, distant and indirect.

Using seven national samples from four European nations, Pettigrew and Meertens<sup>1</sup> developed and assessed subtle and blatant prejudice in dominant or majority group members towards immigrant groups. Their analysis indicated that subtle prejudice could be reliably measured and was conceptually distinct though highly correlated with blatant prejudice. Not only that, blatant prejudice was often found to be confounded by conservatism and levels of education, whereas measures of subtle prejudice were less likely to be affected by these factors suggesting that it was less open to the influence of social norms and intergroup beliefs.

The central aim for this research has been to develop a measure of subtle prejudice for use in Northern Ireland so that we can assess Catholic and Protestant people's attitudes towards one another whilst minimising socially desirable responding. This report outlines the development of the subtle prejudice scale as well

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<sup>1</sup> T. F. Pettigrew and R. W. Meertens, 'Subtle and blatant prejudice in Western Europe, *European Journal of Social Psychology*, 25, pp. 57-75, 1995; R. W. Meertens and T. F. Pettigrew, 'Is subtle prejudice really prejudice? *Public Opinion Quarterly*, 61(1), pp. 54-71, 1997.

as our findings subsequent to the administration of the scale to a random sample of the population (n = 1,162).

### Scale generation

Items were generated initially with reference to Pettigrew and Meertens’ original scale adapted so it could be used in Northern Ireland. The original subtle prejudice scale suggests three components to this form of prejudice. The first relates to traditional values (e.g. ‘immigrants living here should not push themselves where they are not wanted’), the second to cultural differences (e.g. ‘how different or similar do you think immigrants are to other people like yourself in the values they teach their children’) and the third to affective prejudice (e.g. ‘how often have you felt sympathy for immigrants living here?’). As the scale was developed to assess prejudice towards minority groups in the dominant or majority community, adaptation was necessary in order to assess prejudice of the two main groups in Northern Ireland towards one another.

Based on these three subscales we developed a series of questions relating to cultural differences between Catholics and Protestants, affective prejudice towards the other religious groups and traditional values as they pertain in Northern Ireland. Subsequent to a web based pilot of the survey and consequent statistical analysis we reduced the number of items to 15. These three sets of questions are illustrated in Tables I to III.

Table I: Cultural differences scale

Item		Response Categories			
<i>Please indicate how similar or different you think Catholics and Protestants are ...</i>					
Q1	<i>... in the TV programmes and films they like to watch</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar
Q2	<i>... in the values that they teach their children</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar
Q3	<i>... in what they find funny</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar
Q4	<i>... in their religious beliefs and practices</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar
Q5	<i>... in the way they speak and conduct themselves</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar
Q6	<i>... in their political beliefs</i>	Very Different	Somewhat Different	Somewhat Similar	Very Similar

Table II: Affective prejudice scale

Item		Response Categories			
Q7	<i>How often have you felt sympathy for those of the other religious tradition?</i>	Very Often	Fairly Often	Not Too Often	Never
Q8	<i>How often have you felt admiration for those of the other religious tradition?</i>	Very Often	Fairly Often	Not Too Often	Never
Q9	<i>How often have you felt compassion for those of the other religious tradition?</i>	Very Often	Fairly Often	Not Too Often	Never

Table III: Traditional values scale

Item		Response Categories			
Q10	<i>People who see themselves as Irish are normally Catholic</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q11	<i>Protestants are unlikely to be nationalist</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q12	<i>Any economic advantage enjoyed by one group in Northern Ireland is generally at a cost to the other main religious tradition</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q13	<i>Protestants normally see themselves as British</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q14	<i>A political gain for one group in Northern Ireland usually results in a loss of ground for those of the other main religious tradition</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q15	<i>Unionists are unlikely to be Catholic</i>	Strongly Agree	Agree	Disagree	Strongly Disagree

### Sampling

The above subtle prejudice scale was administered to a random sample selected from the adult population of Northern Ireland. The sampling methods used were designed by PriceWaterhouseCoopers (PWC) and agreed with the present authors. PWC were then commissioned to undertake the data collection. Full details of the sampling methodology used is provided in the Appendix.

In summary, the population from which the sample was drawn comprised all individuals aged 18 or over living in Northern Ireland. Because of budgetary constraints, it was necessary to use a multistage sampling procedure. The procedure began with the random selection of 50 wards stratified across the 18 parliamentary constituencies within Northern Ireland. For each ward, an address was selected at random from a list of all valid addresses in that ward. This address represented the starting point for that ward. Alongside calling at this address, fieldworkers then followed a route requiring them to call at every fourth house in an anti-clockwise direction and turning left at every corner. At each address, an adult was selected randomly using a Kish Grid from all of those living at that address. Because of

budgetary constraints, each address was only visited once and in cases where there was no answer no call back was made.

Table IV provides details of the overall response rates for the survey. As can be seen, a total of 4654 addresses were visited and 1175 interviews achieved from these representing an overall response rate of 25.2%. However, a major contributing factor to this non-response was the high number of addresses visited where no one was available. Of those addresses visited where an eligible adult was available the response rate was 57.7%.

Table IV: Response rate for the survey

	All Addresses		Addresses Where Eligible Respondents Identified	
	n	%	n	%
Number of addresses that were uninhabited	74	1.6		
Number of addresses where no one was available	2489	53.5		
Number of addresses where no one was eligible	53	1.4		
Number of addresses where residents refused to participate	863	18.5	863	42.3
Number of interviews completed	1175	25.2	1175	57.7
Totals*	4654	100.0	2038	100.0

\*Percentage columns may not sum to 100.0 due to rounding.

While the stratified nature of the sample ensured that it was representative in terms of the geographical location of respondents across Northern Ireland, this low response rate did result in the final achieved sample not being representative in relation to gender, age and community background (religion) of respondents. Subsequent to the receipt of the final dataset from PWC, a weighting variable was therefore calculated to correct for known non-response in relation to these three variables as compared to the 2001 Census.<sup>2</sup> Details of the calculations are provided in Table V. Of the 1175 respondents, 13 refused to give their age and therefore it was not possible to calculate a weight for them. As such they were excluded from the analysis giving a final achieved weighted sample of 1162. All of the subsequent analysis to follow has therefore been conducted with this weighting variable applied.

<sup>2</sup> This weighting variable is different from the ones referred to in the technical report and calculated by PWC (see Appendix). It was decided subsequently that a more complex weighting variable, correcting for biases in the sample in relation to gender, age and community background was required.

Table V: Calculation of the weighting variable

Sex	Community Background	Age	2001 Census		Achieved Sample		Expected Frequency <sup>2</sup>	Weighting for Each Category <sup>3</sup>
			n	% <sup>1</sup>	n	% <sup>1</sup>		
Male	Catholic	18 to 24	39282	3.2	13	1.1	37.14914	2.85763
		25 to 34	52307	4.3	32	2.8	49.46634	1.54582
		35 to 44	52037	4.2	35	3.0	49.21070	1.40602
		45 to 59	56080	4.6	39	3.4	53.03368	1.35984
		60 +	42454	3.5	49	4.2	40.14710	0.81933
	Protestant	18 to 24	37236	3.0	19	1.6	35.22022	1.8537
		25 to 34	62131	5.1	31	2.7	58.76234	1.89556
		35 to 44	65147	5.3	36	3.1	61.60924	1.71137
		45 to 59	84497	6.9	62	5.3	79.91074	1.28888
		60 +	82854	6.7	122	10.5	78.35366	0.64224
	None	18 to 24	2584	0.2	5	0.4	2.44020	0.48804
		25 to 34	3846	0.3	7	0.6	3.63706	0.51958
		35 to 44	2971	0.2	4	0.3	2.81204	0.70301
		45 to 59	2509	0.2	9	0.8	2.37048	0.26339
		60 +	1178	0.1	1	0.1	1.11552	1.11552
	Female	Catholic	18 to 24	39904	3.2	25	2.1	37.74176
25 to 34			57475	4.7	44	3.8	54.35836	1.23542
35 to 44			57051	4.6	56	4.8	53.95166	0.96342
45 to 59			58730	4.8	63	5.4	55.54360	0.88164
60 +			56437	4.6	47	4.0	53.37066	1.13555
Protestant		18 to 24	36176	2.9	31	2.7	34.20928	1.10353
		25 to 34	61846	5.0	68	5.9	58.48346	0.86005
		35 to 44	66354	5.4	96	8.3	62.74800	0.65363
		45 to 59	85136	6.9	87	7.5	80.51498	0.92546
		60 +	112582	9.2	150	12.9	106.47410	0.70983
None		18 to 24	2155	0.2	4	0.3	2.03350	0.50838
		25 to 34	3191	0.3	6	0.5	3.02120	0.50353
		35 to 44	2221	0.2	7	0.6	2.10322	0.30046
		45 to 59	1554	0.1	6	0.5	1.46412	0.24402
		60 +	767	0.1	8	0.7	0.72044	0.09006
		Total		1228692	100.0	1162	100.0	1162.00000

<sup>1</sup>Percentages may not sum to 100.0 due to rounding.

<sup>2</sup>Expected frequencies for the achieved sample based upon the 2001 Census

<sup>3</sup>Weighting variable calculated by dividing the expected frequencies by the actual frequencies for the achieved sample.

With the weighting variable applied, the final achieved sample was representative of the Northern Ireland adult population in terms of gender (47.8% were male and 52.2% were female) and community background (56.5% were Protestant, 41.7% were Catholic and 1.9% were ‘other’) as well as age as outlined in Table VI. As also shown by Table VII, the socio-economic background of the weighted sample was also broadly representative of the Northern Ireland population.

Table VI: Age distribution of the achieved sample (weighted)

Age	n	%
18 to 24	149	12.8
25 to 34	228	19.6
35 to 44	232	20.0
45 to 59	273	23.5
60 and over	280	24.1
Total	1162	100.0

Table VII: Social class distribution of the achieved sample (weighted)

Occupational Classification	n	%
A	36	3.1
B	144	12.4
C1	230	19.8
C2	263	22.6
D	189	16.3
E	261	22.4
Student	6	0.5
Refused	32	2.8
Total	1162	100.0

### **Reliability and construct validity of the final scale**

Those assessing attitudes using survey methods tend to have two central concerns, namely that the final measure is both reliable and valid. The reliability of the scale as administered to the above sample was assessed using a standard psychometric measure namely Cronbach's alpha. This indicated that the reliability of the scale was very good at .82. Importantly all 15 items added to the scale's reliability as indicated in the reliability statistics shown in Table VIII.

Table VIII: Reliability statistics of the final scale

Item	Scale mean if item deleted	Scale variance if item deleted	Corrected item total correlation	Cronbach's alpha if item deleted
Q1	34.70	35.312	.433	.807
Q2	34.29	32.955	.554	.797
Q3	34.64	34.934	.448	.806
Q4	33.55	32.851	.521	.800
Q5	34.33	33.932	.499	.802
Q6	33.21	33.448	.463	.805
Q7	34.18	34.823	.417	.808
Q8	34.00	33.966	.515	.801
Q9	34.14	34.334	.475	.803
Q10	33.09	35.849	.328	.813
Q11	33.07	36.350	.290	.815
Q12	33.86	35.255	.399	.809
Q13	32.94	36.002	.394	.809
Q14	33.57	35.514	.354	.812
Q15	33.02	36.077	.352	.811
Cronbach's alpha				.817

In relation to the construct validity of the scale, a factor analysis of the 15 items comprising the scale using principal components analysis indicate that this scale had 5 factors or sub-scales rather than 3 as illustrated by the Scree Plot in Figure I.

Figure I: Scree plot for final scale

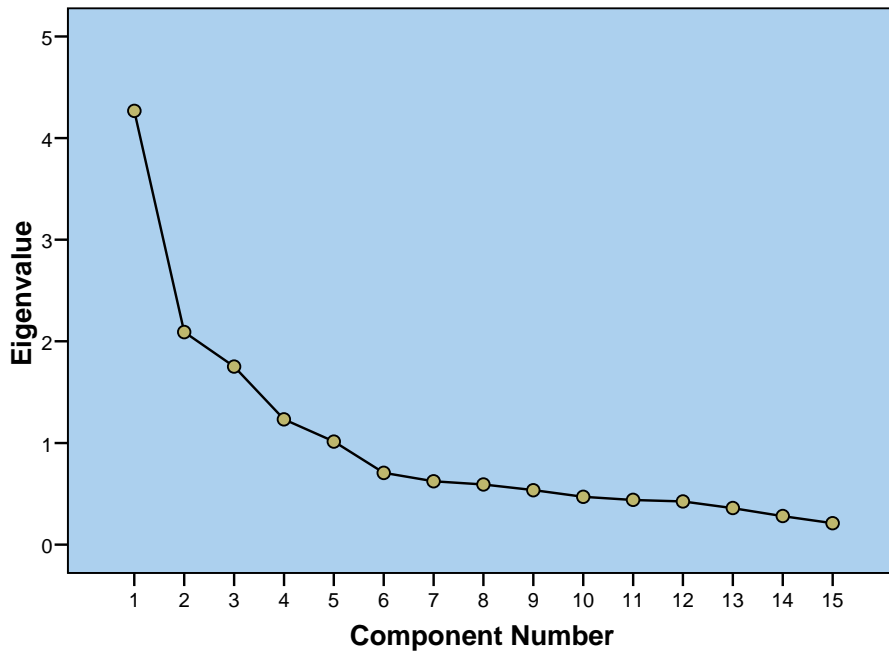


Table IX: Component pattern matrix of final scale

Item	Component				
	1	2	3	4	5
Variance Explained (Total: 69.0%)	28.4%	13.9%	11.7%	8.2%	6.8%
Q1 How similar or different do you feel Catholics and Protestants are with regard to ... the TV programmes and films they like to watch?	<b>.888</b>	.028	-.016	-.026	.075
Q2 How similar or different do you feel Catholics and Protestants are with regard to ... the values that they teach their children?	.407	.006	.040	.058	<b>-.484</b>
Q3 How similar or different do you feel Catholics and Protestants are with regard to ... what they find funny?	<b>.842</b>	-.036	.060	-.029	.019
Q4 How similar or different do you feel Catholics and Protestants are with regard to ... their religious beliefs and practices?	.039	-.016	.054	.003	<b>-.845</b>
Q5 How similar or different do you feel Catholics and Protestants are with regard to ... The way they speak and conduct themselves?	<b>.558</b>	.043	-.007	.146	-.198
Q6 How similar or different do you feel Catholics and Protestants are with regard to ... their political beliefs?	-.069	.047	-.029	-.008	<b>-.901</b>
Q7 How often have you felt sympathy for those of the other religious tradition?	.003	-.019	<b>.933</b>	-.009	.068
Q8 How often have you felt admiration for those of the other religious tradition?	-.014	.039	<b>.874</b>	<.001	-.079
Q9 How often have you felt compassion for those of the other religious tradition?	.004	-.010	<b>.920</b>	.023	.012
Q10 How strongly do you agree that ... People who see themselves as Irish are normally Catholic?	.056	<b>.793</b>	-.027	.048	.104
Q11 How strongly do you agree that ... Protestants are unlikely to be nationalist?	.001	<b>.754</b>	.022	-.205	-.066
Q12 How strongly do you agree that ... Any economic advantage enjoyed by one group in Northern Ireland is generally at a cost to the other main religious tradition?	.079	.053	.025	<b>.827</b>	.054
Q13 How strongly do you agree that ... Protestants normally see themselves as British?	-.081	<b>.720</b>	-.007	.166	-.073
Q14 How strongly do you agree that ... A political gain for one group in Northern Ireland usually results in a loss of ground for those of the other main religious tradition?	-.054	-.014	.014	<b>.859</b>	-.049
Q2.15 How strongly do you agree that ... Unionists are unlikely to be Catholic?	.016	<b>.677</b>	.032	.059	-.003

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

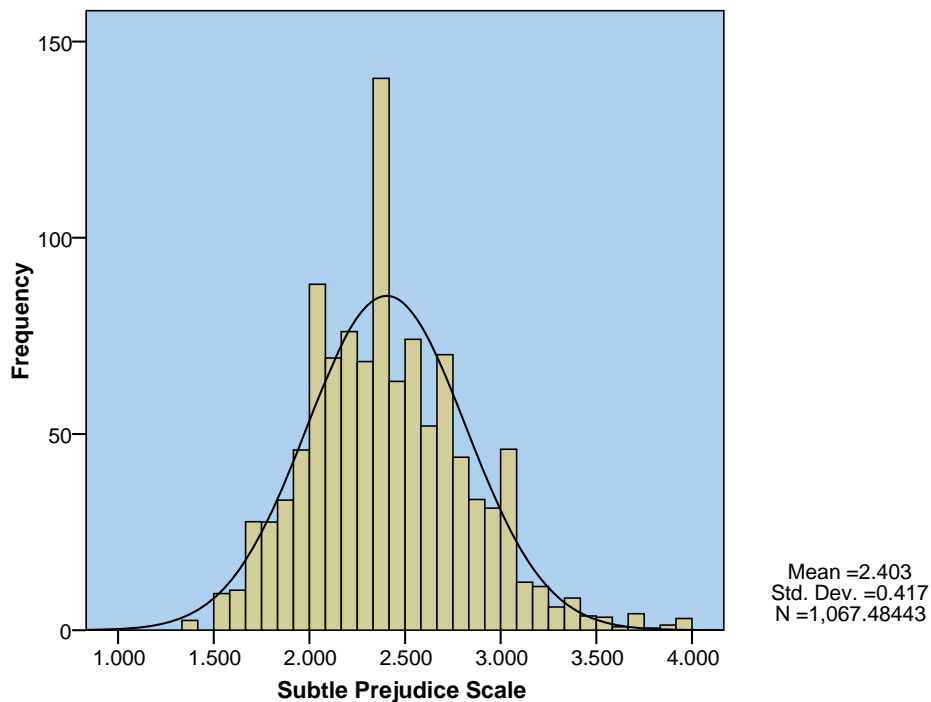
As shown by the component matrix in Table IX, the cultural differences items actually separated into two subscales, the first related to perceptions of cultural differences in social behaviours (Items 1, 3, 5) and the second relating to perceived cultural differences between Protestants and Catholics in terms of values (Items 2, 4, 6). The third component related to affective prejudice as anticipated. The traditional



values subscale was developed from previous qualitative research by Muldoon *et al.*<sup>3</sup> which suggests that relations between the two groups in Northern Ireland are frequently constructed as oppositional and involving a zero sum game (items 12 and 14) and that prejudice is often exacerbated by the conflation of religious, political and national identities (items 10, 11, 13, 15). The analysis conducted again suggested that these six items formed two subscales rather than one.

The final scale was created by calculating the mean score of all 15 items, allowing for up to three missing values. This gave a total of 1067 in the sample for whom final scores were calculated. As can be seen, from Figure II, each individual's score could take a value from 1.0 (very tolerant) to 4.0 (very intolerant) and the scores for the sample as a whole were found to be broadly normally distributed.

Figure II: Distribution of mean total subtle prejudice scores.



### External validity of the final scale

The external validity of the scale was examined by assessing the relationship between scores on the subtle prejudice scale and known correlates. Three particular measures

<sup>3</sup> Muldoon, O., Trew, K., Todd, J., Rougier, N. and McLaughlin, K. (2007) Religious and national identity after the Belfast Good Friday Agreement, *Political Psychology*, 28 (1): 89-103.

included in the survey were conservatism, overall favourability ratings of the other main group and blatant prejudice. The first was measured by asking respondents to rate their political beliefs on a scale of 1 (liberal) to 10 (conservative). The second was measured by asking respondents to indicate their overall feelings towards the other community on a scale of 0 (extremely unfavourable) to 100 (extremely favourable). The third measure, for blatant prejudice, was derived from a five item scale as detailed in Table X. The scale proved to be sufficiently reliable (Cronbach's alpha = .75) and also valid, with a principle components analysis producing just one component accounting for 50.3% of the variation in responses.

Table X: Blatant prejudice scale

Item		Response Categories			
Q1	<i>If I had a choice, I would prefer to live in a neighbourhood where most people are from the same religious tradition as myself.</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q2	<i>I wouldn't mind if one of my close relatives married someone from the other main religious tradition.</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q3	<i>If I had a choice, I would prefer to send my children to a school where most of the other children are from the same religious tradition as myself.</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q4	<i>I wouldn't mind if my new boss was someone from the other main religious tradition</i>	Strongly Agree	Agree	Disagree	Strongly Disagree
Q5	<i>If I had a choice, I would prefer to have a job in a workplace where people are from the same religious tradition as myself</i>	Strongly Agree	Agree	Disagree	Strongly Disagree

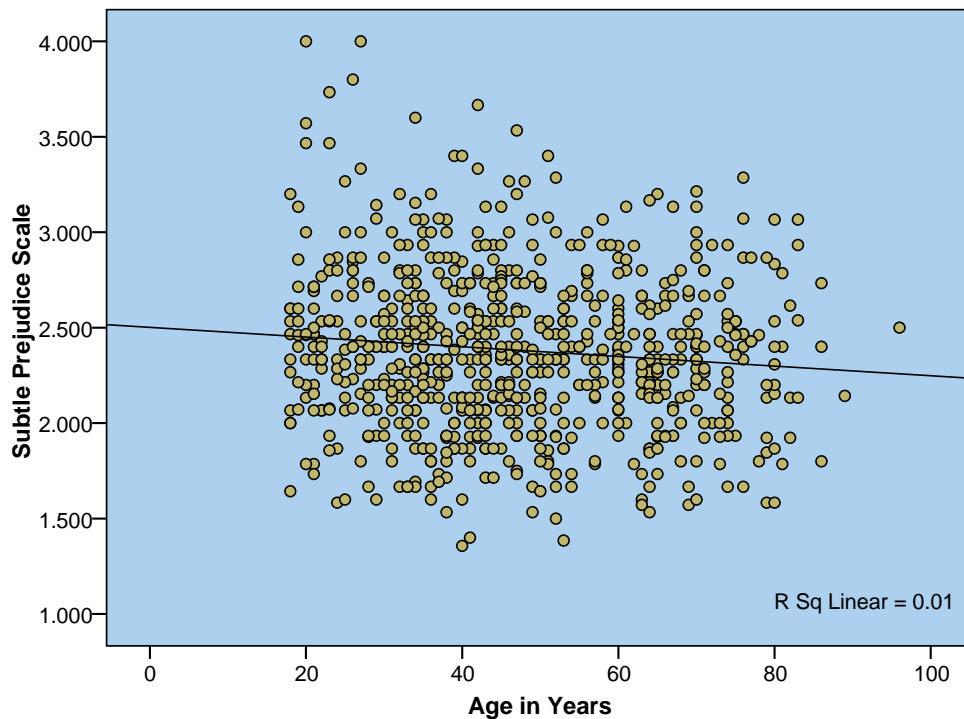
Consistent with previous research, subtle prejudice was weakly correlated with conservatism ( $r=.27, p<.01$ ) whereas blatant prejudice was slightly more highly correlated with conservatism ( $r=.33, p<.01$ ). Furthermore, and consistent with other studies, subtle prejudice was negatively correlated with overall favourability ratings of the other religious group ( $r=-.39, p<.01$ ), an indicator of prejudice that has been used in previous research, and was positively correlated with blatant prejudice ( $r=.48, p<.01$ ).

### Patterns of scores in the population

Subtle prejudice was found to be associated with age, social class, educational attainment, community background and religion. However, in each case the relationship tended to be weak suggesting that none of these variables, by themselves, could act as a reliable predictor of subtle prejudice.

In relation to age, for example, a very weak correlation was found such that older respondents were slightly less likely to be prejudiced than younger respondents ( $r=-.10$ ,  $p<.01$ ). However, and as illustrated by Figure III, there was considerable variation in relation to subtle prejudice scores within any particular age range.

Figure III: Relationship between age and subtle prejudice



A slightly stronger relationship, but still relatively weak, was found between social class background and subtle prejudice ( $r_s=.17$ ,  $p<.01$ ) such that the lower the occupational group a person came the more likely they were to be prejudiced. However, and as shown in Figure III, there remains considerable variation in subtle prejudice scores within each occupational category suggesting, again, that social class is not a particularly useful predictor of prejudice.

A very similar picture also emerged in relation to the relationship between educational qualifications attained and subtle prejudice ( $r_s=-.17$ ,  $p<.01$ ) such that the lower the level of educational qualifications a person attained the more likely they were to be prejudiced. However, and as shown in Figure V, there was also considerable variation within each attainment group indicating that educational attainment by itself is also not a good predictor of subtle prejudice.

Figure IV: Relationship between social class and subtle prejudice

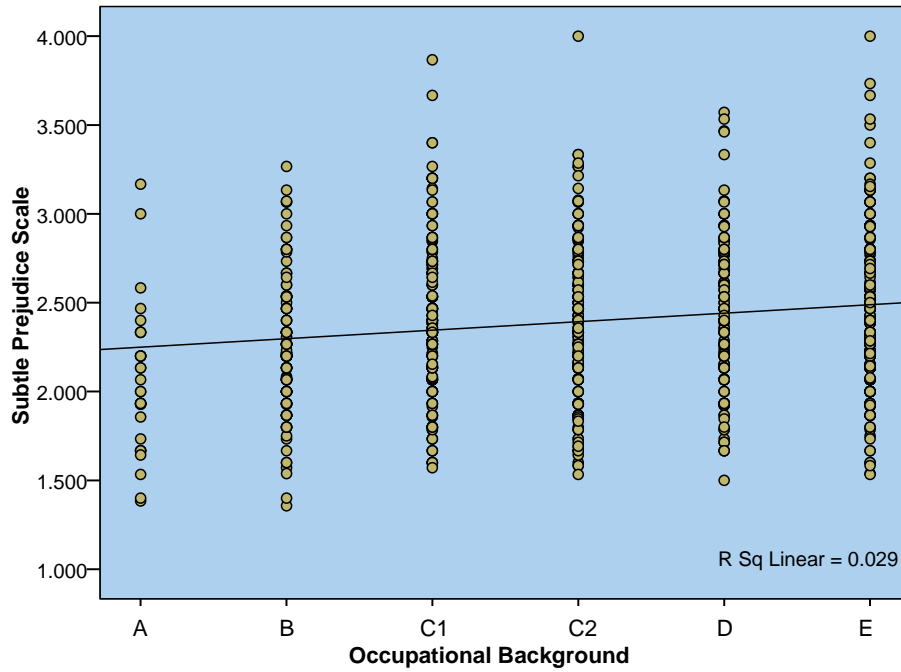
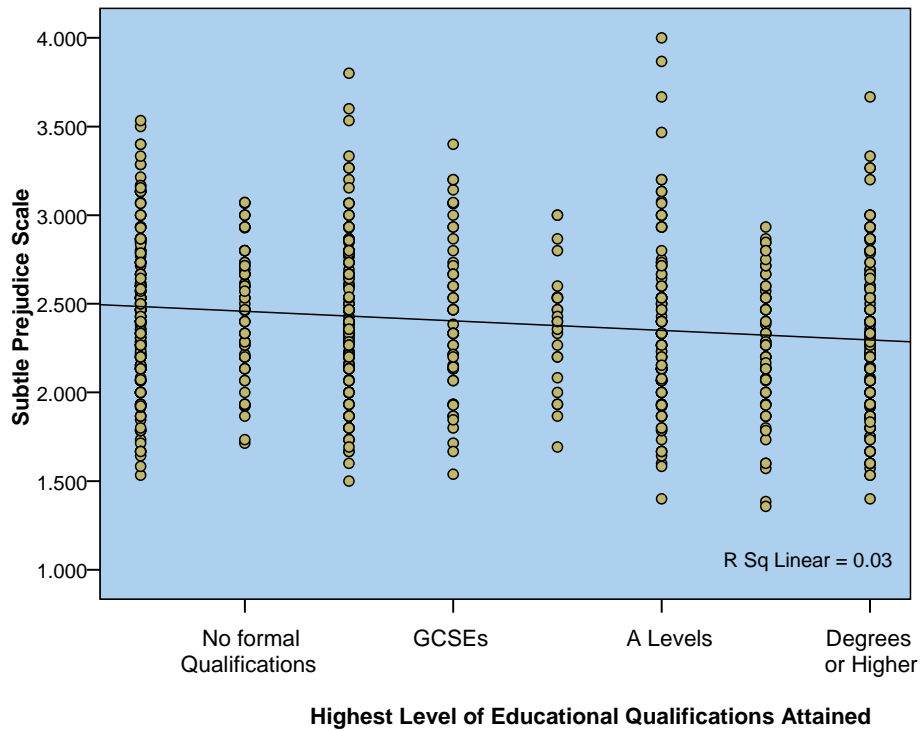
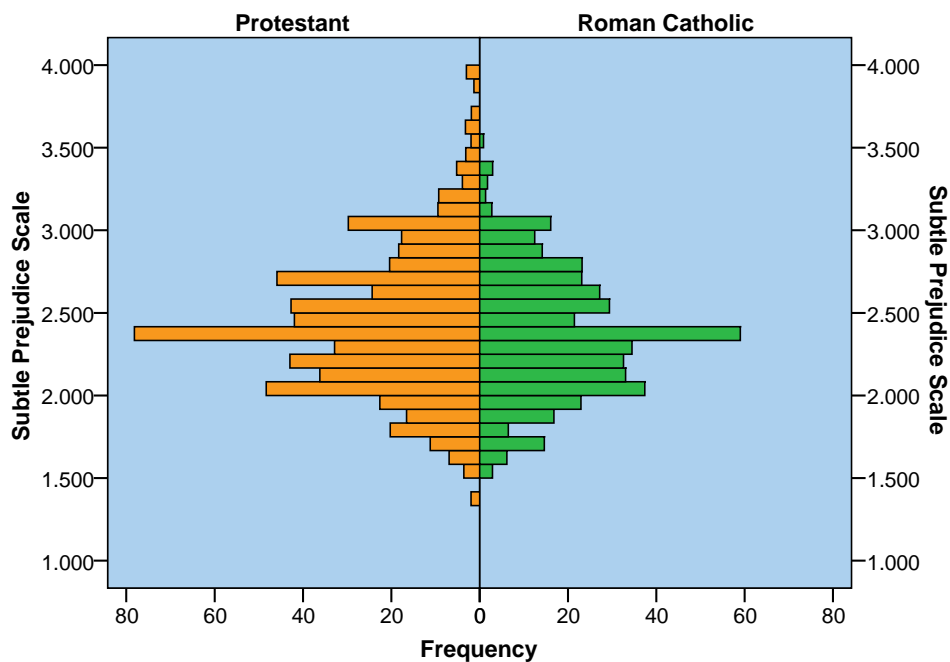


Figure V: Relationship between social class and subtle prejudice



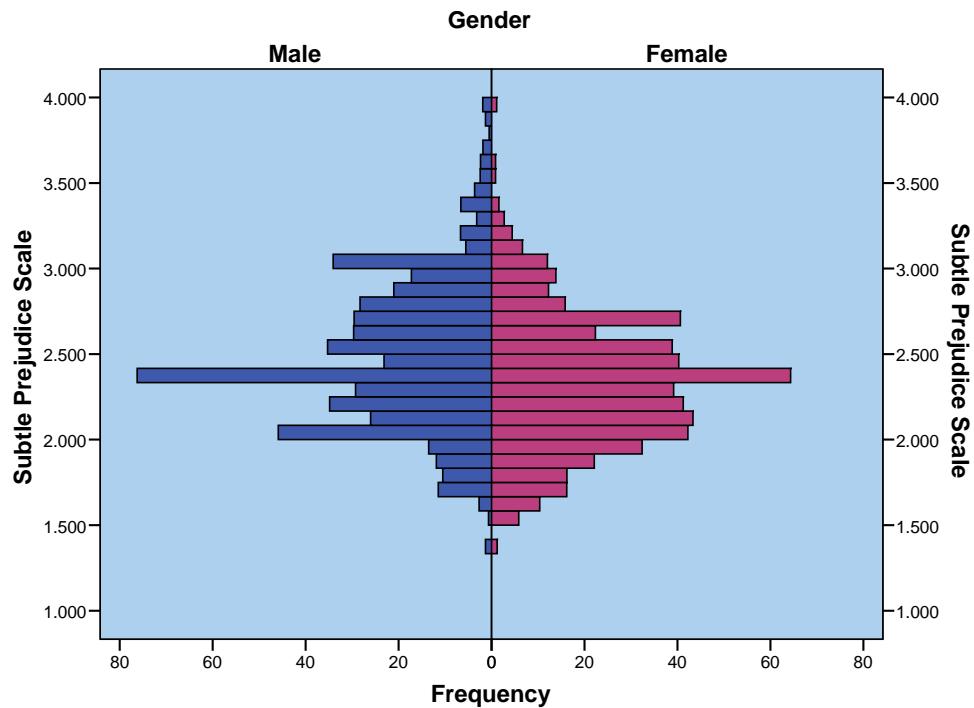
The same substantive picture emerged in relation to differences between Catholic and Protestant respondents. Thus while the mean subtle prejudice score for Protestants (2.43,  $sd=.44$ ) was found to be slightly higher than for Catholics (2.36,  $sd=.37$ ) ( $t=2.882$ ,  $df=1021.454$ ,  $p<.01$ ), the differences were only small (effect size,  $d=.17$ ) and there remained considerable variation within each group as illustrated by Figure VI, suggesting that community background was also a poor predictor of subtle prejudice.

Figure VI: Relationship between community background and subtle prejudice



Finally, gender was found to have the strongest association with subtle prejudice although even here the relationship was only moderate (effect size,  $d=.37$ ). In this case the mean subtle prejudice scores for women (2.33,  $sd=.39$ ) were slightly lower than for men (2.48,  $sd=.43$ ), ( $t=5.874$ ,  $df=1037.212$ ,  $p<.01$ ). However there was still considerable overlap in the scores as illustrated in Figure VII, indicating again that gender by itself was a relatively poor predictor of subtle prejudice.

Figure VII: Relationship between gender and subtle prejudice



### Interaction effects

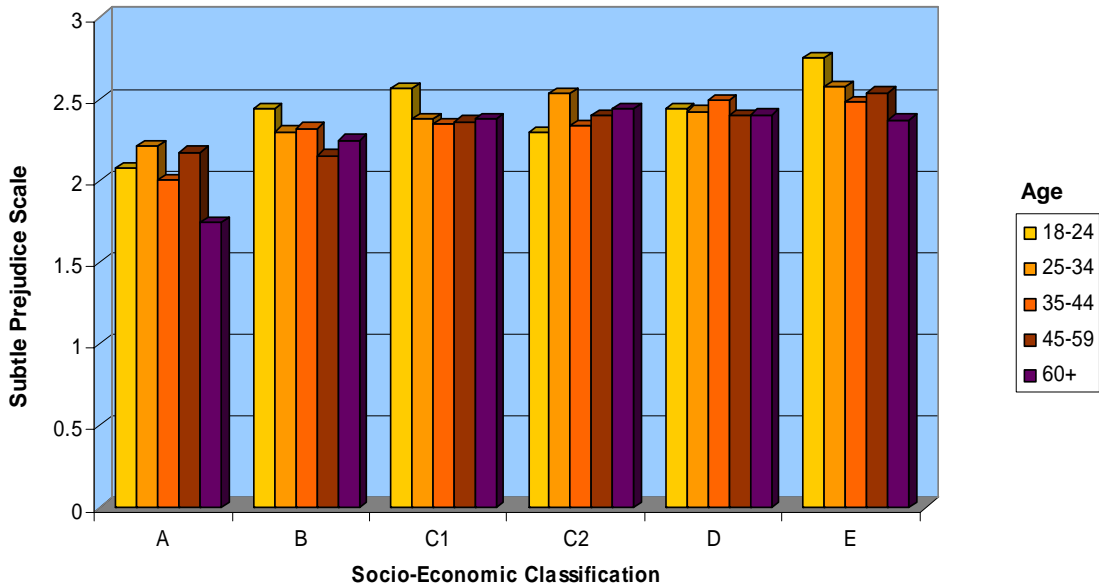
While each of the individual variables examined above is only weakly associated with subtle prejudice, it may be that specific combinations of these variables could create particular subgroups within the population who are much more likely to exhibit subtle prejudice such as, for example, older Protestant males or younger females with no qualifications.

With this in mind, all possible two-way and three-way interactions between the variables considered above were analysed using ANOVA a statistical technique used to analyse mean differences in subtle prejudice scores between particular subgroups of the population. The only interact effect that proved to be statistically significant was that between age and social class ( $F=2.5(20, 1038), p<.01$ ) and Figure VIII illustrates this effect.

This combined effect suggests that older respondents with occupations classified more highly in terms of social class tended to have lower overall prejudice scores than younger respondents from lower social classes. However, it can be seen that the differences in the mean scores are only small and, as before, there will be considerable variation in levels of subtle prejudice within each particular subgroup

making it misleading to generalise about the likely attitudes found among members of each group.

Figure VIII: Mean subtle prejudice scores in relation to age and occupational classification



### Calculation of quartile bands

Finally, the raw scores were converted into approximate quartile bands for the purposes of providing feedback to those who complete the survey online during the live BBC broadcast. In relation to those completing the survey online, their overall score will be calculated simply by adding together the individual scores obtained from the 15 items. This will produce a range of 15 to 60 as the items are currently coded. However, to make the scores more meaningful, the items will be re-coded so that each item will score from 0 to 3 rather than 1 to 4. This will give an overall range from 0 to 45.

In relation to respondents in the final sample, 768 answered all 15 questions and so the calculation of approximate quartile bands has been based on these. The final bands and their descriptions are shown in Table XI. As can be seen, for the 768 respondents for whom scores were calculated, these bands do reflect approximate quartiles.

Table XI: Calculation of approximate quartile bands

Band	Description	n	%
0 to 16	'Tolerant'	171	22.3
17 to 20	'Somewhat Tolerant'	212	27.6
21 to 24	'Somewhat Intolerant'	181	23.5
25 to 45	'Intolerant'	204	26.6
Total		768	100.0

In relation to these four bands, therefore, feedback to those who completed the survey online could be as follows:

- You scored between 0 to 16. Your attitudes can therefore be described as 'tolerant'. In comparison to the rest of Northern Ireland this places you among that quarter of the population with the most positive attitudes.
- You scored between 17 to 20. Your attitudes can therefore be described as 'somewhat tolerant'. In comparison to the rest of Northern Ireland your attitudes are more positive than average. However you do not fall into that quarter of the population with the most positive attitudes.
- You scored between 21 and 24. Your attitudes can therefore be described as 'somewhat intolerant'. In comparison to the rest of Northern Ireland your attitudes are more negative than average. However you do not fall into that quarter of the population with the most negative attitudes.
- You scored between 25 and 45. Your attitudes can therefore be described as 'intolerant'. In comparison to the rest of Northern Ireland this places you among that quarter of the population with the most negative attitudes.

## Conclusions

The scale devised has been successfully applied to identify broad patterns of prejudice in the population. The scale appears to be highly reliable and evidences good content and external validity. Furthermore, the administration of the scale is straight forward. The analysis of the data collected suggested that there are different components of subtle prejudice and that scores on the scale are related, albeit weakly, to demographic factors such as gender, age and social class.

Despite this success in devising the scale, it should be remembered that surveys can only measure some components of attitudes- the cognitive component, or what people think and the affective components of attitudes or how people feel.



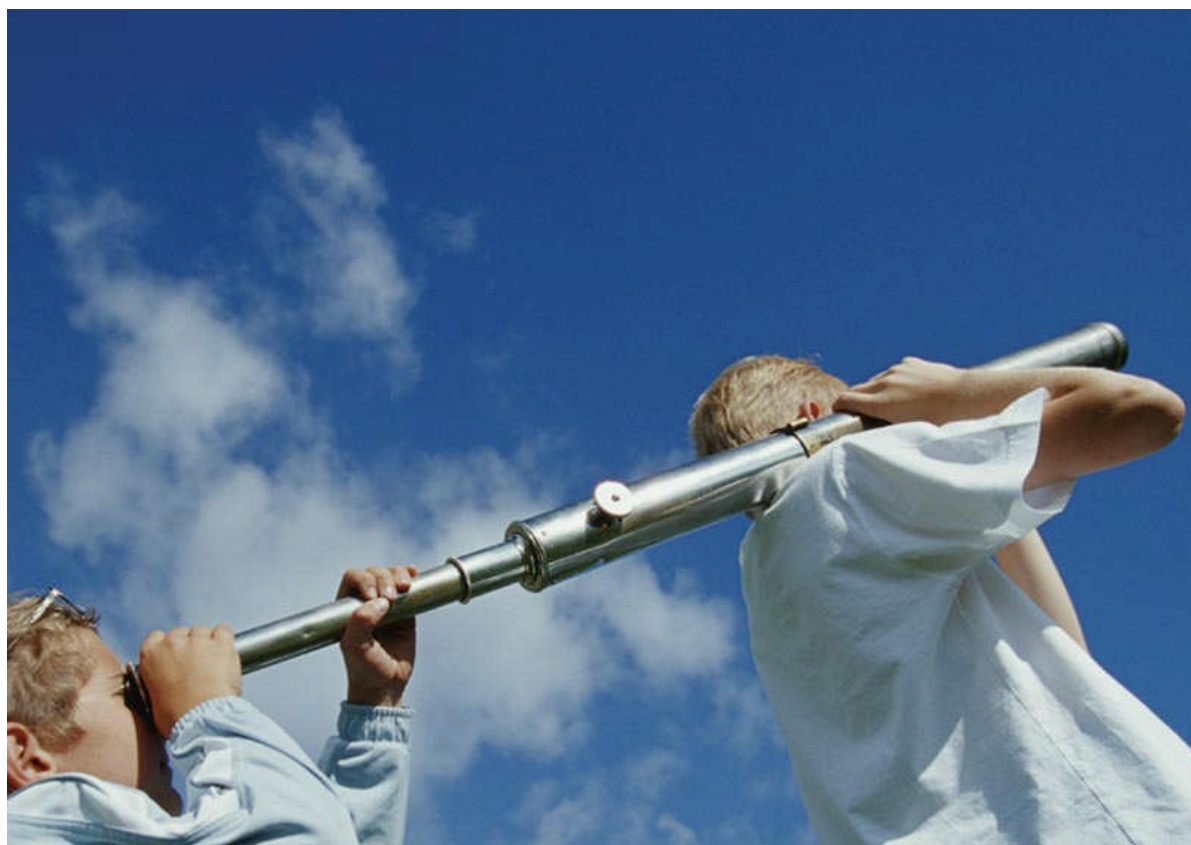
Individuals' behaviours as a result of their attitudes are more difficult to access. Further, responses on surveys are open to socially desirable responding; though this is likely to be minimised through the use of subtle prejudice scales. As a result of these limitations, a series of three experiments were devised to explore attitudes in Northern Ireland in the round. The results of this study as well as the series of experiments should be taken together in order to fully understanding the complexity of this phenomenon in Northern Ireland.

## **Appendix: Technical Report from PriceWaterhouseCoopers**

# BBC

*Technical Report*

March 2007



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## BBC State of Mind Poll

### Overview

- 1.1 The aim of this quantitative survey was to collect data on community relations issues, which exist within and between the two main communities in Northern Ireland.
- 1.2 The relevant universe for the study was all adults across the 18 constituencies of Northern Ireland who were 18+ years of age. That is, all those eligible to vote – importantly we know from previous research that many (particularly concentrated in the younger age brackets) have not exercised the right to register to vote. However, the total registered to vote are the best current published proxy of the 18+ population at a sub Northern Ireland level.
- 1.3 The QUB team asked that 1,200 interviews be conducted across the 18 parliamentary constituencies. All responses were included in the final datasets. In addition the survey team collected as much information as possible on those who were defined as 'non-response'. The definition of non-response was potential respondents who were not available for interview, refused an interview or where a property was uninhabited.

### Administration

- 1.4 The survey was launched on the 8th January and concluded on the 25th January 2007.
- 1.5 All interviewers working on this survey were trained in accordance with the Interviewer Quality Control Scheme (IQCS). All interviews were conducted by members of the PricewaterhouseCoopers market research field force. Our field force is accredited under the Interviewer Quality Control Scheme (IQCS), which sets and monitors quality standards for research fieldwork. In addition all of our interviewers are trained to meet the rigorous standards of the Market Research Society's Code of Conduct.
- 1.6 Supervisory staff undertook verification of the sample. Verification took place by back checking at least 10% of interviews and was completed in accordance with IQCS (Interviewer Quality Control Scheme) standards. This means that 10% of the respondents were contacted by either telephone call or post and a number of questions asked to ensure that the interview was conducted in accordance with the Market Research Code of Conduct and that the questionnaire sequence was followed accurately and consistently. This review by a supervisor ensured that the interview was conducted to the highest levels of quality.
- 1.7 It was agreed with the BBC and QUB that PwC would conduct 1,200 interviews. The aim of the sampling was to ensure that the sample selected was reflective of the geographical spread of the electorate at a constituency level, e.g., to take note of the fact that for many years North Antrim has been the largest of the seats and the four Belfast seats have seen a steady reduction in their total. Table 1 details each constituency in Northern Ireland and the relevant totals. These figures are taken from the December 2006 electoral register.

Table 1: Details of each constituency

Constituency	Dec-06	%	1200 interviews
Belfast East	48570	5	54
Belfast North	47369	4	53
Belfast South	47190	4	53
Belfast West	45923	4	51
East Antrim	55658	5	62
East Londonderry	55056	5	61
Fermanagh and South Tyrone	64039	6	72
Foyle	62521	6	70
Lagan Valley	68430	6	77
Mid Ulster	59358	6	66
Newry and Armagh	68812	6	77
North Antrim	70868	7	79
North Down	56420	5	63
South Antrim	63983	6	71
South Down	69951	7	78
Strangford	65504	6	73
Upper Bann	69588	6	78
West Tyrone	55876	5	62
<b>Totals:</b>	<b>1075116</b>	<b>100</b>	<b>1,200</b>

- 1.8 Within the entire sampling frame of Northern Ireland a random start number was utilised and applying the relevant sampling fraction, wards were then selected via a probability of selection proportional to size (PPS) methodology. A minimum of 2 wards were therefore randomly selected in each constituency. In some constituencies three wards were chosen. Hence interviewing took place across 50 randomly selected wards using best practice techniques.
- 1.9 Table 2 below details the wards chosen within each constituency, the number of interviews to be conducted in each wards and each constituency and the actual number of interviews achieved.

Table 2: The wards and number of target and achieved interviews

Ward No.	Constituency	Ward	No. of Interviews	No. of interviews per Constituency	Actual No. of interviews conducted per Constituency
2515	Belfast East	Cregagh	27	54	54
2607	Belfast East	Stormont	27		
2125	Belfast North	Valley	27	53	50
2645	Belfast North	Ballysillan	26		
2510	Belfast South	Galwally	18	53	54
2615	Belfast South	Rosetta	18		
2624	Belfast South	Shaftesbury	17		
2628	Belfast West	Glen Road	25	51	47
2637	Belfast West	Shankill	26		

0612	East Antrim	Kilwaughter	31	62	56
2204	East Antrim	Boneybefore	31		
0202	East Londonderry	Aghanloo	20	61	62
0303	East Londonderry	Dundooan	20		
0317	East Londonderry	Churchland	21		
1208	Fermanagh & South Tyrone	Lisbellaw	24	72	72
1220	Fermanagh & South Tyrone	Portora	24		
1316	Fermanagh & South Tyrone	Aughnacloy	24		
0106	Foyle	Enagh	23	70	71
0117	Foyle	Brandywell	23		
0129	Foyle	Ballynashallog	24		
1903	Lagan Valley	Moira	25	77	77
1912	Lagan Valley	Knockmore	26		
1922	Lagan Valley	Hilden	26		
0807	Mid Ulster	Tobermore	22	66	66
0904	Mid Ulster	Oaklands	22		
1308	Mid Ulster	Coalisland West and Newmills	22		
1510	Newry & Armagh	Killeen	25	77	79
1614	Newry & Armagh	Windsor Hill	26		
1626	Newry & Armagh	Creggan	26		
0410	North Antrim	Carnary	26	79	78
0702	North Antrim	Slemish	26		
0713	North Antrim	Academy	27		
2303	North Down	Ballyholme	21	63	60
2313	North Down	Princetown	21		
2325	North Down	Loughview	21		
2009	South Antrim	Massereene	23	71	70
2102	South Antrim	Doagh	24		
2117	South Antrim	Glengormley	24		
1608	South Down	Clonallan	26	78	77
1802	South Down	Kilmore	26		
1817	South Down	Dunmore	26		
2402	Strangford	Ballygown	24	73	63
2412	Strangford	Movilla	24		
2502	Strangford	Carrowreagh	25		
1403	Upper Bann	Aghagallon	26	78	76
1414	Upper Bann	Edenderry (Craigavon)	26		
1425	Upper Ban	Church	26		
1002	West Tyrone	Castlederg	20	62	63
1016	West Tyrone	Ballygolman	21		
1115	West Tyrone	Killyclogher	21		

1.10 In total 1175 interviews were conducted across the 18 constituencies. The slight variation between actual and target interviews has made no overall difference to the validity and reliability of the data.

## Selection Process

- 1.11 It is important to outline a key aspect of the design process. Cost considerations had meant that all parties recognised that the optimal design for the agreed budgets precluded any call-backs to non-responding households. Within these constraints the survey design was optimised to ensure that the most rigorous technical standards were applied.
- 1.12 As an additional recognition of the cost implications it was immediately apparent that some element of clustering would be implemented as necessary in order to remove the inefficient situation of an interviewer conducting, for example, one interview in the isolated Lower Glenshane ward. It was therefore decided at the outset that the most efficient design was to ensure that the interviews were grouped together in wards and that all steps of the process maintained the key random design elements.
- 1.13 In order to further enhance the sample design (since the unit of analysis is adults rather than householders), a Kish Grid procedure was used on the doorstep in order to randomise the selection of the actual respondent and to ensure the inclusion of electoral 'attainers', (that is, those coming onto the register during the lifetime of the project).
- 1.14 The interviewers recorded the electoral ward within which each respondent resided and also recorded the postcode where possible.
- 1.15 A list of potentially valid addresses was obtained for each of the wards in the sample. Having selected random start numbers (as listed below) a start point for each ward was selected. For example, in the first ward, the interviewer would select elector 1915 as a starting point. If the listing of electors did not have 1915 in the first instance, then the interviewer used the next listed number that was lower, e.g., 410.

1915	320	2687	2998	929
2554	2571	2188	63	1270
410	1811	103	2344	1592
2592	1728	2067	2748	2173
1346	618	2529	1335	1651
2183	2610	1582	2669	876
2249	2072	296	2800	557
186	1899	1220	1249	1087
410	433	2394	1080	173
459	1705	1621	1906	1246
1996	1132	2723	235	355
835	2833	280	2972	1723
2548	687	1848	165	427
1719	2590	1033	135	1084
111	574	20	1887	208
2745	757	868	2427	267
1299	621	996	1845	9
1808	2459	1957	2633	134
1566	2605	1786	2801	1002
28	2735	236	1652	1790



- 1.16 If more than one interviewer was working within a ward then they selected more than one starting point in the same way.
- 1.17 The interviewer was allocated their start point. From there they selected every 4th house, working anti-clockwise and turning left at the end of each street. If they encountered an apartment block they simply added 4 to get the right address, e.g. apartment 4, 8, 12, etc.
- 1.18 If the house was derelict or there was no answer, the interviewer recorded the information on the non-response sheet and move on 4 houses. Refusals to participate were also recorded.
- 1.19 At the doorstep the interviewer first established how many people at the address were 18 years or older. Having done this they then referred to the Kish Grid to establish the correct person to interview. If that person was there and willing then the interviewer proceeded with the interview. If that person was not available then the interviewer reverted to the alternative method of establishing who in the household, at that time, had the "next birthday". If they agreed to participate then the interviewer proceeded. There were no call backs to any households. If the interviewer did not secure an interview at that address they then moved onto the next selected household using the agreed approach.
- 1.20 All Interviewing took place between Monday and Saturday, 9am to 9pm (with the last interview commencing no later than 8:30pm)

### **Questionnaire design and piloting**

- 1.21 The questionnaire was developed by QUB in a lead role and then the BBC and PwC were consulted.
- 1.22 A pilot was conducted in two wards which were deliberately chosen to represent different points on the community spectrum in Northern Ireland and to ensure that the following quality control indicators were met.
  - Validity – do the questions posed access the information needed?
  - Inter-tester reliability – is the questionnaire reliable across respondents?
  - Ease of administration – can the questionnaire be completed within the recommended time, using the proposed methodology?
  - Respondent understanding – can the respondents understand the terminology and instructions where relevant? And
  - Reliability – will the questionnaire stand the test of time, i.e., is it fit for purpose and could it be used in subsequent surveys?
- 1.23 The target for the number of pilot interviews was 48 interviews. These were to be spread equally between two wards. The selected wards were Whiterock (Belfast West Constituency) and Bushmills (North Antrim Constituency).
- 1.24 A random start point was selected within each ward. Two interviewers were sent to each ward and were each given a random route to follow, which required them to work anti-clockwise by taking every 4th house and turning left at every corner. If they encountered an

apartment block they simply added 4 to get the right address, e.g. apartment 4, 8, 12, etc. until they completed their 24 interviews.

- 1.25 Once the households were selected the respondent was selected. This was achieved by using one of two different methods: the Kish Grid and a quota-based method. The interviewing took place over two days (15<sup>th</sup> & 16<sup>th</sup> December 2006) and was spread across a range of times during the day, evening and weekend.

#### **Outcome of Pilot in Bushmills**

- 1.26 The quota-based method achieved seven successful interviews and the Kish Grid produced one interview. There was however ten instances where the Kish Grid selected a member of the household that was not available, and the person the interviewer first met stated that they would participate. These participants were interviewed in order to test the content of the questionnaire.
- 1.27 The interviewers did find some difficulty with some of the questions asked on the survey, in particular, Section 2: Core Questions. Respondents were wary about answering questions about how similar or different they felt Catholics and Protestants were and some refused to complete the questionnaire at this point.
- 1.28 Another problem noted by interviewers was to do with the method used to produce a random route to follow - work anti-clockwise by taking every 4th house and turning left at every corner. This meant that they were missing houses that were obviously occupied and approaching houses that were obviously empty or uninhabited at that time.

#### **Outcome of pilot in Whiterock**

- 1.29 The quota-based method achieved ten interviews and the Kish Grid produced six interviews and the quota based method produced four interviews. There were a substantial number of households within the sample that could not be interviewed due to the rules of the Kish Grid as the member of the household which it selected, was not available. These totalled to 23.5%. 47.8% were non-responses, 20% were not available and 15% were refusals.
- 1.30 Overall the questionnaire was received quite well; some respondents did feel that some of the questions were quite sensitive, for example, Q2.10 to Q2.15. However, as you would expect there will always be respondents who will refuse questions or terminate an interview at certain points and the refusal rate at these questions were not deemed to be above average compared to other surveys. Furthermore, no matter what the subject is, there will always be some people who are wary of door step surveys.

#### **The final data set**

- 1.31 Table 3 details the profile of the final data set and compares the profile data with that of the overall population aged 18 years plus as gauged by the 2001 Census:

Table 3: Profile of the final sample compared to the 2001 Census data

	Survey Data	Population Data (18 years and over)
<b>Gender</b>		
Male	40%	49%
Female	60%	51%
<b>Age</b>		
18-24	8%	13%
25-34	16%	20%
35-44	20%	20%
45-59	23%	24%
60+	32%	24%
Refused	1%	-
<b>SEG</b>		
ABC1	34%	36%
C2DE	63%	56%
Refused	3%	8%
<b>Religion</b>		
Catholic	33%	44%
Protestant	60%	55%
None	7%	-

### Data weighting

- 1.32 The first requirement of data analysis was to ensure that the data was representative of the relevant universe; hence it was correct procedure to weight the data by gender and religion. Weighting variables were created for gender and religion and also a combined weighting variable to account for the variance between the survey data and the population data in terms of both religion and gender.
- 1.33 First analysis of the data revealed that Protestants and Roman Catholics were represented proportionally 65% to 35%. In order to make this representative of the NI population, the Protestant respondents were assigned a weight of 0.84, representing the factor required to deflate the actual percentage of Protestant respondents to match more closely the NI population percentage of 55%. The Roman Catholic respondents were inflated using a weight of 1.3, so the percentage of responses would match the 45% of NI population who are Roman Catholic.
- 1.34 In a similar way, there was a weight variable assigned to raise the percentage of male respondents to 49%, and to reduce the number of female respondents to 51%. These variables were multiplied together to produce an overall weighting variable that would factor all the religion and gender responses at once, to create a dataset that mirrored the actual NI universe.
- 1.35 The variance between the survey data and the population data can be explained by the ward selection. The wards within each of the 18 constituencies were randomly selected and hence there was no way to control how representative the survey sample would be overall. Also the selection of the respondent in each household was via the Kish Grid and there were no quotas applied to the selection of the respondent.

1.36 Table 4 below details the new profile of the survey data after weighting:

**Table 4: New profile of survey data after weighting**

	Survey Data	Population Data (18 years and over)
<b>Gender</b>		
Male	49%	49%
Female	51%	51%
<b>Age</b>		
18-24	8%	13%
25-34	16%	20%
35-44	20%	20%
45-59	23%	24%
60+	32%	24%
Refused	1%	-
<b>SEG</b>		
ABC1	34%	36%
C2DE	63%	56%
Refused	3%	8%
<b>Religion</b>		
Catholic	43%	44%
Protestant	50%	55%
None	7%	-

### Non-response

1.37 All interviewers were required to collect non-response data. A non-response was defined as potential respondents who were not available for interview, refused an interview or where a property was uninhabited. The following table details the response for each ward.

Constituency	Ward	Interviews completed	Not available	Refused	Uninhabited	Not eligible	Total	Percentage of non-response %
Belfast East	Cregagh	25	23	4	0	2	54	54
Belfast East	Stormont	29	25	6	1	2	63	54
Belfast North	Valley	24	24	6	0	0	54	56
Belfast North	Ballysillan	26	37	8	0	0	71	63
Belfast South	Galwally	18	121	44	0	1	184	90
Belfast South	Rosetta	19	158	25	8	3	213	91
Belfast South	Shaftesbury	17	35	16	0	0	68	75
Belfast West	Glen Road	21	45	19	0	1	86	76
Belfast West	Shankill	26	49	27	3	2	107	76
East Antrim	Kilwaughter	31	19	6	12	2	70	56
East Antrim	Boneybefore	25	39	15	0	0	79	68
East Londonderry	Aghanloo	20	63	27	1	1	112	82
East Londonderry	Dundooan	21	27	14	0	4	66	68
East Londonderry	Churchland	21	25	1	0	1	48	56
Fermanagh & South Tyrone	Lisbellaw	24	35	14	6	0	79	70
Fermanagh & South Tyrone	Portora	24	40	19	4	0	87	72
Fermanagh & South Tyrone	Aughnacloy	24	11	2	0	0	37	35
Foyle	Enagh	24	60	23	0	0	107	78
Foyle	Brandywell	23	22	30	0	1	76	70
Foyle	Ballynashallog	24	26	17	0	0	67	64
Lagan Valley	Moirá	25	67	34	0	0	126	80
Lagan Valley	Knockmore	26	68	17	0	2	113	77
Lagan Valley	Hilden	26	103	33	3	0	165	84
Mid Ulster	Tobermore	22	43	14	1	1	81	73
Mid Ulster	Oaklands	22	25	16	1	0	64	66
Mid Ulster	Coalisland West and Newills	22	46	21	1	1	91	76

Constituency	Ward	Interviews completed	Not available	Refused	Uninhabited	Not eligible	Total	Percentage of non-response %
Newry & Armagh	Kileen	26	9	2	0	0	37	30
Newry & Armagh	Windsor Hill	24	70	18	1	0	113	79
Newry & Armagh	Creggan	29	40	17	3	2	91	68
North Antrim	Carnary	25	72	24	0	3	124	80
North Antrim	Slemish	26	39	9	1	0	75	65
North Antrim	Academy	27	65	17	3	0	112	76
North Down	Ballyholme	21	44	13	5	7	90	77
North Down	Princetown	20	33	2	0	0	55	64
North Down	Loughview	19	31	19	1	0	70	73
South Antrim	Massereene	24	86	10	0	4	124	81
South Antrim	Doagh	25	49	2	1	0	77	68
South Antrim	Glengormley	21	68	12	1	2	104	80
South Down	Clonallan	26	65	11	0	0	102	75
South Down	Kilmore	25	36	12	1	5	79	68
South Down	Dunmore	26	166	56	7	5	260	90
Strangford	Ballygowan	16	35	12	7	1	71	77
Strangford	Movilla	23	73	14	0	0	110	79
Strangford	Carowreagh	24	22	8	0	0	54	56
Upper Bann	Aghagallon	26	14	10	0	0	50	48
Upper Ban	Edenderry (Craigavon)	24	23	26	1	0	74	68
Upper Ban	Church	26	23	9	0	0	58	55
West Tyrone	Castledearg	21	56	25	0	0	102	79
West Tyrone	Ballycolman	21	81	51	1	0	154	86
West Tyrone	Killyclogher	21	53	26	0	0	100	79