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The Structure of Philosophical and Ethical Views among the Australian Public: Background Paper to the Monash Health and Social Values Survey Project

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The Structure of Philosophical and Ethical Views Among the Australian Public: Background Paper to the Monash Health and Social Values Survey Project

Detecting and Explaining Determinants of Health Care Issues and Choices

This project arose out of an enquiry into 'Empirical Ethics', an endeavour to seek out and identify factors that may determine the general publics' attitudes and beliefs regarding selected medical ethics, health care and health choices (Richardson and McKie 2005; McKie and Richardson 2005a; McKie and Richardson 2005b). In this background paper, we outline some aspects of the philosophy of the project so far as it determined questionnaire design and survey methodology.

The Monash Survey and Questionnaire

The Monash Health and Social Values Survey was conducted during 2006 and 2007. In brief, the aim of the project was to examine "empirical ethics", or the actual ethical preferences that exist among the general public regarding health care rationing and a selected number of ethical dilemmas relating to health policy - particularly in so far as they relate to policy issues and spending decisions.

Within the constraints of survey costs, a trade-off always looms between *response rates* and *sample numbers* (cf. Teitler, Reichman and Sprachman, 2003). It is normative practice in social science surveys to aim for high response rates, but it must be noted that the literature is highly confused regarding what an 'acceptable' response rate might be (cf. relevant sections in the following, all without uniformity or harmony: Denscombe 2003; Burns 2000; Jackson 1995, Merkle and Edelman, 2002). Earl Babbie (author of a popular social research methods textbook), for example, tells us, "a response rate of at least 50 percent" is adequate (60 percent is "good"; 70 percent "very good"), but then undermines his position by noting that "you should bear in mind, however, that these are only rough guides; they have *no statistical basis*" (Babbie 1995: 262; again, emphasis added). Indeed, the opinions of the professional survey community (and the social science methodology text-book writers) are somewhat at odds with that of the statisticians (cf. Groves 1987; and especially collection of essays in de Vaux 2002). Neuman's summary should be noted: "survey researchers disagree about what constitutes an adequate response rate. Adequate is a judgment call ..." (Neuman 1991: 247).

In the health and epidemiological literature, extremely high response rates are deemed essential, but this relates, firstly, to the peculiar nature of this data (it does, generally, differ from social science data), and secondly, because of the prevalence of low sample sizes (an unavoidable characteristic of some low-incidence health studies). The health economics and general health care literature has apparently followed the trend of their epidemiological colleagues in this respect – sometimes to the point of enforcing erroneous methodologies upon scholarship (Price et al, 2004). However, the obvious research program constraints enforced by lower sample numbers, are not always recognizes as part of the 'cost'. Higher response rates with lower overall sample sizes tend to entail standard

errors margins that greatly exceed less unbiased samples, corrected with judicious weighting, with larger sample sizes.

Table A: Respondent Characteristics

Characteristic	Category	Years	Percentage	2001 Census
Gender	Male		40.7	48.6
	Female		59.3	51.4
Age	Mean	56.7		45.4
	Standard Deviation	15.1		17.7
	Median	58.0		42.0
Age Groups	Age 18 to 24		2.3	12.6
	Age 25 to 34		5.7	19.6
	Age 35 to 44		12.5	20.2
	Age 45 to 54		22.8	18.3
	Age 55 to 64		25.3	12.6
	Age 65 +		31.4	16.7
Country of Origin	Australia		83.6	71.7
	Overseas		16.4	28.3
Education	Degree		23.7	18.8
	Postgraduate Qualification		10.8	3.8
	Non-degree		65.6	77.4
Main Activity	Working		53.6	59.9
	Unemployed		1.6	4.5
	Not in Labour Force		44.8	35.6

While care was taken to approximate the demographic characteristics of the adult population, emphasis was directed at reducing standard errors by maximizing overall questionnaire *numbers* in preference to exacting higher return *rates*. This method enabled more refined comparisons between survey sub-groups (e.g. males versus females etc), while at the same time not too grossly distorting

either parameter estimates (where they are needed) or multivariate data analysis - in our case, Principal Components Analysis, where population representativeness is less of a problem. The characteristics of overall survey respondents is shown in Table A (above), and compared with the most recent census figures available, namely the 2001 Australian Census.

In consequence, the target frame aimed for maximum numbers, and received minimal follow up (usually one postal reminder; in some cases, a telephone reminder). In the event, the return rate was around 15 percent, and the total number of questionnaires received stood at 494.

A feature of the project entailed serious effort to enlist a *cooperative partnership* with potential respondents. Thus, randomly chosen members of the public were first sent a letter inviting them to participate in the survey. We also offered a summary of results. The intention of this approach was to increase the interest and cooperation of respondents and thereby increase the probability of reliable and valid results and their agreement to participate in subsequent (and linked) questionnaires. We thus rejected the 'cold calling' approach on the premise that the public already suffers from over-exposure to questionnaire surveys. We clearly indicated to prospective respondents that there would be two separate questionnaires several months apart (we subsequently invited respondents to participate in another phase of the research - which would include a third questionnaire).

This method facilitated *inter-survey modifications* of the design of the second (and subsequent) questionnaires prompted by the nature of results from the first. Names were gathered from a CD telephone number database in the state of Victoria with a slight over-sampling of the rural population: the suburbs and towns chosen, however, reflected a balance of socio-economic status groups.

The Structure of Philosophical and Ethical Views Among the Australian Public

Overall, the Monash Health and Social Value Survey asked around 480 questions (in addition to another twenty items concerned with basic demographic and personal information) which concerned, in the first case, items about health, Medicare, and a range of medical ethics items. In the second place, we asked questions about a large number of philosophical, ethical and socio-economic beliefs and predilections. Out of these we sought substantial variable reduction through the production of scales (mathematically highly correlated items that were also grammatically and logically coherent). Thus, the method – via the inspection of the overall pattern of correlations (utilizing principal components analysis) – is to identify those explanatory variables that may produce the best-fitting models.

Table B below briefly summarizes the way we ordered these items, divided into thirteen areas, or, as we have termed them, *parts*. We start with single item demographics (age, schooling, rurality, etc): those which cover firstly, Part A, the 'genetic demographics' (those personal background characteristics that formed respondents' lives, such as sex, rurality, or language). Next, the Part B items, or 'lifeway demographics' (characteristics in which respondents may exercise some choice, such as marriage). Then follows Part C, income and life satisfaction scales, and Part D, educational level and special knowledge (here, knowledge of economics, science, or medical/health-related occupation or training). For each part, there were usually multiple scales, and *each* scale - of course, with the exception of single item demographics – was comprised of multiple items. For example, Part

C, 'income advancement and life satisfaction', comprised three separate scales, namely income level (based on one question); 'achievement in life' (a scale based on four items); and 'life satisfaction' (also based on four items).

Next came economic and political outlooks, an important and conceptually wide field of thinking and opinion, which we arranged into five separate groups, each with several scales (and each scale also composed of a number of items). The first couple of columns of most of these tables (for example, Table 3 in the Appendix) lists the 'high' and 'low' ends of the particular scales; the second last column gives the number of items in the scale, while the final column presents the correlation or inter-correlation (Cronbach alpha) score. For the politico-economic parts, for example, there were 9 scales just for Part E1 'economic objectives' (for example, whether Australians were viewed as fair, tolerant and sharing, itself a scale composed of three items; and respondents' preferences for overall social objectives – happiness, liberty, prosperity and so on – so far as they were *ranked*). Parts E2, E3, E4 and E5 comprised respectively, 4, 7, 6 and 3 scales. Altogether, the 29 politico-economic scales were constructed out of 63 separate questionnaire items.

Then follows three separate 'moral and social order' groups (with, respectively, 2, 5 and 1 scales), then two religious affectation parts, a personal philosophical views part (4 scales from 11 items); general ethics (forming 4 separate parts comprising, in total, 17 scales derived from 47 items), personality (18 scales), social capital/networks (9 scales), logic and rationality (5 scales), and finally 5 scales covering medical and personal habits (smoker, alcohol drinker, obesity, possession of private health insurance, and experience of prolonged sickness).

A final feature of the questionnaire design is its dual role in research formulation, something inherent in the large number of demographics and philosophy scales (around 122 in total). Firstly, we ensured sufficient items (and hence scales) to permit testing of *specific hypotheses* (e.g. affect of socio-economic views on health rationing); and secondly, we ensured a wide net or suite of *factors of possible influence* to enable methodical searching of relevant explanatory variables (sometimes known as *post hoc* testing). Partly this was suggested by the very nature of the research program: it was hardly known in advance what might determine public thinking on issues such as health rationing, or deciding 'who lives and who dies', or age-related preference for health care, or the funding (and reasons for support) of Medicare, or adaptation to illness - and other thorny problems. A specifically targeted hypothesis (for example socio-economic explanations) might in fact fall well off the mark, so the problem was solved by 'Edisonian[1]' brute-force multi-explanatory scales (as detailed below).

The 26 tables in the Appendix below show the particular demographic groups or philosophical and ethical 'pairs' that make up the overall suite of determinants. These groups were then cross-tabbed with particular questionnaire items of interest – or used in regression (or other multivariate) analyses. They are presented below with minimum commentary, save footnotes which give examples of some of the specific questionnaire items. In the case of the multi-item philosophy and ethics scales, the results of reliability analysis (generally Cronbach's *alpha* or correlation *r*) are given to indicate how well

1. It might be recalled that before Thomas Edison found the right filament to make his electric light glow, he methodically tested thousands of different substances between the electrodes.

the items 'stick together'. All Cronbach *alpha* scores are based on unweighted data and represent the *unstandardized* measure.

Table B Structure of the Demographics

Part A Genetic and Background Demographics
Part B Lifeway Demographics
Part C Income Advancement and Life Satisfaction
Part D Education and Special Knowledge
Part E Public Issues, Economic and Political Outlooks
Part E1 Economic Objectives
Part E2 Economic Organisation
Part E3 Social Welfare and Social Justice
Part E4 Voting Intentions and Positioning
Part E5 Government Spending Priorities
Part F General Moral and Social Order Outlooks
Part F1 Position and Expression
Part F2 Personal Freedom and Tolerance
Part F3 Responsibility and Meaning
Part G Personal Religious Views and Affectations
Part G1 General Religiosity
Part G2 Evolution, Design and Human Origins Beliefs
Part H Personal Philosophical Views: Sources of Authority
Part I General Ethics & Duty
Part I1 Utilitarianism, Kantianism and Duty
Part I2 Law, Conscience and Duty
Part I3 Relativism and Tolerance
Part I4 Environment and Animals
Part J Personality Factors
Part J1 'Big Five' Personality Factors
Part J2 LOC (Locus of Control)
Part J3 Fatalism, Freewill and Achievement
Part J4 Personal Attributes
Part K Social Capital (Community Networks)
Part L Logic and Rationality
Part M Medical and Personal Habits and Characteristics

Appendix: Tables Showing Detailed Components of Demographics, as Well as Social, Political, Ethical and Philosophical Scales

Table 1: Part A Genetic and Family Background Demographics

Demographic 1		***Demographic 2***
Females	v	Males
Foggies: Born 1910 to 1945	v	Boomers: Born 1946 to 1964
Boomers: Born 1946 to 1964	v	Gen XY: Born 1965 or After
GenXY: Born 1965 or After	v	Foggies: Born 1910 to 1945
Australian Born	v	Overseas Born
English Speaking	v	Non-English Speaking
Rural Folk	v	Urban Dwellers
Worker in Paid Employment	v	Not In Labour Force
Catholic Schooling	v	Government Schooling
Independent Schooling	v	Government Schooling

Notes: All based on straightforward demographic items (usually ticking what is relevant).

Table 2: Part B Lifeway Demographics

Demographic 1		***Demographic 2***
Married	v	Divorced or Separated
Raised Children	v	No Offspring

Notes: All based on straightforward demographic items (usually ticking what is relevant). We did ask for the number and ages of offspring and used this later on to try and produce a typology for family type.

Table 3: Part C Income Advancement and Life Satisfaction

High		***Low***	***Items***	***Cronbach alpha***
High Income ($60K and Over)	v	Low Income (Under $30K)	1	-
High Advancement in Life Achievements	v	Low Advancement in Life Achievements	4	0.7841
High Life Satisfaction	v	Low Life Satisfaction	4	0.7444

Notes: Income items: options range from "under $20,000"; then increments of $10,000, until the final option which read "more than $80,000". Example of 'Advancement in Life' scale: items asked if respondent felt they were better or worse off financially since five years ago (5 option likert, from much better to much worse); other items asked about personal achievements; career and job opportunities; and educational opportunities. Example of 'Life Satisfaction' scale: 'I feel satisfied by the sense of purpose and meaning in my life' (5 option likert, from strongly agree to strongly disagree)

Table 4: Part D Education and Specialist Knowledge

High/Present		***Low/Absent***
High Education (University Level Qual)	v	Low Education (Secondary/Trade)
Studied Economics at School/University	v	Not Studied Economics
Read Some Economics	v	Ignorant of Economics
Medical Related Work/Study	v	Non-Medical Work/Study
Studied Science at School/University	v	Not Studied Science

Notes: All based on straightforward demographic items (usually ticking what is relevant).

Table 5: Part E1 Econo-Political Outlooks: Economic Objectives

High/First Choice		***Low/Other-Choice***	***Items***	***Cronbach alpha***
View Australians as Fair, Tolerant and Sharing	v	View Australians as Unfair, Intolerant and Selfish	3	0.7721
Happiness (First Ranked Social Objective)	v	Non-Happiness Soc Obj	1	-
Choice (First Ranked Social Objective)	v	Non-Choice Soc Obj	1	-
Liberty (First Ranked Social Objective)	v	Non-Liberty Soc Obj	1	-
Economic Prosperity (First Ranked Social Objective)	v	Non Prosperity Soc Obj	1	-
Fairness (First Ranked Social Objective)	v	Non-Fairness Soc Obj	1	-
Sense of Community (First Ranked Social Objective)	v	Non-Community Soc Obj	1	-
Fairness and Community A	v	Liberty and Prosperity A	1	-
Fairness and Community B	v	Liberty and Prosperity B	1	-

Notes: Example of whether respondent viewed Australians as fair, tolerant and sharing: "Australian are fairly tolerant of other cultures" (5 option likert, strongly agree to strongly disagree). All other items were based on rankings where respondents were asked to "rank the following social objectives from 1 to 6" The options were: Happiness, Choice, Liberty, Economic Prosperity, Fairness, and Sense of Community.

Table 6: Part E2 Econo-Political Outlooks: Economic Organisation

High/Grouping 1		***Low/ Grouping 2***	**Items**	***Cronbach alpha***
High Pref Privatisation/Government Ownership	v	Low Pref Privatisation/Government Ownership	2	0.5257
High User Pays Principles (Public Park Entrance Fees)	v	Low User Pays Principles (Public Park Entrance Fees)	4	0.7838
High Cooperation Goals for Aust	v	High Competition Goals for Aust	2	0.7117
High Commitment to Government Efficiencies	v	Low Commitment to Government Efficiencies	3	0.4025

Notes: Example of Privatisation scale: " All government services should be privatised if possible"; Example of User Pays scale: "People who use public parks should pay an entrance fee"; example of Cooperation/Competition scale: "People are naturally cooperative"; Example of Commitment to Government Efficiencies scale: "The government should not be owning and running businesses – this is best left to private enterprise" (5 option likert, from strongly agree to strongly disagree). Source in most cases are the ISSS surveys or modifications thereof.

Table 7: Part E3 Econo-Political Outlooks: Social Welfare and Social Justice

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Support for Legislation to Protect Families re Working Hours	v	Low Support for Legislation to Protect Families re Working Hours	2	0.5394
Accept Widening Income Disparities	v	Oppose Widening Income Disparities	2	0.7960
High Hard Work and Self-Sufficiency	v	Low Hard Work and Self-Sufficiency	8	0.7571
High Support for Govt Role to Level Income Disparities	v	Low Support for Govt Role to Level Income Disparities	2	0.3814*
Support Govt Subsidizing Sports and the Arts	v	Oppose Govt Subsidizing Sports and the Arts	2	0.6324
High Social Justice Commitment	v	Low Social Justice Commitment	4	0.5200
High Commitment to Universal Pension Entitlements	v	Low Commitment to Universal Pension Entitlements	2	0.8831

Notes: Represented by such items as: "Government should force corporations to place a limit on working hours" (Legislation to protect Families Scale); "Australia is better off if the wealthy receive even higher incomes so long as the income of the poor does not fall" (Accept Widening Income Disparities Scale); "Unemployment payments in Australia are too generous" (Hard Work and Self-Sufficiency Scale); "Government should do more reduce income differences" (Government Role to Level Income Disparities Scale); "We should subsidies sports from (compulsory) taxes because most people take great pride in the achievements of our sportsmen and women when they win at the Olympics and other international competitions" (Subsidizing Sports and Arts Scale); "Australians suffer because social services are inadequate" (Social Justice Scale); "Pensions should be a right for all citizens - even if taxes rise" (Universal Pension Entitlements Scale). Source in most cases are the ISSS surveys or modifications thereof.

* While the Cronbach alpha appears to be low, nevertheless the items correlate with a high r at 0.2356, statistically significant at 0.01 (p=0.000)

Table 8: Part E4 Econo-Political Outlooks: Voting Intentions and Positioning

Grouping 1		***Grouping 2***
Coalition Voting (Liberal or National)	v	Non-Coalition Voting
ALP Voting	v	Non-ALP Voting
Greens Voting	v	Non-Greens Voting
Left Wing in Politics	v	Right Wing in Politics
Tending to Centre in Politics and Economics	v	Tending to the Wings (Left or Right) in Politics and Economics
Strong Support for Nominated Political Affiliation	v	Weak Support for Nominated Political Affiliation

Notes: Most based on straightforward demographic items (usually ticking what is relevant). For the political voting items, the question read, "If a federal election were held today, how do you think you would vote in the House of Representatives". The support item (last row above) was based on the item, "How strongly do you currently support the political party you identified with above". Left and Right wing scales were based on three items, an example being: "In political matters, where would you say you stand – on the left or the right? (5 option likert, from LEFT!!, Left, Centre, Right or RIGHT!!). The sources for these questions are the standard International Social Science Surveys.

Table 9: Part E5 Econo-Political Outlooks: Government Spending Priorities

High/Grouping 1		***Low/ Grouping 2***	**Items**	***Cronbach alpha***
More Spending: Police, Military and Terrorism	v	Less Spending: Police, Military and Terrorism	3	0.8315
More Spending: Arts, Environment, Universities	v	Less Spending: Arts, Environment, Universities	4	0.7725
More Spending: Health, Education, Medical Research	v	Less Spending: Health, Education, Medical Research	5	0.8207

Notes: These scales were broadly based on ISSS items, but were phrased (as an example) as follows: "It would be OK to increase taxation if the money were spent on …" Then followed "Cleaning up the environment" (5 option likert from strongly agree to strongly disagree)

Table 10: Part F1 Moral and Social Order Outlooks: Position and Expression

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
Socially Conservative	v	Socially Progressive	3	0.7808
Tending to Centre in Moral issues	v	Tending to Take Moral Positions in Moral issues	3	0.7808

Notes: *Both* scales (identical) represented by items such as: "In matters regarding the sanctity of life - issues such as abortion, euthanasia: would you say you are more 'conservative' in your views - or 'progressive'? In the case of the first scale, it was simply the higher and lower ends; in the case of the second scale, those in the middle (representing weak, or hesitant commitment to either end of the social spectrum were opposed by those at either of the more persuaded ends).

Table 11: Part F2 Moral and Social Order Outlooks: Personal Freedom and Tolerance

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Tolerance For Sexual Freedom in Society	v	Low Tolerance For Sexual Freedom in Society	2	0.5997
High Tolerance For Social Drug Use	v	Low Tolerance For Social Drug Use	2	0.8144
High Tolerance for Radical Social Views	v	Low Tolerance for Radical Social Views	2	0.8179
High Tolerance for Media and Its Independence	v	Low Tolerance for Media and Its Independence	2	0.2056*
High Tolerance for Educational Alternatives	v	Low Tolerance for Educational Alternatives	1	-

Notes: Represented by such items as: "Sexual activity in private no business of the state" (Tolerance For Sexual Freedom Scale); "Personal use of recreational drugs (such as ecstasy) should be legalized" (Tolerance For Social Drug Use Scale); "Individuals who want to overthrow the government by revolution should NOT be allowed to hold public meetings to express their views" (Tolerance for Radical Social Views Scale); "No media institution should receive public funding" (Tolerance for Media and Its Independence Scale); "To combat alternative views of science (such as homeopathy, Chinese medicine, acupuncture etc) we need to exclude discussion of such views from secondary school

classrooms" (Tolerance for Educational Alternatives Scale). Source in most cases are the ISSS surveys or modifications thereof.

* Correlation *r* for first four scales are all statistically significant. They are, in the order shown in the table: 0.4282; 0.6869; 0.6920; 0.1146. All were significant at the 0.01 level (p=0.000) in every case with the exception of the 'Tolerance for Media and Its Independence", which was significant at the 0.05 level (p=0.017).

Table 12: Part F3 Moral and Social Order Outlooks: Responsibility and Meaning

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Meaningful Actions	v	Low Meaningful Actions	3	0.6389

Notes: Represented by items such as "Some people waste their lives on trivial pursuits, such as watching television, when their lives would be better if they did more meaningful things" (5 option likert from strongly agree to strongly disagree).

Table 13: Part G1 Religious Affectations: General Religiosity

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
Little Importance to Religious Faith	v	High Importance to Religious Faith	1	-
Feel Strong Duty to God	v	No Duty to God	1	-
High Religiosity and Spirituality	v	Low Religiosity and Spirituality	3	0.8716
High True Significance: Character, Achievement, Deeds	v	Low True Significance: Character, Achievement, Deeds	3	0.6953
High True Significance Comes from Image of God	v	Low True Significance Comes from Image of God	4	0.8837
Secular Spirituality	v	Purely Secular	2	(logical combination)
Protestant Orthodoxy	v	Liberal Religious	1	-

Notes: Represented by such items as: "First Religious faith is very important in my life" (Importance of Religious Faith); 'Duty to God' based on a list of various individuals or organisations which respondents choose from a scale of 1 to 5 (No duty at all to Strong duty); " I attend religious services regularly" (Religiosity); "Our true significance comes from what we achieve in our lives" (True Significance: Character, Achievement, Deeds); "Significance and dignity because made in the image of God" (True Significance Comes from Image of God); 'Secular Spirituality' based on logical combination of two separate items; 'Protestant Orthodoxy' based on "I am significant because Jesus Christ died in my place to ensure forgiveness".

Table 14: Part G2 Religious Affectations: Evolution, Design and Human Origins

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Belief in the Fact of Evolution	v	Low Belief in the Fact of Evolution	5	0.7984
High Belief in Intelligent Design	v	Low Belief in Intelligent Design	4	0.7576
No Mechanism for Evolutionary Change	v	Natural Selection Facilitates Evolutionary Change	3	0.7221
High Tolerance For Teaching Creationism	v	Low Tolerance For Teaching Creationism	4	0.7481
Link Between Evolution and Moral Laxity	v	No Link Between Evolution and Moral Laxity	1	-

Notes: Represented by items such as "We should not question the theory of evolution – it is an established fact" (Belief in the Fact of Evolution Scale); "Regardless of how things came to be (evolution or otherwise), it is clear that the universe bears all the marks of being designed by a higher intelligence" (Belief in Intelligent Design Scale); "There is no adequate mechanism known, which permits a complex organism (such as a human) to have evolved over time" (Mechanism for Evolutionary Change Scale); "Creation science (the view that God's creation of the universe is a scientifically valid alternative to the theory of evolution), should be discussed in government secondary school science classes along with evolution" (Tolerance For Teaching Creationism Scale); "The teaching of evolution in schools is likely to affect students' attitudes to questions of sexual morality" (Link Between Evolution and Moral Laxity Scale)

Table 15: Part H Personal Philosophical Views: Sources of Authority

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Science, Psychology & Intellectuals Reliable Guide Ethics	v	Low Science, Psychology & Intellectuals Reliable Guide Ethics	3	0.7806
High Public Opinion Reliable Ethics Guide	v	Low Public Opinion Reliable Ethics Guide	3	0.6091
High Conscience, Inner Light, Tradition Reliable Ethics Guide	v	Low Conscience, Inner Light, Tradition Reliable Ethics Guide	4	0.6109
High Authority of Bible Reliable Ethics Guide	v	Low Authority of Bible Reliable Ethics Guide	1	-

Notes: Represented by items such as: "Science is a reliable guide to standards of right and wrong" (Science, Psych and Intellectuals Scale); "Public opinion important fact to take into account in deciding right and wrong" (Public Opinion Scale); "Conscience is a reliable guide to standards of right and wrong" (Conscience and Inner Light Scale); "The Bible is a reliable guide to standards of right and wrong" (Biblical Authority Scale).

Table 16: Part I1 General Ethics: Utilitarian, Kantianism and Duty

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Personal Self Interest	v	Low Personal Self Interest	6	0.7492
High Utilitarian Philosophy	v	Low Utilitarian Philosophy	4	0.7534
High Duty Before Personal Happiness	v	Low Duty Before Personal Happiness	4	0.7094
High Kantian re Affect of Lying on Social Cohesion	v	Low Kantian re Affect of Lying on Social Cohesion	3	0.8152
High Kantian re Social Rules	v	Low Kantian re Social Rules	1	-
High Duty to Friends, Neighbours, Poor & Nation	v	Low Duty to Friends, Neighbours, Poor and Nation	6	0.7588
High End Justifies the Means	v	Low End Justifies the Means	2	0.5547*
High Foolish to Sacrifice for Ideals	v	Low Foolish to Sacrifice for Ideals	3	0.7917

Notes: Represented by items such as: "Self-interest is the only standard of right and wrong" (Personal Self-Interest Scale); "Action that produces the greatest happiness always right" (Utilitarian Philosophy Scale); " People have a duty to help other people even if it makes them unhappy" (Duty Before Personal Happiness Scale); " It is wrong to lie because break down trust in society" (Kantian Affect of Lying Scale); "In general people should follow the moral rules of their own society" (Kantian Social Rules Scale); " Duty to: Friends" (Duty to Friends etc Scale); "Action that produces greatest happiness is always right" (End Justifies the Means Scale); "It is foolish to sacrifice interests for the sake of society" (Foolish to Sacrifice for Ideals Scale). *Although low Cronbach alpha, the correlation *r* between these two items was 0.3838 (Statistically significant at 0.01 level; p=0.000).

Table 17: Part I2 General Ethics: Law, Conscience and Duty

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
Tend to Obey the Law Rather Than Follow Conscience	v	Tend to Follow Conscience Rather Than Obey the Law	1	-
Duty is Done to Fulfill Others Only	v	Duty is Done to Fulfill the Self Only	2	(logical combination)
High Duty to Fulfill Others	v	Low Duty to Fulfill Others	1	-
High Duty to Fulfill the Self	v	Low Duty to Fulfill the Self	1	-
High View of Expectations and Role in Duty	v	Low View of Expectations and Role in Duty	3	0.6386

Notes: First scale above based on single item: "In general, would you say that people should obey the law without, exception or are there exceptional circumstances in which people should follow their conscience even if it means breaking the law?" Second scale based on a logical combination of the two following. Third scale on "I fulfill my duties so will make others happy"; Fourth scale: "I fulfill my duties so will make me happier in the long run". Fifth scale based on three items including: "I fulfill my duties to individuals and organisations (to family, country etc) not primarily because it will make me or others happy, but because it is my role (e.g. As a mother, father, employee etc)."

Table 18: Part I3 General Ethics: Relativism and Tolerance

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Tolerance of Other Cultures	v	Low Tolerance of Other Cultures	2	0.4927*
High Relativism: No Cultures Morally Superior to Others	v	Low Relativism: Some Cultures Morally Superior to Others	5	0.6252

Notes: Examples of the first scale "It is wrong for one society to impose its values on another"; and the second: "There are no absolute standards of right and wrong". *Although low Cronbach alpha, the correlation *r* between these two items was 0.3268 (statistically significant at 0.01 level; p=0.000).

Table 19: Part I4 General Ethics: Environment and Animals

High/Grouping 1		*Low/ Grouping 2*	*Items*
High Duty to Pets	v	Low Duty to Pets	1
High Commitment to Environmental Cleanup	v	Low Commitment to Environmental Cleanup	1

Notes: In hindsight, we could have added more items around these interesting perspectives. In the event, they is based on one item each: "To what individuals or organisations do you feel a duty: pets (five option likert ranging from 'No duty at all' to 'Very strong duty'); and the government spending item (see Table 9, above) "Spend more money: Cleaning up the environment."

Table 20: Part J1 Personality Factors: Big Five Personality Typology

High/Grouping 1		*Low/ Grouping 2*	*Items*	*Cronbach alpha*
High Extraversion (Big Five Personality)	v	Low Extraversion (Big Five Personality)	4	0.5743
High Agreeableness (Big Five Personality)	v	Low Agreeableness (Big Five Personality)	4	0.6191
High Conscientiousness (Big Five Personality)	v	Low Conscientiousness (Big Five Personality)	4	0.5814
High Emotional Stability (Big Five Personality)	v	Low Emotional Stability (Big Five Personality)	4	0.6850
High Imagination (Big Five Personality)	v	Low Imagination (Big Five Personality)	4	0.5543

Notes: Scales derived from public access: The International Personality Item Pool (IPIP) items found on the web at http://ipip.ori.org/ipip (accessed 2006). Examples of items include: "I tend to start conversations easily" (Extraversion); "I sympathize with others feelings" (Agreeableness); "I tend to follow a schedule" (Conscientiousness); "I am relaxed most of the time" (Emotional Stability); and "I have a vivid imagination" (Imagination).

Table 21: Part J2 Personality Factors: Locus of Control

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Internal Locus of Control	v	Low Internal Locus of Control	4	0.5881
High Powerful Others Locus of Control	v	Low Powerful Others Locus of Control	3	0.6002
High Chance Locus of Control	v	Low Chance Locus of Control	4	0.4425

Notes: Scales for LOC were derived from Kenneth Wallston's public access items on the web for the Multidimensional Health Locus of Control (MHLOC).

See www.vanderbilt.edu/nursing/kwallston/mhlcscales.htm (accessed 2006). The structure appears slightly different from what might be expected in LOC (namely, 'High Internal' would naturally be expected to be on the same factor/scale as 'Powerful Others', except on opposite poles). It might be more appropriate to give new monikers to the three scales used in the MHLOC, but for the time being, we have kept with those on the MHLOC web-page. Examples of items include: "The main thing which affects my health is what I do myself" (Internal); "Following doctor's orders is the best way for me to stay healthy" (Powerful Others); "No matter what I do, if I am going to get sick, I will get sick" (Chance). There has been a growing literature on Locus of Control with respect to health behaviour, see for example Steptoe and Wardle 2001 and references therein.

Table 22: Part J3 Personality Factors: Fatalism, Freewill and Achievement

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Personal Success is in Own Hands	v	Low Personal Success is in Own Hands	1	-
High Economic Success is in Own Hands	v	Low Economic Success is in Own Hands	1	-
High Genetic and Social Fatalism	v	Low Genetic and Social Fatalism	2	0.6695

Notes: First two based on only one item each: "If I fail to fulfill my goals, I only have myself to blame" (Personal Success), and "People in economic hardship have no one to blame but themselves" (Economic Success); third scale based on "Free decisions result of our genetic/social upbringing" and "Free decisions are the result social and political forces".

Table 23: Part J4 Personality Factors: Personal Attributes

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
More Pleasure in Giving Gifts	v	More Pleasure in Receiving Gifts/Unsure	1	-
High Personally Ambitious and Competitive	v	Low Personally Ambitious and Competitive	2	0.7997

Notes: First item: "Generally speaking, do you find more pleasure in receiving a gift - or giving a gift?". Second scale based on : "I am a very ambitious person" and "I am a very a competitive person" (5 option likert from strongly agree to strongly disagree).

Table 24: Part K Social Capital/Community Networks

High/Grouping 1		***Low/ Grouping 2***	***Items***	***Cronbach alpha***
High Trust and Safety (Social Capital)	v	Low Trust and Safety (Social Capital)	3	0.5100
High Value of Life (Social Capital)	v	Low Value of Life (Social Capital)	2	0.5563
High Tolerance of Diversity (Social Capital)	v	Low Tolerance of Diversity (Social Capital)	2	0.5489
High Work Connections (Social Capital)	v	Low Work Connections (Social Capital)	2	0.7049
High Participation in Local Community (Social Capital)	v	Low Participation in Local Community (Social Capital)	3	0.7455
High Family and Friends Connection (Social Capital)	v	Low Family and Friends Connection (Social Capital)	2	0.4668
High Neighbourhood Connections (Social Capital)	v	Low Neighbourhood Connections (Social Capital)	3	0.5344
High Social Agency/Social Context Proactivity (Social Capital)	v	Low Social Agency/Social Context Proactivity (Social Capital)	4	0.5306
High Life is Good (Social Capital)	v	Low Life is Good (Social Capital)	5	0.7179

Notes: Although some of the four Cronbach alpha indices for the two-item scales appear on the low side, in every case they returned statistically significant correlation r figures at the 0.01 level (p=0.000). Source for most items come from Jenny Onyx and Paul Bullen, "Measuring Social Capital in Five Communities", *Journal of Applied Behavioral Science* 36 (1) March 2000, and used by permission. Our scales did not precisely tally with those of Onyx and Bullen, so we relied on our own inter-correlations and dropped items accordingly (note also modifications by O'Brien et al, 2004. Examples of items include: Do you often help out a local group as a volunteer? (four option likert ranging from "No, never" to "Yes, often") and "My local neighbourhood feels like home" (5 option likert from strongly agree to strongly disagree). For full list see Onyx and Bullen (esp their Appendix).

Table 25: Part L Logic and Rationality

High/Grouping 1		***Low/ Grouping 2***
High Awareness of Realism re Health Rationing Decisions #1	v	Low Awareness of Realism re Health Rationing Decisions #1
High Awareness of Realism re Health Rationing Decisions #2	v	Low Awareness of Realism re Health Rationing Decisions #2
High Rationality (re Superstition)	v	Low Rationality (re Superstition)
High Rationality (re Govt Spending)	v	Low Rationality (re Govt Spending)
High Accept Controversial Scientific Results	v	Low Accept Controversial Scientific Results

Notes: Generally, we scored a low level of realism awareness if respondents did not think health rationing was not already practiced (two items – one scale each); the 'Rationality and superstition' scale was based on one question, namely, "All events are determined by the stars", but note that a 'high' score of rationality included only those who strongly disagreed with the proposition – all others were accorded a (relatively) 'low' rationality. The 'Rationality and Government Spending' scale was constructed broadly by scoring low to those who wanted higher government spending in many areas (See Table 9, above – which specifically qualified such increases with the proviso that it is "OK to increase taxation") cross-tabbed with those who also opted for lower taxation than we already have (another separate item). The 'Controversial Scientific Results' scale was based on the item, "If good scientific research showed that one race (or ethnic group) was more intelligent than another race or group, we should accept the findings as true" (5 option likert from strongly agree to strongly disagree).

Table 26: Part M Medical and Personal Habits and Characteristics

High/Grouping 1		***Low/ Grouping 2***
Smoker (Light or Heavy)	v	Non-Smoker
Daily or Heavy Drinker of Alcohol	v	None or Moderate Drinker of Alcohol
Moderately or Definitely Overweight	v	Not Overweight
Has Private Health Insurance	v	No Private Health Insurance
Have Experienced Prolonged Illness	v	No Experience Prolonged Illness

Notes: All based on straightforward demographic items (usually ticking what is relevant).

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