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How Dutch citizens prioritise the social agenda

An analysis of the 2003, 2005 and 2006 surveys

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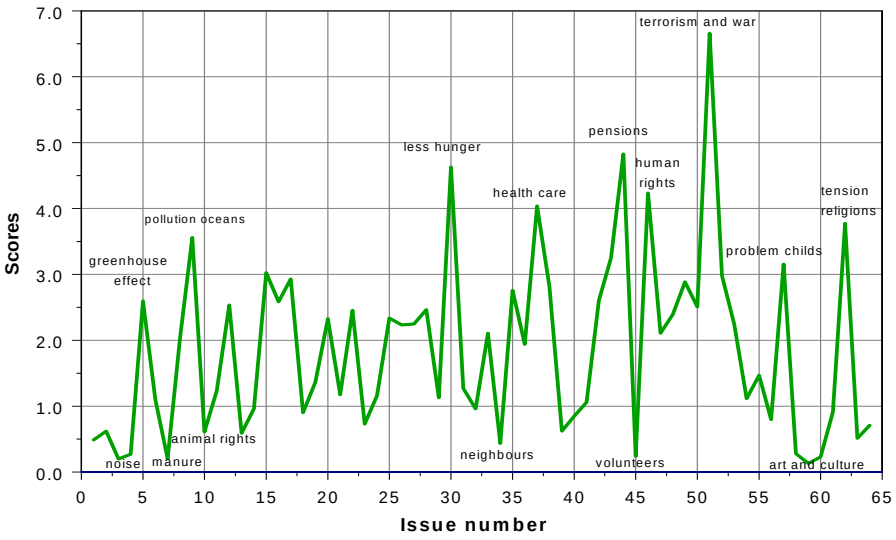
Rapport in het kort

Hoe de sociale agenda voor duurzaamheid gemeten kan worden: een benadering via enquêtes

Volgens de Sociaal Economische Raad (SER) wordt een maatschappij duurzamer wanneer consumenten en bedrijven hun verantwoordelijkheid nemen voor de negatieve consequenties van hun handelen. In andere woorden, een maatschappij wordt duurzamer wanneer consumenten en bedrijven bijdragen aan de oplossing van belangrijke maatschappelijke vraagstukken. Het Kabinet-Balkenende II stelde dat de sociale agenda voor duurzaamheid een prominente plaats zou moeten innemen in belangrijke beleidsdossiers. Dit rapport beschrijft een enquête-benadering waarmee het belang kan worden bepaald dat burgers hechten aan maatschappelijke vraagstukken.

De toegepaste enquête-techniek is een zogenaamde *card-sorting*-enquête waarmee in vier stappen de volgorde van maatschappelijke vraagstukken wordt bepaald. Analyse van de 2006-studie naar het ordenen van 64 maatschappelijke vraagstukken, laat zien dat Nederlanders de dreiging van terrorisme en oorlog, veilig stellen van pensioenen, de bestrijding van honger in de wereld, het verbeteren van de mensrechten en het verbeteren van de Nederlandse gezondheidszorg de belangrijkste issues vinden. Veel vraagstukken met een mondiaal karakter scoren hoog: 10 vraagstukken uit de top-15 hebben een globaal karakter en 5 vraagstukken een nationaal karakter.

Trefwoorden: card-sorting-enquêtes, duurzaamheid, onzekerheidsanalyse, sociale agenda



Survey-averaged scores for 64 social issues, October 2006.
The highest and lowest scoring issues are denoted by catchwords.

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According to the Social and Economic Council of the Netherlands (SER, 2000) a society becomes more sustainable when consumers and businesses take responsibility for the negative consequences of their actions. In other words, society becomes more sustainable when consumers and businesses contribute to solving important social issues. According to the Dutch Government (Cabinet Balkenende II, 2003–2006), the social agenda for sustainability must be prominent in major policy-making portfolios.

The social agenda contains a list of issues ranked in importance according to the opinions of Dutch citizens. This report describes a method that can establish the importance that citizens place on social issues. In contrast to other studies, this method, denoted as a *four-stage card sorting survey*, makes it possible to prioritise a large number of issues simultaneously.

The social issues were compiled from publications by political parties, national organisations and international organisations. This resulted in a list of 53 issues in 2003 and 2005, and 64 issues in 2006. Each issue is provided with an unambiguous description and an indication of whether the issue is peculiar to the Netherlands or found elsewhere in the world. Approximately 2600 respondents were then asked to prioritise these social issues by means of an access panel (TNS NIPObase). The pros and cons of access panels are discussed.

To make the survey sample representative for the Netherlands as a whole, all the surveys were weighted with respect to sex, age, region and political preference. A number of quality checks have been performed to ensure high-standard survey results.

This study on the importance of 64 social issues indicates that in 2006 Dutch citizens considered the most important issues to be the threat of terrorism, Dutch old-age provisions, combating hunger, human rights and Dutch health care (see Table A). The importance of environmental issues tended to decline from 2003 to 2006. Except for pollution of the oceans, environmental issues do not appear in the top 15 of the 64 issues. Many global issues received high scores (10 of the top 15 issues in Table A are global in nature). This study was about social issues in general, without any specific focus on the Netherlands or Dutch politics.

From a methodological point of view, the new survey set up in 2006 circumvented some drawbacks of the 2003 and 2005 surveys. By using a *control survey* in 2006 it was possible to calibrate the results from the 2003 and 2005 surveys to the 2006 survey, despite differences in the set-up and formulation of the issues.

Table A *Scores by the Dutch public in 2003, 2005 and 2006 for issues that counter threats to sustainable development, both nationally and internationally.*

Scores 2003	Scores 2005	Scores 2006	Order 2006	Description
4.89	6.87	6.66	1	That the threat of terrorism and war in the world will decrease
5.12	5.80	4.83	2	That good old-age provisions for people in the Netherlands will continue to be offered in the future
4.49	4.56	4.63	3	That action will be taken to combat hunger in the world
4.29	4.30	4.23	4	That there will be less violation of human rights around the world in the future
5.70	4.97	4.04	5	That health care in the Netherlands will improve
NA	NA	3.77	6	That there will be less tension between religions in the world in the future
4.59	4.12	3.56	7	That ocean, river and lake pollution in the world will be less in the future
3.07	2.85	3.25	8	That child labour in the world will be reduced in the future
NA	NA	3.15	9	That problem children are better helped, and earlier in their lives
2.63	2.90	3.03	10	That there will be more clean drinking water in the world in the future
3.01	3.37	2.98	11	That respect for norms and values in the Netherlands will be reinstated
3.67	3.12	2.93	12	That welfare in developing countries increases
3.20	3.81	2.89	13	That more action will be taken to fight crime in the Netherlands
2.49	2.66	2.82	14	That fewer people in the world will suffer from infectious diseases
2.54	3.01	2.76	15	That the gap between rich and poor in the Netherlands will be reduced

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1 Introduction

1.1 Sustainability and the social agenda

According to the Social and Economic Council of the Netherlands (SER, 2000) a society becomes more sustainable when consumers and businesses take responsibility for the negative consequences of their actions. In other words, society becomes more sustainable when consumers and businesses contribute to solving important social issues. According to the Dutch Government, the social agenda for sustainability must be prominent in major policy-making portfolios and will contain a list of social issues. This report describes a method that can establish the importance that citizens place on these social issues. In contrast to other studies, the method makes it possible to prioritise a large number of issues simultaneously.

What is 'the social agenda' and what does it contain? Google offers almost 10,000 hits in answer to the question of what should or should not be on the social agenda. One thing is clear: *social issues* are on the social agenda. Characteristics of social issues are that they are neither individual nor compatible with acceptable norms and values and that there is no consensus on how they should be solved. The agenda is determined by citizens and is to be debated by the authorities. We note that the term 'social' as used here has a broad meaning, covering environmental, economic and socio-cultural issues.

The word 'agenda' suggests that the issues are worthy of debate and that the issues are related in some way. Social issues are often presented in lists. The more familiar ones are the Eurobarometer by the EU, the social barometer used in the Dutch television programme *Network*, McKinsey's 21 minute survey (2005), the survey for the *Toekomstagenda Milieu* (TAM)[1] (VROM, 2005)[2] and others. The purpose of these lists is usually to draw up an inventory of public opinion and to assist policy-makers in establishing Dutch policy. A frequently used method for developing such agendas is to establish the issues and their importance by surveying a representative sample of citizens. The phrasing of issues and their context are important in these surveys.

[1] Future Environmental Agenda (TAM)
[2] Netherlands Ministry of Housing, Spatial Planning and the Environment, 2005

In essence, sustainability is about the quality of life and the possibilities of maintaining that quality in the future. Moreover, the answer to the question of sustainability depends on public opinion concerning the quality of life, its distribution across the globe and scientific understanding of humans and the environmental system (MNP, 2004; Petersen et al., 2006).

Quality of life could be defined in terms of people being able to do the things they consider important and being who they want to be, now and in the future. In other words, they want to have the means to make their own interpretation of a good life and to realise their goals (Robeyns and van der Veen, 2006). The government should not determine what is the best way to live, but should create the resources for people to achieve this. These are resources that citizens are unable to realise individually, but must be collectively realised, such as rights, freedom, opportunities, clean air, safety, etc.

The core question in surveys designed to establish the social agenda is '*what do you think is the most important social issue that needs to be solved*'. Additionally, social issues are formulated in terms of positive changes: an expressed desire by citizens to solve issues with resources. The assumption is that the solution contributes to the improvement of the quality of life.

1.2 This report

This report summarises the methodology and results of the social issues surveys held in the years 2003, 2005 and 2006. The design of the surveys is described in Chapter 2, including the use of access panels, open versus closed format questioning, item selection, fieldwork and the representativeness of respondents. A number of quality control tests are described in Chapter 3.

The results of the 2006 survey are given in Chapter 4, which also contains a discussion of the sensitivity of survey-averaged rankings to (i) the scoring system chosen and (ii) the method for weighting respondents. The chapter also contains an analysis of the ranking of social issues according to specific background variables: sex, geographical region, political preference and level of education. Chapter 5 describes a method for calibrating the 2003 and 2005 surveys results to those obtained in 2006 (both the survey set-up and the formulation of issues differs between the years). The report ends with a summary and conclusions in Chapter 6.

2 Survey design

This chapter addresses the survey method chosen by the Netherlands Environmental Assessment Agency (MNP) (section 2.1), the choice for closed format questioning (section 2.2), the development of a list of 64 social issues (section 2.3) and the specific design of the surveys held in three different years (sections 2.4 through 2.7).

2.1 Access panels

2.1.1 The TNS NIPObase access panel

The MNP commissioned the Veldkamp agency to perform the data collection. To collect the data Veldkamp made use of the TNS NIPObase access panel, a database containing approximately 200,000 respondents who regularly take part in surveys conducted by Veldkamp and TNS NIPO. The access panel is described below.

Recruitment

Respondents are recruited to the panel by traditional research instruments (telephone and face-to-face interviews) and not via the internet. Additional measures have been taken to enable 'difficult' groups (with lower internet penetration), such as seniors and people with low education, to be represented in the panel.

Membership of the panel is by invitation by Veldkamp and TNS NIPO only; respondents are not able to admit themselves to the panel. This means that the number of 'professional respondents' (people who participate in a large number of panels) in the TNS NIPObase is much smaller than in other panels. A recent comparative study of online panels (NOPVO, performed by the Marketing Research Association) has shown that panel members participate in 3.3 panels on average. The panel members in the TNS NIPO and Veldkamp database participate in just 1.9 panels on average.

Panel management and composition of the panel

The way participants in TNS NIPObase are recruited to the panel does not influence the ways they are approached for surveys. Most participants indicate a desire to participate in one or more types of surveys:

- Available for telephone surveys: approx. 80,000
- Available for face-to-face surveys: approx. 45,000
- Available for self-completion surveys: approx. 145,000
- Available for written surveys: approx. 82,000

To promote a loyal bond the panel members are rewarded for each study in proportion to the length of the survey. The advantage of this is that people take more time to answer the surveys. A recently performed NOPVO study showed that participants in the TNS NIPObase took an average of 13.6 minutes to complete a survey, while respondents from other panels took 12.5 minutes. The panel members are generally loyal. Panel drop-out and panel lapse are minimal.

2.1.2 Critical comments on access panels

There has been much discussion about access panels. A recent edition of the Dutch television programme *Zembla* was dedicated to the manner in which marketing research agencies collect their data. The marketing research branch itself has also examined the way information is collected, an example being the recent NOPVO study which compared the quality of a number of online panels.

Online access panels have a number of significant advantages. They make research considerably cheaper and the fieldwork can be performed in a much shorter period of time than previously. Additionally, collecting data online offers a number of possibilities that face-to-face collecting does not. Questions can be posed that depend on previous answers and short films can be shown. Lastly, because of the self-completion nature of these surveys they are not subject to the *bias* that can arise through the presence of an interviewer. In many cases, this anonymity leads to less socially desirable answers from respondents.

Nonetheless, there is discussion about the representativeness of access panels. In many panels, recruitment takes place *online* or by individual application. It is possible that such panels lack in individuals that should be represented in online panels, which puts the representativeness of sample populations into question. Because this criticism is partly justified, we comment on this aspect below:

- Distortions in results caused by a select population (non-representative) are highly dependent on the subject being studied. If the study involves internet use, then the distortion will be larger than for a general subject that is not affected by variance in the sample, such as whether or not an individual has an internet connection. In other words, the consequences of a select population are not the same for each subject being studied.
- There are large differences in the quality of panels. Members of the TNS NIPObase panel, for example, are not recruited via the internet, nor can individuals make their own applications to join. It is too simple to place all panels in one category and to doubt the quality of a survey that uses data collected by means of a panel.
- Selectivity is a problem that affects all survey research, not only access panels. There is always the possibility that people who do not participate are different from those that do. This is valid, for instance, in face-to-face research, which is increasingly putting the representativeness of this method into question – although many would say that it delivers the best quality of samples. For one thing, certain groups of people are less frequently at home as a consequence of rising employment levels. Furthermore, people are increasingly reluctant to let surveyors into their homes without an appointment, especially in the large cities. In other words, these methods can also lead to non-representative select populations.

We anticipate that face-to-face research will be used less frequently in the future because of the diminishing representativeness of this method, as described above. The representativeness of telephone surveys is also being increasingly questioned for the same reasons (a lower response) and also because of the decreasing penetration of landline telephones. Currently, 84% of households have a landline telephone available, which is slightly higher than the proportion of households with an internet connection (77%).

Due to the continually increasing internet penetration, it is anticipated that, in the long term, computer-guided self-completion surveys implemented via access panels will become the dominant research method. The representativeness of these panels will therefore increase. Additionally, the recruitment of panel members will become more professional, and more information will become available about the nature of the deviations between those that participate in the panel and those that do not. This will better enable deviations to be corrected.

2.2 Open versus closed format questioning

There are three ways of establishing which social issues the Dutch population consider to be important:

- asking the population directly. This type of survey is sometimes denoted as 'top of mind', and uses an *open format* of questioning;
- identifying the issues from publications about social issues and presenting them to respondents, who are asked to express their preferences. This type of survey uses a *closed format* of questioning;
- a mixture of open and closed questioning.

Open format questions are those that elicit unprompted opinions. In other words, there are no predetermined set of responses, and participants are free to answer however they choose. Closed format questions usually take the form of multiple-choice questions or a list of items/issues to be sorted by importance.

There has been a long-lasting debate among survey researchers on which survey design is best for measuring people's attitudes or opinions. The debate on open versus closed survey questioning began during World War II between commercial and academic researchers working in the US federal government (Converse, 1984), and in fact continues today (see, for example, Geer, 1991).

The advantages and disadvantages of open versus closed format questioning are summarised briefly below, followed by the rationale for choosing closed format questioning in the context of social issues.

Advantages of open format questioning:

- Open questions 'force' the respondent to think and reflect.
- Open questions generate a broad list of important items.
- Respondents have to draw on their 'active knowledge', and so they are likely to name items/issues that are most important to them.
- Answers are likely to be spontaneous.

Disadvantages of open format questioning:

- The quality of the answers depends on the capacity of respondents to *verbalise* their opinions.
- Respondents can elaborate on the question at hand as much as they want.
- Answers may be ambiguous.
- There is a risk that the respondents' 'active knowledge' depends on what they have recently heard (although one could argue that any opinion is, by definition, changeable).
- It is difficult to categorise the broad list of answers received.
- The process of categorisation depends on the subjective opinion of the analyst.

Advantages of closed format questioning:

- Closed questions give respondents a frame of reference for possible answers.
- Survey results are easily compared over time.
- They do not generate elaborate or extreme answers.

Disadvantages of closed format questioning:

- The formulation or meaning of items/issues could cause bias: the interpretation of an item could be steered by its formulation or additive explanation.
- Relevant items/issues may be absent, which can cause irritation.

For more information, see Geer (1988, 1991), Schaeffer and Presser (2003), Schuman and Presser (1981), Schuman and Scott (1987), or the website

http://changingminds.org/techniques/questioning/open_closed_questions.htm

Taking into account all the aspects listed above, MNP has chosen to present an established list of social issues to a representative sample of respondents; in other words, a *closed format* survey set-up.

The main arguments for this choice are:

- All respondents have the same frame of reference.
- The opinion of citizens on social issues can be followed over time.
- A range of statistical analysis techniques are available, leading to unambiguous and consistent survey results.

To circumvent the disadvantage of not having a broad set of social issues in advance, a relatively long list of social issues was carefully selected. Attempts were made to describe the issues in such a way that the respondents could identify the issues and easily interpret them. Moreover, in the 2003 and 2005 surveys respondents were asked if they thought any important issues were missing (an open format question). Their answers were used to improve the list of social issues in 2006. More details are given in the next section.

2.3 Social issues: from gross list to selected items

This section describes how the list of social issues was developed. It also addresses their relevance, validity and the way in which they were formulated.

Selection

The first priority was to research what the current social issues are in the Netherlands. The goal was to fully cover the most important social issues. To that end, an extensive list of approximately 250 social issues was established for 2003. This was compiled from the Dutch political parties' election manifestos, social themes and aspects of these that were highlighted by the Dutch policy assessment agencies, the indicator listings from ministers, national institutions and international institutions (sources used: Van den Brink, 2002; Vinken et al., 2003; Telos, 2002; Inglehart, 2005; NSDO/VROM, 2002; Eurostat, 2003; UN/UNCDS, 2004; OECD, 2001; Long Island University, 2000; New Jersey Future, 2002; Federal Planning Agency, 2002; Richard, 2002). In a couple of sessions, a team of four people combined issues associated with each other and expanded the formulation and elucidation of these issues such that the various aspects of an issue were concisely articulated. After this session, 53 issues remained, of which 16 had a global scope and 37 a national focus. This list

was presented to colleague researchers at the Social and Cultural Planning Office and elsewhere.

Validity and completeness of the selection

The long list of 250 issues is in reasonable agreement with the 225 or so that were spontaneously mentioned in the national election study during the previous election.[3] Additionally, Corporate Social Responsibility – the Netherlands (2004) commissioned KPMG to independently compile a list of the most significant social issues in the Netherlands. In terms of the number and formulation of issues, this list closely resembles the 53 issues selected.

A control question in the 2003 survey revealed that most of the respondents could not think of any other social issues. A couple of issues that were not selected from the 53 issues were mentioned *spontaneously* and were retained as candidates for inclusion in the future. These were: religion and religious conflicts, addiction, population growth, prices, integration and globalisation. Presumably, none of these issues would have received a high priority in 2003 because they were just emerging at the time. In view of the fact that a number of aspects of the new issues to be included were for the most part already present on the existing list of issues, a cautious approach was taken to introducing new issues. The list was updated in 2006 to include the candidate issues.

Relevance of the selection for sustainability

The concept of sustainable development implies that solutions to social issues must involve a balance between:

- socio-cultural, ecological and economical values (people, planet, profit);
- short-term and long-term (now versus later);
- various spatial scopes (here versus elsewhere);
- individual and collective interests (me versus them/we).

The social issues were allocated exclusively to one of three domains (economy, ecology/environment and socio-cultural) on the basis of the context in which they were placed in the sources used. MNP clearly phrased the dimensions of each issue according to its spatial scope (here in the Netherlands or elsewhere in the world) and its timescale (now or in

[3] The Dutch Parliamentary Elections Studies distinguishes approximately 450 different issues in total.

the future). Note that the issues are not described in terms of individual and collective interests because social issues do not have personal dimensions.

Formulation of the issues

The social issues are formulated as an expression of the *desire* to solve the problem. The concrete character of the 53 social issues makes them understandable to a broader range of groups within society. Each issue in the survey is explained through the use of practical illustrations and cause-and-effect relations, where relevant.

The social issues are not presented in such a way that respondents feel invited to offer socially desirable answers. After all, solving these issues is not the responsibility of the respondents, but rather of the government.

2.4 The surveys

Surveys about the importance of social issues were performed in 2003, 2005 and 2006. The 53 issues were phrased identically in the years 2003 and 2005. In 2006, the number of issues was expanded to 64 and the survey design was improved. In this section, we discuss briefly the methodical approach that was applied during these three years.

The Netherlands Environmental Assessment Agency (NMP) commissioned the Veldkamp agency to survey a representative sample of Dutch citizens using a questionnaire consisting of carefully selected and formulated social issues categorised in three blocks (sorting tasks). Veldkamp announced the survey as being important to the government.

2.4.1 The 2003 and 2005 surveys

In the design of the surveys in 2003 and 2005, the 53 selected issues were distributed across three blocks. Each block consisted of the issues from one domain: 16 ecological (environmental) issues, 15 economic issues and 22 socio-cultural issues (see Table 1). Each issue differed in orientation: here and now, here and later, elsewhere and now, elsewhere and later. These orientations were unambiguously formulated in the questions, such as: ‘here in

the Netherlands' or 'here in my neighbourhood' and 'elsewhere in the world'; 'now' was not reformulated, but 'later' was reformulated as 'in the future'.

The questions within each domain were first presented to the respondents with a description, without mentioning the name of the domain. This occurred in a series of approximately five issues that were randomly offered to the respondents. This method of presenting random series avoids 'anchoring' the first issue that is presented (which would potentially influence the judgment of other issues). Then the respondents were asked to rank the issues for all three domains separately in their order of importance: 'What do you think is the most important issue that needs to be solved?', followed by 'What do you think is the second important issue that needs to be solved?', and so on. Finally, each respondent was asked to rank a list of 15 issues containing their five most important social issues for each domain. The latter ranking is called 'the fourth sorting task' in this report.

Table 1 *Social issues used for the 2003 and 2005 surveys. The 53 surveys were grouped into three domains: ecology (issues 1–16), economy (issues 17–31), and socio-cultural (issues 32–53). The five issues highlighted in yellow were replaced by other issues in 2006.*

Issue	Description
1	That the livability of my neighbourhood will improve
2	That there will be more nature in the Netherlands in the future
3	That the Netherlands will be more attractively laid out in the future
4	That there will be less noise nuisance in my neighbourhood
5	That the greenhouse gas effect on the world will be less in future
6	That natural plants and animals in the world will, in the future, not be threatened or made extinct through genetic change
7	That the Netherlands will take steps to reduce contamination of soil by manure
8	That (scarce) plants and animals will survive into the future thanks to reduced deforestation
9	That ocean, river and lake pollution in the world will be less in the future
10	That animals exposed to Dutch (intensive) farming will be treated better
11	That air pollution in the Netherlands will decrease
12	That we will take the environment into consideration in our consumption pattern
13	That the contaminated soils in the Netherlands will be cleaned up
14	That the quality of public transport in the Netherlands will improve
15	That there will be more clean drinking water in the world in the future

16	That the ozone hole will decrease in the future
17	That welfare in developing countries increases
18	That Dutch companies will be able to compete better and better with foreign companies
19	That government finances in the Netherlands will be put in better order in the future
20	That taxes in the Netherlands will be reduced
21	That there will be enough and affordable housing in the Netherlands in the future
22	That we will earn more in the Netherlands
23	That the traffic congestion in the Netherlands will decrease
24	That men and women in the Netherlands will have equal employment opportunities and the same chance of promotion
25	That we will have more income security in the Netherlands in the future
26	That the water, gas and electricity facilities in the Netherlands will in the future be just as reliable as now
27	That the exploitation of world oil and gas reserves will be more economical in the future
28	That global trade and industry will assume social responsibility in the production of goods
29	That the Netherlands will continue to make a difference in science and technology through investment in education
30	That action will be taken to combat hunger in the world
31	That import duties for products from third world countries will cease to exist
32	That fewer asylum seekers will be allowed in the Netherlands
33	That the trustworthiness of the Dutch government will increase
34	That my neighbours will keep less to themselves
35	That the gap between rich and poor in the Netherlands will be reduced
36	That unemployment in the Netherlands will be reduced
37	That health care in the Netherlands will improve
38	That fewer people in the world will suffer from infectious diseases
39	That food safety in the Netherlands will improve
40	That we in the Netherlands will be under less stress and be able to combine work, care and leisure
41	That the chance of a disaster in the Netherlands will be less than it is now
42	That in the future more people in the world will be literate, and a minimum of basic education will be available to them
43	That child labour in the world will be reduced in the future
44	That good old-age provisions for people in the Netherlands will continue to be offered in the future
45	That more volunteer work will be done in the Netherlands
46	That there will be less violation of human rights around the world in the future
47	That the quality of education in the Netherlands will be higher in the future
48	That there will be less poverty in the world in the future
49	That more action will be taken to fight crime in the Netherlands
50	That laws and regulations will be better implemented in the Netherlands
51	That the threat of terrorism and war in the world will decrease
52	That respect for norms and values in the Netherlands will be reinstated
53	That there will be less discrimination according to race, gender, sexual inclination and religion

A fixed order of issues was used in 2003 because randomisation of the issues was not achievable at that time due to technical and practical reasons. The issues were randomised in 2005. The results for 2003 were verified for potential sequence effects: a small survey was conducted in December 2003 for two groups of 400 respondents; one group received the issues in an established order, the other group in a randomised order. Both approaches did not lead to significantly different outcomes.

2.4.2 The 2006 surveys

Based on the experiences with the 2003 and 2005 surveys, the 53 issues were expanded to 64. The additional questions were taken from a review of (1) information received from respondents in the surveys from 2003 and 2005 (see section 2.3), (2) recent parliamentary election studies by political parties at the time of the 2006 elections, and (3) information from NIPO and Veldkamp. The 64 issues are listed in Table 2. The issues highlighted in yellow (16 in total) are new with respect to the 2003 and 2005 surveys. The non-highlighted issues, 48 in total, are identical across all surveys.

Besides the expansion from 53 to 64 issues, a different survey design was chosen in 2006, the main alteration being that the division into ecological, economic and socio-cultural domains was abandoned. This led to two significant improvements. First, issues that could be considered to fall under more than one domain were no longer restricted to a single domain. An issue such as ‘less car traffic’, for example, contributes to improvement of the environment (ecological component), reduced economic loss (economic component) and possibly also to an improvement in the welfare of the drivers (socio-cultural component).

Second, the construction of the four sorting tasks was changed. In the new design, each respondent received the 64 issues presented in three sorting tasks (21 issues each in the first and second tasks, 22 issues in the third task), whereby the issues were entirely arbitrarily drawn from the set of 64. In mathematical terms, permutations were made of the numbers 1 through 64 in which each number was coupled to one of the 64 issues. Each respondent received a unique permutation that was *entirely independent* of the permutations received by all the other respondents. Domain categorisation was therefore no longer a component of the sorting tasks, as was the case in 2003 and 2005.

Subsequently, for each individual respondent, the top five from each of the three sorting tasks were combined into a fourth sorting task for the same respondent (five issues from each of the first three sorting tasks). This change to the method meant that respondents, if they wished, could choose questions for the fourth sorting task that have the characteristics of any of the three domains (ecological, economical or socio-cultural). In the design used in 2003 and 2005, five issues from each of the domains were selected, which could lead to a distortion of the scores. See section 5 for the calibration of the surveys through the years.

Table 2 *Description of 64 social issues used in the 2006 survey. The issues highlighted in yellow are new issues introduced since the 53 issues used in 2003 and 2005 (cf. Table 1).*

Issue	Description
1	That the livability of my neighbourhood will improve
2	That there will be more nature in the Netherlands in the future
3	That the Netherlands will be more attractively laid out in the future
4	That there will be less noise nuisance in my neighbourhood
5	That the greenhouse gas effect on the world will be less in future
6	That natural plants and animals in the world will, in the future, not be threatened or made extinct through genetic change
7	That the Netherlands will take steps to reduce contamination of soil by manure
8	That (scarce) plants and animals will survive into the future thanks to reduced deforestation
9	That ocean, river and lake pollution in the world will be less in the future
10	That animals exposed to Dutch (intensive) farming will be treated better
11	That air pollution in the Netherlands will decrease
12	That oil and gas will be replaced by other energy sources
13	That the contaminated soils in the Netherlands will be cleaned up
14	That the quality of public transport in the Netherlands will improve
15	That there will be more clean drinking water in the world in the future
16	That the ozone hole will decrease in the future
17	That welfare in developing countries increases
18	That Dutch companies will be able to compete better and better with foreign companies
19	That government finances in the Netherlands will be put in better order in the future
20	That taxes in the Netherlands will be reduced
21	That there will be enough and affordable housing in the Netherlands in the future
22	That the purchasing power in the Netherlands increases
23	That the traffic congestion in the Netherlands will decrease
24	That men and women in the Netherlands will have equal employment opportunities and the same chance of promotion

25	That we will have more income security in the Netherlands in the future
26	That the water, gas and electricity facilities in the Netherlands will in the future be just as reliable as now
27	That the exploitation of world oil and gas reserves will be more economical in the future
28	That the economy in the Netherlands grows
29	That the Netherlands will continue to make a difference in science and technology through investment in education
30	That action will be taken to combat hunger in the world
31	That the Netherlands will become less dependent for its energy supply from other countries
32	That fewer asylum seekers will be allowed in the Netherlands
33	That the trustworthiness of the Dutch government will increase
34	That my neighbours will keep less to themselves
35	That the gap between rich and poor in the Netherlands will be reduced
36	That unemployment in the Netherlands will be reduced
37	That health care in the Netherlands will improve
38	That fewer people in the world will suffer from infectious diseases
39	That food safety in the Netherlands will improve
40	That we in the Netherlands will be under less stress and be able to combine work, care and leisure
41	That the chance of a disaster in the Netherlands will be less than it is now
42	That in the future more people in the world will be literate, and a minimum of basic education will be available to them
43	That child labour in the world will be reduced in the future
44	That good old-age provisions for people in the Netherlands will continue to be offered in the future
45	That more volunteer work will be done in the Netherlands
46	That there will be less violation of human rights around the world in the future
47	That the quality of education in the Netherlands will be higher in the future
48	That in the future there will be more democracies and fewer dictatorships in the world
49	That more action will be taken to fight crime in the Netherlands
50	That laws and regulations will be better implemented in the Netherlands
51	That the threat of terrorism and war in the world will decrease
52	That respect for norms and values in the Netherlands will be reinstated
53	That there will be less discrimination according to race, gender, sexual inclination and religion
54	That the integration of minorities in the Netherlands improves
55	That the Dutch government becomes smaller and more decisive
56	That it becomes more easy to combine work and children
57	That problem children are better helped, and earlier in their lives
58	That the quality of the Dutch army will stay at a good standard
59	That there will continue to be rich and varied offerings on art and cultural activities
60	That sport is more stimulated in the Netherlands
61	That traffic safety increases in the Netherlands
62	That there will be less tension between religions in the world in the future
63	That the form of government is improved
64	That job participation in the Netherlands is improved

Finally, in 2006 a simultaneous *control survey* was performed with 619 respondents using the design from the 2003 and 2005 surveys. This was done to compare the results of the 2003 / 2005 surveys with those from the 2006 survey (see section 5).

2.5 Fieldwork

The 2003 and 2005 surveys

The fieldwork was performed using the TNS NIPObase access panel. The total sample consisted of 2967 people in 2003 and 2549 people in 2005. The aggregated sample was representative of sex, age (> 18 years old), education, size of household, region and municipality.

The fieldwork was performed in the period 11–24 June 2003 and during May 2005. Ultimately, 2474 (2003) and 2549 (2005) completed surveys were received. The response rate of approximately 80% is considered to be high, certainly considering the effort demanded of the respondents. After removing respondents with very short fill-in times, the final analysis was performed with N = 2452 people (in 2003) and N = 2470 people (in 2005).

The 2006 surveys

The new survey in 2006 was conducted from September 26 to October 5, with a raw number of 2613 respondents and a response rate of 80%. The control survey consisted of 619 respondents and was held in the period 12–20 October.

2.6 Representativeness of respondents

Despite the care that was taken with the fieldwork, it is possible that a sample bias deviation for the Netherlands as a whole occurred. In such cases, it is customary to correct such deviations by re-weighting. Re-weighting of the 2003, 2005 and 2006 responses was made for the variables sex, age, education, size of household, region, municipality and value structure in the Netherlands (VIN) (see Hessing-Couvret and Reuling, 2002) using the norm data from the 'MiniCensus'. The results for the years 2003 and 2005 for this weighting are shown in Table 3.

Table 3 The sample composition in 2003 and 2005, before and after weighting

.

	Sample 2003			Sample 2005		
	Unweighted	Weighted	Norm data	Unweighted	Weighted	Norm data
	%	%	%	%	%	%
Sex						
• Male	49	49	48	50	idem	50
• Female	51	51	52	50		50
Age						
• younger than 24	11	11	10	10		10
• 25-34 years old	19	20	20	19		19
• 35-44 years old	22	21	21	22		21
• 45-54 years old	19	19	19	18		18
• 55-64 years old	12	14	14	16		15
• 65 and older	16	17	17	16		17
*Educational level**						
• lower	29	32	32	25		24
• middle	52	39	38	44		45
• higher	19	29	30	31		31
Household size						
• 1 person	18	18	18	19		19
• 2 persons	38	39	39	37		36
• 3 persons	15	17	17	17		17
• 4 persons	20	18	19	18		19
• 5 or more persons	9	8	8	9		9
Region						
• large cities	12	12	12	17		15
• West	29	33	33	26		28
• North	10	10	10	11		11
• East	21	21	21	21		21
• South	28	24	24	25		25
VIN segment						
• Caring faithful	15	16	16	16		15
• Conservatives	18	15	15	16		16
• Hedonists	11	12	12	12		12
• Balanced	22	18	18	21		21
• Materialists	10	10	10	11		11
• Professionals	7	10	10	8		8
• Broad minded	6	6	6	7		7
• Socially minded	12	13	13	11		10

* For 2005, a different distribution for education, based on the Golden standard, was applied. This accounts for the differences between the norms for 2005 and 2003.

The deviations of the sample data from the 2005 survey measured against the norms were so slight that a re-weighting of the results was omitted. The sample was considered to be representative of the above-mentioned characteristics. The descriptions of the results from the surveys held in the other years are based on the re-weighted data. However, the statistical tests were performed on the unweighted data.

For the 2006 survey, weighting factors were calculated three times, based on voting behaviour in 2003, political preference in 2006 at the time of the survey, and voting behaviour at the end of 2006 (November 22).

2.7 Explanatory variables

A number of explanatory variables were gathered for all the surveys. The most important of these variables are age, sex, income, educational level, family size, political preference, region and VIN segment. We will treat the influence of these explanatory variables in section 4.4 (except VIN).

3 Quality control

In this chapter we describe a number of tests performed for the 2006 survey. Similar tests have been performed for the 2003 and 2005 surveys (see Aalbers et al., 2006, or Visser et al., 2005) and are not described here.

3.1 Lazy-respondent test

The lazy-respondent test is a simple test for checking whether respondents altered the order of importance of the issues between the first, second and third sorting tasks. The order of the issues at the time of their distribution to the respondents was recorded for background information. This order has been analysed with respect to the order of the issues *after* 'shuffling', for each individual respondent.

The 'laziness' is analysed as follows. We denote the order of issues in the first and second sorting tasks *before* shuffling with the figures 1 through 21, and in the third sorting task with the figures 1 through 22. These figures are put in a vector c_i = (1, 2, ... , 21, 1, 2, ... , 21, 1, 2, ... , 22), with i being the number of the respondent. Then, a vector d_i is formed with orderings *after* shuffling in all three sorting tasks.

Finally, the correlation coefficient R_i between the vectors c_i and d_i is calculated. If a respondent did not change anything, the result will be R_i = 1.0. If a respondent performed serious ordering, R_i will lie around 0.0. The histogram of all R_i values is given in Figure 1. This histogram shows that the number of 'lazy respondents' is minimal. Therefore, no respondents were removed from the survey.

3.2 Survey completion time

The time taken between starting and ending the survey sorts was recorded for each respondent. These survey completion times lie in the range of 1 to 120 minutes, with a median value of 14 minutes. It was decided to remove all respondents with a completion time shorter than 5 minutes, which amounted to 28 respondents in total.

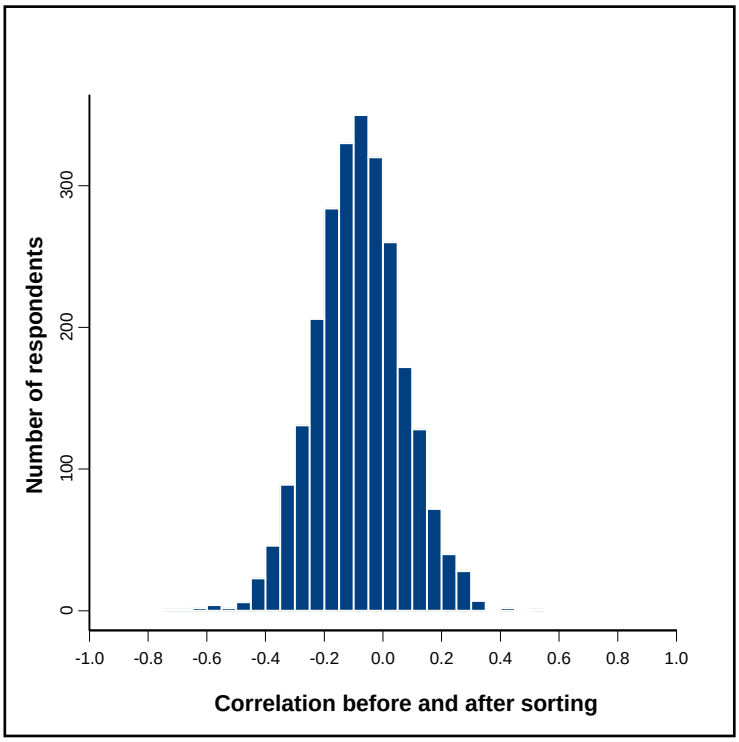

Figure 1 *Histogram for 2585 correlations. A correlation was computed for each respondent to see if they altered the order of the 64 issues.*

3.3 Stability test

Stability tests can be used to check whether the sample size of the survey is large enough to draw solid conclusions from the ordering in the survey-averaged rankings for all 64 issues. To test the stability, we divided the survey randomly into three non-overlapping subsets of 850 respondents. The subset-averaged rankings were then calculated from the fourth sorting task. In the scoring system, the highest ranked issue of a particular respondent is awarded 15 points and the least import issue receives 1 point. All 850 points were then averaged per issue.

The 64 rankings for each subset and for all 2585 respondents are summarised in the scatterplot matrix in Figure 2. The figure shows that the rankings are very similar: the correlation coefficients are all between 0.99 and 1.00. It is therefore concluded that the survey is very stable, in the sense defined above.

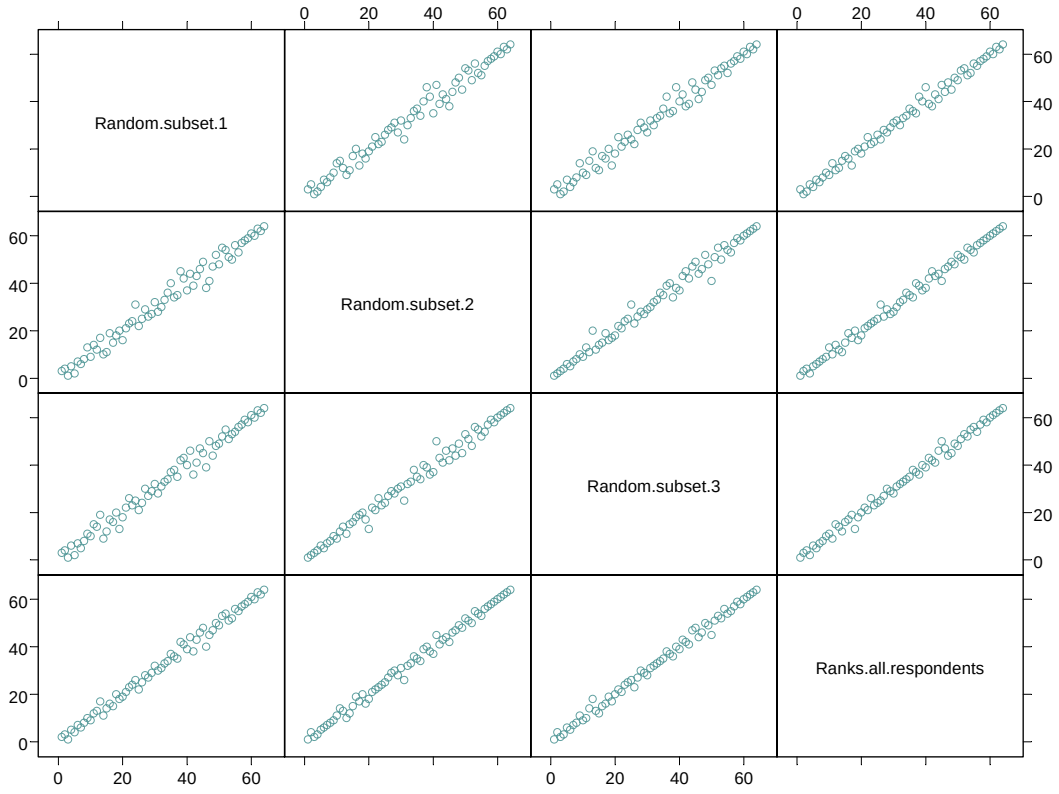

Figure 2 *Scatterplot matrix for 64 survey-averaged scores based on three random subsets (each with 850 respondents, and in the final row and final column the ranks of all respondents with N = 2585). The correlation matrix is given below.*

*** Correlations for data in: Rand3 ***

	Random subset 1	Random subset 2	Random subset 3	Ranks all respondents
Random subset 1	1.00	0.99	0.99	1.00
Random subset 2	0.99	1.00	0.99	1.00
Random subset 3	0.99	0.99	1.00	1.00
Ranks all respondents	1.00	1.00	1.00	1.00

3.4 Fatigue test

As will be explained in section 4.5, survey-averaged ranks could be calculated on the basis of each sorting task. The fact that each respondent orders a subset of 21 issues, randomly chosen from the total set of 64 issues in the first sorting task, ensures this significant research result. This result allows us to check whether respondents were eager enough to do their best in all four tasks. If respondents becomes 'tired', 'lazy', or even willing to cheat, the orderings after finishing the first sorting task – the survey-averaged results based on *single sorting tasks* – should deviate. Hereafter, this aspect will be checked.

Figure 3 shows the scatterplot matrix for the survey-averaged rankings, based on (i) the first sorting task alone, (ii) the second sorting task alone, (iii) the third sorting task alone, and (iv) the fourth sorting task. The similarity is high for the survey-averaged rankings based on the first three sorting tasks: the correlations are R = 0.96/0.97. Correlations for the fourth sorting task are somewhat lower: R = 0.93, 0.93 and 0.95.

The latter result may be explained by the fundamental difference between the first three tasks and the fourth task. In the fourth task the respondents order their personal top 15 issues selected from the preceding tasks, whereas in the first three tasks they rank 21/22 issues which were randomly selected *by the survey software*.

The conclusion is that there is no sign of 'getting tired', 'getting lazy' or 'cheating' throughout the cycle of ranking task 1 → ranking task 2 → ranking task 3 → ranking task 4.

3.5 Conclusion

Our overall conclusion from the tests described here is that the 2006 survey is very well suited to detailed studies on the ranking of social issues. The only change we had to make was the omission of respondents who finished the survey in less than 5 minutes.

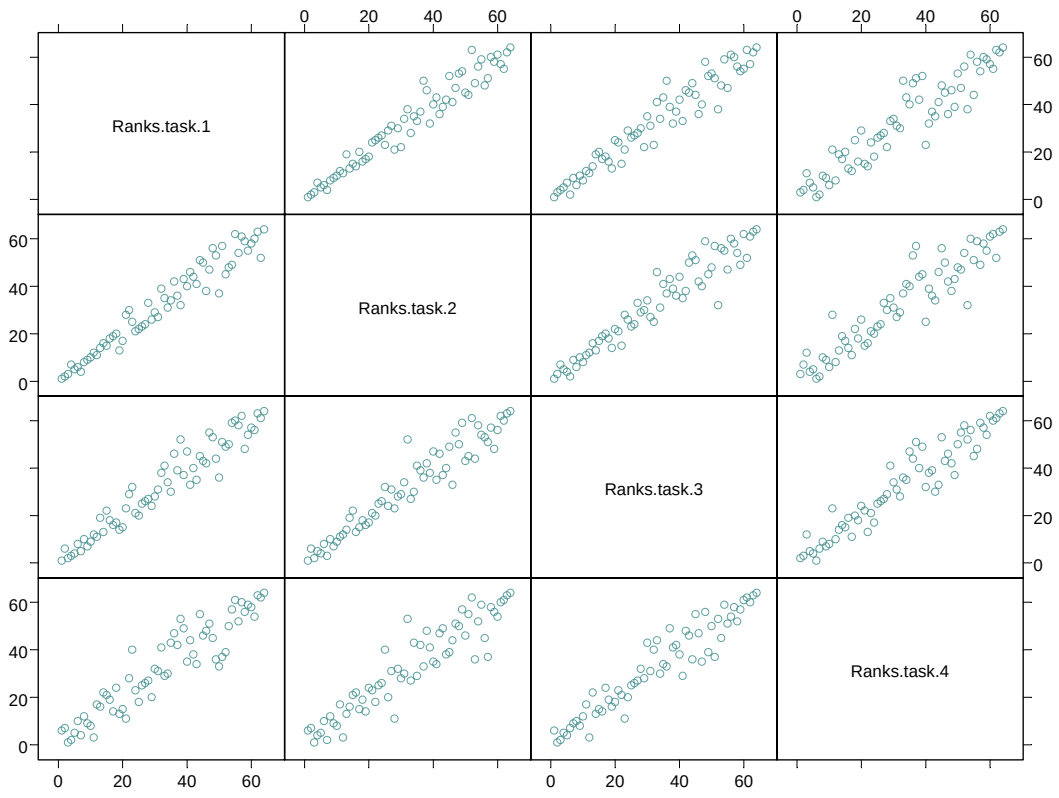

Figure 3 *Scatterplot matrix for 64 survey-averaged scores based on sorting tasks 1, 2, 3 and 4 (each task with N = 2585). The correlation matrix is given below.*

```
*** Correlations for data in:  VeldavNeworder ***

            Ranks task1 Ranks task2 Ranks task3 Ranks task4
Ranks task1        1.00        0.97        0.96        0.93
Ranks task2        0.97        1.00        0.96        0.93
Ranks task3        0.96        0.96        1.00        0.95
Ranks task4        0.93        0.93        0.95        1.00
```

4 Results of the 2006 survey

In this section we present the survey-averaged rankings of the 64 issues from the 2006 survey. The descriptions of the issues are summarised in Table 2. The indexes 1 through 64 are also given in Table 2 and will be used in the graphs shown in this and later sections. A detailed analysis of the 2003 and 2005 surveys has been given by Visser et al. (2005), and is not repeated here.

For all analyses given we have based computed *scores* and *rankings* on the fourth sorting task, unless stated otherwise. The survey-averaged scores S_i, i = 1, 2, 3,...64 stand for the average value of all points given to issue i by all 2585 respondents. From these scores (S_i) rankings (R_i) follow by simply ordering the scores. In other words, the issue with the highest score is ranked 64 and the issue with the lowest score is ranked 1.

Section 4.1 contains the survey-averaged results. The sensitivity of the scores and ranking to the chosen scoring system is presented in section 4.2, and the influence of the weighting factor applied to respondents is presented in section 4.3. In section 4.4 we show how particular *groups* have ranked the social issues.

4.1 Results

The scores from the 2006 survey are given in Figure 4. The highest and lowest scoring issues are denoted by catchwords in the graph. It should be noted that the issues are ordered in such a way that the first 16 issues have a dominant environmental character, issues 17 through 31 have an economic character and issues 32 through 64 a more social-cultural character, although not all issues are unique to any one of these three domains.

In Table 4 the 64 rankings are given which follow from the scores shown in Figure 4. The highest ranks are given to the issues ‘that the threat of terrorism and war in the world will decrease’, ‘that good old-age provisions in the Netherlands will continue to be offered in the future’ and ‘that action will be taken to combat hunger in the world’. At the low end we see the issues ‘that the Netherlands will take steps to reduce contamination of soil by manure’, ‘that the Netherlands will be more attractively laid out in the future’, and ‘that there will continue to be rich and varied offerings on art and cultural activities’.

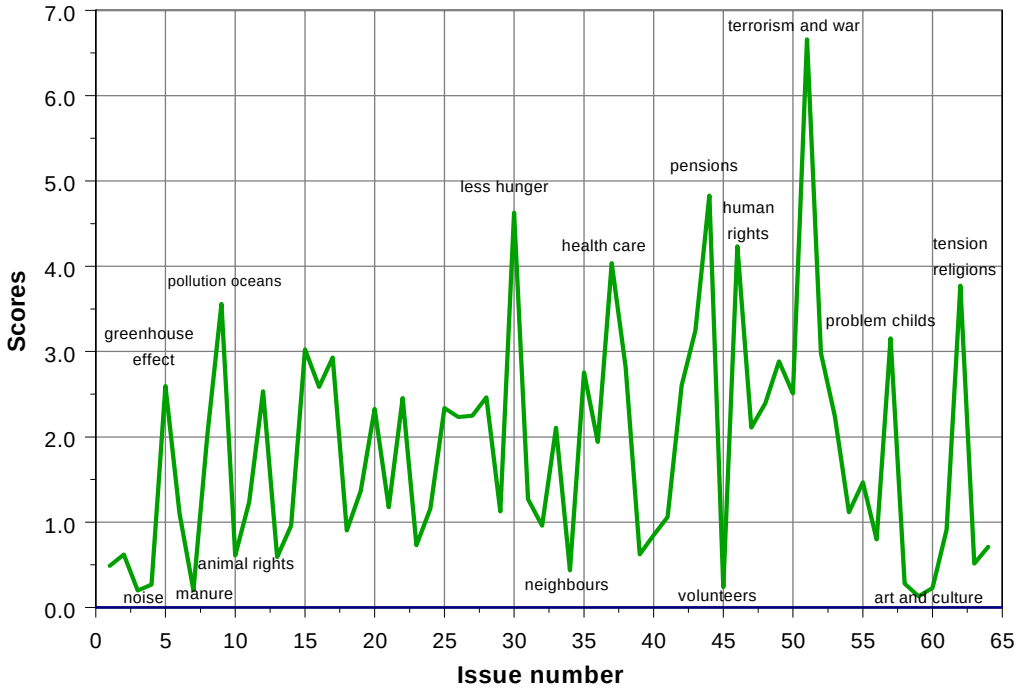

Figure 4 *Survey-averaged scores for 64 social issues. The issue numbers on the x-axis refer to the ordering and full descriptions given in Table 2. The highest and lowest scoring issues are denoted by catchwords.*

Table 4 *Ranking of all 64 social issues. The top issue has order 1 (and ranking 64, first row in the table), the least important issue has order 64 (and ranking 1, last row in the table). The second column contains the issue numbers given in Table 2.*

Order	Issue number	Description
1	51	That the threat of terrorism and war in the world will decrease
2	44	That good old-age provisions for people in the Netherlands will continue to be offered in the future
3	30	That action will be taken to combat hunger in the world
4	46	That there will be less violation of human rights around the world in the future
5	37	That health care in the Netherlands will improve
6	62	That there will be less tension between religions in the world in the future
7	9	That ocean, river and lake pollution in the world will be less in the future
8	43	That child labour in the world will be reduced in the future
9	57	That problem children are better helped, and earlier in their lives
10	15	That there will be more clean drinking water in the world in the future
11	52	That respect for norms and values in the Netherlands will be reinstated
12	17	That welfare in developing countries increases
13	49	That more action will be taken to fight crime in the Netherlands
14	38	That fewer people in the world will suffer from infectious diseases
15	35	That the gap between rich and poor in the Netherlands will be reduced
16	42	That in the future more people in the world will be literate, and a minimum of basic education will be available to them.
17	5	That the greenhouse gas effect on the world will be less in future
18	16	That the ozone hole will decrease in the future
19	12	That oil and gas will be replaced by other energy sources
20	50	That laws and regulations will be better implemented in the Netherlands
21	28	That the economy in the Netherlands grows
22	22	That the purchasing power in the Netherlands increases
23	48	That in the future there will be more democracies and fewer dictatorships in the world
24	25	That we will have more income security in the Netherlands in the future
25	20	That taxes in the Netherlands will be reduced
26	27	That the exploitation of world oil and gas reserves will be more economical in the future
27	53	That there will be less discrimination according to race, gender, sexual inclination and religion
28	26	That the water, gas and electricity facilities in the Netherlands will in the future be just as reliable as now
29	47	That the quality of education in the Netherlands will be higher in the future
30	33	That the trustworthiness of the Dutch government will increase
31	8	That (scarce) plants and animals will survive into the future thanks to reduced deforestation
32	36	That unemployment in the Netherlands will be reduced
33	55	That the Dutch government becomes smaller and more decisive

34	19	That government finances in the Netherlands will be put in better order in the future
35	31	That the Netherlands will become less dependent for its energy supply from other countries
36	11	That air pollution in the Netherlands will decrease
37	21	That there will be enough and affordable housing in the Netherlands in the future
38	24	That men and women in the Netherlands will have equal employment opportunities and the same chance of promotion
39	29	That the Netherlands will continue to make a difference in science and technology through investment in education
40	54	That the integration of minorities in the Netherlands improves
41	6	That natural plants and animals in the world will, in the future, not be threatened or made extinct through genetic change
42	41	That the chance of a disaster in the Netherlands will be less than it is now
43	32	That fewer asylum seekers will be allowed in the Netherlands
44	14	That the quality of public transport in the Netherlands will improve
45	61	That traffic safety increases in the Netherlands
46	18	That Dutch companies will be able to compete better and better with foreign companies
47	40	That we in the Netherlands will be under less stress and be able to combine work, care and leisure
48	56	That it becomes more easy to combine work and children
49	23	That the traffic congestion in the Netherlands will decrease
50	64	That job participation in the Netherlands is improved
51	39	That food safety in the Netherlands will improve
52	2	That there will be more nature in the Netherlands in the future
53	10	That animals exposed to Dutch (intensive) farming will be treated better
54	13	That the contaminated soils in the Netherlands will be cleaned up
55	63	That the form of government is improved
56	1	That the livability of my neighbourhood will improve
57	34	That my neighbours will keep less to themselves
58	58	That the quality of the Dutch army will stay at a good standard
59	4	That there will be less noise nuisance in my neighbourhood
60	45	That more volunteer work will be done in the Netherlands
61	60	That sport is more stimulated in the Netherlands
62	7	That the Netherlands will take steps to reduce contamination of soil by manure
63	3	That the Netherlands will be more attractively laid out in the future
64	59	That there will continue to be rich and varied offerings on art and cultural activities

4.2 Sensitivity to the chosen scoring system

As described in Section 2.5, respondents were 'forced' to give their priorities in *sorting* tasks. However, this 'pressure' does not ensure proper performance of that task. It could well be that in reality they are able to select only *one* issue as being 'most important', the remaining issues being equally important or unimportant. Expressed in terms of scores (rates), if a respondent is able to rank all 21 issues, for example, the most import issue would be given a score of 21, the second most important issue a score of 20, down to the least important issue, which obtains a score of 1. Given the possibility of having only one 'most important' issue, the selected most important issue would receive a score of 1 and all 20 remaining issues a score of 0.

The method of giving scores to issues will be denoted here as the **'**scoring system**'** (rating system). In the example above two scoring systems have been defined, but there are more scoring systems imaginable, at least from a psychological point of view. For example, it could be that respondents are not able to *rank* issues, but they are able to *select the five issues which are most important to them* (without ranking these). As far as we know, the definition and choice of scoring systems has not been addressed in the literature beyond their similarity with voting systems, which is mentioned below.

Why are scoring systems important? Clearly, the ability of respondents, or a subgroup of respondents, to rank issues will influence the survey-averaged rankings of all 64 issues, which is the main goal of the surveys at hand. But if this is so, how can we know which scoring system is the 'best' – in terms of being best suited to the psychological abilities of respondents to sort the given issues? To make the situation even more complex, it could be that one scoring system is best for 50% of the respondents, one scoring system for 30% of the respondents and a third scoring system for the remaining 20%.

Interestingly, there is a connection between finding optimal scoring systems, as defined here, and the field of *voting theory* and *voting systems* (see, for example, Gill and Gainous, 2002). In fact, voting systems and scoring systems are identical. For example, if the ranks of scores in a sorting task of 15 issues are used, the Borda count is applied. If it is assumed that respondents can only select one single issue from a large set of issues, 'majority rules' is applied. If it is assumed that respondents are able to select a subset of M issues from larger set of N issues, without ranking these M issues, a special form of *range voting* is applied.

In general, voting theory deals with questions like 'How can we design a system for elections where the possibilities of cheating by a subgroup of voters are minimal?' In contrast, our

respondents have no knowledge of different ways of scoring and will, in general, not try to 'cheat' when ranking issues. And if they do, most of these respondents will be left out in the final selection of respondents (see Chapter 3 on quality checks). Therefore, findings from voting theory do not really help us here.

The influence of specific scoring systems has been studied in detail by Visser et al. (2005) for the 2003 and 2005 surveys. For the 2006 survey we calculated the survey-averaged ranks directly from the survey-averaged scores for both scoring systems described above, based on the fourth sorting task. The ranking results are given in the scatterplot in Figure 5. The scatterplot shows the 'M1 scoring system' on the x-axis (i.e. the most import issue in the respondent's fourth task receives 15 points and the least important issue receives 1 point; all the issues not included in the fourth task receive 0 points), and the 'M5 scoring system' on the y-axis (i.e. the most import 5 issues in the respondent's fourth task each receive 1 point; all other issues receive 0 points).

The correspondence between both scoring systems is extremely high: $R = 0.99$. Therefore, it is concluded that scores and ranks are highly independent of the specific scoring system chosen. Throughout this report the M1 scoring system is applied.

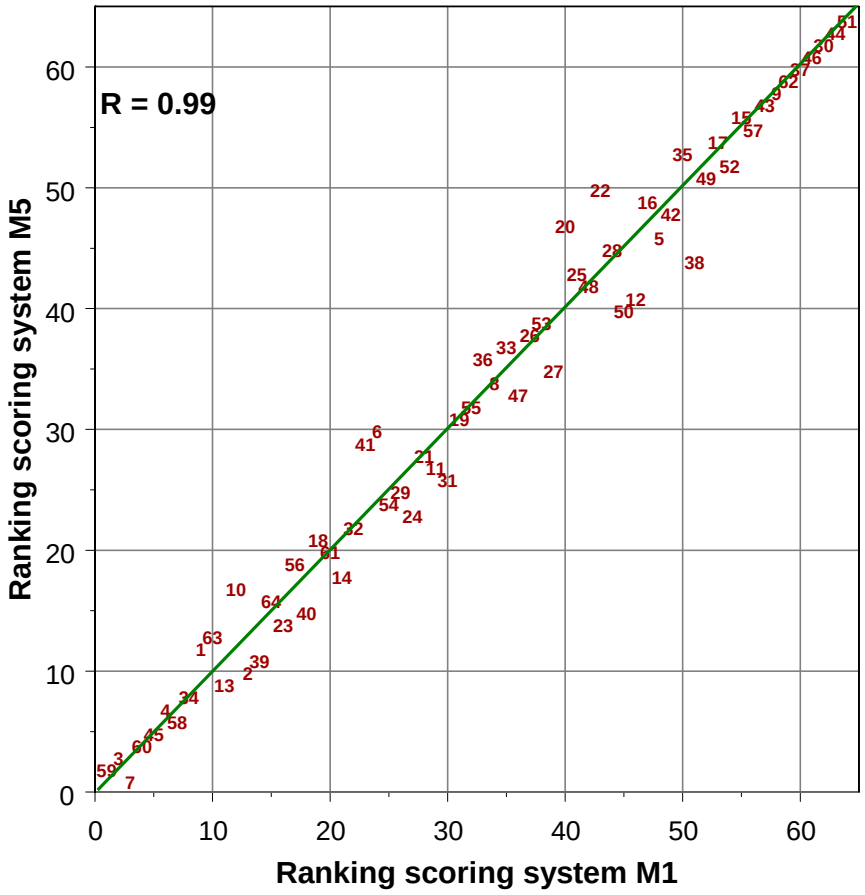

Figure 5 *Scatterplot for rankings based on the M1 scoring system (x-axis) and the M5 scoring system (y-axis). The issue ranks range from 1 (least important issue) to 64 (most important issue), and are based on the 2006 survey. The symbol numbering corresponds to the social issue numbering and descriptions given in Table 2. The green line gives the one-to-one relationship in which the rankings for the scoring systems are identical (R = 1.00). The correlation between male priorities and female priorities is R = 0.99.*

4.3 Sensitivity to weighting factors

We have tested the sensitivity of rankings, shown in Table 4, to the specific weighting of respondents (see section 2.6). The survey-averaged rankings have been computed, based on (1) weighting to take account of the political voting behaviour in the year 2003, (2) weighting for the political preference in 2006, at the time of the survey, and (3) no respondent-weighting at all.

The results are presented in the scatterplot matrix given in Figure 6. The correlations between these three series are very high: between R = 0.99 and 1.00. Therefore, it is concluded that the results presented in Figure 4 and Table 4 are solid against variations in specific weighting factors. To calculate the results for 2006 we chose a weighting to take account of the voting behaviour in the year 2003.

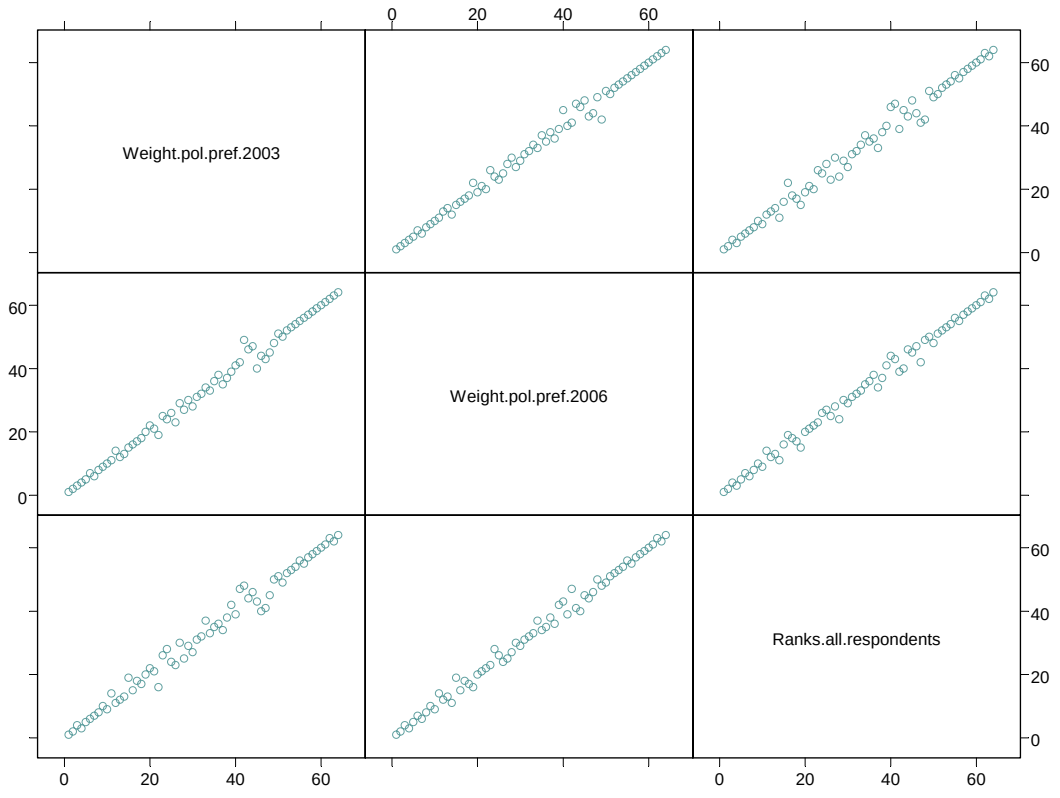

Figure 6 *Scatterplot matrix for 64 survey-averaged ranks based on (1) weighting factors partly based on voting behaviour in 2003, (2) political preference in 2006, and (3) no weighting factor at all (i.e. all respondents have the same weight, 1.0). Correlations lie between 0.99 and 1.0.*

4.4 Priorities and explanatory variables

Male/female

Do male respondents have other preferences with respect to the 64 social issues than female respondents? To answer this question we computed the scores and rankings for male respondents (N = 1228) and female respondents (N = 1357). The result for rankings is given in the scatterplot in Figure 7. The correlation between male and female rankings is high: R = 0.96. The largest shift in ranking is for issue 12, 'that oil and gas will be replaced by other energy sources', which is more important to men.

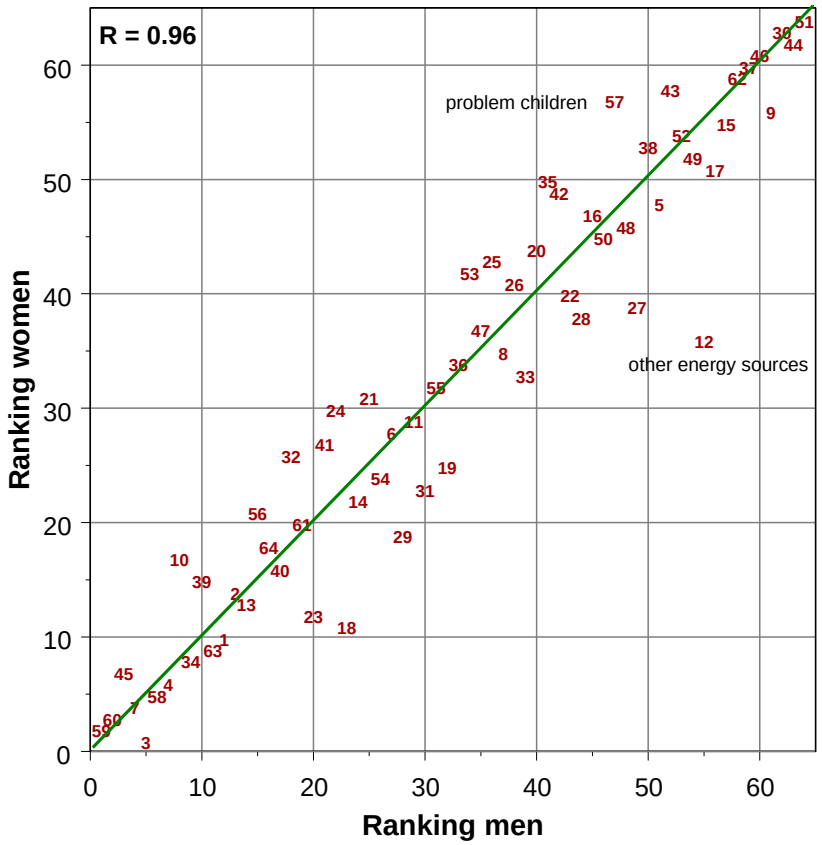

Figure 7 *Scatterplot for males (x-axis) and females (y-axis). The issue ranks range from 1 (least important issue) to 64 (most important issue) and are based on the 2006 survey. The symbol numbering corresponds to the social issue numbering and descriptions given in Table 2. The green line gives the one-to-one relationship, which represents identical rankings for males and females (R = 1.00). The correlation between male priorities and female priorities is R = 0.96.*

Geographical region

Does the ordering of social issues depend on the region where respondents live? To answer this question, we have divided the Netherlands into five regions: North (N = 271), East (N = 537), South (N = 575), West (minus the 3 major cities, N = 778) and West3 (cities Rotterdam, The Hague and Amsterdam, N = 421). The scores and rankings were calculated for each region. The scatterplot matrix, based on the 5 regions, is given in Figure 8.

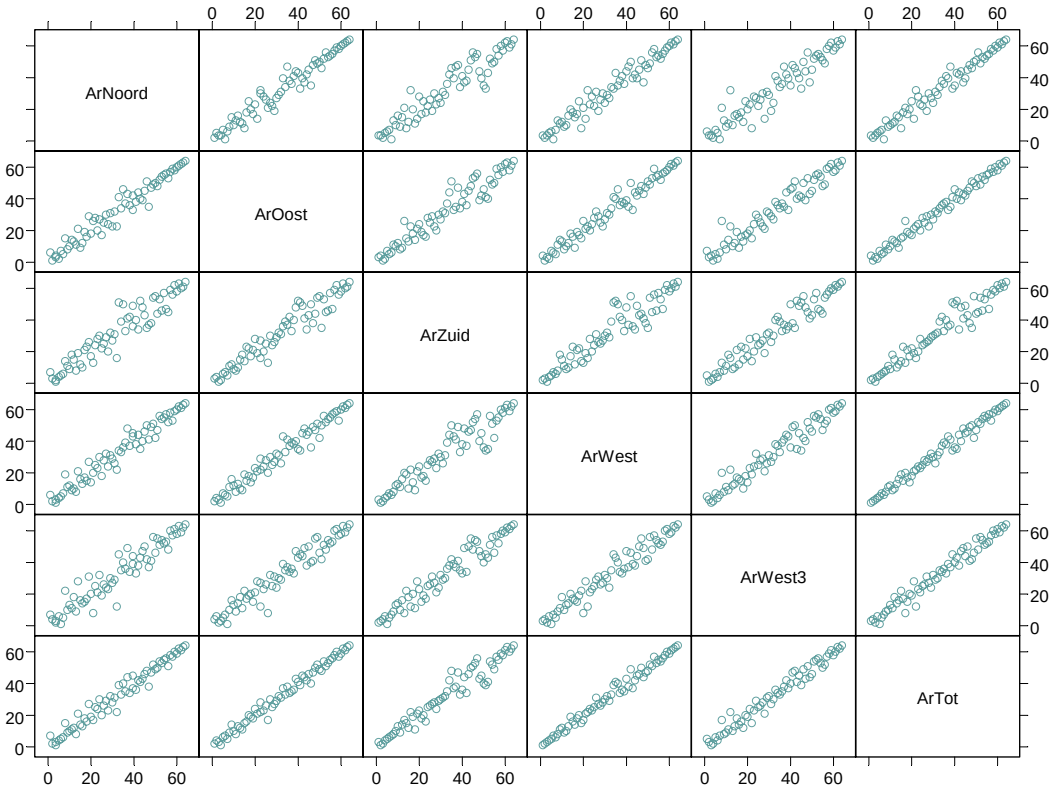

Figure 8 *Scatterplot matrix for 64 ranks based on five geographical regions, and in the final row and final column the ranks of all respondents (N = 2585). The regions are (along the diagonal): North, East, South, West and West3. Region West3 stands for respondents living in the three large cities in the western part of the Netherlands. Region West is the western part of the Netherlands excluding these three cities. The correlation matrix is given below.*

*** Correlations for data in: Regio ***

	Ranks North	Ranks East	Ranks South	Ranks West	Ranks West3	Ranks Total
Ranks North	1.00	0.97	0.94	0.97	0.95	0.98
Ranks East	0.97	1.00	0.96	0.98	0.97	0.99
Ranks South	0.94	0.96	1.00	0.94	0.97	0.97
Ranks West	0.97	0.98	0.94	1.00	0.97	0.99
Ranks West3	0.95	0.97	0.97	0.97	1.00	0.98
Ranks Total	0.98	0.99	0.97	0.99	0.98	1.00

The matrix and the corresponding correlation matrix show that the rankings across different regions are very similar: correlations lie in the range of 0.95 to 0.99. From this result it is concluded that the scores and rankings presented in Figure 4 and Table 4 have no specific geographical dependence.

Political preference

Are respondents' priorities influenced by their political preferences? To answer this question, respondents were selected with a preference for the largest political parties in the Netherlands: the CDA (N = 241), the PvdA (N = 353), the VVD (N = 354), the SP (N = 349) and the ChristenUnie (N = 244). The number of respondents with no particular preference was 383. These preferences are based on polls for the elections in November 2006.

We note that the number of respondents for the smaller parties (VVD, SP and ChristenUnie) is higher than would be expected for the population of the Netherlands as a whole. This was to ensure enough respondents to perform the analysis. The survey-averaged scores and ranks in Table 4 were corrected by a compensating weighing factor (sections 2.6 and 4.3).

The scatterplot matrix for these five groups, along with the rankings of all respondents, is given in Figure 9. The corresponding correlation matrix in the caption shows that the highest correlations are found between PvdA and SP (R = 0.97). Both parties have a social/socialist philosophy. The lowest correlation is found for the SP and the ChristenUnie: R = 0.85.

The differences are illustrated in more detail in the scatterplot in Figure 10 (SP against VVD), and Figure 11 (CDA against ChristenUnie). The most significant differences in rankings are identified in the graphs by catchwords.

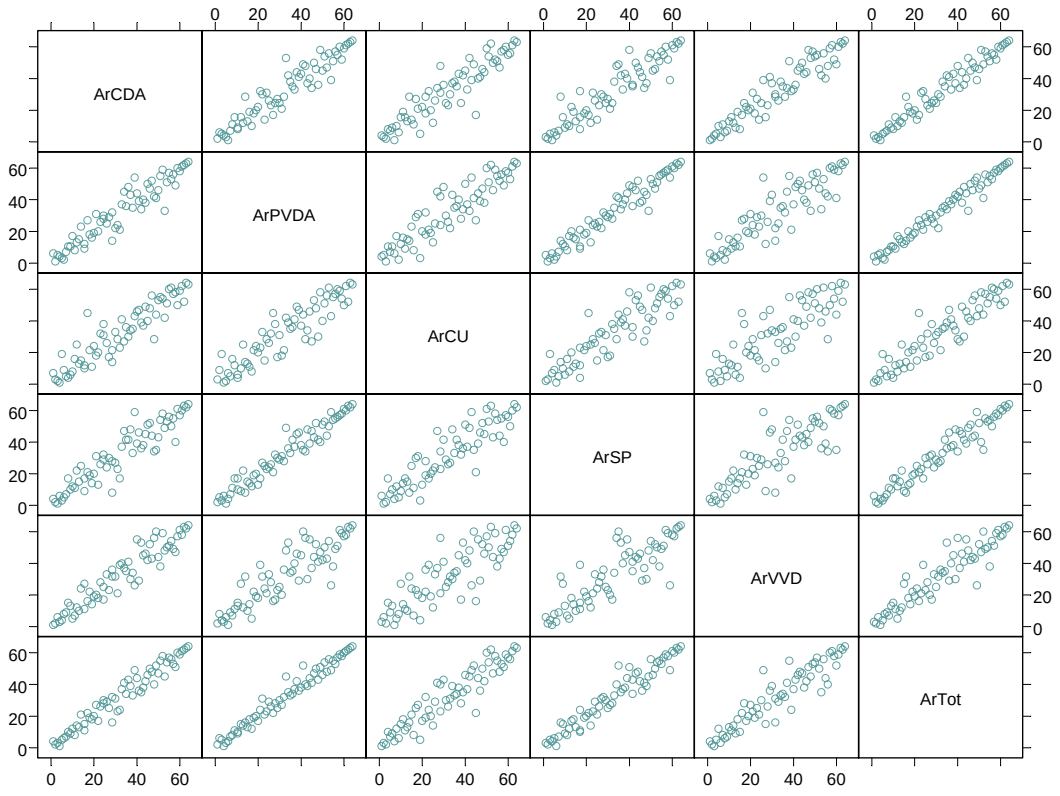

Figure 9 *Scatterplot matrix for 64 ranks based on respondent preferences for five political parties, and in the final row and final column the ranks of all respondents (N = 2585). The parties are: the Christian Democrats (CDA), the Labour Party (PvdA), the Christian Union (CU), the Socialistic Party (SP) and the Liberal Party (VVD). The last row and column are for all respondents in the survey. The correlation matrix is given below.*

*** Correlations for data in: Politiek ***

	Ranks CDA	Ranks PVDA	Ranks CU	Ranks SP	Ranks VVD	Ranks Total
Ranks CDA	1.00	0.94	0.92	0.93	0.95	0.97
Ranks PVDA	0.94	1.00	0.91	0.97	0.89	0.98
Ranks CU	0.92	0.91	1.00	0.90	0.85	0.93
Ranks SP	0.93	0.97	0.90	1.00	0.85	0.97
Ranks VVD	0.95	0.89	0.84	0.85	1.00	0.93
Ranks Total	0.97	0.98	0.93	0.97	0.93	1.00

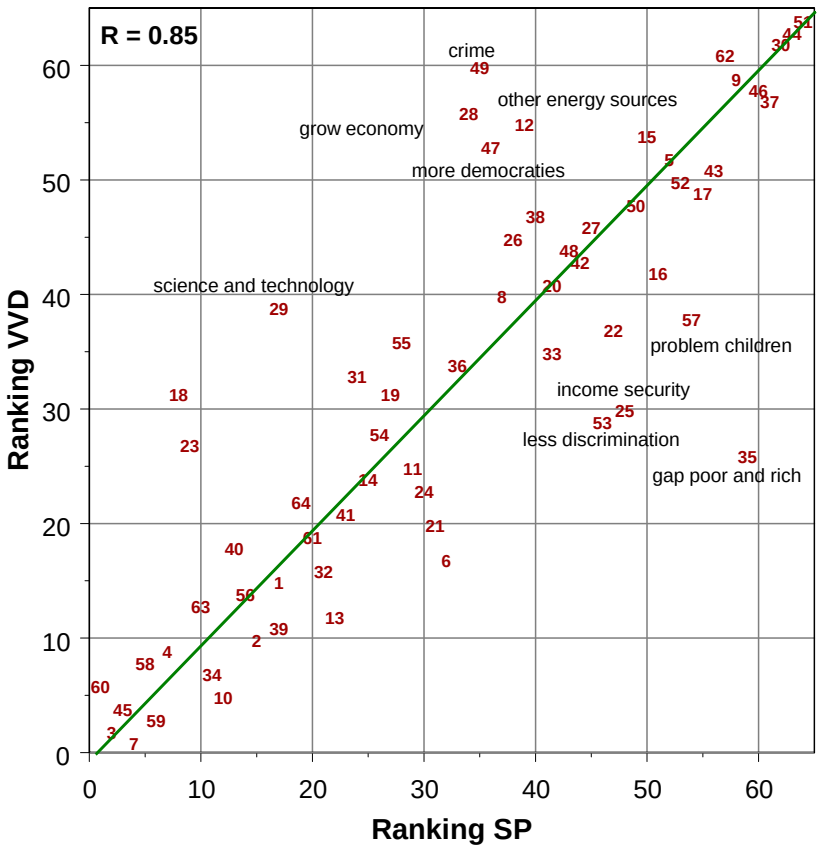

Figure 10 *Scatterplot for respondents with a preference for the Socialist Party (SP, x-axis) and the Liberal Party (VVD, y-axis). The issue ranks range from 1 (least important issue) to 64 (most important issue) and are based on the 2006 survey. The symbol numbering corresponds to the social issue numbering and descriptions given in Table 2. The green line gives the one-to-one relationship representing identical rankings for the SP and the VVD (R = 1.00). The correlation between SP priorities and VVD priorities is R = 0.85.*

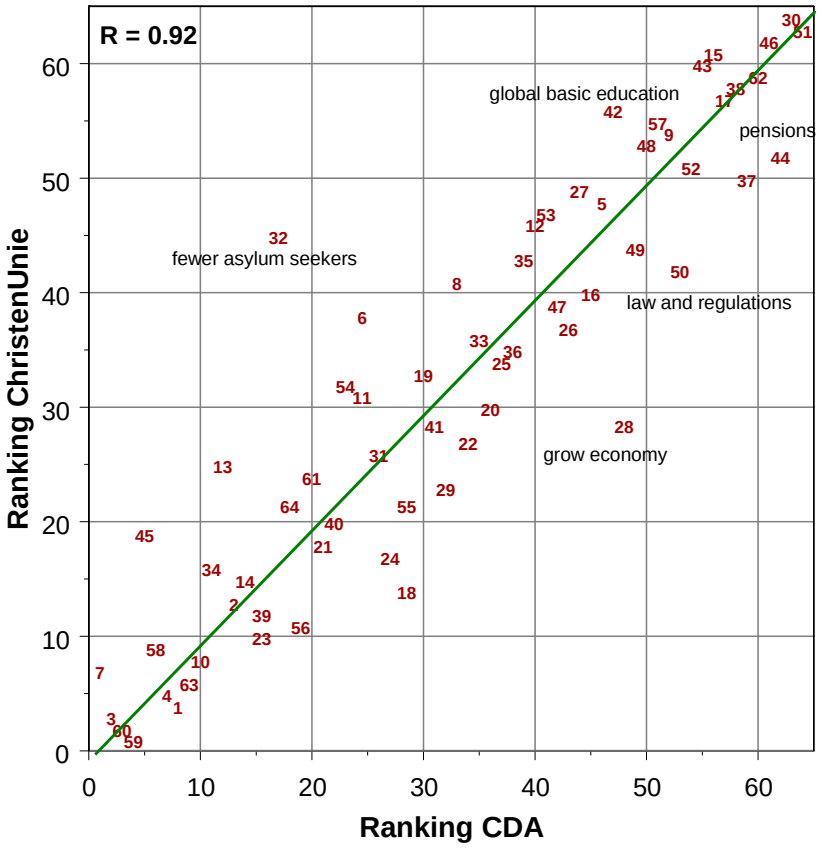

Figure 11 *Scatterplot for respondents with a preference for the Christian Democrats (CDA, x-axis) and the Christian Union (CU, y-axis). The issue ranks range from 1 (least important issue) to 64 (most important issue) and are based on the 2006 survey. The symbol numbering corresponds to the social issue numbering and descriptions given in Table 2. The green line gives the one-to-one relationship representing identical rankings for the CDA and the CU (R = 1.00). The correlation between CDA priorities and CU priorities is R = 0.92.*

Education

All the respondents have been categorised into three classes of education: 'high', 'medium' and 'low'. Does the ranking of respondents depend on the level of education? The number of respondents with a high, medium and low level of education are 962, 1123 and 499.

The correlation of the 64 rankings between the 'high-level education' and 'medium-level education' groups is 0.87. The correlation of the 64 rankings between the 'high-level education' and 'low-level education' groups is 0.82 (Figure 12). The rankings of the 'medium-level education' and 'low-level education' groups are almost equal: R = 0.98.

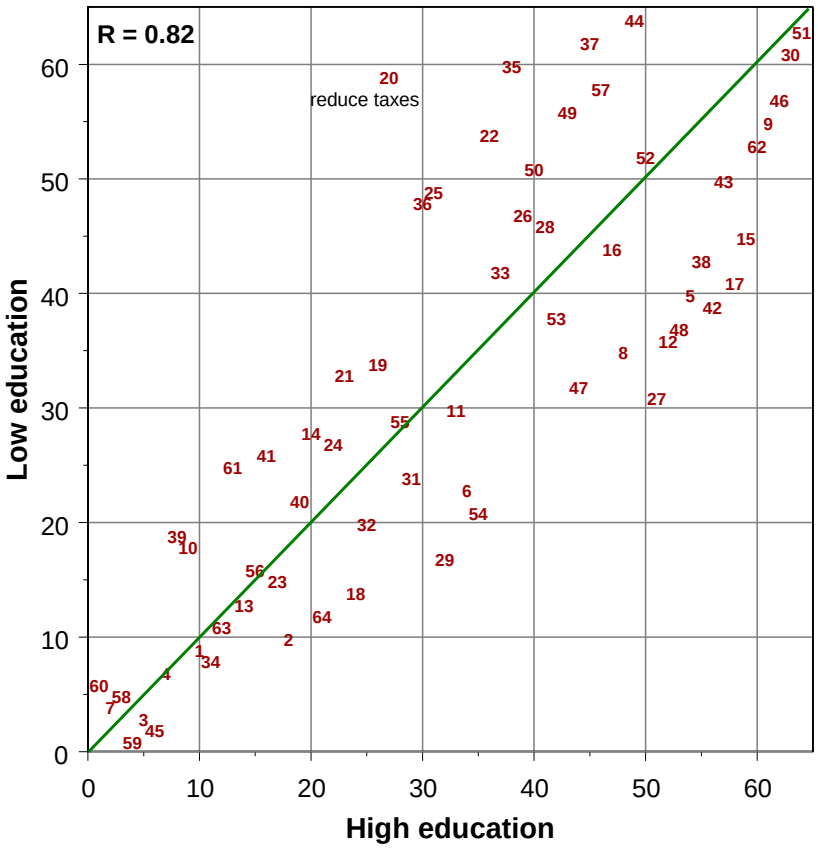

Figure 12 *Scatterplot for two levels of education. The issue ranks range from 1 (least important issue) to 64 (most important issue) and are based on the 2006 survey. The symbol numbering corresponds to the social issue numbering and the descriptions given in Table 2. The green line gives the one-to-one relationship representing identical rankings for different levels of education (R = 1.00). The correlation between both levels of education is R = 0.82.*

4.5 Giving respondents only a subset of all social issues

The new survey philosophy in 2006 makes two important improvements over the 2003 and 2005 surveys. First, no distinctions are made between issues which have an environmental, an economic or a social-cultural character, in recognition of the fact that many issues can be attributed to more than one domain. Second, the centring of issues in one of three domains and then putting the top 5 in a fourth sorting task led to an overestimation of environmental issues and an underestimation of social-cultural issues, as is shown in the preceding section. The new design has none of these disadvantages.

The new design has another important advantage, briefly mentioned in section 3.4 (the 'fatigue/cheating test'). It appeared that the ranking of 64 issues could be based not only on the scores from the fourth sorting task, but also on the rankings given by respondents in one of the first three sorting task. This seems intuitively contradictory, because each respondent *ranks only 21 issues* in the first sorting task, which are randomly chosen from the full set of 64 issues. How could it be possible to reconstruct the *survey-averaged rankings* from these partial respondent-rankings for all 64 issues?

First, it will be shown that rankings based on (1) solely the first sorting task, (2) solely the second sorting task, (3) solely the third sorting task and (4) the fourth sorting task lead to very similar scores and ranks of issues.

Scores for individual respondents, based on the first sorting task, are calculated by giving 21 points to the most important issue of that respondent and 1 point to the least important issue. All other 43 issues are set to 'missing', using the M1 scoring system for 21 issues. Survey-averaged scores $\mathbf{S_1} = (S_{1,1},..., S_{1,64})$ are obtained by averaging all the points for issue 1 through issue 64. Finally, ranks $\mathbf{R_1} = (R_{1,1},..., R_{1,64})$ are computed directly from $\mathbf{S_1}$ by ordering the scores. In the same way, $\mathbf{S_2}$ and $\mathbf{R_2}$ are calculated, based on 21 issues, and $\mathbf{S_3}$ and $\mathbf{R_3}$ are calculated, based on 22 issues. Finally, $\mathbf{S_4}$ and $\mathbf{R_4}$ are calculated, based on the 15 issues in the fourth sorting task.

For comparison purposes the score vectors $\mathbf{S_1}$, $\mathbf{S_2}$, $\mathbf{S_3}$ and $\mathbf{S_4}$ have been standardised by subtracting the average and dividing by the standard deviation. These standardised score vectors $\mathbf{S_1'}$, $\mathbf{S_2'}$, $\mathbf{S_3'}$ and $\mathbf{S_4'}$ have zero mean and unit variance. These standardised scores are shown in Figure 13a, which shows that the correspondence between high and low scoring issues is very high (although not completely identical).

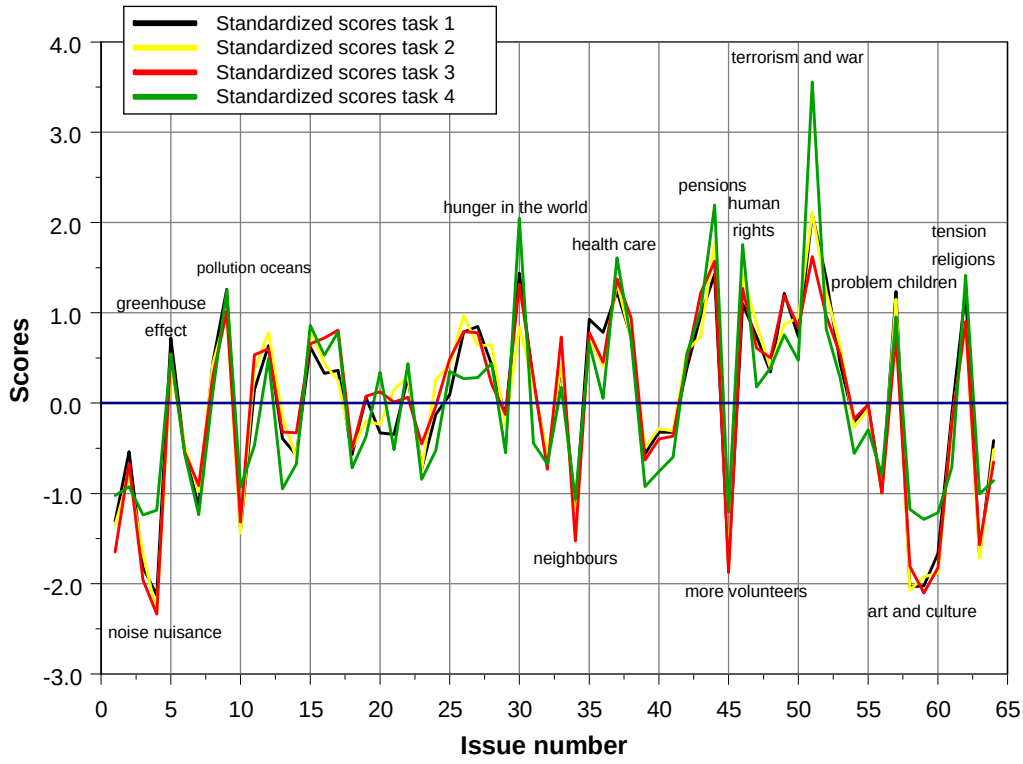

Figure 13a *Standardised scores for the issues 1 through 64, as defined in Table 2. The survey-averaged scores are based on the **first sorting task only** (each respondent ranked 21 issues randomly chosen from the complete set of 64 issues). These scores are shown by the black line. The yellow line indicates the scores based on the **second sorting task only** (21 issues), and the red line the **third sorting task only** (22 issues). The green line shows the scores based on the fourth sorting task (15 issues), similar to the scores shown in Figure 4. The original scores have been standardised for easy comparison of these four approaches within one graph. The standardisation transforms each set of 64 scores into a set of 64 scores with zero mean and unit variance.*

	Scores task 1	Scores task 2	Scores task 3	Scores task 4
Scores task 1	1.00	0.97	0.96	0.93
Scores task 2	0.97	1.00	0.96	0.93
Scores task 3	0.96	0.96	1.00	0.95
Scores task 4	0.93	0.93	0.95	1.00

This also follows from the correlation matrix, given in the caption of Figure 13a: correlations vary between 0.88 and 0.99. The lower correlations for the fourth sorting task (R= 0.88/0.89) are due to the cascade of the fourth ranking. In the fourth ranking, respondents ordered their own 15 most important issues, leading to a scoring system of 1 through 15 for these issues

and 48 zeros for the remaining 48 issues. In rankings based on the first three sorting tasks respondents gave the points 1 through 21 to the issues presented to them (no zeros were given). If we focus on *ranks*, as presented in Figure 13b, the differences between scoring systems become smaller. The correlations range from 0.94 to 0.99.

Without giving details here, it is noted that the remaining differences in ranks, as shown in Figure 13b, are partly due to uncertainties in scores and ranks (due to the limited number of respondents), and partly due to *psychological* factors. The latter are explained by the fact that there is a psychological difference between a situation in which a respondent orders 15 issues

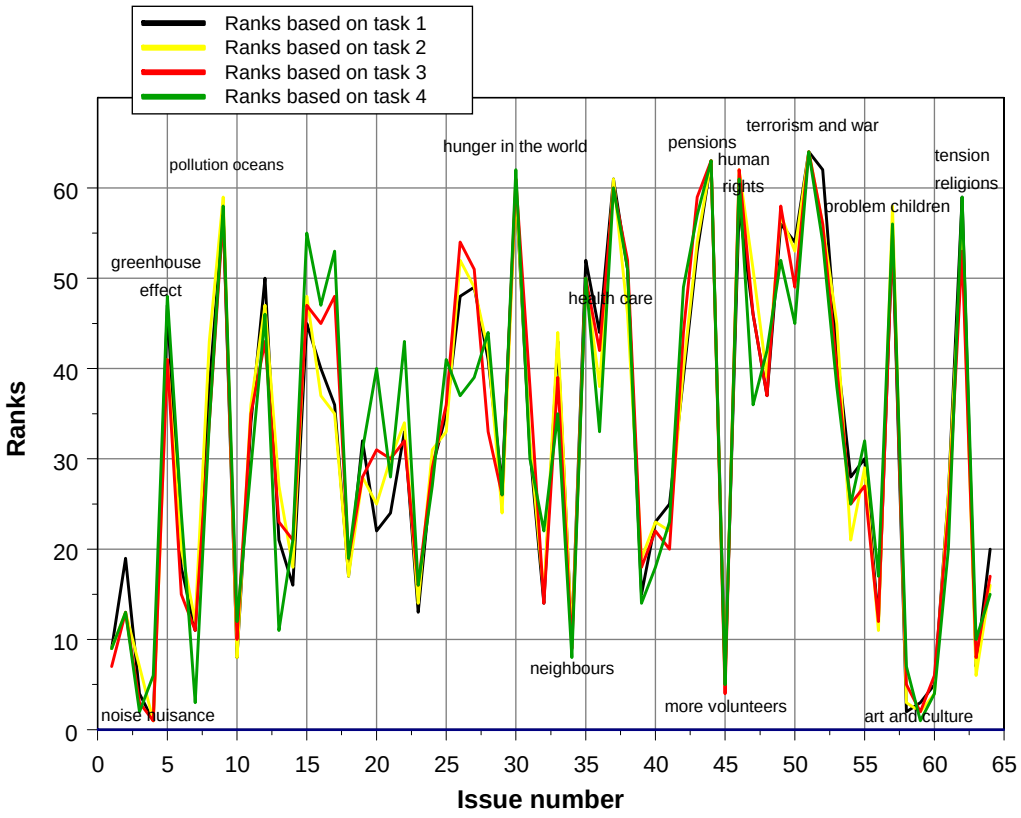

Figure 13b *The ranks directly derived from the scores, using the different scoring systems. The colour coding is the same as in Figure 13a. The highest rank on the y-axis is 64: 'that the threat of terrorism and war in the world will decrease' (issue 51). The lowest rank is 1: 'that there will continue to be rich and varied offerings on art and cultural activities' (issue 59).*

	Ranks task 1	Ranks task 2	Ranks task 3	Ranks task 4
Ranks task 1	1.00	0.99	0.98	0.95
Ranks task 2	0.99	1.00	0.98	0.94
Ranks task 3	0.98	0.98	1.00	0.96
Ranks task 4	0.95	0.94	0.96	1.00

which are *all* important to him or her, and a situation in which the respondent is ordering 21 issues (randomly chosen from the total set of 64 issues), some of which are of little or no concern to the respondent.

It even appears that survey-averaged scores and ranks can also be calculated by giving respondents *only two issues to order.* To show this, the survey-averaged rankings have been calculated on the basis of the first two issues given to a respondent in the first sorting task (for each respondent these two issues are a random sample from the total set of 64 issues). The rankings are compared with the rankings based on all 21 issues in the first sorting task (Figure 13c). The correlation between both series is R = 0.92, which is quite high given the fact that information density in the ordering of 2 issues is much lower than in the ordering of 21 issues.

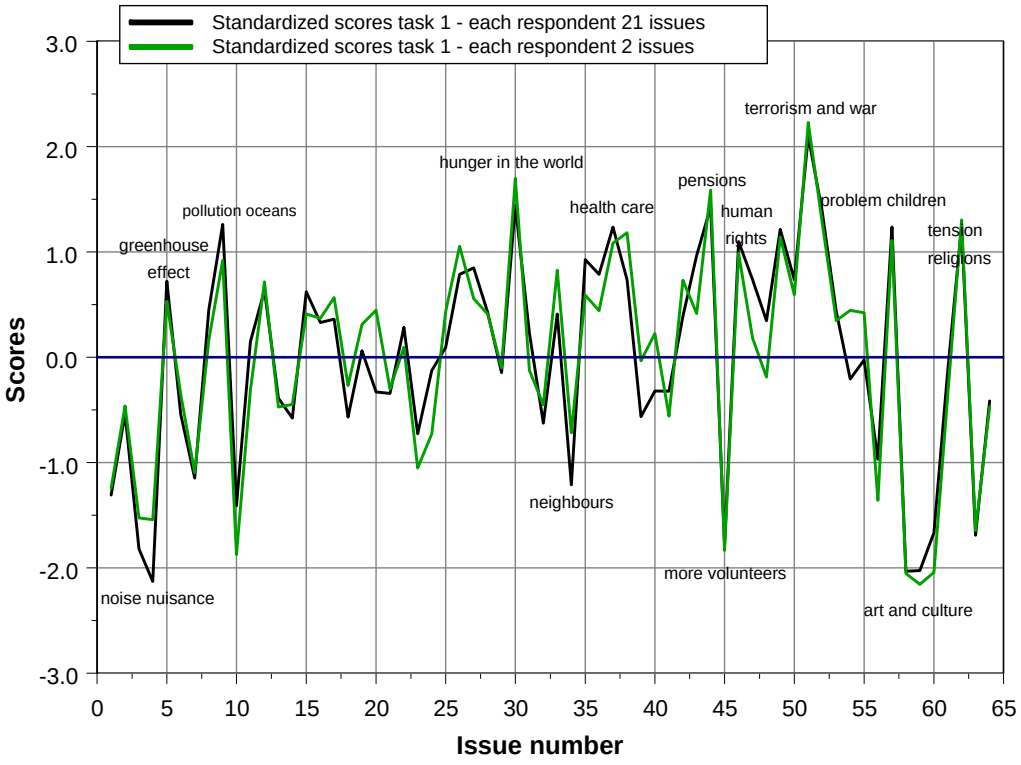

Figure 13c *Survey-averaged standardised scores based on the first sorting task (21 issues, black line) and two random chosen issues from the first sorting task (2 issues, green line).*

The latter aspect, the relation between sample size and the loss of information, can be approximated by the formula for the standard error (SE) of a certain issue i. This SE equals its standard deviation divided by the square root of the number of times this issue was awarded points. If each respondent had ordered *all* 64 issues, the SE_i would be

$$SE_i = SD_i / \sqrt{N}$$

with N being the number of respondents. If each respondent had ordered *fewer* than 64 issues, or M issues, the SE_i becomes larger:

$$SE_i = SD_i / \sqrt{(N / (64 / M))} = 8\ SD_i / \sqrt{(N * M)}$$

SE_i is presented as a function of N and M in a nomogram in Figure 13d. The graph clearly shows the 'cost' in terms of an increase or decrease in the standard error of a certain issue, depending on the choice for N and M.

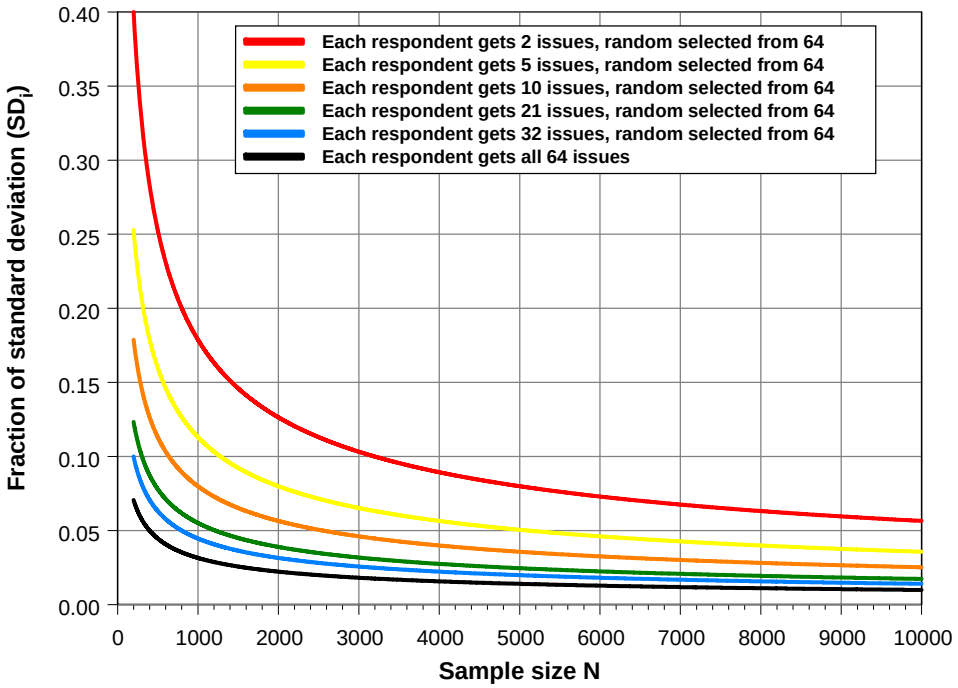

Figure 13d *Nomogram for the relation between the standard error of a certain issue score and the sample size (N) and number of issues per respondent (M). The y-axis is expressed in SD_i units.*

The implication of the results found here is twofold. First, a priority list can be made of a very large set of social issues, for example 250, just by giving each respondent a small subset. The only condition is that these subsets are randomly chosen from the full set of issues. Second, giving respondents a small set of issues can save both time and money in the survey fieldwork.

5 Calibration procedure 2003, 2005 and 2006 surveys

5.1 Implications of differences in survey design

The designs of the 2003/2005 and 2006 surveys have been described in section 2.4. Both the number of social issues (53 in 2003/2005 and 64 in 2006) and the way the sorting tasks were put together differed. In 2003/2005, 16 ecological issues were grouped together in the first sorting task, 15 economic issues in the second sorting task and 22 socio- cultural issues in the third sorting task. The survey software placed the top 5 issues from each group in the fourth sorting task.

In 2006, it was recognised that this approach had two disadvantages. First, many issues have a mixed character. For example, they may have both an environmental and an economic character. Second, and more importantly, the composition of the fourth sorting task 'forces' the respondents to rank 5 issues from each domain, whereas *their own preference* may have been, for example, to rank only 1 environmental issue, 2 economic issues and 12 social cultural issues. It was argued in Visser et al. (2005) that this specific survey design would not influence the final ranking of issues, but we were not completely sure.

To test the differences in rankings between both survey designs we simultaneously performed two surveys in 2006: one with the new design, as analysed in the preceding section, and one with the old design (N = 619). Both surveys have 48 issues in common with exactly the same formulation (compare the non-yellow issues in Tables 1 and 2).

The scores and ranks were calculated for these 48 issues and plotted in Figure 14. The figure shows that there are marked differences for a number of issues. Issues 5 ('that the greenhouse gas effect on the world will be less in the future'), 9 ('that ocean, river and lake pollution in the world will be less in the future') and 16 ('that the ozone hole will decrease in the future') are much higher in the old design. On the other hand, issues 37 ('that health care in the Netherlands will improve'), 44 ('that good old-age provisions for people in the Netherlands will continue to be offered in the future') and 51 ('that the threat of terrorism and war in the world will decrease') receive much higher scores in the new design.

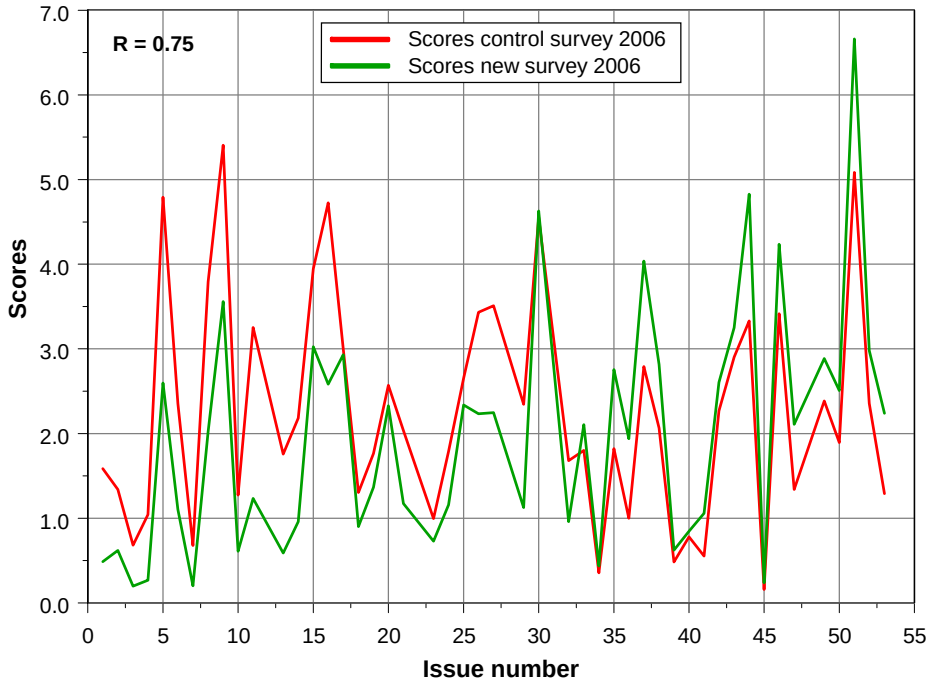

Figure 14 *Scores for the 2006 control survey and the new 2006 survey. Scores are given only for the 48 issues that are identical in both surveys. The issue numbering on the x-axis corresponds to the issue numbering and the descriptions in Tables 1 and 2 (the non-yellow issues). The correlation between the 48 paired scores is R = 0.75.*

How can these differences be explained? To find out, we checked the number of issues with an environmental character carried forward by respondents to the fourth sorting task in the new design (issues 1 through 16 in Table 2). The same check was performed on the issues with an economic character (issues 17 through 31 in Table 2) and the issues with a social-cultural character (issues 32 through 64 in Table 2). The histogram for each domain is given in Figure 15.

Figure 15 shows that respondents have a clear preference for moving social-cultural issues to their personal top 15 in the fourth sorting task: on average 8.3 issues. In contrast, they carried forward on average 3.1 environmental issues and 3.6 economic issues.

We tested the hypothesis that the preference of respondents for social-cultural issues could explain why these issues have lower scores in the 2003/2005 design, at the expense of higher scores for environmentally oriented issues. To this end, we corrected the issue

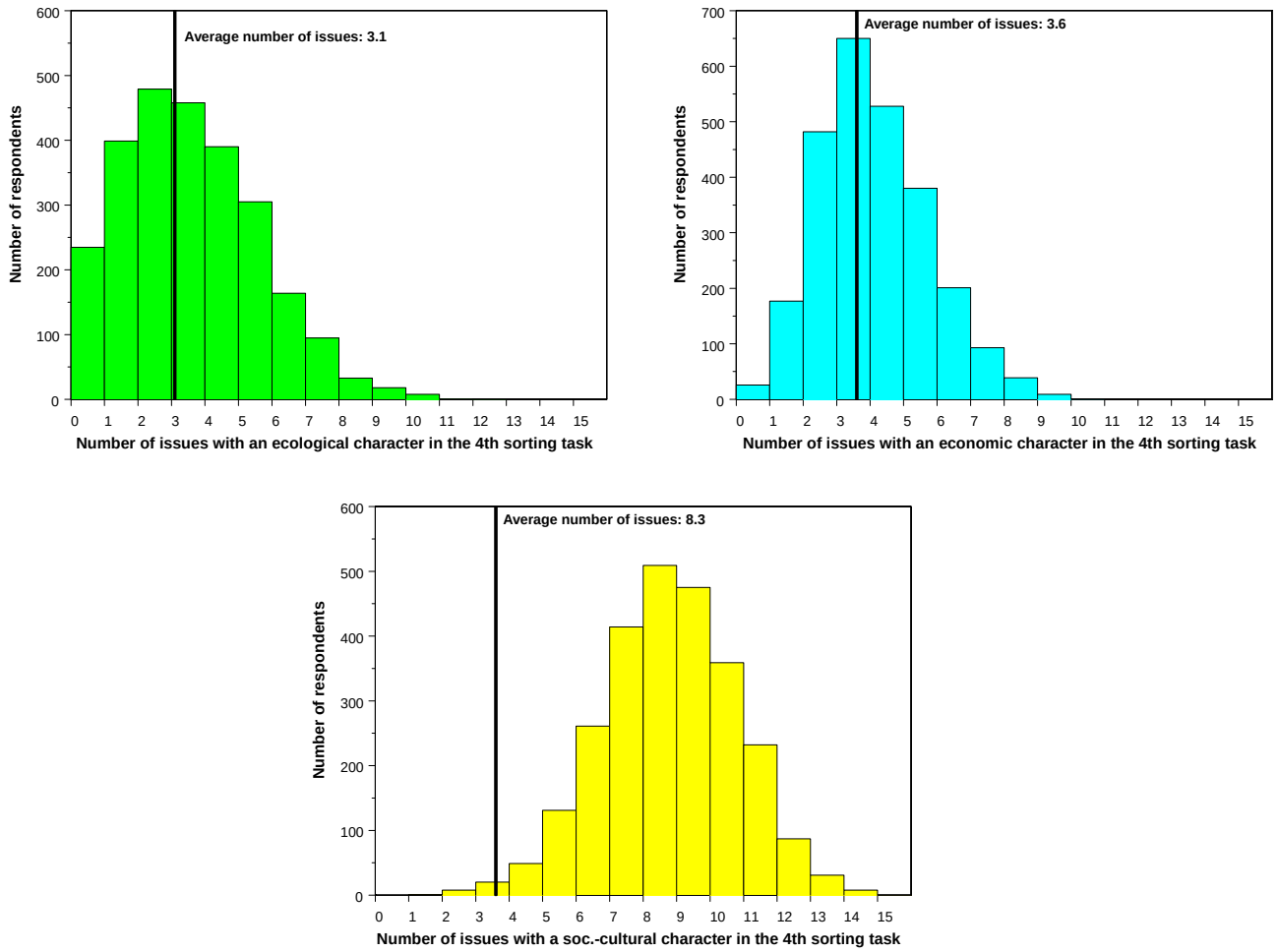

Figure 15 *Histograms for the number of environmental issues (left upper graph), the economic issues (right upper graph) and socio-cultural issues (lower graph). All histograms are based on the fourth sorting task of the 2006 survey (with N = 2585 respondents).*

scores for the 2006 control survey: a correction factor of 3.1/5.0 was applied to the environmental issue scores, a correction of 3.6/5.0 to the economic issue scores and a correction of 8.3/5.0 to the social-cultural issue scores. These corrections were applied to the 48 issues that are in common.

The result of the correction exercise is given in Figure 16. The figure shows that the scores are very similar after correction. The correlation without correction (Figure 14) is R = 0.75,

and R = 0.93 after correction (Figure 16). Our conclusion here is that the 2003/2005 survey design led to a systematic bias, which mostly favoured the environmental issues. The bias can be removed with three simple correction factors.

In the next paragraph an issue-by-issue correction is applied, based on calibration factors derived from the scores in the new design for 2006 and the old design for 2006. This makes it possible to compare the issue scores for 48 issues which the 2003, 2005 and 2006 surveys have in common.

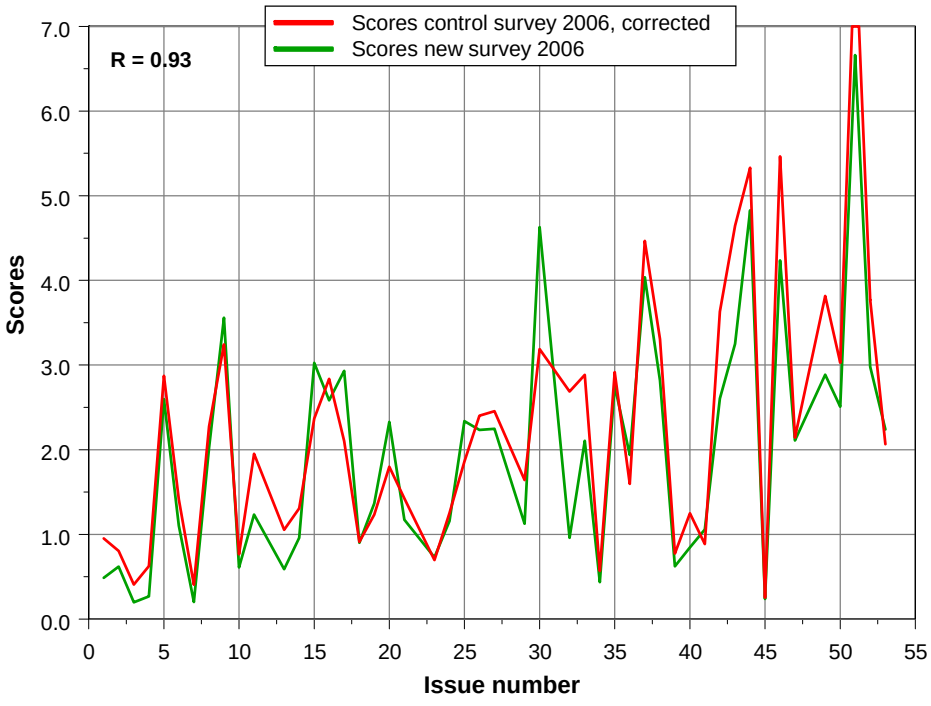

Figure 16 *Scores for the corrected 2006 control survey and the new 2006 survey. The scores are only for the 48 issues which are identical in both surveys. The issue numbering on the x-axis corresponds to the issue numbering and descriptions in Tables 1 and 2 (the non-yellow issues). The correlation between the 48 paired scores is R = 0.93.*

5.2 Calibration of surveys over the years

The following calibration procedure is proposed. Let the vector S_{2006} contain the 64 scores and the vector S_{2006}' contain the corresponding scores for the 48 issues which are common to all surveys. In the same manner, we have the vector C_{2006} with 53 scores in the control survey and C_{2006}' with the corresponding scores of the 48 issues (i.e. the non-yellow issues in Tables 1 and 2).

The scores in vector C_{2006}' are corrected using the following 48 individual corrections $\mathbf{c} = (S_{2006,1}'/C_{2006,1}', ..., S_{2006,48}'/C_{2006,48}')$. These corrections precisely transform the scores of the control survey to the new survey. By multiplying the scores of the 2003 and 2005 survey using the vector **c**, a calibrated survey series is obtained. Note that the *changes in scores over time* are in not influenced by the correction. What is corrected is that ecological issues were overestimated in the past, and socio-cultural issues were underestimated.

The result is shown in Table 5. The correlation matrix for the three score series (based on the 48 scores which the surveys have in common) is as follows:

	Scores 2003	Scores 2005	Scores 2006
Scores 2003	1.00	0.96	0.93
Scores 2005	0.96	1.00	0.97
Scores 2006	0.93	0.97	1.00

The correlation between the 2005 and 2006 survey is high: R = 0.97, and only slightly lower for the 2003 and 2006 survey: R = 0.96.

Table 5 *Scores for the calibrated surveys 2003, 2005 and 2006. The orderings (fifth column) have the values 1 (most important issue, row 1) to 64 (least important issue). The issue numbers in the first column refer to the numbering in Table 2. Because the 2006 survey has only 48 issues in common with the 2003 and 2005 surveys (cf. Table 2, non-highlighted issues) some issues have no scores for 2003 and 2005; these are indicated by 'NA' (Not Available). The first and last two columns are identical to those in Table 4.*

Issue number	Scores 2003	Scores 2005	Scores 2006	Order 2006	Description
51	4.89	6.87	6.66	1	That the threat of terrorism and war in the world will decrease
44	5.12	5.80	4.83	2	That good old-age provisions for people in the Netherlands will continue to be offered in the future
30	4.49	4.56	4.63	3	That action will be taken to combat hunger in the world
46	4.29	4.30	4.23	4	That there will be less violation of human rights around the world in the future
37	5.70	4.97	4.04	5	That health care in the Netherlands will improve
62	NA	NA	3.77	6	That there will be less tension between religions in the world in the future
9	4.59	4.12	3.56	7	That ocean, river and lake pollution in the world will be less in the future
43	3.07	2.85	3.25	8	That child labour in the world will be reduced in the future
57	NA	NA	3.15	9	That problem children are better helped, and earlier in their lives
15	2.63	2.90	3.03	10	That there will be more clean drinking water in the world in the future
52	3.01	3.37	2.98	11	That respect for norms and values in the Netherlands will be reinstated
17	3.67	3.12	2.93	12	That welfare in developing countries increases
49	3.20	3.81	2.89	13	That more action will be taken to fight crime in the Netherlands
38	2.49	2.66	2.82	14	That fewer people in the world will suffer from infectious diseases
35	2.54	3.01	2.76	15	That the gap between rich and poor in the Netherlands will be reduced
42	3.04	2.28	2.61	16	That in the future more people in the world will be literate, and a minimum of basic education will be available to them
5	3.30	2.57	2.60	17	That the greenhouse gas effect on the world will be less in future
16	3.04	3.15	2.58	18	That the ozone hole will decrease in the future
12	NA	NA	2.53	19	That oil and gas will be replaced by other energy sources
50	2.97	2.95	2.51	20	That laws and regulations will be better implemented in the Netherlands
28	NA	NA	2.46	21	That the economy in the Netherlands grows
22	NA	NA	2.46	22	That the purchasing power in the Netherlands increases
48	NA	NA	2.39	23	That in the future there will be more democracies and fewer dictatorships in the world
25	1.96	2.50	2.34	24	That we will have more income security in the Netherlands in the future
20	2.11	2.38	2.33	25	That taxes in the Netherlands will be reduced

27	2	2.53	2.25	26	That the exploitation of world oil and gas reserves will be more economical in the future
53	1.63	2.71	2.24	27	That there will be less discrimination according to race, gender, sexual inclination and religion
26	2	1.92	2.23	28	That the water, gas and electricity facilities in the Netherlands will in the future be just as reliable as now
47	1.65	1.53	2.11	29	That the quality of education in the Netherlands will be higher in the future
33	2.78	2.60	2.11	30	That the trustworthiness of the Dutch government will increase
8	2.45	2.19	2.02	31	That (scarce) plants and animals will survive into the future thanks to reduced deforestation
36	3.71	3.80	1.94	32	That unemployment in the Netherlands will be reduced
55	NA	NA	1.47	33	That the Dutch government becomes smaller and more decisive
19	2.16	1.90	1.37	34	That government finances in the Netherlands will be put in better order in the future
31	NA	NA	1.27	35	That the Netherlands will become less dependent for its energy supply from other countries
11	0.90	1.19	1.23	36	That air pollution in the Netherlands will decrease
21	1.21	1.08	1.17	37	That there will be enough and affordable housing in the Netherlands in the future
24	0.99	1.04	1.16	38	That men and women in the Netherlands will have equal employment opportunities and the same chance of promotion
29	0.98	1.10	1.13	39	That the Netherlands will continue to make a difference in science and technology through investment in education
54	NA	NA	1.12	40	That the integration of minorities in the Netherlands improves
6	1.40	0.91	1.10	41	That natural plants and animals in the world will, in the future, not be threatened or made extinct through genetic change
41	0.67	1.13	1.06	42	That the chance of a disaster in the Netherlands will be less than it is now
32	1.20	1.04	0.96	43	That fewer asylum seekers will be allowed in the Netherlands
14	0.58	0.54	0.96	44	That the quality of public transport in the Netherlands will improve
61	NA	NA	0.91	45	That traffic safety increases in the Netherlands
18	0.86	0.88	0.90	46	That Dutch companies will be able to compete better and better with foreign companies
40	0.76	0.82	0.85	47	That we in the Netherlands will be under less stress and be able to combine work, care and leisure
56	NA	NA	0.80	48	That it becomes more easy to combine work and children
23	0.98	0.69	0.73	49	That the traffic congestion in the Netherlands will decrease
64	NA	NA	0.71	50	That job participation in the Netherlands is improved
39	0.49	0.39	0.62	51	That food safety in the Netherlands will improve
2	0.64	0.45	0.62	52	That there will be more nature in the Netherlands in the future
10	0.48	0.48	0.61	53	That animals exposed to Dutch (intensive) farming will be treated better
13	0.44	0.40	0.59	54	That the contaminated soils in the Netherlands will be cleaned up
63	NA	NA	0.51	55	That the form of government is improved
1	0.52	0.26	0.49	56	That the livability of my neighbourhood will improve
34	0.54	0.40	0.44	57	That my neighbours will keep less to themselves
58	NA	NA	0.28	58	That the quality of the Dutch army will stay at a good standard
4	0.12	0.08	0.27	59	That there will be less noise nuisance in my neighbourhood
45	0.19	0.17	0.24	60	That more volunteer work will be done in the Netherlands
60	NA	NA	0.23	61	That sport is more stimulated in the Netherlands
7	0.14	0.11	0.20	62	That the Netherlands will take steps to reduce contamination of soil by manure
3	0.14	0.09	0.20	63	That the Netherlands will be more attractively laid out in the future
59	NA	NA	0.13	64	That there will continue to be rich and varied offerings on art and cultural activities

We plotted these calibrated results in two scatterplots, shown in Figure 17 (for ranks, based on the scores shown in Table 5). The scatterplots show that there is only one outlier rank, which is issue 36: 'that unemployment in the Netherlands will be reduced'. In 2003 and 2005 this issue was ranked 41/42, and lowered in 2006 to rank 23. This result is easily explained by the fact that unemployment in the Netherlands was at a record low at the time of the 2006 survey.

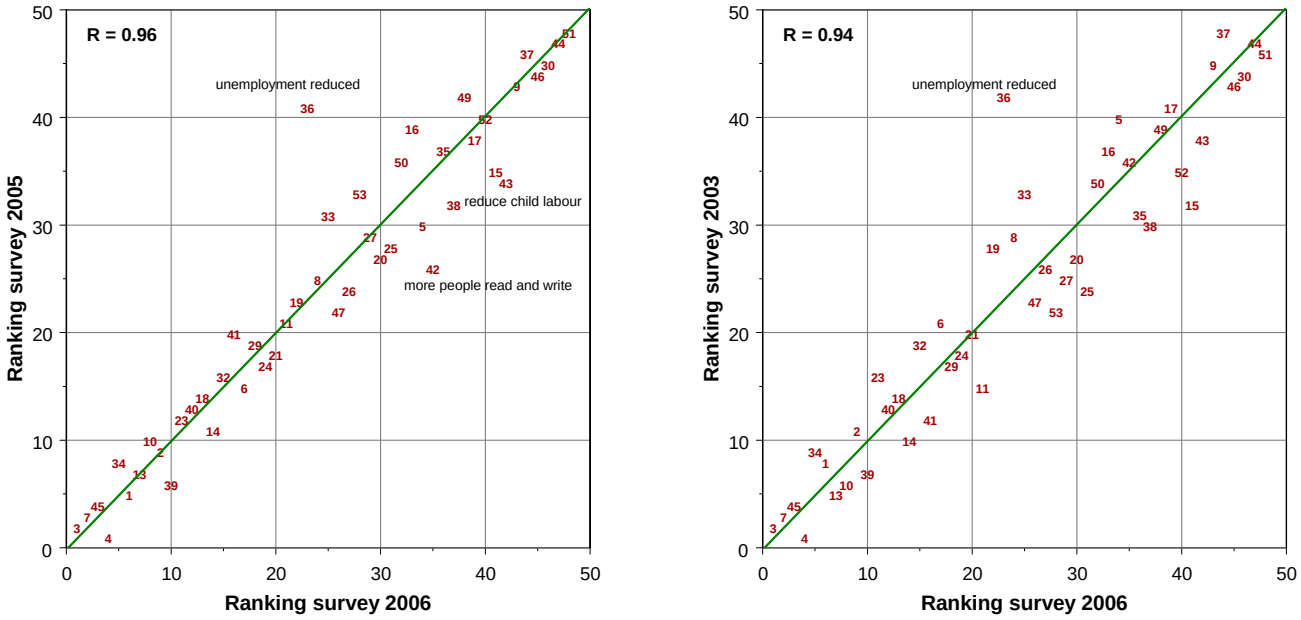

Figure 17 *Scatterplots between rankings 2005 and 2006 (left-hand plot) and 2003 and 2006 (right-hand plot). The issue ranks range from 1 (least important issue) to 48 (most important issue). Data are given in Table 5. The symbol numbering corresponds to the social issue numbering and descriptions given in Table 2 (non-highlighted issues).*

6 Summary and conclusions

This report describes four surveys that were developed to establish a social agenda for the Netherlands in the near future. The surveys were held in 2003, 2005 and 2006. The survey in 2006 was performed twice: a larger survey of 2613 respondents and a much smaller survey of 619 respondents. The smaller survey was used to determine exactly what the impact of differences in survey design are between the 2003 and 2005 surveys and the new survey design in 2006.

The surveys contain a series of 53 social issues (in 2003 and 2005) and a series of 64 social issues (in 2006), which had to be ranked in order of importance by respondents from an access panel. This task was performed in four sorting tasks (section 2.4). Furthermore, we have described a number of quality control tests for the 2006 survey that yielded satisfactory results for all tests (Section 3).

For the 2006 survey we have summarised the survey-averaged order of 64 issues in Table 4 (Section 4). From this table the top 15 issues are presented in Table 6. It is interesting to note that 10 issues from the top 15 list are global in scope and, consequently, 5 issues are national in nature. Clearly, people in the Netherlands favour issues that are global in scope or affect places elsewhere rather than issues that immediately concern the Netherlands or even their own neighbourhood.

It also has been analysed how the issue ranks depend on specific background variables. In section 4.4 it is shown that the survey-averaged rankings are hardly influenced by the gender of the respondents or by the geographical region where respondents live. On the other hand, marked differences have been found for differences in educational level and preference for specific political parties. Marked differences in issue rankings are easily explained. For example, it appears that respondents with a preference for the Liberal Party (VVD) rank the issue of economic growth much higher than respondents with a preference for the Socialist Party (SP), but they rank the issue of the gap between rich and poor people much lower.

A new finding in card-sorting surveys (all surveys in this report have this characteristic) was presented in section 4.5. Here, we showed that it is not necessary for each respondent to order all social issues included in the survey. If each respondent is given a *random subset of 21 issues*, drawn from the total set of 64 issues, one can reconstruct the survey-averaged rankings for the survey as a whole. It is even possible to give each respondent only 2 issues,

randomly drawn from the total set of 64 issues. However, there is also a 'cost': the survey sample size should be larger to gain sufficient precision in scores and ranks.

The implication of this result is twofold. First, one can make a priority list of a very large set of, say, 250 social issues, just by giving 20 issues to respondents. Second, giving respondents a small set of issues can deliver considerable time and cost saving in the survey fieldwork. It should be noted, however, that these findings do not guarantee that orderings based on subsets yield *identical* results to those based on all four sorting tasks. Here, psychological factors also play a role. This aspect will be dealt with in a forthcoming publication.

Finally, we have described a method for calibrating the 2003 and 2005 survey-averaged rankings to the 2006 ranking. A key role is played by the 2006 control survey, which was held at the same time as the new 2006 survey, but with the old design. The result is that issues with an environmental character had been overestimated and issues with a more socio-cultural character underestimated in the old survey design (in 2003 and 2005). This marked difference has been explained in Chapter 5 and applied in an issue-by-issue correction, summarised in Table 5. The top 15 issues are repeated in Table 6.

Figure 17 shows the shifts in rankings over the years 2003, 2005 and 2006. The main shift is found for the importance of *reducing unemployment*. This issue ranked much higher in 2003 and 2005 than in 2006. This shift can be explained by the very low level of unemployment in the Netherlands in 2006.

Table 6 *Top 15 scores from the calibrated surveys 2003, 2005 and 2006 (as taken from Table 5). The ordering has the values 1 (most important issue, row 1) to 25 (least important issue). Because the 2006 survey has only 48 issues in common with the 2003 and 2005 surveys (cf. Tables 1 and 2, non-highlighted issues) some issues have no scores for 2003 and 2005; these are indicated by 'NA' (Not Available).*

Scores 2003	Scores 2005	Scores 2006	Order 2006	Description
4.89	6.87	6.66	1	That the threat of terrorism and war in the world will decrease
5.12	5.80	4.83	2	That good old-age provisions for people in the Netherlands will continue to be offered in the future
4.49	4.56	4.63	3	That action will be taken to combat hunger in the world
4.29	4.30	4.23	4	That there will be less violation of human rights around the world in the future
5.70	4.97	4.04	5	That health care in the Netherlands will improve
NA	NA	3.77	6	That there will be less tension between religions in the world in the future
4.59	4.12	3.56	7	That ocean, river and lake pollution in the world will be less in the future
3.07	2.85	3.25	8	That child labour in the world will be reduced in the future
NA	NA	3.15	9	That problem children are better helped, and earlier in their lives
2.63	2.90	3.03	10	That there will be more clean drinking water in the world in the future
3.01	3.37	2.98	11	That respect for norms and values in the Netherlands will be reinstated
3.67	3.12	2.93	12	That welfare in developing countries increases
3.20	3.81	2.89	13	That more action will be taken to fight crime in the Netherlands
2.49	2.66	2.82	14	That fewer people in the world will suffer from infectious diseases
2.54	3.01	2.76	15	That the gap between rich and poor in the Netherlands will be reduced

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