

**RESPONDENT PANEL AND FACE-TO-FACE INTERVIEW COMPARED.
THE 'CULTURAL CHANGES IN THE NETHERLANDS' SURVEY 2000.**

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1. The survey and the experiment

Cultural Changes in the Netherlands is a longitudinal survey in which a representative sample of the Dutch population aged 16 and over is interviewed at regular intervals. The survey was carried out annually until 1998, since when it has been held every two years. The aim of the project is to construct opinion time series. The questionnaires used consist of selections of questions taken from earlier surveys, which are presented verbatim. The Social and Cultural Planning Office of the Netherlands (SCP) carried out the first survey in 1975; that survey was itself based on earlier surveys, the results of which had been stored in a databank, the Steinmetz Archive. The project is organised and funded by SCP, a Dutch government agency whose task is to describe the status of welfare in the Netherlands and to advise the government on its welfare policy.

The survey samples are representative and generally comprise around 2,000 respondents. The response rate can be calculated in various ways. It is reasonable to assume that, at the level of individual respondents, the response rate at the end of the 1990s was approximately 37%. Respondents are given face-to-face interviews, but also have an opportunity to fill in some question blocks themselves.

Since 1987, the majority of SCP surveys have included a self-completion drop-off questionnaire which is a part of the International Social Survey Programme (ISSP). These questionnaires are left with the respondent by the interviewer at the end of the face-to-face interview, and collected at a later date. The respondent is given a gift voucher as thanks for taking part in the survey. The collection of the questionnaires plus the gift voucher produce a high number of fully completed ISSP questionnaires: a response rate of roughly 90%. The fieldwork for the entire survey is carried out by the NIPO market research bureau in Amsterdam.

Budget cuts meant that in 1999 it was only possible to carry out the ISSP survey; this was done using the NIPO computer panel, Capi@home. NIPO has a pool of around 25,000 households each having a computer. For each survey, NIPO draws a sample of the required size from the total number of households available. As far as possible, these samples are made representative by applying a number of population distribution factors. The members of the households sampled have declared themselves willing to cooperate in surveys periodically. The questionnaires appear on the respondent's screen and are returned to NIPO electronically after completion.

This report describes an experiment in which the 2000 edition of the *Cultural Changes in the Netherlands* survey was carried out using two different instruments. In 1999, pressure of time ruled out closer reflection on the possible effects of using Capi@home; because of this, SCP organised an experiment in 2000, when it was again possible to conduct a complete *Cultural Changes* survey, i.e. one part containing the usual questions for SCP, together with the ISSP self-completion list. Around three-quarters of the survey population (1,650 respondents) were selected in the usual manner and given face-to-face interviews using a hand-held computer instead of the traditional paper questionnaire; the respondents also filled in the ISSP list in the usual way. We will call this part of the survey *Compass*. Around a quarter (647 respondents) of the survey population were drawn from the Capi@home database and completed the entire survey - both the SCP part and the ISSP part - as a self-completion exercise on their

computers. The Compass and Capi@home samples were independent of each other, but were as far as possible drawn in the same way.

SCP's aim in conducting this experiment was to investigate whether the Compass and Capi@home instruments produced the same results for the same questions. If this were the case, then Capi@home could replace Compass in the future. In other words, the intention was to obtain an insight into the mode effects. Generally speaking, a discrepancy in the results between two survey modes is not especially serious; if the researcher generalises to the population, then both surveys have margins of unreliability. It is also reasonable to assume that the correlations between independent and dependent variables will be the same in both cases. Both types of survey are thus perfectly capable of producing the same global conclusions. In longitudinal studies, however, this problem is of more significance. If a different data gathering tool is introduced during the course of such a survey, discrepancies of as little as 5% may produce a trend break. A time series comprised of measurements from both Compass and Capi@home can therefore reveal apparent changes, which are due to the instruments used rather than to actual changes in trends.

The experiment offered opportunities for an analysis of mode effects. The 2000 survey contained 161 separate items on opinions. The remaining items related to personal particulars or behaviours. The respondents' opinions could be arranged in a number of categories.

There may be several possible explanations for any discrepancies between the results obtained with Capi@home and Compass:

- They may be due to differences in the demographic composition of the samples.
- They may be due to differences in the socio-psychological composition of the samples, not connected to their demographic profile.
- There may be other sources of discrepancy, such as effects caused by the interview method or perceived social desirability.

The following comments can be made regarding the potential significance of demographic factors. In principle, both samples are representative of the Dutch population; this means that their composition in terms of things such as sex, age, education and income should be the same. However, much depends on who ultimately takes part in the survey. In all *Cultural Changes in the Netherlands* surveys, the number of men and women in the gross sample is identical. If women respond more frequently than men - something which cannot be controlled for fully - this will lead to a distortion in the representativeness of the net sample. And although in the case of Capi@home the market research bureau (NIPO) can prescribe which family members should answer questions, in practice households may deviate from these instructions.

An explanation for any discrepancies found can also be sought in the socio-psychological profile of the samples. This is of course of practical importance in every sample survey; it is not always fully clear whether people who participate in surveys have a different mentality from those who refuse to participate. The issue of the psychological characteristics of the respondent is more prominent with a computer panel such as Capi@home; it is for example perfectly possible that ownership and frequent use of a computer is accompanied by special psychological characteristics. In this case, controlling by demographic profile offers no help. It is possible to include sufficient older people with an interest in computers in a panel, for

example, but might it not be the case that these are very unusual older people? Naturally, this is a difficult question to answer; the age of the respondent is known, but many psychological characteristics are not.

It is necessary to look further afield in order to explore the other sources of discrepancy. *Cultural Changes in the Netherlands* is an omnibus survey which deals with a range of topics. The questions on religious issues have been found to produce different responses from those given to the same questions in the survey *God in the Netherlands III* (God in Nederland III), which focuses exclusively on religious and ideological issues. The publicising of the survey and the nature of the questionnaire probably helped to focus the interest and shape the responses of the respondents. In both Compass and Capi@home, however, SCP used the same omnibus questionnaire, which means that this potential source of discrepancy cannot be relevant here.

In addition to the nature of the survey, the way in which the questions are put and the person by whom they are answered may also affect the responses. In the Compass survey an interviewer was present; this was not the case with Capi@home. This may be important from the point of view of ‘social desirability’: it may be for example that the absence of an interviewer weakens the importance of social desirability and the importance of expressing politically correct views; this could mean that the responses in the Capi@home survey are more ‘honest’ than in Compass.

Furthermore, Capi@home respondents filled in the questionnaires independently. Although this is also the case with certain blocks in Compass, most of the questions are read out by the interviewer. The self-completion of the questionnaire could increase the accuracy of the responses.

We shall concentrate first on the question of whether there are major discrepancies between the results of Compass and Capi@home, and if so whether these could be caused by the demographic composition of the two samples. To do this, we asked the following questions, which we shall attempt to answer in this paper.

- To what degree do the Compass and Capi@home respondents react in the same way to the same survey questions? For which questions do differences occur?
- If differences occur, do these appear to be systematic? Is it possible to identify the substance these differences?
- Do the Compass and Capi@home samples have the same profile, especially as regards sex, age, education, income and household composition? What differences can be identified?
- If a demographic explanation does not hold, is it reasonable to assume that the Capi@home respondents were socio-psychologically selected?

2. Comparison of the responses

161 items were examined in this study. These items were subdivided into 17 categories: government (subdivided into public spending, policy & priorities and evaluation); social security benefits; politics (general, effectiveness & political distrust, authoritarianism & anomie and inequality); freedom and democratisation (democratic freedoms, participation and alternative action); criminality; religion; health care; working women/children; minorities; economy; income & taxation; and concerns.

The 161 individual items were reviewed and scales constructed based on factor analyses and cumulation, for example a short discrimination scale and a materialism-postmaterialism scale. The aim of testing these scales was to examine whether the significance of the individual items might be due to chance fluctuations which disappeared when items were combined. 20 scales were tested, and the Compass and Capi@home were found to differ significantly on ten scales - more than would be expected on the grounds of chance. The scale construction is not reported here.

Appendix A contains a summary of the categories and the individual items. The first column contains the category labels; for the sake of completeness, the next column shows the numbers given to the items in the questionnaire. The content of the items is described using keywords in the third column. The 'Response cat.' column shows the categories for which the percentages are shown in columns 5, 6 and 7 (the percentage within Compass, the percentage within Capi@home and the percentage for the two samples together). In order to keep the size of the table within reasonable bounds, not all response categories are shown for each item. The items were therefore dichotomised. In some cases several response categories from the questionnaire were combined for a single item, in order to show the discrepancy more clearly. One example is '(strongly) agree', which means that the categories 'strongly agree' and 'agree' have been combined. For most of the questions, this enabled a clear picture of the responses to be obtained. In one case this was not possible and discrepancies arose primarily in the response categories which were not presented. The final column in the table shows the outcome of Pearson's chi-square test at $\alpha=.05$.

The number of items which tested as significant (104 of the total 161) was much too large to be attributable to chance. This led to a search for a system in the response patterns. Although it emerged that the Capi@home respondents were more conservative and traditional than Compass, no convincing system was found. The differences between the respondent groups are described below, using the same order as in the table in Appendix A.

On the question of whether government spending should rise, there were no differences between the two groups. When the question focused specifically on public provisions, the opinions of Capi@home respondents were less favourable than those of Compass respondents. There were no differences on three of the eight questions about individual provisions: housing, free education and the environment; these were considered equally important by both groups. On the other five questions, Capi@home respondents felt less strongly that the government ought to do more.

The picture was less clear on thirteen types of policy. Capi@home respondents were somewhat more in favour of increased efforts in the areas of social security, employment and

reducing the cost of living. For the other ten policy categories, the only differences found were on cultural policy and environmental policy, which received slightly less support from Capi@home respondents.

Few differences were also found with regard to the prioritising of policy objectives. Respondents were asked to rank 16 political objectives in order of importance. The ranking of the first five priorities is shown in the appendix. In line with our earlier observations, Capi@home respondents attached importance mainly to combating price rises, a stable economy, high economic growth and a good social security system. Freedom of speech and the importance of ideas for politics received less support.

The respondents allocated a score ranging from 1 to 10 to the thirteen policy types (ratings). Capi@home respondents more often tended to give lower scores (below 6). This was the case, for example, for social security, employment and living costs, as well as for care, cultural policy, leisure policy, public order and the environment.

So far the picture to emerge is that the Capi@home respondents are somewhat conservative regarding increases in provisions but valued economic certainty. Cultural and leisure policy are less important to them. This suggests a materialistic attitude to life akin to that described by Inglehart, and as the short Inglehart scale in the appendix shows, the Capi@home group did indeed contain more materialists than the Compass group. However, the list of opinions on social security benefits does not match this supposition. Benefits such as old age pension, national assistance benefit, unemployment benefit, invalidity benefit and sickness benefit did not need to increase according to the Capi@home respondents. Although the score given to social provisions by Capi@home respondents was on the low side, the two groups of respondents were equally satisfied with the level of social provisions. All that we can say is that the picture here is unclear.

In the area of politics, Capi@home and Compass respondents regarded themselves as left-wing or right-wing with the same frequency, and their party preferences also showed few differences. Their interest in politics was the same, though Capi@home respondents read less about national politics in the newspaper and were also less inclined to vote. The attitudes 'materialism' and 'postmaterialism' have already been mentioned. Capi@home respondents may have taken a somewhat less favourable view of politics than the Compass respondents. They more frequently felt that MPs and ministers took little notice of the views of the public and paid too much attention to powerful groups. The feelings of effectiveness appear to be the same in both groups; they rejected to the same degree the statement that people have no real influence on the government.

A series of items aimed at determining the level of authoritarianism and anomie revealed few differences between the Capi@home and Compass respondents. Capi@home scored slightly higher for authoritarian attitudes or anomic feelings, but the differences were not large. Closer examination showed that Capi@home respondents tended mainly to score on the neutral answer categories.

Differences were found in a few individual areas of opinion-formation. This was less the case with democratisation issues. The Capi@home group differed from Compass only in that they wished to see a reduction in differences between what people possess – or in their wealth (not in their incomes). As regards democratic freedoms and participation, the number of

differences was also not large; Capi@home respondents were in favour of more scope for criticising the Royal Family and of freedom of the press. They were also slightly more in favour of participation for members of the public and employees - two forms of participation which have existed for a long time in the Netherlands anyway. When it came to alternative political actions, Capi@home respondents were less supportive than the Compass group across the board.

The picture is unclear as regards opinions on criminality and drug use. Capi@home respondents placed some emphasis on harsher sentences: they believed that punishments in the Netherlands are too light and were slightly more inclined to reject a decriminalised approach (aimed at changing the perpetrator). Compass respondents, by contrast, were rather more in favour of harsh sentences for soft drug users. Against this, Capi@home were more in favour of compulsory rehab and gave less support to providing free drugs under medical supervision. Finally Capi@home respondents showed greater support for the extreme statement that criminal elements should be removed from society. All in all, little pattern could be discovered in the opinions.

There was no difference in church membership between the two groups. When asked about the extent to which religious groups should be given complete freedom, Capi@home respondents were less in favour of complete freedom than the Compass group for all religions mentioned.

As regards health care, the Capi@home respondents were generally sceptical about both mainstream and alternative medicine. They were less inclined to believe that doctors could cure most ills, and also did not support the idea that illnesses could be cured through positive thinking or by visiting a faith healer. The Capi@home and Compass groups both considered their own health to be the most important thing in life.

Though it was not always clear-cut, the Capi@home group emerged in a number of areas as relatively cautious, traditional or even conservative. This was particularly true for alternative actions, granting freedom to religious groups and on many of the items relating to benefits. This conservative line was continued in their opinions on working wives: Capi@home respondents were less in favour of mothers with small children going to work and using childcare facilities. Policy designed to give priority to helping women into work also found less support among this group. They were also more inclined to think that parents gave their children too much freedom.

The Capi@home group differed from the Compass respondents in the greater emphasis they placed on equal treatment for minorities in the allocation of housing, dismissal protection and promotion at work. At the same time, however, Capi@home held less positive views about foreigners, being particularly against having foreigners (or people of a different race) as next-door neighbours.

The Capi@home respondents showed some dissatisfaction regarding the economic situation - not so much the national economy as their personal financial situation. They were less inclined to feel that the government was doing enough for their prosperity. They were also substantially less satisfied with their own income, and relatively more often felt that taxes were too high. This dissatisfaction with their personal situation was also reflected in a number of concerns: the Capi@home group were more concerned than the Compass respondents

about money matters, their own health, their own family and their own future. Politics formed an exception to this, but then this is fairly far removed from the personal living situation.

In summary, we can say that the number of significant differences between the Capi@home and Compass respondents was greater than might be expected on the grounds of chance. The use of scales does not impair this conclusion. We are unable to give a complete substantive interpretation of the differences found, though there are indications that the Capi@home group contained more respondents with a conservative, traditional attitude than the Compass group. Capi@home did not have a positive view of foreigners in all respects. They also had more concerns about their own living situation.

3. Composition of the samples

Introduction

Can the differences described in the foregoing section be attributed to the demographic profile of the samples? While at first sight it appears that good, representative samples were drawn, it is always possible that non-response makes the ultimate samples less representative than expected. A discrepancy in age profiles can in theory influence the responses to questions on age-sensitive topics. We shall examine this possibility further here.

Background variables used

The profiles of the two samples were compared on the basis of nine background variables: gender, age, civil status, educational status, degree of urbanisation, labour market participation, religion, household composition and income. Pearson's chi-square test was used to verify whether the samples genuinely differed from each other.

Differences between Compass and Capi@home based on background variables

The chi-square tests showed that the two samples had different distributions on five of the nine background variables, namely civil status, household composition, educational status, labour market participation and gross household income. The differences found for these variables were as follows:

- The Capi@home sample contained far fewer divorced respondents and far fewer widows/widowers than the Compass sample.
- Compared with Compass, Capi@home also contained far more married respondents. Single persons without children and single mothers were underrepresented in the Capi@home sample.
- The Capi@home group contained far fewer people with a higher professional education and far more people with a university background than the Compass sample. The percentage of people with low and medium education backgrounds was the same in both groups.
- Working people were over-represented compared with non-workers in the Capi@home sample. This was not the case in Compass.
- The Capi@home sample contained more people with higher incomes than the Compass group.

The variable 'gender' proved to have no significant impact on the chi-square test, but is still worth mentioning. Generally, women take part in the *Cultural Changes* surveys more often than men. In 2000, however, this phenomenon was only found in the Compass group; in the Capi@home sample the proportions were reversed, and more men took part than women.

Time series

The demographic profile of the Capi@home sample thus differed measurably from that of the Compass sample. If the sample profile we observed for Capi@home here also occurred commonly in the past, this could have given rise to chance fluctuation. If on the other hand the divergent Capi@home profile was a one-off, this would suggest that the nature of the instrument has had an influence.

We studied time series of background variables beginning in 1975. The year 1999, which was a Capi@home survey, was left out of the series; we shall return to this survey briefly later. We restricted the analysis to gender, educational status and labour market participation; the

effect of inflation meant that income was not a practicable variable, and we assumed that the influence of civil status and household composition on most of the opinions sought would be low.

Gender

It has already been noted that there is a discrepancy as regards the variable 'gender'. The distribution of men and women in the population is 49.5% and 50.5%, respectively; however, this distribution is not found in any of the *Cultural Changes* surveys held. Since the first survey in 1975, considerably more women than men have participated: an average of 53% compared with 47% men. These percentages remained fairly stable over the years. In 2000, if all respondents are considered as a single group, the distribution of men and women in the samples was 50-50% - an almost ideal distribution. However, looking at the two samples separately showed that the distribution within the Capi@home sample was less good than expected; this group contained far more men than women: 53.2% versus 46.8%, respectively. The distribution in the Compass sample was the same as in the group as a whole.

Although the significance of the variable 'gender' was not tested using Pearson's chi-square test, the time series showed that the gender distribution in the Capi@home sample was an exception. It is therefore probably wise to include this variable in subsequent analyses.

Education

On the variable educational status, both the Compass and Capi@home samples contained similar percentages of people with a low education level. In the time series, however, these percentages stand out. The recent trend in the number of people with a low education level shows a consistent drop in the number of low-educated people in the samples, mirroring the trend in the Dutch population. However, in both samples there were considerably more people with a low education level than expected on the basis of this trend: the percentage in the population as a whole in recent years was 23%; in the Compass sample the figure was 28%, while in Capi@home it was no less than 31%. Respondents with a junior secondary education background followed the trend in both samples.

The respondents with secondary and higher vocational education backgrounds also stood out strongly in the time series. The number of this group increased in line with the trend, but in 2000 there appeared to be far fewer of them. Closer inspection showed that this was caused mainly by the Capi@home sample, which contained an extremely low number of respondents in this category: 14.8% compared to an average of 23% in previous years. The picture for university graduates showed the reverse, i.e. there were far more people from this category in Capi@home than in Compass and in previous years (18%, 13% and an average of 13%, respectively). The 2000 samples therefore also exhibited discrepancies on the variable 'education' within the time series.

Labour market participation

Labour market participation was divided into 'performs paid work' and 'does not perform paid work'. There are no notable results to report regarding the distribution of labour market participation, observations of which in fact only began in 1988. The results for 2000 as a whole are not out of line: 64% of respondents were in paid work, fitting in with the time series which shows rising labour market participation. The results of the individual samples also fit in with this pattern.

Interim conclusion

The composition of the Capi@home sample deviated quite widely from the picture presented by corresponding time series from *Cultural Changes* surveys in terms of gender, educational status and labour market participation. It would appear that Capi@home is an unusual survey. What was striking was that the percentage distributions in Capi@home showed very many correspondences with the percentage distributions of the sample in 1999 - precisely the year in which the ISSP survey was held using Capi@home. This reinforces the conclusion that the Capi@home and Compass samples are not entirely comparable.

Weighting

There was thus a considerable difference in the composition of the two samples. The question now is whether the differences in responses disappear after controlling for these differences in demographic profile. A system of weighting was used to answer this question. In 1992 SCP investigated whether weighting was a useful tool in the *Cultural Changes* survey (Gijsberts, 1992). The data set was weighted according to the population using four weighting models. Five variables (gender, age, geographical region, degree of urbanisation and civil status) were incorporated in these models in differing combinations. The percentage distributions of the responses to the questions in the unweighted data set were then compared with the percentage distributions for the four weighted data sets. These comparisons revealed that weighting had few consequences: there was little or no change in the percentages. Why then was weighting adopted in the present study? Gijsberts weighted the sample data according to the population, because the purpose of that study was to determine the influence of non-response. This was not however the purpose of the present study; the aim here was to discover whether the two samples had the same composition.

Variables included in the weighting

Capi@home was weighted against Compass on for background variables which were considered important: gender, educational status, labour market participation and income. The variables 'civil status' and 'household composition', which like 'educational status', 'labour market participation' and 'income' had tested as significant, were not included in the weighting model. There were two reasons for this. First, a larger number of variables would have produced many empty cells, and empty cells in a weighting model lead to poor weighting; filled cells in the group which is being weighted can then acquire a weight of 0, which means they are unnecessarily lost. Second, it was felt likely that socio-economic variables would have a bigger influence on the responses to opinion questions than family variables. The weighting method used was post-stratification; this is the most specific method. It is only possible to apply weighting at this level if all cell contents are known; this was the case in the present study.

Differences between Compass and Capi@home responses after weighting

After weighting, there were of course three possibilities: the differences could remain unchanged; the significances could disappear; or significant differences could emerge which were not present earlier.

With a few exceptions, the differences in responses were still present after weighting. Only three questions produced differences which were significant before weighting but not significant afterwards. Seven items tested as significant after weighting, where this was not the case before weighting. These items are shown in table 1.

Table 1. Items with changed significance after weighting (percentage before – percentage after)

No.	Description	Response cat.	Compass	Capi@home	All
Items significant before weighting, not significant after weighting					
Var951	Economic situation coming 12 months	Improve	27 – 27	30 – 29	28 – 28
Var1229	Faith healers can cure	Absolutely/probably true	20 – 20	15 – 16	19 – 19
Var204	Frequency of churchgoing	At least once every 2 weeks	14 – 14	14 – 14	14 – 14
Items not significant before weighting, significant after weighting					
Var1046h	Political objective: social climate in cities	1st to 5th place	8 – 8	6 – 5	7 – 7
Var406	Tax increase/reduction	Reduction	62 – 62	67 – 68	64 – 64
Var952	Unemployment coming 12 months	Fall	48 – 48	44 – 44	47 – 47
Var275	Party for which would vote	Christ. Democrat (CDA)	17 – 17	19 – 19	17 – 18
		Labour (PvdA)	29 – 29	24 – 23	28 – 27
		Liberal (VVD)	22 – 29	24 – 24	22 – 22
		Democrats (D66)	9 – 9	8 – 8	9 – 9
		Green & Socialist (Groen Links & SP)	18 – 18	21 – 19	19 – 23
		Religious (SGP,GPV,RPF)	6 – 6	4 – 4	5 – 5
Var351	Reintroduce death penalty for some crimes	(strongly) agree	39 – 39	44 – 45	40 – 41
Var1031	No. of foreigners in the Netherlands	Too many	53 – 53	55 – 55	54 – 53
Var1143	Most foreigners are integrated	Quite well/in near future	35 – 35	33 – 33	34 – 34

It can be seen in this table that the rounded-off percentages within Capi@home change by at most two percentage points, and often do not change at all. This is probably due to chance.

In conclusion, it can be said of the weighting that the differences between the groups in terms of responses to the questionnaire could not be attributed to differences in the composition of the samples.

Weighting without sex

In addition to the weighting as described above, a weighting was also applied in which gender was not included as a background variable. This halved the number of cells in the weighting and also reduced the number of empty cells. The results of this treatment corresponded with those of the original weighting; once again, the number of questions for which significant differences were found remained virtually unchanged from that for the unweighted data.

Influence of background variables tested using ANOVA

The results of the weighting were studied in more detail by applying a number of ANOVAs (Analysis Of Variance) to the unweighted data set. Seven items were selected for this. The

selection criteria meant that the questions selected were those for which the two samples differed most widely, and that the questions covered different topics. The seven items chosen were: the materialism-postmaterialism scale; concerns about health (var133); MPs take too much notice of the interests of powerful groups (var320); granting freedom to Muslims (var589c); satisfaction with income (var149); neighbours of a different race (var546); and Political objective: freedom of speech (var1046d). Five background variables were included in the ANOVAs, plus the group variable instrument. The background variables were gender, age, income, education and labour market participation; they were chosen because it was expected that these variables could have the biggest influence.

All main effects and two-way interactions were included in the analysis. Not all two-way interactions were of interest in ascertaining differences in the influence of the background variables within the two samples. Only the interactions between the background variable and the group variables showed whether such differences did indeed exist. The other two-way interactions were however still included in the analysis because they could perhaps explain part of the variance which could not be explained by the interactions with the instrument. If these interactions were not included, those interactions which were included could perhaps erroneously test as significant.

The ANOVAs confirmed the results of the weighting (a summary is given in Appendix B). Once again, the differences proved to be attributable to the variable 'instrument' - as evidenced by the significance of the main effect on all seven questions - and not to differences in the background variables. The interaction-effects between instrument and background variables rarely proved significant and, where present, these effects were not systematic. If the background variables had explained the differences, the interaction effects would have tested as significant and the main effect of the instrument would not. The conclusion drawn earlier that the instrument used has an impact on the responses is thus confirmed by the ANOVAs.

Based on our analyses, we conclude that the differences between Capi@home and Compass are not attributable to the demographic composition of the samples. The explanation for the differences which were observed in section 2 must therefore be sought in a different direction.

4. Social desirability

Social desirability is understood as the tendency of respondents to provide answers which are in line with the general norm. It may be more common where the respondent has to make his or her opinion known to an interviewer; conversely, it may be less apparent where the respondent completes the questionnaire on a computer. In the former case there could be a further difference between the situation where the respondent fills in the responses him/herself and where he/she responds to questions read out by the interviewer.

In Compass, the responses to 121 questions were filled in by the interviewer; the answers to the other 40 questions were filled in by the respondents. Differences in the responses of the two groups (Compass and Capi@home) were found in 76 of the 121 questions (62.8%), which in Compass were put by the interviewer and in Capi@home were completed by the respondents. Of the 40 questions which were completed by the respondents themselves in both groups, 70% (28 questions) tested as significant. No systematic difference was found between questions answered by the respondents themselves and questions where the responses were given verbally to the interviewer.

According to expectations, socially desirable responses ought to occur more in Compass than Capi@home. One caveat is needed here, however: if giving socially desirable answers is a personality trait, the difference will not emerge, since these personality types probably occur to an equal extent in both groups. If it is a 'situational' characteristic, the difference will exist. We have no certainty on this point, however.

We will recap some of the differences between the two groups. In 2000 Capi@home respondents were conservative on socio-economic issues; government spending received less support and the same applied for raising social security benefits. Capi@home respondents showed less support for alternative actions and, with a few exceptions, were not strongly in favour of participation and democratic freedoms. The Capi@home group had a more traditional attitude to working wives and childcare. Capi@home rejected discrimination against minorities about as strongly as Compass; at the same time, however, Capi@home was less positive in its attitude to foreigners. Capi@home respondents were more worried about aspects of their living situation. These differences are of course not black and white; the percentages can even lie fairly close together. What is important is to discover a trend in the responses.

Did the Capi@home group produce less socially desirable responses, as expected? It could not be seen which desirabilities had had less influence on the computer panel (Capi@home). This might be expected as regards concerns: people probably do not like admitting that they are worried; this could give other people the idea all is not well with them, and people usually prefer not to acknowledge this. In the area of government spending, benefits and political matters this denial mechanism does not operate, however; it is not even certain whether there are any norms here, or even a prevailing climate of opinion from which people might prefer not to deviate openly.

It is possible to add to this. In 1979 a battery of questions was included to measure social desirability. The items were as follows (with percentage of socially desirable responses): Do you sometimes put off till tomorrow what you should have done today (no = 30%)? Are you always friendly and polite to everyone (yes = 65%)? Do you sometimes show off a bit (no =

62%)? Do you sometimes talk about things you know nothing about (no = 68%)? Do you sometimes gossip (no = 65%)? Are there some people you know whom you really dislike (no = 47%)? Do you always think very carefully before you form an opinion about someone or something (yes = 57%)? Do you always answer personal letters as quickly as you can (yes = 55%)? Would you declare everything at Customs, even if you knew you would definitely not be caught (yes = 25%)?

The tendency to give socially desirable responses was fairly widespread in 1979. As shown above, more than half the respondents claimed they were always friendly and polite, whilst the same proportion asserted that they never gossiped. We added the number of 'desirable' responses for each respondent to arrive at a total score. We then used contingency tables to investigate the relationships between this total score and a number of items which also occurred in 2000. The results were as follows.

- The relationship with government spending was unclear; no relationship was found with benefits.
- A low tendency towards social desirability was accompanied by support for alternative protest and support for democratic freedoms. The picture was unclear as regards participation.
- The fewer socially desirable responses a respondent gave, the more positive was their attitude to working wives.
- A low score on the social desirability scale was accompanied by the reporting of concerns and dissatisfaction about income.
- The lower the score on the social desirability scale, the more the respondent rejected authoritarian statements, such as 'The Netherlands would be better governed by strong leaders' and 'Laws are strictly speaking unnecessary'.

Social desirability was thus a factor in the responses to a number of questions. It was found that a high score on social desirability was accompanied by a certain faith in authority and traditionalism. The problem still remains however that, contrary to expectations, in 2000 this phenomenon was found more in the Capi@home sample than in the Compass population. One would expect that social desirability would score low in Capi@home, but the responses in fact pointed in the opposite direction; the concerns expressed were the only exception to this. The phenomenon of social desirability is thus real, but is of little help in explaining the differences between our two groups of respondents.

5. Conclusion

The responses to the opinion questions given by the Compass and Capi@home populations differed markedly. These differences could not be explained by the demographic composition of the samples, nor was it the result of social desirability which, contrary to expectations, turned out to be a bigger factor in the Capi@home group than in Compass. It must be assumed that a selection mechanism was at work in the Capi@home sample which operated on the basis of factors that we were unable to measure. The influence of computer ownership could be studied by asking the respondents in face-to-face interviews about their interest in and ownership of computers and their use of the Internet and computers. It would then be possible to test whether people with access to the Internet and computers are indeed different from those without these amenities. Similar questions, but this time focused on media consumption, could be used to study the influence of higher media consumption by the computer panel. Whatever the cause of the differences between Compass and Capi@home, it would be undesirable to supplement a time series created using Compass or a related interview method with results from the Capi@home survey.

References

Gijsberts (1992)

Gijsberts, M. Culturele Veranderingen: het wegen waard?. Rijswijk: SCP, 1992.

NIPO (2001)

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Appendix A

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi ² sig?
Govt.: - spending, policy, priorities	Var125	Government spending should increase	Increase	28	25	27	no
	Var096	More money for public provisions	Much more/a little more	64	58	62	yes
	Var100	More housework provisions	(strongly) agree	55	47	53	yes
	Var101	More student grants for the poor	(strongly) agree	83	76	81	yes
	Var103	Cheap housing	(strongly) agree	74	72	73	no
	Var107	Free education	(strongly) agree	80	83	81	no
	Var109	Combat environmental pollution	(strongly) agree	77	74	76	no
	Var121	Compulsory schooling to age 18	(strongly) agree	52	43	50	yes
	Var122	Increase art subsidies	(strongly) agree	19	10	17	yes
	Var124	More crèches	(strongly) agree	58	48	55	yes
	var1162A	Care policy	Do more	88	89	88	no
	var1162B	Cultural policy	Do more	20	17	19	yes
	var1162C	Leisure policy	Do more	25	27	25	no
	var1162D	Policy on use of amenities and services	Do more	50	44	48	no
	var1162E	Vocational education policy	Do more	45	43	44	no
	var1162F	Maintaining order	Do more	75	80	77	no
	var1162G	Social security	Do more	39	42	40	yes
	var1162H	Employment	Do more	21	25	22	yes
	var1162I	Environmental policy	Do more	43	38	41	yes
	var1162J	Policy on living costs	Do more	44	52	46	yes
	var1162K	Policy on urban living environment	Do more	51	51	51	no
	var1162L	Reception of foreigners	Do more	24	18	23	yes
	var1162M	Childcare policy	Do more	46	40	44	yes
	Var1046A	Political objective: maintain order	1st to 5th place	58	58	58	no
	Var1046B	Id: more participation by citizens	1st to 5th place	18	17	17	no
	Var1046C	Id: combat price rises	1st to 5th place	25	30	27	yes
	Var1046D	Id: freedom of speech	1st to 5th place	43	30	39	yes
	Var1046E	Id: high economic growth	1st to 5th place	21	26	23	yes
	Var1046F	Id: strong army	1st to 5th place	3	1	3	yes
	Var1046G	Id: participation in workplace/residential env.	1st to 5th place	19	17	18	no
	Var1046H	Id: enhance cities	1st to 5th place	8	6	7	no
	Var1046I	Id: stable economy	1st to 5th place	50	60	53	yes
	Var1046J	Id: combat crime	1st to 5th place	63	64	64	no
Var1046K	Id: friendlier society	1st to 5th place	44	46	45	no	
Var1046L	Id: ideas before money	1st to 5th place	25	20	24	yes	
var1046M	Id: reduce unemployment	1st to 5th place	25	24	25	no	

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi ² sig?
Govt.: - spending, Policy, priorities (cont.)	Var1046N	Id: combat environmental pollution	1st to 5th place	33	30	32	no
	Var1046O	Id: good social security	1st to 5th place	55	62	57	yes
	Var1046P	Id: take care of minorities	1st to 5th place	11	9	11	no
- evaluation	Var1145A	Score: care policy	6 and higher	32	25	30	yes
	Var1145B	Score: cultural policy	6 and higher	72	67	71	yes
	Var1145C	Score: leisure policy	6 and higher	78	73	77	yes
	Var1145D	Score: policy on use of amenities and services	6 and higher	67	66	67	no
	Var1145E	Score: voc. educ. policy	6 and higher	72	71	72	no
	Var1145F	Score: maintaining order	6 and higher	51	41	49	yes
	Var1145G	Score: social security	6 and higher	75	67	61	yes
	Var1145H	Score: employment	6 and higher	88	84	86	yes
	Var1145I	Score: environ. policy	6 and higher	72	73	72	no
	Var1145J	Score: living costs policy	6 and higher	65	56	63	yes
	Var1145K	Score: 'liveability' policy	6 and higher	60	58	60	no
	Var1145L	Score: recep. of foreigners	6 and higher	65	62	64	no
	var1145M	Score: childcare policy	6 and higher	64	61	63	no
	Var1146	Satisfied with government	Very/more or less	77	75	77	no
	Var1163	Dutch govt. functions well	(strongly) agree	65	65	65	no
Soc. sec. benefits	Var571	Expectation soc. sec. benefits	Increase	34	25	31	yes
	Var573	Opinion on benefits in the light of the economy	Increase	54	48	52	yes
	Var154	Opinion: pensions	Should rise	52	45	50	yes
	Var155	Opinion: nat. assistance	Should rise	55	37	50	yes
	Var156	Opinion: unempl. benef.	Should rise	23	16	21	yes
	Var157	Opinion: surviving dependants' benefit	Should rise	60	56	59	no
	Var157A	Opinion: invalidity benefit	Should rise	47	40	45	yes
	Var154A	Opinion: sickness benefit	Should rise	18	16	18	yes
	Var153	Opinion on social provisions	Satisfied	67	65	67	no
Politics: - general	Var461	Political leanings: left/right	(very) left	34	34	34	no
			(very) right	29	29	29	
	Var274	Would vote in general election	yes	75	71	74	yes
	Var275	Party for which would vote	Christ. Dem. (CDA)	17	19	17	no
			Labour (PvdA)	29	24	28	
			Liberal (VVD)	22	24	22	
			Liberal (VVD)	9	8	9	
			Democrat (D66)	18	21	19	
			Green/Socialist (GroenLinks & SP)	6	4	5	
	Religious (SGP,GPV,RPF)						
Var491	Political interest	Strong/normal	43	39	41	no	

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi ² sig?
Politics: - general (cont.)	Var040	Reads newspapers on national politics	Regularly	35	28	33	yes
		Short Inglehart scale	Materialist	23	31	25	yes
- Effectiveness & political distrust	Var318	People like me have no influence on government	Agree	54	58	55	no
	Var319	MPs/ministers don't care about people like me	Agree	52	62	55	yes
	Var320	MPs take too much notice of int. of powerful groups	Agree	65	76	67	yes
- authoritarianism & anomie	Var439	Fewer laws, more dedicated leaders	Completely/largely agree	33	28	32	yes
	V065	Most people can be trusted	Agree	49	48	49	no
	Var430	2 kinds of people: strong and weak	Completely/largely agree + neutral	65	67	65	yes
	Var431	People disappoint when you get to know them better	Completely/largely agree + neutral	44	49	45	yes
	Var434	Rebellious youth is reality	Completely/largely agree + neutral	72	76	73	yes
	Var454	Contact only at own level of good manners	Completely/largely agree + neutral	48	55	50	yes
- in-equality	Var164	Opinion: income differentials	Too wide	67	64	66	no
	Var165	Desired inc. differentials	Slightly/much smaller	70	70	70	no
	Var166	Desired wealth differentials	Slightly/much smaller	51	61	54	yes
Freedom and democratisation: - democratic freedoms	Var179	Free: to demonstrate	Yes	90	91	91	no
	Var180	Free: to criticise Royal Family	Yes	74	80	76	yes
	Var181	Free: to strike for pay rise	Yes	81	77	80	no
	Var183	Free: to occupy buildings	Yes	39	38	39	no
	Var184	Free: to write what you want	Yes	73	77	74	yes
	Var185	Free: to say what you want in public	Yes	84	85	84	no
- participation	Var271	Student participation in running university	Much/a little greater	37	39	37	no
	Var591	Parent part. in schools	Much greater	11	7	10	yes
	Var272	Student part. in secondary schools	Much/a little greater	42	38	41	no
	Var273	Citizen participation in administration	Much/a little greater	71	79	74	yes
	Var167	Desired worker participation	Much/a little greater	59	64	61	yes

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi ² sig?
Freedom & democratization: - alternative action	Var408	Willingness to act on unjust law	High	15	10	14	yes
	Var409	Unjust law: hinder government's work	Pro-action (yes)	64	52	61	yes
	Var410	Arrests of some protestors	Pro-action (no)	38	35	38	yes
	Var411	School occupation by parents/teachers	Pro-action (yes)	58	52	57	yes
	Var412	Participators in teacher action re. dismissals	Pro-action (no)	95	92	94	yes
	Var413	Wildcat strike because of threatened dismissal	Pro-action (yes)	42	41	42	yes
	Var414	Employees occupy workplace: police eviction	Pro-action (no)	41	45	49	yes
	Var634	Strike against cut in social security benefits	Pro-action (yes)	64	62	28	yes
	Var635	Squatting in empty building	Pro-action (yes)	40	34	38	yes
Var636	Violent police eviction from a building	Pro-action (no)	50	45	49	yes	
Criminality	Var687	Crime in NL increasing/decreasing	Increasing	85	84	85	no
	Var953	Crime in NL punished too severely/too lightly	Too lightly	89	94	90	yes
	Var433	Rehabilitate rather than punish criminals	Completely/largely agree	42	36	41	yes
	Var346	Apply strict penalties for soft drugs	(strongly) agree	39	33	37	yes
	Var351	Reintroduce death penalty for some crimes	(strongly) agree	39	44	40	no
	Var445	Treat sex offenders instead of punishing	Completely/largely agree	29	26	28	no
	Var848	Mandatory treatment of drug addicts	Completely/largely agree	77	81	78	yes
	Var849	Free drugs under medical supervision	Completely/largely agree	41	34	39	yes
	Var437	Solve social problems by eliminating crime	Compl./largely agree + neutral	41	50	44	yes
Religion	Var201	Member of church community	No	64	67	65	no
	Var589A	Freedom for Catholics	Complete	79	67	76	yes
	Var589B	Freedom for Protestants	Complete	80	66	76	yes
	Var589C	Freedom for Muslims	Complete	58	41	53	yes
	Var589D	Freedom for Jehovah's Witnesses	Complete	48	33	44	yes
	Var589E	Freedom for humanists	Complete	72	59	68	yes
	Var589F	Freedom for misc. groups	Complete	29	21	27	yes

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi ² sig?
Health care	Var1050	Doctors cure almost all ills	(strongly) agree	53	46	51	yes
	Var1052	Doctors don't always know best	(strongly) agree	82	79	81	no
	Var1227	Causes of illnesses not treated	Absolutely true	15	11	14	yes
	Var1228	Positive thinking can cure	Absolutely true	11	7	10	yes
	Var1229	Faith healers can cure	Absolutely/probably true	20	15	19	yes
	Var1230	Negative thinking leads to illness	Absolutely/probably true	54	55	54	yes
	Var229	Most important thing in life	Health	59	59	59	no
Working women/ children	Var515	Young children at school, mother works	Good idea	33	26	31	yes
	Var516	Young children in crèche, mother works	Good idea	17	10	15	yes
	Var768	Child < 4 years in childcare	Good idea	21	14	19	yes
	Int071	Working mother bad for family	Strongly agree	16	14	15	yes
	Var608	Parents give children too much freedom	Completely/largely agree	63	66	64	yes
	Var594	Pos. discrimination for women on jobs market	(strongly) agree	19	11	17	yes
Minorities	Var1161	Immigrants enrich society	Completely/largely agree	40	31	38	yes
	Var683B	Housing: guestworker – Dutch person	Shouldn't make any difference	62	68	64	yes
	Var728B	Dismissal: foreigner – Dutch person	Shouldn't make any difference	79	83	80	yes
	Var729B	Promotion: foreigner – Dutch person	Shouldn't make any difference	82	85	83	yes
	Var546	Neighbours different race	No objection	47	30	42	yes
	Var1031	No. foreigners in NL	Too many	53	55	54	no
	Var1140	Attitude to minorities	Positive	23	16	21	yes
	Var1141	Foreigners should learn Dutch	(strongly) agree	97	96	96	no
	Var1142	Foreigners should adhere less to their own culture	(strongly) agree + neutral	79	87	81	yes
	Var1143	Most foreigners are integrated	Quite well/in near future	35	33	34	no
	Var1103	Residency for political refugees	Very/somewhat flexible	81	75	79	yes
	Var1104	Id: economic refugees	Very/somewhat flexible	34	30	32	yes
	Var1105	Id: entry of wife of illegal immigrant	Very/somewhat flexible	10	9	10	yes
	Var1106	Id: entry of future wife of legal immigrant	Very/somewhat flexible	57	55	56	no
Var1033	Priority for foreigners on government job	(strongly) agree	27	16	24	yes	

Category	no.	Description	Response cat.	Com pass	Capi@ home	All	Chi² sig?
Economy, income & taxation	Var951	Economic situation coming 12 months	Improve	27	30	28	yes
	Var952	Unemployment coming 12 months	Fall	48	44	47	no
	Var065	Economic crisis in near future	Crisis on way	16	21	17	yes
	Var567	Expect income to rise/fall	Rise	54	53	53	no
	Var569	Opinion on incomes in light of economy	Rise	64	69	65	no
	Var064	Increase govt efforts to improve own prosperity	Yes	40	34	38	yes
	Var149	Satisfaction with income	Satisfied	50	34	46	yes
	Var151	Match between income & training	Income too low	30	34	31	yes
	Var406	Tax increase/reduction	Reduction	62	67	64	no
	Var407	Level of income tax	Too high	57	66	60	yes
Concerns	Var131	Concerns: money	Yes	48	56	51	yes
	Var132	Concerns: politics	Yes	52	57	53	no
	Var133	Concerns: health	Yes	54	64	57	yes
	Var134	Concerns: family	Yes	61	68	63	yes
	Var135	Concerns: own future	Yes	46	55	48	yes

Appendix B

ANOVA: Materialism – postmaterialism

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	5.685	.000
2-way interaction	INSTRU * gender	1	10.233	.001
	INSTRU * education	3	4.214	.006
	INSTRU * income	3	.791	.499
	INSTRU * labour market participation	1	1.697	.193
	INSTRU * age category	6	2.065	.054
Residual		2120		

ANOVA: Health concerns

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	4.183	.000
2-way interaction	INSTRU * gender	1	.029	.864
	INSTRU * education	3	.934	.424
	INSTRU * income	3	.978	.402
	INSTRU * labour market participation	1	.843	.359
	INSTRU * age category	6	2.263	.035
Residual		2188		

ANOVA: MPs take too much notice of the interests of powerful groups

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	21.891	.000
2-way interaction	INSTRU * gender	1	1.777	.183
	INSTRU * education	3	.999	.392
	INSTRU * income	3	2.112	.097
	INSTRU * labour market participation	1	.035	.852
	INSTRU * age category	6	.804	.567
Residual		1924		

ANOVA: Freedom for Muslims

		Degrees of freedom	F-value	Significance Of F
Main effect	INSTRU	15	29.088	.000
2-way interaction	INSTRU * gender	1	1.552	.213
	INSTRU * education	3	1.040	.374
	INSTRU * income	3	2.517	.057
	INSTRU * labour market participation	1	.033	.856
	INSTRU * age category	6	2.165	.044
Residual		2045		

ANOVA: Satisfaction with income

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	28.426	.000
2-way interaction	INSTRU * gender	1	.056	.814
	INSTRU * education	3	.571	.634
	INSTRU * income	3	1.123	.338
	INSTRU * labour market participation	1	2.906	.088
	INSTRU * age category	6	1.807	.094
Residual		2146		

ANOVA: Neighbours of different race

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	17.882	.000
2-way interaction	INSTRU * gender	1	.962	.327
	INSTRU * education	3	.678	.566
	INSTRU * income	3	.647	.585
	INSTRU * labour market participation	1	5.824	.016
	INSTRU * age category	6	1.384	.217
Residual		2169		

ANOVA: Political objective: Freedom of expression

		Degrees of freedom	F-value	Significance of F
Main effect	INSTRU	15	33.013	.000
2-way interaction	INSTRU * gender	1	3.333	.068
	INSTRU * education	3	.489	.690
	INSTRU * income	3	1.005	.390
	INSTRU * lab. mkt. particip.	1	.117	.733
	INSTRU * age category	6	1.094	.363
Residual		2199		