



Universiteit
Leiden
The Netherlands

Public opinion without opinions? Item nonresponse and (the absence of) substantive opinions in public opinion surveys

Maat, J. van de

Citation

Maat, J. van de. (2019, September 17). *Public opinion without opinions? Item nonresponse and (the absence of) substantive opinions in public opinion surveys*. Retrieved from <https://hdl.handle.net/1887/76853>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/76853>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The following handle holds various files of this Leiden University dissertation:
<http://hdl.handle.net/1887/76853>

Author: Maat, J. van de

Title: Public opinion without opinions? Item nonresponse and (the absence of) substantive opinions in public opinion surveys

Issue Date: 2019-09-17

CHAPTER 8

Comparing Survey Experiments (Conclusions I)

8.1 Introduction

The previous chapters showed that non-substantive response options – i.e. the explicit DK option, the filter question and the follow-up question – affect the picture of public opinion emerging from surveys by increasing item nonresponse rates (the DK option and filter question) or making a distinction between respondents with a directive and permissive opinion (the follow-up question). Surprisingly, the substantive overall distributions of opinions were rarely altered by question design choices, suggesting that item nonresponse is missing at random.

What has not been addressed so far is whether the results of the separate experiments are consistent with one another. The aim of this chapter is to compare the three experiments on item nonresponse and the overall distribution of opinions. The main question is what the impact of a Don't Know option or filter question is on the outcome of a survey and whether this impact is consistent in all experiments. Some question design elements – i.e. explicit and implicit DK options and the filter question – were used in multiple experiments, enabling such a comparative analysis. If this analysis shows similar effects, more robust conclusions can be drawn about how non-substantive response options affects survey outcomes.

8.2 Theoretical Reflection

A number of factors play a role in influencing the results of a survey, including question design. This process is graphically illustrated in Figure 8.1.

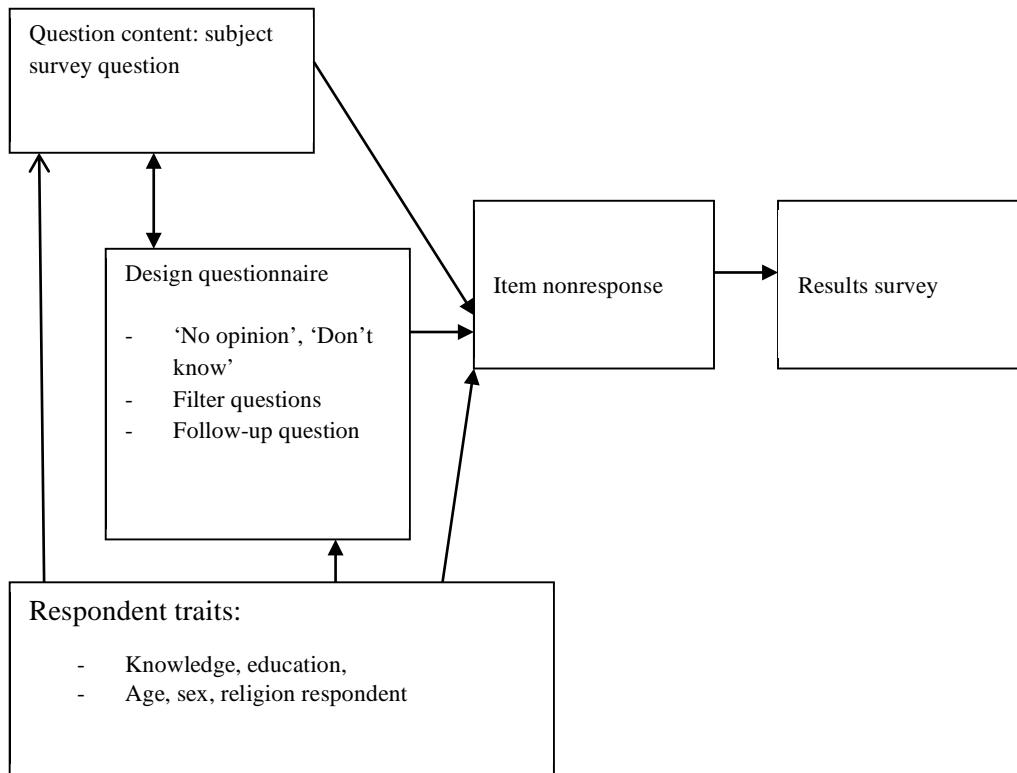


Figure 8.1: Model for Non-Substantive Response Options and Survey Outcomes

The model positions the analysis from the previous chapters and illustrates which variables and effects were central in the discussion so far. It does not contain an exhaustive account of all methodological aspects affecting survey results; the intention is merely to illustrate how the elements examined in this chapter (i.e. non-substantive response options and survey results) may interact. The model shows that both the design of the questionnaire and the subject of the survey question(s) affect item nonresponse. At the same time, an interaction effect was expected: the content of a question affects the susceptibility of a respondent to design effects.

8.3 Hypotheses

The hypotheses for the comparative analyses focus on three aspects: 1) item nonresponse; 2) the distribution of opinions; and 3) question content and its interaction with the other two aspects. The hypotheses are summarized in Table 8.1. See chapter 3 for a more extensive discussion.

Table 8.1: Hypotheses for Comparative Analyses

Question design	H1a	The more explicit a non-substantive response option is presented, the more item nonresponse will be measured
	H1b	A filter question results in more item nonresponse than an explicit DK option
Missing data	H2a	(Based on MAR) An increase of the level of missing data does not affect the distribution of opinions
	H2b	(Based on NMAR) An increase of the level of missing data results in a different distribution of opinions
Question content	H3a	If the topic of a survey question is related to a major political dimension, then the item nonresponse is lower compared to a survey question that is not related to such a dimension
	H3b	The item nonresponse for questions about foreign policy issues is higher than for questions about issues related to the core dimensions
Response categories	H4a	The more substantive response categories are offered, the lower the item nonresponse rate
	H4b	A midpoint in the absence of a non-substantive response option results in more use of this midpoint option than when a non-substantive response option is offered
	H4c	A midpoint combined with a non-substantive response option results in less item nonresponse as compared to offering no midpoint category
Response time	H5	The more explicit the DK option is presented, the less response time will be registered
Break-offs	H6	When respondents are forced to answer survey questions, the number of break-offs is higher than when a non-substantive response option is available

8.4 Data and Methods

The design of the survey experiments was discussed in Chapter 4 (Data and Methods). Details on the execution of the individual survey experiments can be found in Chapter 5, 6 and 7. Three internet panels were used to collect data: the probability-based LISS Panel and two volunteer or convenience panels (EenVandaag Opiniepanel and Team Vier's internet panel). Table 8.2 gives an overview of the questionnaire variants and how many respondents completed that particular variant in the three internet panels.

Table 8.2: Overview of Comparison Questionnaire Variants and Panels

		Number of respondents
Explicit Don't Know Option		
LISS Panel	Variant 2 (Single Explicit DK)	1464
EenVandaag Opiniepanel	Variant 3a (No Filter, Explicit DK)	3931
Team Vier internet panel	Variant 1a (No Filter, Explicit DK)	251
Implicit Don't Know Option – Possibility to Skip Question		
LISS Panel	Variant 3 (Single Implicit DK)	1375
EenVandaag Opiniepanel	Variant 3b (No Filter, Implicit DK)	3591
Team Vier internet panel	Variant 1b (No Filter, Implicit DK)	249
(Weak) Filter Question, Explicit Don't Know Option		
EenVandaag Opiniepanel	Variant 2a (Weak Filter, Explicit DK)	4327
Team Vier internet panel	Variant 2a (Weak Filter, Explicit DK)	251
(Weak) Filter Question, Implicit Don't Know Option		
EenVandaag Opiniepanel	Variant 2b (Weak Filter, Implicit DK)	4283
Team Vier internet panel	Variant 2b (Weak Filter, Implicit DK)	250
Forced Choice – No Non-substantive response options Offered		
LISS Panel	Variant 4 (No DK / Forced Choice)	1421
EenVandaag Opiniepanel	Variant 4 (Forced Choice)	4460
Team Vier internet panel	Variant 1c (Forced Choice)	252

The variants differ in the number of respondents, sample composition and their timing, but otherwise they are identical or at least equivalent; for example, the three surveys with the Explicit Don't Know Option used the same introduction, question order and answer categories. The questions that allow for comparison are the eight replicated scientific questions that were included in all three experiments. These questions cover four policy fields or themes: socio-economic, ethical, multicultural and foreign affairs. In the first experiment, executed with

the LISS Panel, four additional scientific questions were included. These questions were asked in between the other eight questions and another example of the four issue themes. Furthermore, in the third experiment (executed with the Team Vier internet panel) the order of the questionnaire was randomized. Question order is not held completely constant.

The aim of the survey experiments was to identify causal relations. The between-subjects-design with random assignment to subgroups ensured that question design was the only factor affecting survey results. The experiments have a high internal validity.

It should be noted, however, that the external validity of the two volunteer or convenience samples is very limited. Generalization to the population is problematic. The ability to compare the findings of the three survey experiments is impaired by the unrepresentative nature of the EenVandaag Opiniepanel and Team Vier's internet panel. To give an example: 31 percent of the EenVandaag Opiniepanel respondents and 64 percent of the Team Vier internet panel respondents was female. A comparison of the three experiments may reinforce the findings of the individual chapters, but differences between the experiments and panels cannot be ruled out beforehand. Since the differences between the panels cannot be excluded as a potential explanation, any conclusions about differences between the three individual survey experiments need to be drawn very tentatively.

8.5 Results

8.5.1 Item Nonresponse

The first main question is how non-substantive response options affect item nonresponse. The expectation (hypothesis H1a) was that more explicit non-substantive response options result in more item nonresponse. Figure 8.2 displays the average item nonresponse for the variants in the three survey experiments⁴². The item nonresponse results from a *single* non-substantive response option, i.e. a DK option or a filter question, and not from the combination of both a filter question and a DK option in one variant.

⁴² The average item nonresponse was computed by counting either the DK answers or the 'no's' to the filter question, and dividing this sum by the total number of questions in the questionnaire. See for an additional analysis of the total item nonresponse resulting from all non-substantive response options offered in one variant. Since no DK option was offered in the Forced Choice variants, these are excluded from this analysis.

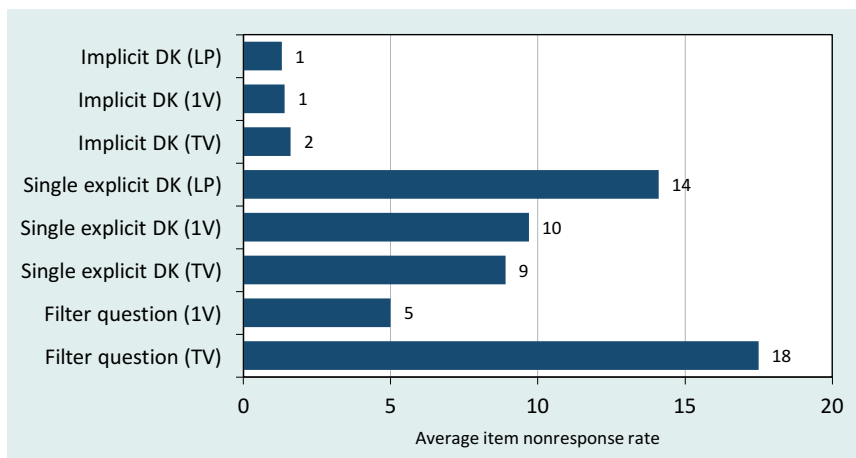


Figure 8.2: Average Item Nonresponse Rate (%) of Individual Non-Substantive Response Options

The first hypothesis (H1a) stated that more explicit non-substantive response options result in more item nonresponse. The least explicit non-substantive response option in this analysis is the implicit DK option, the most explicit option is the filter question⁴³. Figure 8.2 shows mixed results: the filter question in the experiment with the Team Vier internet panel resulted in the highest item nonresponse rate (17 percent) and the implicit DK options indeed yielded the least item nonresponse (1 to 2 percent), but there are exceptions to the rule that more explicit non-substantive response options result in more item nonresponse. The single explicit DK option in the experiment with the LISS panel, for example, resulted in 14 percent of the respondents using the DK option and this was substantially higher than the 5 percent saying ‘no’ to the more explicit filter question in the experiment in the EenVandaag Opiniepanel. In fact, all explicit DK options resulted in more item nonresponse than the filter question in this experiment.

A possible explanation of these mixed results is that respondents may have learned during the survey that there were two non-substantive response options available: when they said ‘yes’ to the filter question, they were still able to use the DK option. An additional analysis of the average item nonresponse rate including both non-substantive response options does indeed show that filter variants, i.e. questionnaire variants including both a filter question and a DK option, have the highest total item nonresponse of all questionnaire variants except for one (the explicit DK variant executed with the LISS panel in the first experiment – see Figure C.62 in the Appendix).

⁴³ Only variants that were used at least twice by two different panels are included.

Looking at the average item nonresponse rates in Figure 8.2, another thing catches the eye: the differences within the single explicit DK and within the filter question variants. Depending on the survey experiment and panel, the item nonresponse for the single explicit DK variants varied between 9 and 14 percent; the item nonresponse for the filter question variants varied between 5 and 18 percent. This range is rather large.

A number of potential explanations can be given for the differences between the three experiments: panel composition, the standard practice of the panels and incentives. The first explanation, panel composition, stems from the fact that both the EenVandaag Opiniepanel and Team Vier's internet panel are non-probability based samples resulting from self-selection. Only the LISS Panel is probability-based. As a result, the outcome of the second (filter question) and third (follow-up question) experiment in this study cannot be generalized to the population. Furthermore, comparisons between the three panels are difficult because specific characteristics of the panel respondents may have contributed to the survey outcomes. Due to the unrepresentative nature of two panels and their subsequent incomparability with the third (LISS) panel, no conclusions can be drawn about the differences in item nonresponse rate within the explicit DK and within the filter question variants.

The second potential explanation concerns the panels' standard practice. Do they offer non-substantive response options to the respondents and if so, how? The respondents of the EenVandaag Opiniepanel usually get an explicit DK option and may as such be more used to the possibility to use it than the respondents of the LISS Panel. This standard practice could explain why the respondents of the former used the explicit DK option less than respondents of the latter. It does not explain, however, why Team Vier's respondents said 'no' to the filter question more often than EenVandaag Opiniepanel's respondents.

The third potential explanation is the incentive offered to the respondents for participating in the survey. Respondents of the LISS Panel and Team Vier's internet panel are awarded money for finishing the survey, whereas EenVandaag Opiniepanel's respondents 'only' get the satisfaction of seeing the results of the survey in EenVandaag's television programme. It might be the case that Team Vier's respondents used the filter question more often than EenVandaag Opiniepanel's respondents, because they wanted to finish the survey and collect their reward. Likewise, respondents of the LISS Panel may have used the explicit DK option more to avoid having to think long about a question and finish the survey quickly. It is, however, mere speculation which factor explains the differences in survey outcomes, since the factors cannot be isolated. EenVandaag's Opiniepanel differs on all factors from the LISS Panel, for example, which means that it is impossible to say which factor explains the differences in item nonresponse best.

The results in Figure 8.2 do confirm that more explicit non-substantive response options on average resulted in more item nonresponse, which supports expectation H1a. Also, the use of a filter question resulted in more item nonresponse than the use of a DK option in one of the two experiments. The nonresponse is not as high as found in previous research on filter questions (Bishop et al., 1983; Schuman & Presser, 1979), but the results partially support hypothesis H1b that filter questions result in more item nonresponse than an explicit DK option when the effect of a single non-substantive response option is considered; when all non-substantive response options are included the total item nonresponse is consistently higher in the filter variants. Offering a non-substantive response option more explicitly results in more item nonresponse; the size of this effect varies.

8.5.2 Distribution of Opinions

A higher nonresponse rate 'provides greater opportunities for bias' (Lynn, 2014, p. 319), but whether this actually happens is dependent on whether the data are missing at random or not. If the data is missing at random, the distribution of opinions should be similar in variants with varying item nonresponse. If the data are not missing at random, the distribution of opinions should be significantly different when nonresponse is excluded. Table 8.3 and Table 8.4 show some characteristics of the distribution of opinions for the self-placement items. Two things should be assessed on the basis of these data: 1) whether the data are missing at random; and 2) whether the panels and variants differ in their outcome for the same survey question.

Table 8.3: Mean, Mode and Standard Deviation of Self-Placement Items in the Non-Filter Variants

Question		Explicit DK			Implicit DK		
		LP	iV	TV	LP	iV	TV
Income Differences	Mean	5.3	5.1	5.2	5.0	5.1	5.1
	Mode	5	7	4	5	7	4
	SD	1.3	1.5	1.4	1.3	1.6	1.3
Euthanasia	Mean	5.8	6.0	5.9	5.7	6.0	6.0
	Mode	7	7	7	7	7	7
	SD	1.5	1.5	1.5	1.5	1.4	1.4
Foreigners	Mean	5.1	5.0	4.9	5.0	4.9	4.9
	Mode	5	7	5	5	5	5
	SD	1.4	1.6	1.3	1.4	1.6	1.5
European Unification	Mean	4.8	4.4	4.5	4.6	4.4	4.6
	Mode	4	7	4	4	7	4
	SD	1.7	2.2	1.8	1.6	2.1	1.7

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

Table 8.4: Mean, Mode and Standard Deviation of Self-Placement Items in the Filter Variants

Question		Weak Filter, Explicit DK		Weak Filter, Implicit DK		Forced Choice		
		iV	TV	iV	TV	LP	iV	TV
Income Differences	Mean	5.2	5.2	5.2	5.0	5.1	5.1	5.1
	Mode	7	5	7	4	4	7	4
	SD	1.6	1.4	1.5	1.5	1.3	1.5	1.3
Euthanasia	Mean	6.1	6.2	6.0	6.0	5.7	6.0	5.9
	Mode	7	7	7	7	7	7	7
	SD	1.4	1.2	1.4	1.5	1.5	1.4	1.5
Foreigners	Mean	5.0	5.0	4.9	4.9	5.1	4.9	4.9
	Mode	5	5	5	5	6	5	5
	SD	1.6	1.4	1.6	1.4	1.3	1.6	1.4
European Unification	Mean	4.4	4.5	4.1	4.7	4.7	4.4	4.5
	Mode	7	7	7	5	4	7	4
	SD	2.1	1.9	2.2	1.8	1.6	2.1	1.8

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

To examine whether the missing data are missing at random, both means and modes are considered. The means do not show much range; the biggest difference between the lowest and highest means is for European Unification with an average of 4.1 in the weak filter, implicit DK EenVandaag Opiniepanel variant and 4.8 in the explicit DK LISS Panel variant. Looking at the modes, the most stable item is self-placement euthanasia; all variants and panels show a mode of '7', i.e. the most liberal stance on euthanasia. The foreigners self-placement item is also rather stable with two exceptions from the general mode of '5'. The other two self-placement items, income differences and European Unification, show the most dissimilarity with '4' and '7' as the answer reported most. Overall, however, the differences are very small and when the complete distributions of opinions are regarded (as displayed in Chapter 5, 6 and 7), the picture of public opinion hardly changes when a different (or no) non-substantive response option is offered. This suggests that the data are missing at random, which supports hypothesis H2a.

Item nonresponse for the self-placement items was relatively low, lowering the probability for a major change in the emerging overall picture of public opinion. The other four items varied more in terms of item nonresponse; hence the possibility for data not missing at random, significantly affecting the distribution of opinions. Table 8.5 depicts the modes of the four non-self-placement items.

Table 8.5: Modes of the Non-Self-Placement Items

Question	Explicit DK			Implicit DK			Filter, Explicit DK		Filter, Implicit DK		Forced Choice		
	LP	iV	TV	LP	iV	TV	iV	TV	iV	TV	LP	iV	TV
Welfare benefits should be lowered in order to stimulate people to work	3	3	3	3	3	3	3	3	3	2+3	3	3	3
Adoption by same-sex couples should be possible	2	2	2	2	2	2	2	2	2	1	2	2	2
There are too many people of a non-Dutch nationality living in the Netherlands	3	3	3	2	3	3	3	3	3	3	2	3	3
The Netherlands should spend more money on development aid	3	4	3	3	4	3	4	3	4	3	3	4	3

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

The items referred to in Table 8.5 included four response categories – completely agree, agree, disagree and completely disagree – which makes them unsuitable for comparing means. Based on the modes, one item ('lowering welfare benefits' in the socio-economic theme) shows no variation at all. Another item, same-sex adoption, has one 'exceptional' mode; the nationality item within the multicultural theme has two exceptions. So overall, it does not really matter which panel was used or how the questions were asked: the overall outcome would be quite similar. This conclusion is supported by the complete distributions of opinions (as displayed in previous chapters). When item nonresponse is excluded as missing data, the picture of public opinion remains the same. This suggests that the data are missing at random (supporting hypothesis H2a).

8.5.3 Differences in Question Content and Panels

How do non-substantive response options affect the outcome of individual questions? The goal of this section is to go beyond the aggregate effect of question design and to look at differences in question content and internet panels. The analysis focuses on the effects on item nonresponse, because it turned out (above and in previous chapters) that non-substantive response options do not have a substantial impact on the outcome in terms of the overall distribution of opinions (when nonresponse is excluded as missing data). To examine in more detail how question design affects item nonresponse, how this is related to question content and whether the panels differ in their outcome, the levels of item nonresponse for the individual eight items are shown in Table 8.6 – Table 8.9.

Table 8.6: Item Nonresponse (%) in the Implicit DK Variants

Question	LP	iV	TV
Self-placement [1-7] Income Differences	0	1	0
Welfare benefits should be lowered in order to stimulate people to work	1	1	1
Self-placement [1-7] Euthanasia	1	0	1
Adoption by same-sex couples should be possible	1	1	1
Self-placement [1-7] Foreigners	0	0	0
There are too many people of a non-Dutch nationality living in the Netherlands	1	1	2
Self-placement [1-7] European Unification	1	0	2
The Netherlands should spend more money on development aid	1	1	2

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

Table 8.7: Item Nonresponse (%) in the Explicit DK Variants

Question	LP	iV	TV
Self-placement [1-7] Income Differences	5	1	2
Welfare benefits should be lowered in order to stimulate people to work	11	4	8
Self-placement [1-7] Euthanasia	4	1	1
Adoption by same-sex couples should be possible	11	5	4
Self-placement [1-7] Foreigners	2	0	1
There are too many people of a non-Dutch nationality living in the Netherlands	12	4	9
Self-placement [1-7] European Unification	10	2	4
The Netherlands should spend more money on development aid	12	5	6

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

Table 8.8: Item Nonresponse (%) in the Weak Filter, Implicit DK Variants – Total Item Nonresponse versus Filtered Out

Question	Total Item Nonresponse		Filtered Out	
	iV	TV	iV	TV
Self-placement [1-7] Income Differences	10	16	8	16
Welfare benefits should be lowered in order to stimulate people to work	8	15	7	14
Self-placement [1-7] Euthanasia	3	5	2	5
Adoption by same-sex couples should be possible	8	16	7	16
Self-placement [1-7] Foreigners	2	9	2	9
There are too many people of a non-Dutch nationality living in the Netherlands	3	11	2	11
Self-placement [1-7] European Unification	5	18	4	18
The Netherlands should spend more money on development aid	4	10	3	9

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

Total Item Nonresponse is measured as a percentage of the total number of respondents not responding to a certain opinion question by saying 'no' to the preceding filter question or by using the implicit DK option and skipping the question. The Filtered Out category only includes the respondents saying 'no' to the filter question, which consequently excludes them from the following opinion question. This category does not include DK answers.

Table 8.9: Item Nonresponse (%) in the Weak Filter, Explicit DK Variants – Total Item Nonresponse versus Filtered Out

Question	Total Item Nonresponse		Filtered Out	
	iV	TV	iV	TV
Self-placement [1-7] Income Differences	8	12	8	12
Welfare benefits should be lowered in order to stimulate people to work	10	16	7	15
Self-placement [1-7] Euthanasia	2	6	2	6
Adoption by same-sex couples should be possible	8	13	7	12
Self-placement [1-7] Foreigners	1	8	1	8
There are too many people of a non-Dutch nationality living in the Netherlands	4	12	2	10
Self-placement [1-7] European Unification	4	17	3	16
The Netherlands should spend more money on development aid	5	9	2	9

LP = LISS Panel; iV = EenVandaag Opiniepanel; TV = Team Vier's internet panel

Total Item Nonresponse is measured as a percentage of the total number of respondents not responding to a certain opinion question by saying 'no' to the preceding filter question or by using the explicit DK option. The Filtered Out category only includes the respondents saying 'no' to the filter question, which consequently excludes them from the following opinion question. This category does not include DK answers.

The implicit DK option is rarely used: for all survey questions in all experiments included in the analysis (see Table 8.6), between 0 and 2 percent used the option to skip a question. This leaves little room for variation between internet panels or, more importantly, between questions with a different content. The implicit DK option is therefore excluded from the discussion below about the susceptibility of individual survey questions to design effects; no relation between offering an implicit DK option and question content can be discerned.

For the explicit DK option (Table 8.7), the main finding is that self-placement items result in less item nonresponse than the other items related to the same theme. A possible explanation is that self-placement items contain more substantive response categories (7 compared to 4 for non-self-placement questions), including a neutral response category, and that it is easier for respondents to pick a response category. Furthermore, the question related to foreign policy (EU) generates more nonresponse – consistent with hypothesis H3b. The other questions, however, do not reveal such a pattern: 'developmental aid' (in the foreign policy domain) yields 5 to 12 percent nonresponse as compared to 4 to 11 percent for 'lowering welfare benefits'

(socio-economic domain) and ‘adoption by same-sex couples’ (ethical domain). So it would be incorrect to conclude that questions related to foreign policy consistently result in more nonresponse than items related to the socio-economic, ethical and multicultural issues; hypothesis H3a and H3b are not supported for the explicit DK option.

Are some questions, related to certain issues, more susceptible to the use of a filter question? The answer depends on the specific experiment and panel. Looking at either total nonresponse or only at the number of no’s to a filter question, i.e. ‘filtered out’ in Table 8.8 and Table 8.9, the respondents of the filter variants in the third experiment (Team Vier) gave a non-substantive answer most often for the foreign policy self-placement item on the EU: 16 to 18 percent of the Team Vier respondents said ‘no’ to the filter question or used the (implicit or explicit) DK option, which is the highest item nonresponse for all issues included in Table 8.8 and Table 8.9. The respondents in the second (EenVandaag Opiniepanel) experiment, however, used a non-substantive response option most for the first two items in the questionnaire: self-placement on income differences and ‘lowering welfare benefits’. Whether this is related to issue content (socio-economic) or the placement of the questions at the start of the questionnaire, when respondents were not yet used to the unfamiliar filter question, is unknown. Nevertheless, the conclusion that should be drawn is that both hypotheses H3a and H3b are not supported; questions related to a major political dimension did not result in the least nonresponse nor did questions related to foreign policy consistently result in the most item nonresponse.

8.6 Conclusion

The goal of this chapter was to compare the three survey experiments to find out whether non-substantive response options consistently affected the results of a survey. In doing so, the findings would be cross validated if similar patterns were discovered. The answer to the question how non-substantive response options affect survey results depends on two things: the type of option and the type of results. Three non-substantive response options were considered: the implicit (DK) option to skip questions, the explicit DK option as a response category and the filter question.

The main effect of the implicit DK option is not much effect at all. On average a maximum of 2 percent used this option. The relatively low item nonresponse rate is, however, consistent with the expectation (hypothesis H1a) that more explicit options would result in more item nonresponse and hence less explicit options – e.g. an implicit DK option – in less item nonresponse.

The explicit DK variants yielded more DK answers than the implicit DK variants and the filter question variants rendered more ‘no’s’ than when respondents used an explicit DK option, at least for one application of the filter question (the Team Vier experiment). So it can be concluded that the expectation (hypothesis H1a) that more explicit non-substantive response options result in more nonresponse and the expectation (hypothesis H1b) that filter questions render more nonresponse than an explicit DK option is correct, although the second statement is tentative because filter questions did not have the strongest effect on item nonresponse in all experiments – possibly because of the way non-substantive response options are normally offered to the respondents of the three panels or because of differences in panel composition and offered incentives.

The finding that more explicit non-substantive response options result in more item nonresponse is not very surprising. The effect of non-substantive response options on the overall distribution of opinions is, however, much less expected. The data strongly support hypothesis H2a; item nonresponse data are missing at random and therefore do not result in nonresponse bias. Consequently, the picture of public opinion hardly changes for any of the questions or variants included in the survey experiments when item nonresponse is excluded as missing data. The outcome seems robust when item nonresponse is disregarded.

No systematic patterns could be discerned regarding question design effects and question content. Survey questions related to the main dimensions in Dutch politics did not consistently result in less item nonresponse (as expected in hypothesis H3a) and questions about foreign policy issues did not consistently result in more item nonresponse (as expected in hypothesis H3b), at least for the items included in the comparative analysis.

