

Mode effects on open-ended agenda questions

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CHAPTER 7**MODE EFFECTS ON OPEN-ENDED AGENDA QUESTIONS** ²⁶

HERMANN SCHMITT, PETER SCHROTT AND MICHAELA THOMA

7.1 Introduction

It is good to know, in a number of contexts and for a variety of purposes, what the public considers the most important political issues to be. It is good for political leaders because only then are they in a position to consider peoples' concerns in what they are doing -- something absolutely essential for the functioning of representative democracy. It is good for social scientists as well because these concerns are known to be important determinants of socio-political behaviour, relevant for answers to the questions why people vote or don't, why they prefer a particular party over another, why they participate in demonstrations or block traffic, and so on.

There is a long debate in empirical social research about how to adequately assess issue preferences of the mass public. Two basic alternatives exist in the framework of survey research: "open-ended" and "closed-ended" questions. Both have their advantages and their shortcomings, and it depends on the purpose of the study which instrument to choose (Schuman and Presser, 1981). The main differences, in a nutshell, are as follows: open-ended questions are better suited to grasp the saliency dimension, that is, to establish which issues are felt to be important. Closed-ended questions are better in determining a structure in issue orientations, that is, in identifying issue dimensions and issue spaces in which parties and politicians can be placed. The problem with close-ended questions is to know which issues are of central importance to the citizenry, while the problem with open-ended questions is to code the resulting information in an intelligent and useful way (see Schwarz and Hippler, 1991, for a review on the impact of open- and closed-response formats).

The more salient an issue is, the more relevant it is for shaping political attitudes and behaviour. Any investigation into the determinants of political behaviour must therefore try to find out what people think the important issues are. Asking people "openly" is probably the best way to learn what they perceive as being most important.

To identify an appropriate way to assess what people think is one thing, to properly measure it is another. There are different survey methods on offer, and the question arises whether they produce similar or different outcomes. This analysis will concentrate on two modes of

26 The authors gratefully acknowledge criticism and advice given by the two editors of the volume and by Norbert Schwarz

surveying people, i.e. on telephone and face to face interviews. Are the answers people give to open-ended questions influenced by a particular mode of survey administration, that is, do responses to the question what the most important problems are, differ between telephone and personal interviews?

To answer this question responses to the open-ended question about the most important problem from the standard Eurobarometer are compared with responses to the same question asked in the two telephone surveys set up in the experiment. The question wording in the Eurobarometer surveys, by face to face and telephone interview, was as follows:

“Generally speaking, what is the most important problem facing (country) today?” „And what is the second most important problem facing (country) today?”

In the telephone survey the wording of the question was about the same, with only marginal changes:

„In your opinion what is the most important problem facing (country) at the moment?” „And in your opinion as well what is the second most important problem facing (country) at the moment?”²⁷

7.2 Mode effects in responses to open-ended questions

Are there reasons to expect mode effects on the response to open-ended questions? There are some psychological differences between face to face and telephone interviews which might lead one to expect such differences (see Schwarz et al., 1991; for a similar discussion de Leeuw, 1992).

Interview modes differ in the presentation of stimuli. In the telephone interview situation stimuli are presented to the respondent auditory, via the “channel” telephone. This is a much poorer communication situation than an interview which is conducted face to face in the respondents private home. There, stimuli are presented both auditory and visually (by the interviewer’s non-verbal behaviour and by presenting show cards etc. to the respondent).

Interview modes differ also in the time pressure they impose on respondents. Time pressure interferes with extensive recall processes and increases reliance on the first thing that comes to mind. In the telephone interview situation moments of silent reflection cannot be bridged by non-verbal communication. The degree of acceptable silence differs between the telephone interview situation and the face to face interview. Interviewers try to avoid silence in telephone interviews and time pressure here must be expected to be perceived much heavier than in face to face interviews.

The modes of data collection differ in the degree of possible interviewer impact. It is evident that interviewer characteristics are more likely to be noticed by the respondents in face to face contact while in a telephone interview interviewer characteristics can only be transmitted through paralinguistic cues and speech styles. In a face to face study, interviewers may

27 In the telephone interview this question was repeated for up to five problem mentionings. In the face to face survey only two answers were asked for and we therefore limit our analyses on these first two mentions.

convey their personal attitudes to the respondents. Through the perception of interviewer characteristics the amount of socially desirable responses may be increased, but may also serve to increase the rapport between the interviewer and the respondent.

The modes of data collection, finally, differ in their degree of perceived confidentiality. Responses to questions may be regarded as more or less confidential with respect to the interviewer, to the researcher and to other household members. It is obvious that the respondent is somewhat less “anonymous” in face to face interviews than he or she is in a telephone survey. Other things being equal, this should result in more socially desirable responses in face to face interviews.

These points have been summarised in figure 1 where a + indicates a possible effect of a mode characteristic on the results.

Figure 1 : Psychological aspects of mode of survey administration

	Face to face	Telephone
Perceived time pressure		+
Interviewer impact	+	
Perceived confidentiality		+

Adapted from Schwarz et al., 1991.

Some evidence exists from mode comparison studies for closed-ended questions. The general impression is that differences if they exist are small (e.g. De Leeuw and Van der Zouwen, 1988). Relatively little is known about the differences in answers to open-ended questions. Groves reported in an earlier study that higher time pressure in the telephone interview condition produced shorter answers to open-ended items compared to face to face interviews (Groves and Kahn, 1979; Groves, 1978). Especially higher income groups and younger respondents were found to give fewer mentions on the phone.

Our general expectations about mode differences -- formulated from a psychological point of view -- are unspecified with respect to the types of survey questions. How can one translate this logic into open-ended agenda questions, what can one specifically say about them? There are three more specific hypotheses that can be deduced from the above:

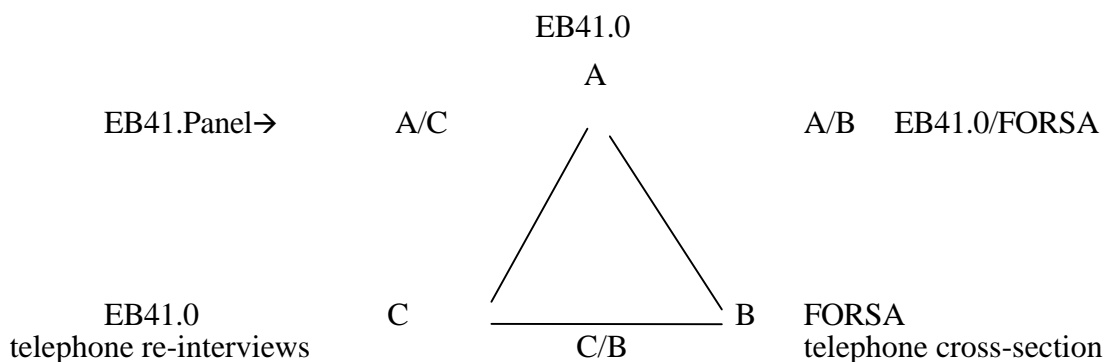
a. Elevated (perceived) time pressure in telephone interviews should result in a higher number of nonresponses as compared to face to face interviews. There is a counter hypothesis, however: greater (perceived) confidentiality might as well see to it that respondents speak out more freely and mention concerns which they would rather like to hide in face to face interviews; other things being equal, this would lead one to expect less rather than more nonresponses.

b. (a) Elevated (perceived) time pressure in telephone interviews should result in a rather limited number of problems mentioned in an open-ended agenda question, and the average thematic variety in face to face interviews is expected to be greater. It is much the same argument to say that (b) elevated (perceived) time pressure in telephone interviews should bring about more limited transcriptions, or verbatims, of answers to open-ended questions than to face to face interviews.

c. Elevated (perceived) confidentiality in telephone interviews should bring about a higher proportion of valid responses which run against social norms. The “foreigners” issue is perhaps a good example -- social norms prescribe that all humans are equal, that xenophobia is an extreme-right attitude, that extreme-right is close to fascism and holocaust and is therefore socially banned. If respondents indeed feel more anonymous in telephone interviews (and are concerned about the number of foreigners in their country), they should speak out more freely, and the foreigners issue should emerge more prominently.

7.3 Study design

In the following responses to identically worded open-ended agenda questions will be compared that were obtained in telephone and face to face interviews of the Eurobarometer experiment. In an ideal “mode comparison study”, one would conduct two surveys of the same population which differ in nothing but the mode of interview (Biemer, 1988). Differences in the results could then be attributed to the mode of survey administration alone and would not be suspected to originate in other design factors. The design of the Eurobarometer experiment was somewhat more complicated. It can be visualised as follows:



One way to assess mode effects in the Eurobarometer experiment rests on a panel design where one panel wave is conducted face to face and the other by telephone (the “A/C” line in the above diagram). To do a mode comparison study within a panel design is a strategy also used by Woltman et al. (1980, on reporting of criminal victimisation) and by Hochstim (1967, on health behaviour). But even if one restricts comparison to panel respondents only, one cannot really rule out the possibility that the differences one may find and is tempted to interpret as mode effects, are caused by other factors, e.g. by learning effects known to occur in panel surveys. Such panel problems cannot disturb a comparison of results between two independent cross-sections, where one is interviewed face to face and the other by telephone

(the “A/B” line of the above triangle). But this comparison again is not without problems if the two surveys are done by different polling firms -- as in our case by INRA and FORSA. Differences one may find and is tempted to interpret as mode effects may then be as well caused by “house” or “agency” effects.²⁸ A conservative strategy is chosen to control for the possible complications “panel learning” and “agency effects”. In this chapter, mode effects are only accepted as such if the result of the “A/C” comparison coincides with that of the “A/B” comparison; to put it in other words, a clear mode effect necessitates that both comparisons arrive at the same result (that is, that the “C/B” comparison shows no difference).

7.4 Do telephone surveys produce a higher proportion of nonresponse?

Elevated time pressure in telephone surveys should produce a higher proportion of item nonresponses, while the greater confidentiality of the telephone interview situation may make it easier to speak out -- this should cause a smaller rather than a greater proportion of nonresponses. The empirical evidence produced by the Eurobarometer experiment does not support any of these considerations (table 7.1). Nonresponses to the open-ended agenda question are somewhat more frequent, within the INRA panel, in the telephone wave than in the one conducted face to face (11 percent as compared to 8; “A/C” comparison). The situation is reversed if one looks at the cross-sections (“A/B” comparison) where telephone interviewing produces a few less missing cases than the face to face approach does (8 percent against 9).

No matter which way one looks at these figures, the differences are small. These results can best be summarised by saying that the mode of survey administration has no impact on the readiness to answer on open-ended agenda question, neither among panel respondents nor among the cross-section samples.

The panel design which was part of the Eurobarometer experiment suggests to go beyond the inspection of differences in marginal distributions. It allows to ascertain stability and change in individual response behaviour, i.e. to determine how many interviewees did or did not answer the open-ended question in both waves, how many answered in the first (face to face) and refused to answer in the second (telephone) wave, and vice versa (see table 7.2).

28 A more intensive discussion on house effects and their impact on responses to various questions asked by different survey organisations is provided by Wiseman et al. (1989).

Table 7.1 Proportion of missing cases, by mode of survey administration (column percent)

	EB41.Panel		EB41.0	FORSA
	First wave face to face	Second wave telephone		
Responses	92	89	91	92
No Responses	8	11	9	8
N	884	884	3124	1501

The usual panel picture -- aggregate stability and individual level flux -- does not emerge from this table. An overwhelming proportion of panel respondents, 85 percent altogether, does not vary between response and nonresponse from one wave to the next. Fifteen percent do change, however: nine percent responded in the face to face interview but refused to answer over the telephone (this is compatible with the time pressure proposition), while six percent answered the open-ended question in the telephone interview but not in the preceding face to face survey (this is compatible with the confidentiality proposition). Statistically, the behaviour of respondents in the first wave is significantly different from their behaviour in the second.

Table 7.2 Response and nonresponse within the EB41.Panel (total percent in parentheses)

	First wave Face to face	Second wave Telephone		All
		Responses	No responses	
Responses		735 (83)	83 (9)	818 (92)
No Responses		52 (6)	14 (2)	66 (8)
All		787 (89)	97 (11)	884 (100)

McNemar Test: $c^2 = 6,7$ $p < 0.01$

Further analyses have shown, however, that these differences are only marginally due to mode effects (results not shown). Higher educated people are somewhat less likely to change form response to nonresponse between waves. The major explanatory factor for the change seems to be national differences: Belgians are 2.4 times more likely to change than others²⁹. Altogether, the statistical difference in table 7.2 should not be taken too seriously. More important is to highlight that 85 percent of the panel respondents did not change from the first to the second wave at all, and that among the few who did change, the time pressure proposition received somewhat more support than the anonymity proposition.

Overall, the difference between the two modes of data collection is remarkably small. With regard to responding or not responding to open-ended questions one finds that the mode does not make much of a difference.

7.5 Do respondents in telephone surveys mention fewer and different issues?

It was pointed out before that higher confidentiality in telephone interviews should produce results which give more emphasis to issues running against social norms. Furthermore, time pressure should make it that respondents mention fewer problems over the phone than they do in a face to face interview. In order to test these propositions, the institute-specific coding frames of INRA and of FORSA were recoded. It is always a tricky business to recode two institute-specific coding schemes into one scheme of higher generality. The problem is that coding rules (that is, decisions to assign a class of responses to one or another category) may have been different between the institutes and that therefore the “common” coding scheme does not necessarily contain identical, or at least equivalent, answers in each category. However, this reservation probably applies to some general category headings more than to more specific ones.

Ten “common” code categories were arrived at: (1) unemployment, (2) health, (3) deterioration of values, (4) foreigners, (5) political situation, (6) social problems, (7) security, (8) economy, (9) environment and (10) other. “Don’t know-no answer” is an additional but technical “common” code. Topical issues like “unemployment” or “foreigners” have been assigned one or several separate codes in the coding schemes of both institutes, and we are confident that a comparison of such specific items, should lead to valid conclusions on the impact of modes of survey administration on substantive answers to open-ended questions.

In the following, one must keep in mind that the open ended question analysed throughout this paper asks for the most and the second most important problem. Both possible responses have been coded by the institutes (and recoded by the authors), and the analysis is based on the answers to both questions with respect to the most and second most important problem together. Table 7.3 gives an overview of the findings.

Of those giving at least one answer, one finds that the average face to face cross-section respondent records somewhat fewer replies (1,8 of 2 possible) than the average telephone

29 These results were obtained through a logistic regression with change between wave as the dependent and subjective social class, education, sex, age and nation as independent variables.

cross-section respondent does (1,9). The picture is reversed within the panel: there, the face to face wave on average produces more replies (1,8 of 2 possible) than the telephone wave (1,6).

Unemployment is by far the most frequently mentioned issue in every survey. The time pressure argument would lead one to expect this “modal issue” to be even more often mentioned in telephone surveys than in face to face interviews. However, the contrary is true. Unemployment appears considerably more often in the face to face survey (87 percent of respondents mentioning it) than in both telephone studies (63 percent each).

The “foreigners” issue should surface more often in the telephone surveys than in the face to face study as well, if for different reasons: the greater confidentiality and anonymity of a telephone interview might make it easier to speak out, to express concerns that are in conflict with social norms. Again, this expectation is not supported by the empirical evidence gathered in the framework of the Eurobarometer experiment. Telephone respondents mention the foreigners issue equally often (proportion of responses) or even somewhat less often (proportion of respondents) than respondents in the face to face interview do.

Are the differences in topical responses between face to face and telephone interviews statistically significant? One can test this again for both “angles” of the comparison -- “intra panel”, and between the “cross-sections”. The result is rather straightforward. Intra-panel comparisons produce only three statistically significant differences³⁰, indicated by a star behind the percentage in the telephone survey: unemployment and health is mentioned significantly less often, and social problems are mentioned significantly more often mentioned over the telephone than face to face. By contrast, there are eight statistically significant differences between the telephone and the face to face cross-sections; only two (foreigners and environment) are not significant.

The relative dissimilarity of responses between the two cross-sections can be interpreted as a result of a combination of an agency effect and a mode effect. The agency effect might be particularly strong in the meta-code-analysis performed here. The relative similarity of responses within the panel can be seen as a result of learning or recall processes.

On the other hand one can not completely rule out mode effects, given the large and statistically significant differences in the panel and the cross sectional study between the two modes for the issues “unemployment “ and “health”. Even according to the conservative test rules introduced earlier in this chapter, the results for these two issues suggest that there are mode effects present in the data. Although these differences do not lead to different conclusions with respect to the ordering of the issues with respect to importance, the effects are large enough to be taken seriously because the same can happen to subcategories of the issue unemployment which could indeed lead to differences in ordering of issues with respect to importance.

30 For the intra-panel test the Wilcoxon signed rank test was used; for the test between cross-sections the chi square test was used.

Table 7.3 Do respondents in telephone interviews mention fewer and different issues than in face to face interviews?

	EB41.0		FORSA		EB41.Panel					
	Percentages	Cases	Responses	Cases	First wave face to face	Second wave telephone	Percentages	Cases	Responses	Cases
Unemployment	49	87	34 *	63	50	89	39*	63		
Health	9	16	5*	9	10	18	8*	12		
Deterioration of values	9	16	2*	4	9	15	9	15		
Foreigners	7	12	6	10	6	11	6	10		
Political situation	6	11	11*	20	6	11	5	8		
Social problems	6	10	6*	12	6	10	4*	6		
Crime	6	11	11*	20	10	10	5	9		
Economy	2	3	8*	16	2	3	1	2		
Environment	1	2	1	2	1	1	1	1		
Other	-	1	3	6	0	1	1	1		
DK/No answer	5	9	13	25	4	8	21	34		
Total %	100	178	100	187	100	176	100	161		
N	5532	3124	2807	1501	1554	884	1422	884		

7.6 Are telephone respondents less talkative?

After investigating nonresponses and the spread of topics mentioned, the final step in this analysis addresses the length of respondents' answers to the open-ended agenda question. Elevated time pressure and the poorer communication situation on the phone should lead to shorter answers; telephone respondents are expected to be less talkative.

The indicator of talkativeness chosen here is the length of the transcribed answers which respondents gave, measured in bytes (i.e. the number of letters used to write the answers down). Bytes were counted for the first and second most important problem mentioned. Respondents not naming any problem are not being included in this step of the analysis. Transcriptions of answers are only available for the cross-section surveys, and hence length comparisons are not possible within the INRA panel. This, of course, makes it impossible to clearly identify mode effects.

Empirical evidence again does not coincide with the expectations. One finds that telephone respondents are considerably more talkative than their face to face counterparts (their transcriptions are on average 10 bytes, (that is: letters), longer; see table 7.4).³¹

Table 7.4 Are telephone respondents less talkative?

	Mean	Std. dev.	N
EB41.0	31,5	26,8	2484
France	38,2	34,3	1027
Belgium *	30,9	21,0	463
Spain	24,9	16,7	994
FORSA	41,5	34,1	1172
France	33,6	28,8	377
Belgium *	55,1	37,3	359
Spain	37,2	32,4	436

* Flemish respondents only; the Walloon “verbatim” could not be matched to the standardised data set.

This overall discrepancy is not uniform across countries. Face to face respondents in France talk more than telephone interviewees while they seem to talk less in Belgium and Spain. If this is a mode effect the mode has an opposite effect in different countries. This is not impossible because there can be different habits in countries with respect to the use of the phone. It is however also possible that it is an effect of the interviewers who did the interviews in the different countries.

Given the scarcity of data in this section, it is not possible to conclusively argue that the significant difference between the telephone and face to face interviews is a mode effect. It may just as well be an agency effect due to polling practices, sampling routines or the like. However, if one controls for age, sex and social class (as a proxy for education) and simultaneously specifies interaction terms, one should be able to detect mode/agency effects holding all other factors constant. Doing such an analysis using regression³² the FORSA + telephone (F+T) factor was still significant. This is a combination of a mode and agency

31 It is difficult to say what the interviewer’s and what the respondent’s contribution to this finding is. Face to face, the two may chat for a minute and the interviewer records one keyword because he has to maintain eye contact in the conversation; on the phone, the interviewer has nothing else to do but noting the given answers

32 Social class was used as a substitute for education because there was no education information available in the FORSA survey.

effect. This shows that there are considerable differences between the different studies but on the basis of this study it can not be said whether the differences are due to the mode effects or agency effects.

7.7 Conclusion

The aim of this analysis was to find out whether there are significant mode effects for open-ended questions in face to face and in telephone surveys. Given previous research findings, it was questionable whether clear and powerful mode effects would be discovered. De Leeuw (1992) in her meta analysis found only small differences between face to face and telephone surveys. Groves (1989:551) also reports that the “...most consistent finding in studies comparing face to face and telephone interviews is the *lack* of difference in results obtained through the two modes”.

Focusing on answers to open-ended questions in this chapter, the research strategy concentrated on various aspects of possible mode effects. First, the amount of nonresponses in the two survey modes was analysed. No substantial differences in the data were found.

The second step dealt with the content (or quality) of the answers. Here, much to the authors' surprise, the expectations were reversed: More diverse answers were obtained in telephone surveys than in face to face interviews. Large differences were found between the face to face study and the two telephone surveys for the issues unemployment and health. The similarity in results for the two telephone surveys seems to suggest that there are indications of pure mode effects in these cases. These differences did not change the ordering of the importance of the issues but could produce such a change quite well if more subcategories are used for the unemployment problem.

Finally, the talkativeness (and the possible obstructions for talkativeness) in respondents' behaviour was considered. Clear differences between the two polling firms were found which again ran against expectations about how response behaviour should differ between telephone and face to face interviews. Due to lack of data in this case it could not be determined whether the differences were due to agency effects or mode effects.

In general we can conclude that there is no doubt that quite large differences can be obtained when one compares the answers on open-ended questions of two companies one which is using a face to face approach and another using a telephone procedure for data collection. This study did not show clear evidence for pure mode effects except in case of the frequency with which unemployment and health are mentioned as one of the two most important problems. This happens less frequently on the telephone than in face to face surveys.