

The Effect of Question Tone on Responses to Open-Ended Questions

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The primary objective of the present study was to measure the effects of the question one on responses to open-ended questions, with regard to: the number of words generated; the total number of different ideas generated; the average number of ideas generated per respondent, and the tone of the responses. The tentative findings suggest that a researcher should: Use a negative cue to generate negative ideas; use a neutral or combined cue to generate the widest range of different ideas or positive ideas; use a combined cue to generate more ideas per respondent; use a combined cue to generate longer responses per respondent. However, caution is required before accepting these conclusions, as there are several obvious limitations to this study. The most important limitation is that the effect of question tone on responses was only examined for one question on a single issue; attitudes towards surveys and opinion polls. Thus, it is not possible to say whether the results, particularly the tendency towards negative responses regardless of cue tone, are a function of the topic, or are indeed generalizable. Clearly it would be pertinent to test the effects of question cue tone on responses using questions on a wide range of issues.

Keywords: question tone, wording, open-ended, idea generation

Introduction

Open-ended questions are used in survey research when it is considered important to allow respondents to answer in their own words, and are frequently used to generate ideas that will form the basis of checklists or closed questions in subsequent surveys. Yet, despite their wide-spread use, relatively little attention has been paid to the effects that research design and question wording can have on the responses to open-ended questions.

If the purpose of using an open ended question is to generate as many ideas as possible, then it would be useful to know how to design a questionnaire and formulate questions appropriately to achieve this objective. For example, it has been demonstrated that longer and more detailed answers can be elicited simply by providing more space for the answers, even when the questionnaire is being completed by an interviewer (Smith 1995). A similar result is reported for self-completion questionnaires, although the researchers noted that, while providing more space for an answer elicited longer responses (more words), this did not produce a greater number of different ideas (Gendall, Menelaou & Brennan 1996).

Space is not the only factor that can affect responses to open ended questions. Belson & Duncan (1962) suggest that respondents tend to "omit what is taken for granted" when answering open-ended questions. This observation prompted Gendall et al. (1996) to surmise that, since positive aspects are sometimes taken for granted, the tone of a question might influence the types of responses elicited. Indeed, they found that open-ended questions produced more negative than positive responses, even when respondents were encouraged to make positive comments. However, they found no evidence that encouraging negative comments produced longer responses or more ideas.

Gendall et al. (1996) also note that the tone of the question asked (positive, negative or neutral) influenced the tone of the responses and the nature of the ideas expressed. For example, they report that a negative cue produced most negative responses, a positive cue produced most positive responses, and a neutral cue produced most neutral responses.

These observations suggest that a wider range of ideas might be elicited by combining cue tone in open-ended questions. Thus the primary objective of the present study was to measure the effects of the question tone on:

- The number of words generated,
- The total number of different ideas generated,
- The average number of ideas generated per respondent, and
- The tone of the responses.

Method

To test the effects of question cue tone on the types of responses generated, four questions were used. The three single-cue questions were taken from Gendall et al. (1996). These questions sought to elicit respondents' opinions of surveys and opinion polls. These variations were designed to produce either a neutral, positive, negative, or combined cue tone. The four questions were as follows:

Neutral

"What comments do you have about surveys or opinion polls?"

Positive

"What benefits or advantages do you see in surveys or opinion polls?"

Negative

"What objections or concerns do you have about surveys or opinion polls?"

Combined

"Now I'd like to ask you about the positive and negative aspects of surveys and opinion polls. What objections or concerns do you have, and what benefits or advantages do you see in them?"

These questions were included in the 1996 Palmerston North household omnibus survey, conducted annually by third year marketing students at Massey University. Seventy six students each attempted four face-to-face interviews, two with males and two with females, from clusters of households around randomly selected starting addresses. The starting addresses were selected from each of the 19 statistical areas in the city, in proportion to the number of households in each area. Each interviewer was allocated one of four versions of the questionnaire. The starting addresses were assigned to interviewers in such a way that the four versions of the questionnaire were evenly distributed across the 19 statistical areas in the city. From a total of 638 attempted interviews, there were 218 refusals, 45 quota-filled, 82

non-contacts, and 293 completed interviews. Up to two call-backs were made before replacing a household. The overall response rate was 46%.

Each version of the questionnaire was identical up to the experimental question, which was preceded by questions on grocery shopping, women's clothing, the environment, pets and Palmerston North City issues, and followed questions on previous survey participation.

The interviewers were asked to record the responses to the questions verbatim, with no probing. They were permitted to use neutral prompts, such as "Yes", "mmm", "Uh huh", and were instructed to ask "Anything else?" when the respondent had finished answering.

Results

Number of Words Generated

Sometimes, researchers want detailed answers to a question, to obtain a fuller understanding of what a respondent thinks, and why. Thus techniques for encouraging respondents to give longer rather than short answers are required.

The average number of words generated per respondent by the four question cues is reported in Table 1. The results suggest that the most effective way of generating longer responses is to ask a combined cue question. Substantially shorter responses were generated by the single cue questions, the actual tone of the cue having little effect on the number of words elicited.

Table 1. Mean number of words generated by each cue

Cue	Mean number of Words	
	This study	Gendall et al. (1996)
Positive	14.2 (n = 80)	13.9 (n = 80)
Negative	12.7 (n = 80)	11.5 (n = 85)
Neutral	14.7 (n = 76)	14.7 (n = 84)
Combined	24.0 (n = 72)	n.a.

Whether a combined question would generate longer responses in a self-completion questionnaire remains to be tested. However, it is notable that, for each of the single cues, the mean number of words generated was very similar to that reported by Gendall et al. (1996), who did employ a self-completion questionnaire.

Number of ideas Generated

Probably the most common use of open-ended questions is to generate different ideas, often as a precursor to the development of a checklist for a subsequent survey. Thus it is important to know what effect the tone of a question may have on the number and type of ideas generated by the question.

The number of different ideas generated by the four question cues is reported in Table 2. Both the neutral and combined cues produced the most ideas, while the positive cue produced the fewest ideas. However, there is not a great deal of difference in the total number of ideas produced by each of the four cues.

Table 2. Total number of different ideas generated by each cue

Cue	Ideas			
	Positive	Negative	Neutral	Total
Positive	10	12	2	24
Negative	6	15	5	26
Neutral	11	14	4	29
Combined	12	13	4	29
All	12	18	5	35

Tone of the Ideas Generated

The effect of question tone on the tone of the responses is also reported in Table 2.

All four question cues elicited positive, negative and neutral ideas, and each cue tone produced more negative than positive or neutral ideas. While the positive, neutral and combined cues produced similar proportions of positive and negative ideas, the negative cue produced over twice as many negative as positive ideas.

A notable finding is that both the neutral and combined cues produced more positive ideas than the positive cue, and a similar, albeit slightly smaller, number of negative ideas than the negative cue. Overall, both the neutral and combined cues produced the greatest number of positive and neutral ideas, as well as a high number of negative ideas.

The corresponding results from Gendall et al. (1996) are shown in Table 3. Although they did not test a combined cue, and their study generated fewer different ideas for each cue, the overall pattern of results is very similar and support the conclusions drawn from Table 2. Indeed, the similarity of the results is particularly interesting given that the present study employed interviewers whereas that of Gendall et al. (1996) involved a self-completion questionnaire. These results suggest that the tone of a question is more important than the way it is administered.

The results shown in Table 2 are based on aggregate results. Table 4 shows the mean number of ideas generated per respondent by the four question cues. Overall, the best result was generated by the combined cue. This produced, on average, the highest (equal) number of positive ideas, the highest number of negative ideas, and the highest number of different ideas, per respondent.

Table 3. Total number of different ideas generated by each cue (Gendall et al. (1996))

Cue	Ideas			
	Positive	Negative	Neutral	Total
Positive	8	11	1	20
Negative	3	15	2	20
Neutral	8	12	1	21
Combined	n.a.	n.a.	n.a.	n.a.
All	9	17	2	28

Table 4. Mean number of different ideas per respondent

Cue	Mean number of ideas per respondent				
	Positive	Negative	Neutral	Mixed	Total
Positive	1.2	.4	.1	.1	1.6
Negative	.3	.9	.6	.3	1.7
Neutral	.6	.7	.3	.3	1.6
Combined	1.2	1.0	.3	.6	2.5

Discussion

The results of this study are consistent with those reported by Gendall et al. (1996), and demonstrate the important impact that the tone of a question cue (positive, negative or neutral) has, not only on the length of responses, but on the number of different ideas generated, the tone of the ideas generated, and the average number of ideas generated per respondent.

The tentative findings suggest that a researcher should:

- Use a negative cue to generate negative ideas.
- Use a neutral or combined cue to generate the widest range of different ideas or positive ideas.
- Use a combined cue to generate more ideas per respondent.
- Use a combined cue to generate longer responses per respondent.

However, caution is required before accepting these conclusions, as there are several obvious limitations to this study. The most important limitation is that the effect of question tone on responses was only examined for one question on a single issue; attitudes towards surveys and opinion polls. Thus, it is not possible to say whether the results, particularly the tendency towards negative responses regardless of cue tone, are a function of the topic, or are indeed generalizable. Clearly it would be pertinent to test the effects of question cue tone on responses using questions on a wide range of issues.

Further study is also required to examine the effects of possible interaction between survey mode (self-completion vs interview; telephone vs face-to-face) and cue tone on responses to

open-ended questions. The close correspondence of the results from Gendall et al. (1996) and the present study, which used different modes (self-completion vs face-to-face interview) suggests that the effects of cue tone may be stronger than the effects of survey mode, but further evidence is needed before firm conclusions can be drawn.

From the available data, it would appear that a combined cue is generally the best option. However, investigation is needed into the effects of using different forms of combined cues, and of single combined questions compared with asking multiple questions (e.g., a positively cued question followed by a negatively cued question). In this study, only one version of the combined question was used, in which the negative cue preceded the positive cue. It is possible different results would have been obtained if the cue order had been reversed. Further research is required to determine what form a combined cue should take for optimal results.

A final word of caution relates to the effects attributed to the combined cue question. This question was about three times longer than the single cue questions, and incorporated an introduction. There is some evidence that longer questions produce more responses and longer responses than short questions (Sudman & Bradburn 1982, p50). Thus it is possible that the results for the combined cue question reflect question length rather than cue type.

These points aside, the findings highlight what most researchers would already know, but often overlook; that is, the tone of a question can dramatically affect responses to it. Thus, when formulating a question, researchers need to consider carefully what the purpose of the question is, and if in doubt about its likely effect, pretest.

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