

## The Influence of Considerations on Response Behavior in Survey Interviews: A Mixed Methods Approach

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### Abstract

The aim of this paper is to gain insight into the response behavior of respondents in survey interviews. In this study, Dutch students were asked both closed questions about assertions and open questions, about their attitudes toward Muslims in the Netherlands. Besides, we measured the response latencies of the answers to assertions.

Open questions offer the opportunity for respondents to verbalize considerations on the attitude-object. This study shows that respondents who verbalize considerations in their answers to open questions are more likely to choose a moderate answer category in answering assertions.

This study also demonstrates a link between the response latencies regarding the assertions and the answers to the open questions: respondents who verbalized considerations while answering open questions needed more time to answer the corresponding assertions than respondents who did not verbalize these considerations. Moreover, respondents who chose a moderate answer category on the assertions needed also more time to answer the assertions than respondents who choose an extreme answer category. In the design of the study we controlled for question order effects.

**Keywords:** mixed methods, open questions, closed questions, response latency, attitudes, considerations.

### 1. Introduction

Attitudes are a major topic of research in survey research. It is common practice in this type of research to assess attitudes by presenting a series of assertions and asking respondents to what extent they agree or disagree with each of these assertions. In this study, Dutch students were asked their opinion about Muslims in the Netherlands by using assertions as well as open questions. We used answers to questions of both

formats, and the response latencies of respondents' answers to assertions, to gain insight in the answer behavior of respondents in survey interviews.

Regarding attitudes, we follow Zaller and Feldman (1992) and Tourangeau et al. (2000). Zaller and Feldman (1992) argue that respondents, most of the time, do not possess attitudes at the level of specificity demanded in most surveys. Instead, respondents have to a certain extent different ideas and considerations about a topic and they use these ideas and considerations while answering attitude questions. If respondents answer attitude questions, some or all of their ideas and considerations will come to mind. The specific ideas and considerations that come to mind are influenced among other things by the question wording or question order. In their view, answers to survey questions are not so much 'true', pre-existing attitudes, but rather reflect the ideas and considerations available at the moment the survey questions are asked. Tourangeau et al. (2000) argue in the same way about attitudes. They also consider an attitude as a kind of database consisting of a multitude of feelings, beliefs, and knowledge about an issue. In their view, respondents can vary their answer behavior as a function of considerations available at a certain moment. Anderson (1974) and Tourangeau et al. (2000) argue that respondents may average considerations.

In public opinion research, attitudes are often measured by using assertions. A disadvantage of this practice is that it is impossible to gain insight in whether or not respondents use a multitude of considerations in answering assertions. The main reason is that the question format of assertions does not give respondents the opportunity to express considerations. Earlier studies on this topic (Zaller & Feldman, 1992, Tourangeau et al., 1991) suggest that respondents recall and integrate specific considerations relevant to an issue in answering attitude questions. These scholars used two types of methods to gain insight in this phenomenon.

Zaller and Feldman (1992) used open-ended questions and Tourangeau et al. (1991) used response latencies. In this study both methods are combined. First, we used the answers to the open question as a verbal expression of the considerations respondents used while answering the assertions.

Second, we used response latencies as an indicator of the time respondents used to combine different considerations.

In attitude research, response latencies are often used in a different manner. It is common practice to use response latencies as an indicator of the accessibility of attitudes in memory (e.g. Fazio et al., 1982). In our view, response latencies may also indicate the complexity of the process of combining considerations. Bassili (1996) argues in the same way, that respondents who have conflicting thoughts or feelings take longer to express their opinion than respondents who do not have these conflicting thoughts. We argue that respondents not only take longer to express an attitude if they have conflicting considerations with regard to an issue, but also if the frame of reference of the respondent does not fit in with the frame of reference implied by the question. In both instances, respondents have to combine considerations to answer the attitude question.

## 2. Hypotheses

Following Anderson (1974) and Tourangeau et al. (2000), we expect respondents to average their considerations. Therefore, our first hypothesis (H1) is that we expect respondents who verbalize considerations while answering open questions are more likely to choose one of the moderate answer categories than respondents who do not verbalize these considerations while answering open questions. The moderate answer categories are 'partly agree' 'do not agree / do not disagree' and 'partly disagree'. We chose to include the "partly agree" and 'partly disagree' answer categories, because Van den Berg and Carabain (2003) showed in their study on asylum seekers and traffic jams that the distance between the 'partly (dis)agree' and 'do not agree / do not disagree' answer categories is smaller than the distance between the 'partly (dis)agree' and 'strongly (dis)agree' answer categories.

Our second hypothesis (H2) concerns the relation between response latencies and combining different considerations. We expect that respondents who express different

considerations in answering open questions need more time to answer assertions than respondents who express considerations on comparable open questions.

If we follow the line of reasoning of our second expectation, our third hypothesis (H3) is: Respondents who choose a moderate answer category take longer to answer an assertion than respondents who choose an extreme answer category.

## 3. Methods

### 3.1 Overview

n = 19, Students, Vrije Universiteit Amsterdam  
Age: 21- 48 (85% between 21 and 27)  
Dutch and non-Muslim  
8 open questions and 8 assertions  
Face-to-face interviews held in November 2002

### 3.2 Example Open question and assertion

#### 3.2.1 Example Open Question

Some have the opinion that by far most of the Muslims in the Netherlands are intolerant with regard to people with a different religion. Others have the opinion that by far most of the Muslims in the Netherlands are tolerant with regard to people with a different religion. What is your opinion?

#### 3.2.2 Example Assertion

By far most of the Muslims in the Netherlands are tolerant with regard to people with a different religion.

### 3.3 Response latencies

The response latencies were measured using Sequence Viewer (Dijkstra, 2005) on the audio-files of the interviews. The response latency is the time between the moment that the interviewer has finished asking the question and the respondent starts answering. If respondents changed their answer, we choose for the start of their final answer. If the interviewer substantially intervened between the asking of the question and the answer of the respondent, for example by repeating the question, then that case was dismissed from the study.

## 4. Results

### 4.1 Result 1

Respondents verbalized considerations in 77% of their answers to open questions. They verbalized three types of considerations, that is, respondents: 1) constrained their answer with a condition; 2) differentiated the attitude-object as mentioned in the question; 3) differentiated the qualifications used in the question to evaluate the attitude-object.

### 4.2 Result 2

In accordance with H1: Respondents who verbalized considerations when answering open questions were more likely to choose a moderate answer category than respondents who did not verbalize considerations ( $\chi^2 = 4.947$ ,  $df = 1$ ,  $p < 0.05$ ).

### 4.3 Result 3

In accordance with H2: Respondents who verbalized considerations when answering open questions needed more time to answer assertions than respondents who did not verbalize considerations. ( $t = -1.310$ ,  $df = 93.139$ ,  $p < 0.10$ ). However, this effect disappeared when respondents answered open questions before they answered assertions ( $p = 0.945$ ).

### 4.4 Result 4

In accordance with H3: Respondents who chose a moderate answer category took more time to answer assertions than respondents who chose an extreme answer category ( $t = 2.226$ ,  $df = 65.973$ ,  $p < 0.05$ ). Again, this effect disappeared when respondents answered open questions before they answered assertions ( $p = 0.208$ ).

## 5. Discussion and Recommendations

This study shows that respondents who express considerations regarding an attitude-object while answering assertions, are more likely to choose a moderate answer category than respondents who do not express these considerations. The common practice to interpret answers to moderate answer categories seems inadequate. Our study shows that a so-called more or less 'neutral' attitude often conceals a multitude of conflicting considerations with regard to the attitude object.

Our results also suggest that relatively longer response latencies can be viewed as an indicator of the existence of considerations, such as:

- Redefining of the attitude-object;
- Choosing an answer option conditionally;
- Redefining qualifications used in the question wording.

Nevertheless, the results with respect to the order effects also indicate that response latencies are partly an indicator of the time needed to access information about the attitude object.

A more general conclusion is that our results give rise to the recommendation that including open questions in survey interviews could be an excellent help for interpreting answers of respondents to assertions. Or even more general, on behalf of the validity of survey research, mixed methods should be the standard instead of the exception.

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