ABSTRACT
This methodological note examines whether including “comfort questions”, questions that are supposed to be perceived as enjoyable by the respondent, in an online panel survey affect how the respondents evaluate the survey in the end. The results show that including these kinds of questions in the end of the survey can have positive effects on how entertaining the survey is perceived compared to not including the questions at all, while there at the same time is a risk that the survey is then seen as less well-reasoned. Future studies could explore other types of comfort questions to avoid possible reverse effects.

Introduction
Since 2013, in wave 8 of the Swedish Citizen Panel, a set of rating questions have sometimes been included at the end of each Citizen Panel survey where respondents are asked to evaluate the survey they have just answered. These questions were introduced to measure survey experience and how people react to different types of studies, but also to get an idea of what the panelists think of the survey they have just answered.

The purpose of this methodological note is to examine whether including “comfort questions”, that is specific questions that are supposed to be perceived as enjoyable by the respondent, influences how the respondent evaluate the survey in the end, and if these possible effects vary in different demographic groups. It will also be examined whether getting the comfort questions in the beginning or at the end of the survey affect survey evaluation scores. The idea behind the experiment is that respondents who get these comfort questions could in turn have a more positive survey experience than respondents who do not get these questions at all.
Data and methods

The data used in this methodological note comes from wave 13 of the Citizen Panel at the University of Gothenburg. The survey was fielded during November and December 2014. A total of 5,577 panel members were randomly assigned to receive the comfort questions either at the beginning of the survey (n=1,856), at the end of the survey (n=1,861), or assigned not to receive the questions at all (n=1,860). Respondents were asked to what extent they assent to different statements about Christmas, how they usually celebrate Christmas and opinions about specific Christmas traditions. In the end of the survey, they then had to evaluate the survey in five different areas on a scale of 0-100, regarding how entertaining, time-demanding, interesting, difficult and well-reasoned they found the survey.

Results

To control that the treatment groups were more or less equal in terms of demographic characteristics, one-way ANOVAs on sex [F(1,5405)=0.15, p=.6988], age [F(2, 5438)=0.28, p=.7544] and educational level [F(1, 5439)=0.39, p=.5333] among the different treatment groups were conducted, but no statistically significant differences were found. As demonstrated in Table 1 below, the sample has an overrepresentation of men (62%) and highly educated individuals (42% have studied at least three years at university/college), but as shown by the ANOVAs, the demographic characteristics are evenly spread among the different treatment groups.

Table 1. Percentage in each experiment group across demographic factors

<table>
<thead>
<tr>
<th>Demographic factors</th>
<th>Comfort questions first</th>
<th>Comfort questions last</th>
<th>No comfort questions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>37.9</td>
<td>38.4</td>
<td>38.6</td>
<td>38.3</td>
</tr>
<tr>
<td>Male</td>
<td>62.1</td>
<td>61.6</td>
<td>61.4</td>
<td>61.7</td>
</tr>
<tr>
<td>Age 15-39</td>
<td>27.3</td>
<td>28.7</td>
<td>26.8</td>
<td>27.6</td>
</tr>
<tr>
<td>Age 40-59</td>
<td>40.2</td>
<td>39.7</td>
<td>41.4</td>
<td>40.4</td>
</tr>
<tr>
<td>Age 60+</td>
<td>32.6</td>
<td>31.6</td>
<td>31.9</td>
<td>32.0</td>
</tr>
<tr>
<td>Low education</td>
<td>57.6</td>
<td>54.8</td>
<td>58.6</td>
<td>57.0</td>
</tr>
<tr>
<td>High education</td>
<td>42.4</td>
<td>45.2</td>
<td>41.2</td>
<td>43.0</td>
</tr>
</tbody>
</table>

Comment: Low education equals education less than three years of university/college studies and high education equals three years of university/college studies or more.

Effects of comfort questions on evaluation scores

One-way ANOVAs were conducted to determine if the mean of the survey evaluation scores in the five areas were different for the three treatment groups. Out of the five evaluation areas, there was a statistically significant difference between groups regarding if
the survey was entertaining \([F(2,2)=7.00, \, p=.0009]\) and if it was well-reasoned \([F(2,2)=3.33, \, p=.0358]\).

The first subsequent Bonferroni post-hoc test revealed that the perceived level of entertainment was higher in the group answering the comfort questions at the end of the survey compared to the group not receiving any comfort questions \((p=.001)\), as seen in Figure 1 below. Thus, including comfort questions in the end of a survey can contribute to respondents perceiving the survey as more entertaining.

**Figure 1. Comfort question effects on “entertaining”**

![Diagram showing survey evaluation scores for questions first, questions last, and no questions]

*Comment: Experiment group means. The bars indicate a 95% confidence interval.*

The second Bonferroni post-hoc test found that respondents who were given the comfort questions at the end of the survey thought that the survey was less well-reasoned than the respondents who did not receive these questions at all \((p=.046)\), which is shown in Figure 2 below. This result indicates that including comfort questions at the end of a survey can have a negative impact on the respondent’s experience of the composition of the survey as a whole and how professional and carefully crafted it is perceived.
Comfort question effects in different demographic groups

There is a possibility that exposure to comfort questions in a survey affects the survey experience differently for different demographic groups. Because of this, two-way ANOVAs were carried out with interactions between experiment group and gender, age and educational level.

The two-way ANOVAs show no significant interactions between the effects of gender and treatment group on survey evaluation score in any of the five areas. Despite this, Bonferroni post-hoc tests revealed that women who got the comfort questions in the end of the survey reported higher evaluation scores than women who did not get these questions regarding how entertaining the survey was (p=.001), as demonstrated in Figure 3 below. However, there were no significant differences between male respondents, suggesting that the effect we saw in Figure 1 was driven by women’s appreciation of the comfort questions. This result implies that including comfort questions at the end of a survey can contribute to women finding the survey more entertaining, but not so among men.
There was a significant interaction effect between age and experiment group on how time-demanding the survey was perceived \( [F(4,5385)=2.53, p=.0384] \). Bonferroni post-hoc tests show that younger respondents (age 15-39) who got the comfort questions first thought that the survey was more time-consuming than younger respondents who got the questions at the end of the survey \( (p=.045) \). Thus, exposure to the comfort questions at the end of the survey seem to have a more positive impact on the younger respondent’s evaluation of the time spent answering the survey compared to receiving the questions in the beginning of the survey.

Older people generally thought that the survey was less time-consuming than younger people thought. Significant age differences were found between all age groups among the respondents who got the questions first. Respondents in the oldest age group (age 60+) reported lower scores in all experiment groups compared to respondents in the youngest age group \( (p<.000) \). One interpretation of this is that respondents over the age of 60 generally have more free time to answer surveys than younger respondents, making it feel as less time-demanding for this group to complete the survey.
Comment: Experiment group means. The bars indicate a 95% confidence interval.

No statistically significant interactions between educational level and experiment group on survey rating were found. However, Bonferroni post-hoc tests showed that highly educated persons who got the comfort questions in the end of the survey reported a higher rating on entertainment than highly educated persons who did not get these questions (p=.009). Also, in the group who got the comfort questions in the end of the survey, highly educated respondents thought that the survey was more time-demanding than respondents with low education (p=0.022).

Concluding remarks

In sum, including comfort questions in an online panel survey does seem to influence subsequent survey evaluation scores to some extent. When asking these questions in the end of a survey, it can contribute to respondents perceiving the survey as more entertaining compared to not receiving the questions at all, and this effect was mainly driven by women’s and highly-educated person’s appreciation of such questions. Another implication of including comfort questions might be that it has a negative impact on the respondent’s experience of the composition of the survey (“well-reasoned”).

Asking about comforting things in the beginning of the survey does not seem to have an influence on the overall survey experience, probably because of the longer time between treatment and measurement of the effect. However, it is possible that these questions affect the quality of answers in subsequent questions in the survey. This possibility is not covered by the scope of this experiment but could be an idea for future studies on comfort questions.
Another idea would be to include these type of questions in the middle of the survey, as an interruption, to combat survey inattentiveness and to activate disengaged respondents.

A limitation with this survey experiment is that the comfort questions are only about attitudes towards Christmas, which not all people view as something enjoyable. A suggestion for future studies could be to ask questions that have a smaller risk of being connected with negative experiences by the respondent, to avoid the possibility of a reverse effect where the questions are seen as uncomfortable rather than comforting.
The Laboratory of Opinion Research (LORE) is an academic web survey center located at the University of Gothenburg. LORE was established in 2010 as part of an initiative to strengthen multidisciplinary research on opinion and democracy. The objective of the Laboratory of Opinion Research is to facilitate for scientists to conduct web survey experiments, collect panel data, and to contribute to methodological development. For more information, please contact us at:

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