

Question in Project:

PaCo - Mechanisms of panel conditioning in longitudinal surveys: Questions on social desirability, gender roles, and environment (English Version)

Question Topic:

Environment/ Environmental knowledge & perception

Construct:

Environmental knowledge: Energy in the private household

General Information:

Note: This item was tested in German. This is an English translation of the original German wording.

Question Text:

And what do you think consumes the most energy in a private household?
[Und wofür wird Ihrer Meinung nach in einem privaten Haushalt die meiste Energie verbraucht?]

Answer Categories:

Lighting *[Belichtung]*
Cooking and Baking *[Kochen und Backen]*
Electrical appliances (including refrigerator) *[Elektrische Geräte (einschließlich Kühlschrank)]*
Space heating *[Raumheizung]*
Water heating *[Warmwasserbereitung]*
Don't know [Weiß nicht]

Cognitive Techniques:

Category Selection Probe, Confidence Rating, Specific Probe

Findings for Question:

Do the test persons have problems understanding or answering the question?

Among the ten test persons, one test person (TP 04) selected the correct answer option "Space heating". Of the remaining nine, eight chose other answer options ("electrical appliances," "water heating") and one indicated that she did not know the answer (TP 02). This test person asked what kind of household she should think of: *"This is talking about a general private household, isn't it? [...] I just don't know, I don't know. I can only speak for myself and our family household due to this."*

Apart from test person 02, two other test persons expressed uncertainty about the question or an answer when asked. None of them selected the correct answer option (TP 03, 10):

- *"Due to this, I had to think long and hard. I could rule out lighting and cooking and baking. But I found it very difficult with the other three areas. Due to this, I was very, very uncertain."* (TP 03; Answer: "Electrical appliances")
- *"Because I was also a bit unsure. It could also be for space heating or water treatment. It's difficult to assess from my point of view, but I think there are far too many electrical devices in use in normal households in any case."* (TP 10; Answer: "Electrical appliances")

In the absence of concrete knowledge, four test persons thought of their own households when answering the question and inferred the general public:

- *"Here in my apartment, I would say it's the space heating, because the windows are not properly sealed and everything is so poorly insulated. But in new buildings, which are properly insulated, due to the space heating, I think, is not an issue. And electrical appliances, due to there was also still including refrigerator. Where electrical appliances are then also actually for cooking and baking?"* (TP 03; Answer: "Electrical appliances")
- *"Cooking and baking, I do that twice a day. [With the] lighting, I only ever have on where I am at the time. So, I think that's the electrical appliances that you underestimate due to."* (TP 06; Answer: "Electrical appliances")
- *"We have a big refrigerator, the washer and dryer, and the stove is running, so if you have kids, anyway. I'm just going on the basis of us. For us, I'd say it's the electrical appliances."* (TP 07; Answer: "Electrical appliances")
- *"I can't say in general, but I'm assuming here because we have an instantaneous water heater."* (TP 09; Answer: "Water heating ")

None of the ten test persons had difficulty understanding the question.

Tabelle 1: Table N2_F8. Confidence Rating regarding question 8 (N = 10)

Probing question	Test persons (n)
very certain	1
rather certain	2
rather uncertain	5
very uncertain	1
<i>not specified</i>	1

How sure are the test persons that their answer is correct?

As Table N2_F8 shows, more than half of the test persons (n = 6) were "rather" or "very uncertain" about the correctness of their answer (TP 01, 03, 04, 05, 06, 08). In contrast, three test persons rated their answer as "very" or "rather certain" (TP 07, 09, 10), although none of these test persons selected the correct answer. Test person 02, who had not selected a substantial answer ("Don't know"), was not asked for her assessment.

How difficult (for the general public) do the test persons think the question is?

The Confidence Rating was again followed by Specific Probing, which asked for an estimate of the difficulty of the question in a "real" survey (see Table N3_F8). The majority of test persons (n = 6) estimated that at least half of the respondents would know the correct answer in the later survey ($\geq 50\%$). In contrast to questions 7 and 9, no consistent pattern emerged here, with which the test persons inferred from their personal certainty estimation to the general public.

Recommendations:

Question: No changes recommended.

Answer options: No changes recommended.

Question documented in ZIS (DOI):

<https://zis.gesis.org/DoiId/zis38>

Tabelle 2: Table N3_F8. Comparison of Specific Sample with Confidence Rating at Question 8 (N = 10)

Test person no.	Percentages	Safety assessment
TP 01	65%	Rather uncertain
TP 02	60%	-
TP 03	40%	Very uncertain
TP 04	60%	Rather uncertain
TP 05	30%	Rather uncertainr
TP 06	50%	Rather uncertain
TP 07	20%	Rather certain
TP 08	50%	Rather uncertain
TP 09	50%	Very certain
TP 10	40%	Rather certain