

PaCo - Mechanisms of Panel Conditioning in Longitudinal Studies: Questions on social desirability, gender roles, and environment; Cognitive Pretest

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GESIS Project Report

2020|07

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Questions on social desirability,
gender roles, and environment

Cognitive Pretest

April 2020

*Timo Lenzner, Désirée Nießen, Patricia
Hadler, Patricia Steins, Friederike Quint &
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1 Aims of the pretest

The PaCo project addresses panel conditioning effects (PCE), i.e., changes in actual behavior, attitudes or knowledge, or changes in response behavior as a result of previous survey participation. These jeopardize the most important goals of longitudinal research, namely the reliable measurement of stability and change. In experimental studies, PaCo investigates the mechanisms of PCE and proposes means to reduce measurement error due to PCE.

As part of the planned experimental studies, questions including those on reflectance, social desirability, and motivation will be newly developed and collected for the first time in the GESIS Panel. These questions are to be subjected to a cognitive pretest before implementation in the GESIS Panel. The questions to be tested are primarily attitude questions, and some are behavioral and knowledge questions.

2 Sample

No. of cognitive interviews: 10

Selection of target population: Quota selection

Quota plan: Cross quotas by gender (m/f) x age (18-45, 46+) x education (with/without university entrance qualification) = 2 x 2 x 2 groups

Table 1. Quota plan

Education	With university entrance qualification		Without university entrance qualification		Total
	Men	Women	Men	Women	
Age					
18–45 years	1	2	1	1	5
46+ years	1	1	2	1	5
Total	2	3	3	2	10

Table 2. Central characteristics of the test persons

Test person ID.	Sex	Age	School Education
01	Male	18	A-levels ¹
02	Female	22	A-levels
03	Female	38	A-levels
04	Male	21	General certificate of Secondary School ²
05	Female	36	General certificate of Secondary School
06	Male	51	A-levels
07	Female	59	Advanced technical college certificate ³
08	Male	58	Certificate of Secondary Education ⁴
09	Male	72	Certificate of Secondary Education
10	Female	69	Certificate of Secondary Education

¹ Abitur

² Realschulabschluss

³ FH-Reife

⁴ Hauptschulabschluss

3 Methods

Field time:	23 March to 30 March 2020
Number of interviewers:	2
Tests conducted in the GESIS pretest lab (video recording):	-
Tests conducted via telephone (audio recording):	10
Survey mode:	CAWI
Pretest mode:	CATI
Procedure:	<p>The cognitive interviews were conducted by telephone. The test persons were asked to have a computer with internet access ready for the interview. The link to the online questionnaire to be tested was sent to the test persons by e-mail at the beginning of the cognitive interview. The test persons first answered the online questionnaire independently on the computer and informed the interviewer of their respective answers. After completion of the questionnaire, the cognitive follow-up questions to the questions were asked (retrospective probing), whereby the test persons could follow the individual questions to be tested and their answers on the computer screen.</p>
Cognitive techniques:	Comprehension Probing, General Probing, Category Selection Probing, Specific Probing, Difficulty Probing, Confidence Rating, Emergent Probing
Incentive for respondents:	30 Euro

4 Results for the individual questions

Question 1: Gender roles

Inwieweit stimmen Sie der folgenden Aussage zu oder nicht zu?
 [To what extent do you agree or disagree with the following statement?]

Eine Vollzeitbeschäftigung ist der beste Weg für eine Frau, finanziell unabhängig zu sein.
 [A full-time job is the best way for a woman to be financially independent.]

Stimme überhaupt nicht zu							Stimme voll und ganz zu	Weiß nicht
[Do not agree at all]							[Fully agree]	[Don't know]
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Frequency distribution (N = 10)

1 Do not agree at all	-
2	1
3	1
4	-
5	2
6	3
7 Fully agree	2
<i>Don't know</i>	1

Cognitive techniques:

Comprehension Probe, General Probe, Category Selection Probe, Difficulty Probe, Specific Probe.

Key questions and findings:

What do the test persons understand by "full-time employment"?

All test persons defined the term "full-time employment" as a full-time job, working about eight hours a day, five days a week:

- *"By full-time employment I mean a 40-hour week."*⁵ (TP 04)
- *"That you really work the whole day, so from eight to five o'clock, that's full-time. And that just five times a week."*⁶(TP 07)

What do the test persons understand by "being financially independent"?

All test persons interpreted the term to mean not relying on other people or sources of money to finance their own lives:

- *"By this I primarily mean that the woman is not dependent on any other person, not the husband or the wife. But also not from the parents or the state."*⁷ (TP 02)
- *„For me, financially independent means not being dependent on funds from others. That a woman doesn't depend on her husband or wife, for example. Or on the employment office."*⁸ (TP 03)

Do test persons have trouble understanding or answering the question?

With the exception of test person 01, all persons were able to locate themselves on the answer scale. Test person 01 justified her "Don't know" answer by saying that, in her opinion, full-time employment is a good way to be financially independent, but not the best or only way:

- TP 01: *"I indicated 'don't know' because I also believe that there are other paths or that full-time employment is not the only path to financial independence."*⁹

INT: *"Then how come you didn't indicate 'disagree'?"*¹⁰

⁵ *„Unter einer Vollzeitbeschäftigung verstehe ich eine 40-Stunden-Woche.“* (TP 04)

⁶ *„Dass man wirklich den ganzen Tag arbeitet, also von acht bis fünf Uhr, das ist Vollzeit. Und das eben fünfmal die Woche.“* (TP 07)

⁷ *„Darunter verstehe ich primär, dass die Frau von keiner anderen Person abhängig ist, nicht vom Mann oder der Frau. Aber auch nicht von den Eltern oder dem Staat.“* (TP 02)

⁸ *„Finanziell unabhängig ist für mich, nicht auf Geldmittel von anderen angewiesen zu sein. Dass eine Frau zum Beispiel nicht auf ihren Ehemann oder ihre Ehefrau angewiesen ist. Oder auf das Arbeitsamt.“* (TP 03)

⁹ TP 01: *„Ich habe ‚weiß nicht‘ angegeben, weil ich auch glaube, dass es andere Wege gibt oder dass eine Vollzeitbeschäftigung nicht der einzige Weg zur finanziellen Unabhängigkeit ist.“*

¹⁰ INT: *„Wie kommt es dann, dass Sie nicht ‚stimme nicht zu‘ angegeben haben?“*

TP 01: *“Because I still think that full-time employment is still a way to be financially independent. I just don't think it's the best way or the only way. That's why I was undecided.”*¹¹

Of the remaining nine test persons, the majority ($n = 7$) stated that they tended to agree or fully agreed with the statement (scale points 5 to 7). Only two test persons (TP 03, TP 05) (tended to) disagree with the statement (scale points 2 and 3).

In the cognitive interviews, the test persons were asked to explain their answers in more detail or to give reasons (General Probe, Category Selection Probe). This revealed that two test persons (TP 03, 06) interpreted the term "full-time employment" exclusively as an activity in an employee relationship and excluded a self-employed or freelance activity. While this misinterpretation had only a minor influence on the answer to the question for test person 06 (she chose scale point 6 instead of 7), it led to a strong distortion of the answer for test person 03 (scale point 2 instead of 7):

- TP 03: *“I'm only just noticing that now: I assumed that this would involve a permanent employment relationship. And due to that I thought, no, it can also be self-employed, so that's not the best or only way. That's why I said I don't agree. I'm just noticing that now. Actually, I should have agreed due to that.”*¹²

INT: *“And how would you answer if you interpret the term now in terms of the amount of working time?”*¹³

TP 03: *“Then I would answer 'completely agree'. Because if you want to be financially independent, you also have to provide an income. And as a rule, the best way to do that is to have a full-time job.”*¹⁴

- TP 06: *“Full-time employment is not the only way to be financially independent. In this case, I understand full-time employment to mean that I am employed full-time by a company. Or am I looking at this the wrong way now? Because I am not employed anywhere, I am self-employed. And women can also be self-employed. So maybe I have misunderstood the question then.”*¹⁵

¹¹ TP 01: *„Weil ich dennoch der Meinung bin, dass eine Vollzeitbeschäftigung immer noch ein Weg ist, finanziell unabhängig zu sein. Ich bin nur nicht der Meinung, dass es der beste oder einzige Weg ist. Deswegen war ich unentschlossen.“*

¹² TP 03: *„Das fällt mir jetzt gerade erst auf: Ich bin davon ausgegangen, dass es dabei um ein festes Anstellungsverhältnis geht. Und da dachte ich, nein, die kann ja auch selbständig sein, daher ist das nicht der beste oder einzige Weg. Deswegen habe ich gesagt, ich stimme nicht zu. Das fällt mir jetzt erst auf. Eigentlich hätte ich da zustimmen müssen.“*

¹³ INT: *„Und wie würden Sie antworten, wenn Sie den Begriff jetzt hinsichtlich des Umfangs der Arbeitszeit interpretieren?“*

¹⁴ TP 03: *„Dann würde ich ‚stimme voll und ganz zu‘ antworten. Denn wenn man finanziell unabhängig sein möchte, muss man ja auch für ein Einkommen sorgen. Und das bekommt man in der Regel am besten mit einer Vollzeitbeschäftigung hin.“*

¹⁵ TP 06: *„Eine Vollzeitbeschäftigung ist nicht der einzige Weg, finanziell unabhängig zu sein. Unter Vollzeitbeschäftigung verstehe ich in dem Fall, dass ich als Angestellter bei einem Unternehmen Vollzeit beschäftigt bin. Oder sehe ich das jetzt falsch? Denn ich bin nirgendwo angestellt, ich bin selbstständig. Und auch Frauen können selbstständig arbeiten. Also möglicherweise habe ich die Frage dann falsch verstanden.“*

INT: "So, when you read full time, you say, does that mean an employee relationship for you?"¹⁶

TP 06: "Yes, I have now interpreted that as an employment relationship [and not included self-employment."¹⁷

INT: "And is that then why you didn't say 'agree fully'?"¹⁸

TP 06: "Yes, that is the reason. Because it would not be the only way."¹⁹

Are there any pre-established/strong opinions on the subject?

When asked, only two of the ten test persons stated that they first had to consider whether they agreed or disagreed with the statement (TP 01, 04). The other test persons stated that they had a firm opinion on this subject.

Recommendations:

Question: In order to avoid respondents associating the term "full-time employment" exclusively with a salaried job, we recommend rephrasing the question. One possible rewording would be:

"Having a job is the best way for a woman to be financially independent."

If the focus of the question is on women working full-time to address the issue of the large number of women with part-time jobs, we recommend the following alternative wording:

"Working full time is the best way for a woman to be financially independent."

Response format: Leave.

¹⁶ INT: „Also, wenn Sie Vollzeitbeschäftigung lesen, sagen Sie, heißt das für Sie ein Angestelltenverhältnis.“

¹⁷ TP 06: „Ja, das habe ich jetzt als Angestelltenverhältnis interpretiert [und die Selbstständigkeit nicht miteinbezogen.“

¹⁸ INT: „Und ist das dann der Grund, warum Sie nicht gesagt haben 'stimme voll zu'?“

¹⁹ TP 06: „Ja, das ist der Grund. Weil es nicht der einzige Weg wäre.“

Question 2: Response reliability

Bei der vorherigen Frage ging es darum, ob eine Vollzeitbeschäftigung der beste Weg für eine Frau ist, finanziell unabhängig zu sein. Haben Sie dazu eine eindeutige Meinung oder sind Sie sich Ihrer Meinung zu diesem Thema eher unsicher?

[The previous question was about whether full-time employment is the best way for a woman to be financially independent. Do you have a clear opinion on this or are you rather unsure of your opinion on this topic?]

<p>Ich habe überhaupt keine eindeutige Meinung dazu</p> <p>[I have no clear opinion about it at all]</p> <p><input type="checkbox"/></p>	<p>Ich habe eine eindeutige Meinung dazu</p> <p>[I have a clear opinion on this]</p> <p><input type="checkbox"/></p>
--	--

Frequency distribution (N = 10)

1 I have no clear opinion about it at all	-
2	1
3	-
4	-
5	2
6	4
7 I have a clear opinion on this	3

Cognitive techniques:

General Probing, Difficulty Probing.

Key questions and findings:

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

None of the ten test persons had problems understanding or answering the question. The test persons' answers were largely consistent with their answers to probing question N7_F1 (see appendix)

from question 1, that is, those who had previously indicated that they had a firm opinion on the subject also chose a scale point between 5 and 7 here:

- *“In my opinion, that's the best way to go, unless you work full time for very little money. Due to that, I already have a definite opinion on that.”²⁰ (TP 02; response: scale point 6)*
- *“That follows on from the previous [probing] question, after all. I am not at all unsure here because I know this from my own experience.”²¹ (TP 09; response: scale point 7)*

Test person 01, who first had to think about how to answer question 1, also stated in question 2 that she had no clear opinion on the subject (scale point 2): *“I don't have a clear opinion on this, because I find that it always varies from person to person, and I find that you can't say that across the board.”²²*

Only the two answers given by test person 04 did not agree one hundred percent. While she stated that she did not have a definite opinion on question 1, she stated that she had a rather clear opinion on question 2 (scale point 5). According to this test person, answering question 1 was rather difficult due to the fact that she had never dealt with the topic before. She understood question 2 to mean whether she had reached a clear opinion, which she tended to answer in the affirmative. She did not choose the outer scale point "I have a clear opinion on this" because she did not have this opinion in advance. Her response behavior therefore does not indicate a misinterpretation of the question.

Recommendations

Question: Leave.

Response format: Leave.

²⁰ „Meiner Meinung nach ist das der beste Weg, es sei denn, man arbeitet in Vollzeit für sehr wenig Geld. Von daher habe ich schon eine klare Meinung dazu.“ (TP 02; Antwort: Skalenpunkt 6)

²¹ „Das schließt ja an die vorherige [bohrende] Frage an. Ich bin da überhaupt nicht unsicher, weil ich das aus eigener Erfahrung weiß.“ (TP 09; Antwort: Skalenpunkt 7)

²² „Ich habe hier eher keine eindeutige Meinung dazu, weil ich finde, dass das immer von Person zu Person unterschiedlich ist, und ich finde, dass man das nicht so pauschal sagen kann.“ (TP 01)

Question 3: Compatibility of family and career

Inwieweit stimmen Sie der folgenden Aussage zu oder nicht zu?
 [To what extent do you agree or disagree with the following statement?]

Alles in allem leidet das Familienleben, wenn die Frau in Vollzeit berufstätig ist.
 [All in all, family life suffers when the wife works full time.]

Stimme über- haupt nicht zu [Do not agree at all]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Stimme voll und ganz zu [Fully agree]	<i>Weiß nicht</i> [Don't know]
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--	--

Frequency distribution (N = 10)

1 Do not agree at all	2
2	2
3	-
4	2
5	1
6	-
7 Fully agree	3
<i>Don't know</i>	-

Cognitive techniques:

Comprehension Probe, General Probe, Category Selection Probe, Difficulty Probe, Specific Probe.

Key questions and findings:

What do the test persons understand by "family life"?

All test persons associated the term with the cohabitation of father, mother and child(ren):

- *“By that I mean all the things that happen in the free time or on weekends or how the family life together is, I say, after the job.”*²³ (TP 01)
- *“I'll just say the standard family with mother, father, child. The father works full time, the mom works full time. Then things like activities with the child suffer in part. If both work full time, it is also quite difficult. Or they may not feel like doing something with the child if they work from Monday to Friday and are then exhausted at the weekend.”*²⁴ (TP 04)
- *“So family life is, of course, that when the children come home from school, someone is there, or when they are still in kindergarten, that it's not always some neighbor who picks up the children. That you are together like that.”*²⁵ (TP 07)

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

All test persons were able to locate themselves on the response scale, whereby the entire range of scales was used. Four test persons (TP 01, 02, 03, 06) disagreed with the statement (scale points 1 and 2), two test persons (TP 07, 08) chose the middle of the scale (scale point 4) and four test persons (TP 04, 05, 09, 10) agreed with the statement (scale points 5 and 7).

In the cognitive interviews, the test persons were asked to explain their answers in more detail or to give reasons (General Probe, Category Selection Probe). With one exception (TP 10), the explanations provided by the test persons were in line with the answers selected and the question intention:

- *“I tend to disagree with that, because I think you have a lot of opportunities these days to balance work life and family life. And I think that a full-time job is not quite as intrusive into a family life as it might have been in the past.”*²⁶ (TP 01, Answer: Scale point 2)
- *“I do not see it that way. The only exception would be if a newborn has to be breastfed. But otherwise I believe that children can also be cared for just as well by a man. [...] For me, it's simply a question of how you organize it. Some manage that, others don't. But here it's called 'all in all', I don't find that.”*²⁷ (TP 03, Answer: Scale point 1)

²³ „Darunter verstehe ich all das, was in der Freizeit oder an Wochenenden alles geschieht bzw. wie das Zusammenleben der Familie ist, sage ich mal, nach dem Beruf.“ (TP 01)

²⁴ „Ich sage jetzt einfach mal die Standardfamilie mit Mutter, Vater, Kind. Der Vater arbeitet voll, die Mama arbeitet voll. Dann leiden teilweise Sachen darunter wie Aktivitäten mit dem Kind. Wenn beide voll arbeiten, ist das auch ziemlich schwer. Oder die haben auch eventuell mal keine Lust dann, mit dem Kind etwas zu machen, wenn sie von montags bis freitags arbeiten und am Wochenende dann kaputt sind.“ (TP 04)

²⁵ „Also Familienleben ist natürlich, dass, wenn die Kinder aus der Schule kommen, eben jemand da ist, oder wenn sie noch im Kindergarten sind, dass halt nicht immer irgendeine Nachbarin die Kinder abholt. Dass man dann eben so zusammen ist.“ (TP 07)

²⁶ „Ich stimme dem eher nicht zu, weil ich glaube, dass man heutzutage viele Möglichkeiten hat, das Berufsleben und das Familienleben miteinander zu vereinen. Und ich glaube, dass eine Vollzeitbeschäftigung nicht mehr ganz so einschneidend in ein Familienleben ist, wie es mal eventuell war.“²⁶ (TP 01, Antwort: Skalenpunkt 2)

²⁷ „Ich sehe das nicht so. Eine Ausnahme wäre nur, wenn ein Neugeborenes gestillt werden muss. Aber ansonsten glaube ich, dass Kinder auch genauso gut von einem Mann versorgt werden

- *“The middle way. Due to this, everyone has to find out for themselves what is better.”*²⁸ (TP 08, Answer: Scale point 4)
- *“Well, it's already hard, family life suffers. In the evening, you don't feel like doing anything anymore, you think “I can't do it anymore” or “I don't want to do it anymore.”*²⁹ (TP 09; Answer: Scale point 7)

Test person 10 stated that she tended to agree with the statement (scale point 5). In her reasoning, however, it became clear that she did not have a conservative gender role image, but was of the opinion that a conservative attitude on the part of the man could lead to family life suffering:

- TP 10: *“That depends on the situation. It always depends on the constellation. Depending on how the man is structured in family life, it is not necessarily the usual thing. There are also very conservative men who want to support the family alone because they don't see that a woman should be independent.”*³⁰

INT: *“So, if I understand you correctly, it depends on the man whether family life suffers?”*³¹

TP 10: *“Yes, exactly. Socially, how that accepts at all. It's still the case that women are paid less and so on. So, this is a complex story, so that it is not necessarily self-evident that a woman can finance herself independently.”*³²

Are there any pre-established/strong opinions on the topic?

With the exception of test person 08, all test persons stated that they had a firm opinion on this subject. Test person 08 said that she first had to think about how to answer the question, due to the fact that she *“did not have a 100% opinion”*³³ on the matter (response: scale point 4).

können. [...] Für mich ist das einfach eine Frage dessen, wie man das organisiert. Manche schaffen das, andere nicht. Aber hier heißt es ja ‚alles in allem‘, das finde ich nicht.“ (TP 03, Antwort: Skalenpunkt 1)

²⁸ *„Der Mittelweg. Da muss jeder für sich selbst herausfinden, was besser ist.“*²⁸ (TP 08, Antwort: Skalenpunkt 4)

²⁹ *„Also, es ist schon schwer, das Familienleben leidet schon. Abends hat man zu gar nichts mehr Lust, denkt “ich kann nicht mehr“ oder “ich will nicht mehr“.“* (TP 09; Antwort: Skalenpunkt 7)

³⁰ TP 10: *„Das ist situationsabhängig. Das kommt immer auf die Konstellation an. Je nachdem, wie der Mann im Familienleben gestrickt ist, ist es eben nicht unbedingt das Übliche. Es gibt ja auch noch sehr konservative Männer, die den Unterhalt der Familie allein bestreiten wollen, weil sie nicht einsehen, dass eine Frau unabhängig sein sollte.“*

³¹ INT: *„Also, wenn ich Sie richtig verstehe, hängt das vom Mann ab, ob das Familienleben darunter leidet?“*

³² TP 10: *„Ja, genau. Gesellschaftlich, wie der das überhaupt annimmt. Das ist ja immer noch so, dass Frauen schlechter bezahlt werden usw. Also, das ist ja eine komplexe Geschichte, so dass es nicht unbedingt selbstverständlich ist, dass sich eine Frau unabhängig finanzieren kann.“*

³³ *„keine einhundertprozentige Meinung“* (TP 08, Antwort: Skalenpunkt 4)

Recommendations:

Question: Leave.

Response format: Leave.

Question 4: Attitude strength

Bei der vorherigen Frage ging es darum, ob das Familienleben darunter leidet, wenn die Frau in Vollzeit berufstätig ist. Wie wahrscheinlich ist es, dass Sie Ihre Meinung zu diesem Thema zukünftig ändern werden?

[The previous question was about whether family life suffers when the wife works full-time. How likely is it that you will change your mind on this issue in the future?]

Sehr unwahrscheinlich **Sehr wahrscheinlich**

[Very unlikely] **[Very likely]**

Frequency distribution (N = 10)³⁴

1 Very unlikely	8
2	-
3	1
4	-
5	-
6	1
7 Very likely	-

Cognitive techniques:

General Probe, Difficulty Probe.

³⁴ Listed here are the test persons' final answers after answering the probing questions. Test person 04 changed her answer during the cognitive interview from "7 - very likely" to "1 - very unlikely" and test person 06 from "5" to "2".

Key questions and findings:

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

Two test persons (TP 04, 06) changed their answers to question 4 while answering the probing questions. Both stated that they had misunderstood the question when they first answered it:

- *“Due to that, I must confess, I misunderstood the question earlier. I was thinking whether I wouldn't change my mind. I read that wrong. So actually I would have wanted to click 'very unlikely'.”³⁵ (TP 04; initial response: 7, final response: 1)*
- *“Now that I think about it. I think I chose the wrong answer due to that. I don't think I understood the question correctly. I think I understood it the other way around. Actually, my answer should be 2, because I don't know why I would change my mind due to that. Well, I have to be honest and say that I think I answered question 4 wrong.”³⁶ (TP 06; initial response: 5, final response: 2)*

The remaining test persons had no difficulty answering the question. The majority of the test persons considered it very unlikely that they would change their opinion on this subject in the future and justified this by stating that they had an established opinion on this subject. The two test persons who indicated a certain or high probability (TP 01, 09) justified their answers by saying that social circumstances could change in the future and that their opinions would change as a result:

- *“I can already imagine that circumstances may change in the future and that I will then adjust my opinion accordingly.”³⁷ (TP 01; Answer: Scale point 3)*
- *“Yes, I'm not sure how it will go in the future. I just hope that the world of men will change a bit and that women will have it easier in the future. That's why it's possible that I'll change my mind in the future if circumstances change. The young men are already more helpful. It was the generation in between that was really only interested in their careers. I have hope that it will change.”³⁸(TP 09; Answer: Scale Point 6)*

³⁵ „Da muss ich gestehen, da habe ich die Frage vorhin falsch verstanden. Ich habe gedacht, ob ich meine Meinung nicht ändern werde. Das habe ich falsch gelesen. Also eigentlich hätte ich ‚sehr unwahrscheinlich‘ anklicken wollen.“ (TP 04; initiale Antwort: 7, finale Antwort: 1)

³⁶ „Jetzt, wo ich drüber nachdenke. Ich glaube, da habe ich die falsche Antwort gewählt. Ich glaube, ich habe die Frage nicht richtig verstanden. Ich habe es, glaube ich, eher umgekehrt verstanden. Also eigentlich müsste meine Antwort eher 2 sein, denn ich wüsste nicht, wieso ich da meine Meinung ändern würde. Also ich muss jetzt ganz ehrlich sagen, ich glaube, bei Frage 4 habe ich falsch geantwortet.“ (TP 06; initiale Antwort: 5, finale Antwort: 2)

³⁷ „Ich kann mir schon vorstellen, dass sich die Umstände in der Zukunft vielleicht ändern werden und ich dann meine Meinung dahingehend anpassen werde.“ (TP 01; Antwort: Skalenpunkt 3)

³⁸ „Ja, ich bin nicht sicher, wie das in Zukunft läuft. Ich hoffe eben, dass sich gerade die Männerwelt etwas ändert und dass die Frauen es in Zukunft leichter haben. Darum kann es schon sein, dass ich meine Meinung in der Zukunft ändere, wenn sich die Umstände ändern. Die jungen Männer, die sind doch schon hilfsbereiter. Es war die Generation dazwischen, die es eigentlich nur auf die Karriere angelegt hat. Ich habe die Hoffnung, dass es sich ändert.“ (TP 09; Antwort: Skalenpunkt 6)

Recommendations:

Question: Leave.

Response format: In order to avoid misinterpretation of the question text or the polarity of the scale, we recommend labeling the scale points as follows:

Very unlikely to change my mind - Very likely to change my mind

Question 5: Environmental behavior

Wie häufig werfen Sie kleinere Abfälle auf den Boden, in Kanaldeckel oder Blumenbeete, wenn Sie gerade keinen Abfalleimer sehen?

[How often do you throw smaller trash on the ground, in manhole covers, or flower beds when you don't see a trash can right now?]

Nie [Never]							Sehr Häufig [Very fre- quently]	Weiß nicht [Don't know]
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Frequency distribution (N = 10)

1 Never	7
2	3
3	-
4	-
5	-
6	-
7 Very frequently	-
Don't know	-

Cognitive techniques:

Comprehension Probe, General Probe, Specific Probe.

Key questions and findings:

What do the test persons understand by "smaller waste"?

By "smaller waste", the test persons understood chewing gum (wrappers), paper tissues, cigarette butts, confectionery wrappers, small pieces of paper or coffee cups:

- *“Something like coffee mugs, you get for example at the bakery, or chewing gum paper.”³⁹ (TP 01)*
- *“That would be chewing gum, a piece of handkerchief that you might have lying around in your pocket, that is, an old piece of paper or something.”⁴⁰(TP 04)*
- *“Everything that does not belong on the street. These are scraps of paper and wrappers from candy, cigarette butts.”⁴¹ (TP 06)*
- *“Chewing gum wrappers or things like that, cigarettes.”⁴² (TP 08)*

Those test persons who indicated that they "rarely" (scale item 2) threw smaller trash on the ground or in manhole covers/flower beds also mentioned fruit scraps such as an apple stalk:

- *“With me it is usually a piece of apple, so the style that remains at the end.”⁴³ (TP 02)*
- *“Well, I only throw biodegradable material on the ground or in a manhole cover once in a while.”⁴⁴ (TP 10)*

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

None of the test persons had problems understanding the question or locating themselves on the answer scale. All test persons stated that they "never" (scale point 1; n = 7) or "rarely" (scale point 2; n = 3) did so. The test person's justifications also matched their previous answer word locations.

Those who had stated that they "rarely" do so named biodegradable products or paper tissues that they occasionally throw on the ground or into manhole covers/flower beds:

- *“My sister sometimes wears my jacket. And she uses handkerchiefs a lot and then just puts them in the jacket pockets. And I hate handkerchiefs. When I notice that on the street and I have the handkerchief in my hand and there is no waste garbage can due to it, I throw it on the ground. I hope of course that no one notices.”⁴⁵(TP 02)*

³⁹ „So etwas wie Kaffeebecher, also die man z. B. bei der Bäckerei bekommt, oder Kaugummipapier.“ (TP 01)

⁴⁰ „Das wären jetzt Kaugummis, mal ein Tempo, was man vielleicht mal in der Tasche rumfliegen hat, das heißt, ein alter Zettel oder so.“ (TP 04)

⁴¹ „Alles, was nicht auf die Straße gehört. Das sind Papierschnipsel und Verpackungen von Bonbons, Zigarettenkippen.“ (TP 06)

⁴² „Kaugummipapier oder solche Sachen, Zigaretten.“ (TP 08)

⁴³ „Bei mir ist es meistens ein Stück Apfel, also der Stil, der am Ende übrigbleibt.“ (TP 02)

⁴⁴ „Also, ich werfe höchstens mal biologisch Abbaubares auf den Boden oder in einen Kanaldeckel.“ (TP 10)

⁴⁵ „Meine Schwester trägt manchmal meine Jacke. Und sie benutzt in hohem Maße Taschentücher und legt die dann einfach in die Jackentaschen. Und ich hasse Taschentücher. Wenn ich das dann auf der Straße bemerke und ich habe das Taschentuch dann in der Hand und es ist kein Abfallimer da, dann schmeiße ich das schon auf dem Boden. Ich hoffe natürlich, dass das keiner bemerkt.“ (TP 02)

- *“For example, when I eat an apple, the apple cores already fly into flower beds. So I sometimes drop organic things on the ground, but I don't do that often.”⁴⁶ (TP 03)*

Some of those who had indicated they "never" do it expressed anger when others do it:

- *“But I've also known this from an early age, that I throw my trash in the trash can. That's how I was taught and that's how I've kept it. And I also find it quite unnecessary that you have to throw things on the floor or somewhere where there is no trash can.”⁴⁷ (TP 04)*
- *“Everything that does not belong on the street. That's scraps of paper and candy wrappers. Cigarette butts, which I find really bad. Honestly nothing belongs on the ground.”⁴⁸ (TP 06)*
- *“I simply expect that of myself and I also expect that of others. I always get annoyed, some people throw their cigarette butts or something [on the floor], I always find that completely impossible. So I would never do [that] and it also bothers me when someone else does it.”⁴⁹ (TP 07)*

Others stated that you could put your trash in your handbag, jacket pocket, or pants pocket, for example, until you see a trash can:

- *“So, I always try to keep my smaller scraps with me until I see a trash can.”⁵⁰ (TP 01)*
- *“I just put it in the handbag.”⁵¹ (TP 05)*
- *“If I have small papers or something, there's no need to throw them on the floor. I put it in my jacket or pants pocket and then throw it in the trash can at home.”⁵² (TP 08)*

⁴⁶ *Wenn ich zum Beispiel einen Apfel esse, dann fliegen die Apfelkerne schon in Blumenbeete. Also Organisches lasse ich schon manchmal auf den Boden fallen, aber ich mache das selten.“ (TP 03)*

⁴⁷ *„Ich kenne das aber auch von klein auf, dass ich meinen Müll in den Mülleimer werfe. Das wurde mir so beigebracht und so habe ich es beibehalten. Und ich finde das auch ziemlich unnötig, dass man die Sachen auf den Boden werfen muss oder irgendwo, wo kein Mülleimer ist.“ (TP 04)*

⁴⁸ *„Alles, was nicht auf die Straße gehört. Das sind Papierschnipsel und Verpackungen von Bonbons. Zigarettenkippen, was ich ganz schlimm finde. Es gehört ehrlich nichts auf den Boden.“ (TP 06)*

⁴⁹ *„Das erwarte ich einfach von mir und erwarte ich auch von anderen. Ich ärgere mich immer, manche Leute schmeißen ja ihre Zigarettenkippen oder so [auf den Boden], das finde ich immer völlig unmöglich. Also, [das] würde ich nie machen und es stört mich auch, wenn jemand anderes das macht.“ (TP 07)*

⁵⁰ *„Also, ich versuche meine kleineren Abfälle immer bei mir zu behalten, bis ich einen Mülleimer sehe.“ (TP 01)*

⁵¹ *„Ich stecke es eben in die Handtasche.“ (TP 05)*

⁵² *„Wenn ich kleine Papiere oder so habe, dann muss man die ja nicht auf den Boden schmeißen. Ich stecke das in meine Jacken- oder Hosentasche und werfe es dann zu Hause in den Abfalleimer.“ (TP 08)*

How sensitive do the test persons perceive the question to be?

The test persons were asked to indicate on a seven-point scale how unpleasant they found it to be asked the question (sample N3_F5, see Appendix). They found it either "not at all unpleasant" (scale item 1; n = 8) or "rather not unpleasant" (scale item 2; n = 2) to be asked the question.

Those who chose scale point 2 had also previously chosen scale point 2 ("rarely") for question 5. They justified their answer as follows:

- *"Because it's very human. It would be funny if there are people who have never done this before."*⁵³ (TP 02)
- *"So, [that's] not really unpleasant. Probably because I'm still doing quite well with my fruit waste [laughs]."*⁵⁴ (TP 03)

All other test persons expressed that they had a clear opinion on the subject, that it was a matter of course not to throw one's garbage on the ground, and that it was not an unpleasant subject:

- *"Because I find that this is actually a question that has not really worried me personally [...]. So, I don't find that a big issue to talk about now. And I also find that the question is asked very politely."*⁵⁵ (TP 01)
- *"Because I don't do that. Because I have a clear attitude towards it."*⁵⁶ (TP 06)
- *"Because I have a clear opinion on this and because I also experience that people throw away their cigarette butts from time to time, and because this also bothers me."*⁵⁷ (TP 07)
- *"Because I take it for granted that you don't throw your waste around, and I get annoyed at others who throw their waste into my front garden, for example."*⁵⁸ (TP 10)

Furthermore, the test persons were asked to indicate on a seven-point scale how honestly they thought respondents would answer this question in a proper survey (see Table N5_F5). Six test persons believed that this question would be answered "rather not honestly" (scale point 3) in a questionnaire, and three believed that it would be answered "rather honestly" (scale point 6; n = 1) or "very honestly" (scale point 7; n = 2). Test person 08 stated that she did not know due to not being able to see inside others.

⁵³ „Weil das sehr menschlich ist. Es wäre komisch, wenn es Leute gibt, die das noch nie gemacht haben.“ (TP 02)

⁵⁴ „Also, [das ist] nicht wirklich unangenehm. Wahrscheinlich, weil ich mit meinen Fruchtabfällen noch ganz gut dastehe [lacht].“ (TP 03)

⁵⁵ „Weil ich finde, dass das eigentlich eine Frage ist, die mich persönlich jetzt nicht so beunruhigt hat [...]. Also, ich finde das jetzt kein großes Thema, darüber zu reden. Und ich finde auch, dass die Frage sehr höflich gestellt ist.“ (TP 01)

⁵⁶ „Weil ich das nicht mache. Weil ich eine klare Einstellung dazu habe.“ (TP 06)

⁵⁷ „Weil ich eine klare Meinung dazu habe und weil ich das ja auch immer mal wieder erlebe, dass Leute ihre Zigarettenkippen wegwerfen, und weil mich das auch stört.“ (TP 07)

⁵⁸ „Weil das für mich selbstverständlich ist, dass man seine Abfälle nicht in der Gegend rumschmeißt, und ich mich über andere ärgere, die ihre Abfälle zum Beispiel in meinen Vorgarten schmeißen.“ (TP 10)

Those who believed the question was "more likely not to be answered honestly" cited the climate crisis, feelings of shame, and doubts about anonymity as possible reasons for this:

- *"Because of the current prevailing opinion on the climate crisis. I think it's now really totally disreputable to do something like that. And due to this, people probably already have an inhibition threshold to answer this question honestly without being socially ostracized."*⁵⁹ (TP 02)
- *"Because I think that the environment is a huge issue and some people would like to look better than they do."*⁶⁰ (TP 05)
- *"Because people might be a bit ashamed due to this, it could be that they actually don't want to admit it."*⁶¹ (TP 09)

Those who believed the question was "more likely not to be answered honestly" cited the climate crisis, feelings of shame, and doubts about anonymity as possible reasons for this:

- *"Because the questionnaire or the questions are more or less anonymous later on. And I don't think that this is a topic where many people start lying now."*⁶² (TP 01)
- *"Because it just doesn't involve embarrassment or anything. I think the people who just throw their stuff away in the area, they don't worry about it and they don't feel embarrassed to admit it."*⁶³ (TP 07)

Recommendations:

Question: Leave.

Response format: Leave.

⁵⁹ „Wegen der momentan herrschenden Meinung zur Klimakrise. Ich glaube, inzwischen ist es wirklich total verrufen, wenn man so etwas macht. Und da haben Menschen vermutlich schon eine Hemmschwelle, diese Frage ehrlich zu beantworten, ohne sozial geächtet zu werden.“ (TP 02)

⁶⁰ „Weil ich denke, dass die Umwelt ein Riesenthema ist und manche Leute gerne besser dastehen würden, als sie es tun.“ (TP 05)

⁶¹ „Weil die Leute sich da vielleicht ein bisschen schämen, könnte ja sein, dass die das eigentlich nicht wahrhaben wollen.“ (TP 09)

⁶² „Weil der Fragebogen oder die Fragen ja später mehr oder weniger anonym sind. Und ich glaube auch nicht, dass das eine Thematik ist, bei der jetzt viele Leute anfangen zu lügen.“ (TP 01)

⁶³ „Weil das einfach keine Peinlichkeiten beinhaltet oder so. Ich denke, die Leute, die ihr Zeug einfach in der Gegend wegschmeißen, die machen sich darüber keinen Kopf und denen ist das auch nicht peinlich, das zuzugeben.“ (TP 07)

Question 6: Environmental behavior: Intention

Wären Sie bereit, mehr Geld für Trinkwasser zu bezahlen, wenn damit Maßnahmen gegen die Trinkwasserverschmutzung finanziert werden würden?

[Would you be willing to pay more money for drinking water if it financed measures against drinking water pollution?]

Nein, überhaupt nicht bereit							Ja, voll und ganz bereit	<i>Weiß nicht</i>
[No, not ready at all]							[Yes, fully ready]	[Don't know]
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Frequency distribution (N = 10)

1 No, not ready at all	-
2	-
3	-
4	2
5	1
6	3
7 Yes, fully ready	4
<i>Don't know</i>	-

Cognitive techniques:

General Probing, Category Selection Probe, Specific Probe.

Key questions and findings:

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

At first glance, none of the test persons had any problems understanding the question or locating themselves on the answer scale. Four test persons each indicated that they were "rather" (scale points 5 and 6) or "completely" (scale point 7) willing to do so. Two test persons chose the middle

category (scale point 4). The test persons' reasons in each case matched the previous answer locations.⁶⁴

However, the responses to the probing question itself indicated two potential problems with the question. First, test persons thought either only of supermarket water, only of tap/source water, or both. Second, those test persons who chose scale items 6 and 7 (and thus answered socially desirable) justified their choices with very different things, e.g., that water was very cheap, that it was important to have clean water, and that one also had to think about the future:

- *“I already have a desire for clean drinking water. And if I know that my taxes, for example, will be used for these measures, then I am fully prepared to do so.”*⁶⁵ (TP 02)
- *“I have now simply thought of the bottles that are available in Lidl and Aldi, the drinking water. And due to I personally just would not have a problem if that would also cost more, because the things are so cheap.”*⁶⁶ (TP 04)
- *“Well, I find that very important. I also have children. I find it very important for the future, and that's why I would be willing to do it. [...] I find it important that you can continue to drink it with a clear conscience. Or if you dissolve an effervescent tablet, you can also do that with water from the tap.”*⁶⁷ (TP 07)
- *“We need water for drinking and washing. Due to the fact that water is difficult to purify, we have to be prepared to [pay more].”*⁶⁸ (TP 09)

Some test persons suggested that it depended on the actions that were taken:

- *“If I were to notice that this is just window dressing, then I would not be willing to pay more money for it. But if I see that these are actually measures that are suitable for changing something, then I am also prepared to pay more money for them.”*⁶⁹ (TP 06)

⁶⁴ It should be noted here that the interviewer incorrectly told a test person (TP 01) who had originally chosen scale item 6 that she had chosen the middle category during the cognitive interview, and the test person then answered the probing question as if she had chosen the middle value.

⁶⁵ „Ich habe schon Lust auf sauberes Trinkwasser. Und wenn ich weiß, dass zum Beispiel meine Steuern für diese Maßnahmen eingesetzt werden, dann bin ich voll und ganz bereit dazu.“ (TP 02)

⁶⁶ „Ich habe jetzt einfach an die Flaschen gedacht, die es im Lidl und Aldi gibt, das Trinkwasser. Und da hätte ich persönlich einfach kein Problem, wenn das auch mehr kosten würde, weil die Sachen so günstig sind.“ (TP 04)

⁶⁷ „Also, ich finde das sehr wichtig. Ich habe ja auch Kinder. Ich finde das auch für die Zukunft sehr wichtig und deswegen wäre ich auch dazu bereit. [...] Ich finde es wichtig, dass man das weiterhin auch mit gutem Gewissen trinken kann. Oder wenn man eine Brausetablette auflöst, das macht man ja auch mit Wasser aus dem Hahn.“ (TP 07)

⁶⁸ „Wir brauchen ja Wasser zum Trinken oder zum Waschen. Da muss man auch bereit sein, in Zeiten, in denen das Wasser schwer zu reinigen ist, dass man dann auch [mehr bezahlt].“ (TP 09)

⁶⁹ Würde ich merken, dass es sich dabei nur um Augenwischerei handelt, dann bin ich nicht bereit, mehr Geld dafür zu bezahlen. Wenn ich aber sehe, dass es tatsächlich Maßnahmen sind, die geeignet sind, da etwas zu verändern, dann bin ich auch bereit, dafür mehr Geld zu bezahlen.“ (TP 06)

- *“So, I am willing to pay more money for it [...]. But I am against corporations getting their hands on it and then buying up huge tracts of land and selling the water on at a high price.”⁷⁰ (TP 09)*

Those who had chosen scale points 4 and 5 said that this depended on the need, that water was already expensive and that it was necessary to start much earlier to prevent drinking water pollution in the first place.:

- *“Well, we have already invested our own money in a better drinking water system here in the house, and I don't know exactly how many people drink the drinking water altogether. [...] If you would like to do that, you can also take it into your own hands.”⁷¹ (TP 05)*
- *“On the one hand, it is commendable that it is not polluted. But why should you pay even more money everywhere? You have to get it from somewhere, and that's the problem.”⁷² (TP 08)*
- *“I am willing to do that, but I find that drinking water is already very expensive. And on the other hand, it is a valuable resource and I think that we should actually start somewhere else, i.e. much earlier, so that the drinking water is not so badly polluted.”⁷³ (TP 10)*

How sensitive do the test persons perceive the question to be?

The test persons were asked to indicate on a seven-point scale how unpleasant they found it to be asked the question (Sample N3_F6, see Appendix). All but one of the test persons found it "not at all unpleasant" (scale point 1; n = 9) to be asked the question. Test person 05, on the other hand, found it "rather unpleasant" (scale point 5); she had positioned herself in the middle of question 5 (scale point 4) and justified her answer by saying that for her it already went in a very personal direction: *“The pollution thing, that then goes along the lines of saying of course you're willing to pay something, but the bottom line is somehow you're not.”⁷⁴*

All other test persons expressed that this was an important topic that did not involve anything private or embarrassing:

⁷⁰ *„Also, ich bin bereit, mehr Geld dafür zu bezahlen [...]. Aber ich bin dagegen, dass es Konzerne in die Hand kriegen und die dann riesige Ländereien aufkaufen und das Wasser dann teuer weiterverkaufen.“ (TP 09)*

⁷¹ *„Also, wir haben schon eigenes Geld investiert in eine bessere Trinkwasseranlage hier im Haus, und ich weiß nicht genau, wie viele Leute das Trinkwasser insgesamt trinken. [...] Wenn man das gerne möchte, kann man es ja auch selbst in die Hand nehmen.“ (TP 05)*

⁷² *„Auf der einen Seite ist es lobenswert, dass es nicht verschmutzt wird. Aber warum soll man denn überall noch mehr Geld bezahlen? Man muss das ja auch irgendwo herbekommen und das ist das Problem.“ (TP 08)*

⁷³ *„Ich bin schon dazu bereit, aber ich finde, dass das Trinkwasser schon sehr teuer ist. Und auf der anderen Seite ist es eine wertvolle Ressource und ich bin der Meinung, dass man eigentlich woanders ansetzen müsste, also schon viel früher, dass das Trinkwasser nicht so stark verschmutzt wird.“ (TP 10)*

⁷⁴ *„Das mit der Umweltverschmutzung, das geht dann in die Richtung, dass man sagen muss, dass man natürlich bereit ist, was zu bezahlen, aber im Endeffekt ist man es irgendwie doch nicht.“ (TP 05)*

- *“Because I find that it's actually a topic that's fine to talk about, and I don't think it's a taboo subject per se.”⁷⁵ (TP 01)*
- *“This is not an intimate topic for me.”⁷⁶ (TP 03)*
- *“Because I also have an opinion about it, and what's wrong with that? Even if someone says they don't want to spend money on it, it's not bad either. I find this is a very normal question that is not embarrassing.”⁷⁷ (TP 07)*
- *“Because it's a very important issue that many people don't think about enough.”⁷⁸ (TP 10)*

Furthermore, the test persons were asked to indicate on a seven-point scale how honestly they thought respondents would answer this question in a real survey (see Table N5_F6). Five test persons believed that this question would be answered "rather honestly" (scale points 5 and 6; n = 3) or "very honestly" (scale point 7; n = 2) in a questionnaire, four chose the middle answer category (scale point 4) and one test person (TP 05) believed that this question would be answered "rather not honestly" (scale point 3). The last test person named was the same test person who had been the only one to choose the middle category in the previous probing question (TP 05). She justified her selection by saying that she believed that *“most would like to be in a better position.”⁷⁹*

Those who believed that the question was answered "rather/very honestly" expressed that it was not a question fraught with embarrassment and was a very important topic:

- *“In principle, this does not concern anything you do that you should be ashamed of.”⁸⁰ (TP 04)*
- *“Because it's less embarrassing if you don't necessarily want to pay money for drinking water. Maybe people don't see it that way either. Throwing away Kleenex or cigarette butts in public is more embarrassing because it is immediately noticeable.”⁸¹ (TP 07)*
- *“Because that is our livelihood. You can live without wine, but not without water, that's not possible at all.”⁸² (TP 09)*

⁷⁵ „Weil ich finde, dass das eigentlich eine Thematik ist, über die man gut und gerne sprechen darf, und ich glaube nicht, dass das per se ein Tabuthema ist.“ (TP 01)

⁷⁶ „Das ist für mich kein intimes Thema.“ (TP 03)

⁷⁷ „Weil ich auch eine Meinung dazu habe und was ist daran schlimm? Selbst wenn einer sagt, er würde dafür kein Geld ausgeben wollen, ist es auch nicht schlimm. Ich finde, das ist eine ganz normale Frage, die nicht peinlich ist.“ (TP 07)

⁷⁸ „Weil das ein ganz wichtiges Thema ist, über das sich viele Leute viel zu wenig Gedanken machen.“ (TP 10)

⁷⁹ [...]„die meisten doch gerne besser dastehen würden.“ (TP 05)

⁸⁰ „Das betrifft ja im Prinzip nichts, was man tut, wofür man sich schämen sollte.“ (TP 04)

⁸¹ „Weil es weniger peinlich ist, wenn man eben nicht unbedingt Geld für Trinkwasser zahlen will. Das sieht man vielleicht auch nicht so. Das Wegwerfen in der Öffentlichkeit von Tempos oder Zigarettenskippen ist peinlicher, weil es ja gleich auffällt.“ (TP 07)

⁸² „Weil das ja unsere Lebensgrundlage ist. Man kann ohne Wein leben, aber nicht ohne Wasser, das geht gar nicht.“ (TP 09)

- *“Because I think people realize, at the latest when they ask the question, that this is an important issue to think about.”⁸³ (TP 10)*

Those who placed themselves in the middle category cited social pressure as a possible reason for this:

- *“Because I think it comes across a bit better if you indicate that you would be willing to pay more, even though in the end you wouldn't be. That this acting according to social norms, that you think it's expected of you, [...] tends to tempt you to answer a bit dishonestly.”⁸⁴ (TP 01)*
- *“Because I think that due to this many people feel a social pressure and prefer to answer in a way that is compliant. [...] And I think that is one of these topics, especially now with Fridays for Future, where people are now [...] reacting more sensitively to what they answer.”⁸⁵ (TP 06)*

Recommendations:

Question: The results of the cognitive interviews indicate that question 6 is not particularly well suited to capture socially desirable response behavior. In addition, the intention of the question is not clear (is it about drinking water treatment or water prices in the supermarket?), which allows respondents room for interpretation. Although the frequency distribution of the answers gives the impression that the majority of the test persons answered in a socially desirable manner, in most cases this did not seem to be because the test persons wanted to present themselves in a better light. If the goal of the question is to capture socially desirable behavior, we therefore recommend deleting the question.

Response format: Leave.

⁸³ „Weil ich denke, dass den Leuten spätestens bei der Fragestellung bewusst wird, dass das ein wichtiges Thema ist, über das man sich Gedanken machen sollte.“ (TP 10)

⁸⁴ „Weil ich glaube, das kommt schon ein bisschen besser rüber, wenn man eher angibt, dass man bereit wäre, mehr zu bezahlen, obwohl man es letztendlich gar nicht wäre. Dass dieses Handeln nach sozialen Normen, dass man denkt, es wird von einem erwartet, [...] eher dazu verleitet, ein bisschen unehrlich zu antworten.“ (TP 01)

⁸⁵ „Weil ich glaube, dass da schon viele einen sozialen Druck spüren und lieber so antworten, dass es konform ist. [...] Und ich glaube, das ist so eines dieser Themen, gerade auch jetzt mit Fridays for Future, wo die Leute mittlerweile [...] sensibler reagieren, bei dem, was sie antworten.“ (TP 06)

Question 7: Environmental knowledge: Energy per transport vehicle

Was glauben Sie, welches Verkehrsmittel verbraucht durchschnittlich pro Person und pro km am meisten Energie?

[Which mode of transport do you think consumes the most energy on average per person and per km?]

- Nahverkehrszug/Regionalbahn [Commuter train/ regional rail]
- U-Bahn [Subway]
- Straßenbahn [Tram]
- Omnibus [Omnibus]
- Auto [Car]

- Weiß nicht [Don't know]*

Frequency distribution (N = 10)

Commuter train/ regional rail	1
Subway	-
Tram	-
Omnibus	1
Car	5
<i>Don't know</i>	3

Cognitive techniques:

Category Selection Probe, Confidence Rating, Specific Probe.

Key questions and findings:

Do the test persons have difficulties in to understand the questions?

Of the ten test persons, half (n = 5) chose the correct answer option ("Au-to"). One test person each selected the options "Omnibus" (TP 08) and "Commuter train/regional rail" (TP 04). Three indicated that they did not know the answer to the question:

- *“I would have guessed subway, but I'm very unsure due to that. I really don't know. I have not yet dealt with it and did not want to answer wrongly.”*⁸⁶ (TP 02; Answer: “Don’t know“)
- *“I really don't know. And it is too obvious to immediately condemn the car and credit the other things. I don't know what consumes the most energy per person.”*⁸⁷ (TP 06; Answer: “Don’t know“)
- *“I don't know, I wouldn't know what to take due to. The regional train? I really don't know. Car, I don't know.”*⁸⁸ (TP 07; Answer: “Don’t know“)

None of the ten test persons show difficulties in understanding the question.

Do test persons understand that per person and per kilometer is the maximum number of passengers?

Of the five test persons who selected the correct answer ("car"), all referred in their justification to the maximum number of persons that can be transported in the means of transport:

- *“Because I think that the car, if you calculate it per person and per kilometer, consumes the most fuel, because it can transport so few people and because it consumes a lot of energy in the process behind it, I would say in the extraction of fuels or in the production [...]”*⁸⁹ (TP 01)
- *“Because the car carries the fewest people.”*⁹⁰ (TP 03)
- *“Often there's only one person in a car like that, and that goes for me, too. If there are two, three, four or five people in it, then it's naturally less in proportion. But that starts with the streetcar. It runs on electricity - which of course has to come from coal or somehow. But more people use it. So the less energy is consumed per person.”*⁹¹ (TP 09)

Those test persons who chose one of the wrong answer options (TP 04, 08) justified it by the frequency of trips or the size of transport means:

⁸⁶ „Ich hätte U-Bahn getippt, aber ich bin mir da sehr unsicher. Ich weiß es echt nicht. Ich habe mich damit noch nicht befasst und wollte nichts Falsches antworten.“ (TP 02; Antwort: „Weiß nicht“)

⁸⁷ „Ich weiß es wirklich nicht. Und es ist zu naheliegend, gleich das Auto zu verdammen und die anderen Sachen gutzusprechen. Ich weiß es nicht, was pro Person am meisten Energie verbraucht.“ (TP 06; Antwort: „Weiß nicht“)

⁸⁸ „Ich weiß es nicht, ich wüsste nicht, was ich da nehmen soll. Die Regionalbahn? Ich weiß es wirklich nicht. Auto, keine Ahnung.“ (TP 07; Antwort: „Weiß nicht“)

⁸⁹ „Weil ich glaube, dass das Auto, also wenn man das jetzt pro Person und pro Kilometer rechnet, am meisten Brennstoff verbraucht, weil es eben so wenige Leute transportieren kann und weil es im Prozess dahinter, also ich sage jetzt mal in der Gewinnung von Treibstoffen oder in der Produktion sehr viel Energie verbraucht [...]“ (TP 01)

⁹⁰ „Weil das Auto die wenigsten Menschen befördert.“ (TP 03)

⁹¹ „In so einem Auto sitzt oft nur eine Person drin, das gilt auch für mich. Wenn dann zwei, drei, vier oder fünf drinsitzen, dann ist es natürlich weniger im Verhältnis. Das fängt aber mit der Straßenbahn an. Die fährt ja mit Strom – der muss natürlich über Kohle oder irgendwie herkommen. Aber es sind halt mehr Leute, die sie benutzen. Desto geringer wird also die Verbrauchsenegie pro Person.“ (TP 09)

- *“Because the trains and trains, regional trains very often and frequently and also drive long distances. This is the first thing that came to mind when I think of the railroads.”⁹² (TP 04; Answer: “Commuter train/regional train”)*
- *“I chose it because it's a bigger vehicle than the car. [The] streetcar has more to do with electric. If [the] airplane were included, I would say airplane.”⁹³ (TP 08; Answer “Omnibus”)*

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

As can be seen in the table for probing question N2_F7, the test persons' perceived confidence in answering the question varied. Those test persons who had selected the correct answer ("car") were "very certain" or "rather certain" (TP 01, 03, 09, 10). Test persons who had chosen one of the other answer options were "rather uncertain" (TP 04, 08). Test person 05 was "rather uncertain" despite the correct answer. The test persons who had not selected an answer ("Don't know") were not asked for their assessment.

Table N2_F7. Confidence Rating regarding question 7 ($N = 10$)

Probing question	Test persons (n)
sehr sicher [very certain]	2
eher sicher [rather certain]	2
eher unsicher [rather uncertain]	3
sehr unsicher [very uncertain]	-
keine Angabe [not specified]	3

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

The Confidence Rating was followed by Specific Probing, which asked for an assessment of the difficulty of the question in a "real" survey. Nine of the ten test persons gave such an assessment. Test person 06 was not able to make an assessment and justified this by not knowing the correct answer to the question herself: *"I can't judge that. Probably many, which then makes it even more embarrassing for me."*⁹⁴ Four of the nine test persons estimated a value which was above 50 percent (TP 01, 03, 09, 10).

⁹² *„Weil die Bahnen und Züge, Regionalbahnen sehr oft und häufig und auch lange Strecken fahren. Das kam mir als Erstes in den Sinn, dass ich an die Bahn denke.“* (TP 04; Antwort: „Nahverkehrszug/Regionalbahn“)

⁹³ *„Ich habe mich dafür entschieden, weil das ein größeres Fahrzeug als das Auto ist. [Die] Straßenbahn hat eher etwas mit Elektro zu tun. Wenn [das] Flugzeug dabei wäre, würde ich Flugzeug sagen.“* (TP 08; Antwort „Omnibus“)

⁹⁴ *„Das kann ich nicht beurteilen. Vermutlich viele, was die Sache für mir dann noch peinlicher macht.“* (TP 06)

Table N3_F7. Comparison of the Specific Sample with the Confidence Rating for Question 7.

Test person no.	Percentage	Safety assessment
TP 01	75%	Rather certain
TP 02	30 - 40%	-
TP 03	60%	Rather certain
TP 04	30 - 40%	Rather uncertain
TP 05	30%	Rather uncertain
TP 06	-	-
TP 07	20%	-
TP 08	30%	Rather uncertain
TP 09	70 - 80%	Very certain
TP 10	< 80%	Very certain

The original answer of these test persons to question 7 corresponded to the correct one ("Auto"). In addition, these test persons were "rather" or "very certain" that their answer was correct. The indicated value of the remaining five test persons was below 50 percent (TP 02, 04, 05, 07, 08). These include those who were "rather uncertain" of their answer (TP 04, 05, 08) and test persons who did not know the answer to question 7 (TP 02, 07).

Recommendations

Questions: Leave.

Response options: Leave.

Question 8: Environmental knowledge: Energy in the private household

Und wofür wird Ihrer Meinung nach in einem privaten Haushalt die meiste Energie verbraucht?

[And what do you think consumes the most energy in a private household?]

- Beleuchtung [Lighting]
- Kochen und Backen [Cooking and Baking]
- Elektrische Geräte (einschließlich Kühlschrank) [Electrical appliances (including refrigerator)]
- Raumheizung [Space heating]
- Warmwasserbereitung [Water heating]

- Weiß nicht [Don't know]*

Frequency distribution (N = 10)

Lighting	-
Cooking and Baking	-
Electrical appliances (including refrigerator)	6
Space heating	1
Water heating	2
<i>Don't know</i>	1

Cognitive techniques:

Category Selection Probe, Confidence Rating, Specific Probe.

Key questions and findings

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."*⁹⁵

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."*⁹⁶ (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."*⁹⁷ (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?"*⁹⁸ (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."*⁹⁹ (TP 06; Answer: "Electrical appliances")

⁹⁵ *„Hier wird ja von einem allgemeinen privaten Haushalt gesprochen, oder? [...] Ich weiß es einfach nicht, keine Ahnung. Ich kann da nur für mich und unseren Familienhaushalt sprechen.“* (TP 02)

⁹⁶ *„Da habe ich lange überlegen müssen. Beleuchtung und Kochen und Backen konnte ich ausschließen. Aber bei den anderen drei Bereichen fand ich es sehr schwierig. Da war ich mir sehr, sehr unsicher.“* (TP 03; Antwort: „Elektrische Geräte“)

⁹⁷ *„Da war ich mir auch ein bisschen unsicher. Das könnte auch für die Raumheizung sein oder Wasseraufbereitung. Das ist schwer einzuschätzen aus meiner Sicht, aber ich denke, es sind auf jeden Fall in den normalen Haushalten viel zu viele elektrische Geräte im Einsatz.“* (TP 10; Antwort: „Elektrische Geräte“)

⁹⁸ *„Hier in meiner Wohnung würde ich sagen, ist es die Raumheizung, weil die Fenster nicht richtig dicht sind und alles so schlecht gedämmt ist. Aber bei Neubauten, die ordentlich isoliert sind, da ist die Raumheizung, glaube ich, kein Thema. Und elektrische Geräte, da stand ja auch noch einschließlich Kühlschrank. Wobei elektrische Geräte ja dann auch eigentlich zum Kochen und Backen sind?“* (TP 03; Antwort: „Elektrische Geräte“)

⁹⁹ *„Kochen und Backen, das mache ich zweimal am Tag. [Bei der] Beleuchtung habe ich immer nur das an, wo ich mich gerade aufhalte. Also, ich denke, dass das die elektrischen Geräte sind, die man da unterschätzt.“* (TP 06; Antwort: „Elektrische Geräte“)

- *“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.”¹⁰⁰ (TP 07; Answer: “Electrical appliances”)*
- *“I can't say in general, but I'm assuming here because we have an instantaneous water heater.”¹⁰¹ (TP 09; Answer: “Water heating”)*

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

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.

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

Probing question	Test persons (n)
sehr sicher [very certain]	1
eher sicher [rather certain]	2
eher unsicher [rather uncertain]	5
sehr unsicher [very uncertain]	1
keine Angabe [not specified]	1

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 (≥ 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.

¹⁰⁰ *„Wir haben einen großen Kühlschrank, die Waschmaschine und der Trockner, und der Herd läuft ja auch, also, wenn Sie Kinder haben, sowieso. Ich gehe jetzt mal nur von uns aus. Bei uns würde ich jetzt mal sagen, sind es die elektrischen Geräte.“ (TP 07; Antwort: „Elektrische Geräte)*

¹⁰¹ *„Ich kann es nicht generell sagen, aber ich gehe hier von mir aus, weil wir einen Durchlauferhitzer haben.“ (TP 09; Antwort: „Warmwasserbereitung“)*

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 uncertain
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

Recommendations:

Question: Leave.

Answer options: Leave.

Question 9: Environmental knowledge: Environmental protection sign

Wie sieht das Umweltschutzzeichen des Umweltbundes aus?

[What does the environmental protection label of the Umweltbund look like?]

- Grüner Baum [Green tree]
- Stempel: Registriert beim Umweltbundesamt [Stamp: Registered with the Federal Environmental Agency]
- Aufdruck: umweltgeprüft [Imprint: environmentally certified]
- Grüner Bundesadler [Green federal eagle]
- Blauer Engel [Blue angel]

- Weiß nicht [Don't know]*

Frequency distribution (N = 10)

Green tree	1
Stamp: Registered with the Federal Environmental Agency	-
Imprint: environmentally certified	-
Green federal eagle	-
Blue angel	5
<i>Don't know</i>	4

Cognitive techniques:

Category Selection Probe, Confidence Rating, Specific Probe.

Key questions and findings:

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

Of the ten test persons, half chose the correct answer option "Blue angel" (TP 03, 05, 06, 08, 10). Test person 07 chose the answer "Green tree" and the remaining four test persons stated that they did not know the answer to the question (TP 01, 02, 04, 09).

Of those who said they did not know the answer, three said that some of the signs seemed familiar to them, but they were unsure and therefore did not give an answer:

- *“Because, in my opinion, I have never come into contact with this sign and I have no idea at all what it looks like. [...] So a few have already told me something, but I was just unsure. So the 'Blue Angel' means something to me, but I don't believe that this is the protection mark of the Umweltbund.”¹⁰² (TP 01)*
- *“Honestly, because I really don't know. I have thought about it, but I don't know. [...] I've seen some of the signs already, but now I don't know what they belong to in each case.”¹⁰³ (TP 04)*
- *“Due to that I took 'don't know'. I don't even know if the Federal Office has its own label. No, I know the 'Blue Angel', that's clear. It can't be the green federal eagle, that's illogical. I could imagine an imprint like 'environmentally tested'. I do not know such a stamp. And the green tree rather not. I could also guess 'environmentally tested', but I don't know. I just do not know.”¹⁰⁴ (TP 09)*

Other test persons answered intuitively using signs they were familiar with. In some cases, they also found themselves in conflict with the assignment to the Umweltbund.:

- *“I had to think about that for a long time too. I know the 'Blue Angel'. But I had to think, is that really the environmental protection label of the German Environmental Protection Agency or maybe something else? But I found the other answers not so plausible or I haven't really seen them yet.”¹⁰⁵ (TP 03; Answer: "Blue Angel")*
- *“Because I've seen it before, the 'Blue Angel'. But I don't know if it's part of the Umweltbund.”¹⁰⁶ (TP 05; Answer: "Blue Angel")*

¹⁰² *„Weil ich meiner Meinung nach noch nie in Kontakt mit diesem Zeichen gekommen bin und ich überhaupt keine Ahnung habe, wie das aussieht. [...] Also ein paar haben mir schon etwas gesagt, aber ich war mir eben unsicher. Also der ‚Blaue Engel‘ sagt mir etwas, aber ich glaube nicht, dass das jetzt das Schutzzeichen des Umweltbundes ist.“ (TP 01)*

¹⁰³ *„Ehrlich gesagt, weil ich es wirklich nicht weiß. Ich habe überlegt, aber ich weiß es nicht. [...] Ich habe die Zeichen teilweise schon gesehen, aber weiß jetzt nicht, wozu die jeweils gehören.“ (TP 04)*

¹⁰⁴ *„Da habe ich ‚weiß nicht‘ genommen. Ich weiß ja nicht einmal, ob das Bundesamt ein eigenes Zeichen hat. Nein, also ich kenne den ‚Blauen Engel‘, das ist klar. Der grüne Bundesadler kann es nicht sein, das ist unlogisch. So einen Aufdruck ‚umweltgeprüft‘, das könnte ich mir vorstellen. So einen Stempel kenne ich nicht. Und der grüne Baum eher nicht. Ich könnte auch auf ‚umweltgeprüft‘ tippen, aber ich weiß es nicht. Ich weiß es einfach nicht.“ (TP 09)*

¹⁰⁵ *„Da habe ich auch lange überlegen müssen. Also den ‚Blauen Engel‘ kenne ich. Aber ich musste überlegen, ist das jetzt auch wirklich das Umweltschutzzeichen des Umweltbundes oder vielleicht etwas anderes? Aber die anderen Antworten fand ich nicht so plausibel bzw. habe ich noch nicht wirklich gesehen.“ (TP 03; Antwort: „Blauer Engel“)*

¹⁰⁶ *„Weil ich den schon mal gesehen habe, den ‚Blauen Engel‘. Aber ich weiß nicht, ob der zum Umweltbund gehört.“ (TP 05; Antwort: „Blauer Engel“)*

- *“That's the only one I've heard of. I have never heard of the others.”¹⁰⁷ (TP 06; Answer: "Blue Angel")*
- *“I imagine I've seen this before, but I'm not sure.”¹⁰⁸ (TP 07; Answer: "Green tree“)*
- *“This can also be the 'Green Tree' or any stamp. There are so many due to now. I really don't know 100 percent. I have decided intuitively.”¹⁰⁹ (TP 08; Answer: "Blue Angel“)*

Some test persons thus found it difficult to link a sign they knew with the Umweltbund, but it varied whether they actually chose an answer or said they did not know the answer. Some test persons used the exclusion principle and chose the sign that was familiar to them.

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

As can be seen in Table N2_F9, only two test persons were very certain of the correctness of their answer (TP 06, 10). Both test persons had answered the question correctly and stated that they knew the Blue Angel label. They did not mention whether they were familiar with the Blue Angel as a symbol of the Umweltbund, the Federal Environment Agency or another institution.

Table N2_F9. Confidence rating for question 9 (N = 10)

Probing question	Test persons (n)
sehr sicher [very certain]	2
eher sicher [rather certain]	1
eher unsicher [rather uncertain]	1
sehr unsicher [very uncertain]	2
keine Angabe [Don't know]	4

The other three test persons who had answered the question correctly were "rather certain", "rather uncertain" or even "very uncertain" of their answer (TP 03, 05, 07, 08). They all chose the Blue Angel due to the fact that they were familiar with the label. Their uncertainty stemmed from the fact that they did not know whether this was the mark of the Umweltbund or of another institution. Test

¹⁰⁷ *„Das ist der einzige, von dem ich gehört habe. Von den anderen habe ich noch nie etwas gehört.“ (TP 06; Antwort: „Blauer Engel)*

¹⁰⁸ *„Ich bilde mir ein, ich habe das schon mal gesehen, aber ich bin mir nicht sicher.“ (TP 07; Antwort: „Grüner Baum“)*

¹⁰⁹ *„Das kann auch der ‚Grüne Baum‘ oder irgendein Stempel sein. Da gibt es ja inzwischen so viele. Das weiß ich wirklich nicht 100-prozentig. Dafür habe ich mich intuitiv entschieden.“ (TP 08; Antwort: „Blauer Engel“)*

persons who had not selected an answer ("Don't know") were not asked for their assessment (TP 01, 02, 04, 09).

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

As can be seen in Table N3_F9, test persons 06 and 10 trusted their answers and were confident in their correctness, due to the fact that they gave the highest percentages. These test persons inferred others based on their own knowledge and judgment.

Also consistent with perceived certainty were the percentages given by test persons 05 and 07. Due to being "very uncertain" about the correctness of their answers, they inferred that few of the later respondents would know the correct answer.

If we also compare the values given, which are above and below 50%, it becomes apparent that most (n = 7) estimated that comparatively few of the later respondents would know the correct answer. Considered across all test persons and answers, the test persons are of the opinion that rather special knowledge is asked here.

Table N3_F9. Comparison of Specific Sample with Confidence Rating at Question 9 (N = 10).

Test person no.	Percentages	Safety assessment
TP 01	40%	-
TP 02	40 - 50%	-
TP 03	45%	Rather certain
TP 04	10 - 15%	-
TP 05	10%	Very uncertain
TP 06	80 - 85%	Very certain
TP 07	30%	Very uncertain
TP 08	50 - 60%	Rather uncertain
TP 09	10%	-
TP 10	65%	Very certain

Recommendations:

Question: We recommend changing the question text due to the fact that the Blue Angel is not the environmental protection label of the Umweltbund, but of the Federal Environment Agency or the Federal Ministry for the Environment:¹¹⁰

“What does the Federal Environmental Agency/Federal Ministry for the Environment's environmental protection label look like?”

Answer options: Leave.

¹¹⁰ <https://www.bmu.de/themen/wirtschaft-produkte-ressourcen-tourismus/produkte-und-konsum/blauer-engel/> (abgerufen am 14.04.2020)

Question 10: Internet use for obtaining information

Wie häufig haben Sie in den letzten 14 Tagen das Internet genutzt, um sich über das politische Geschehen zu informieren?
[How often have you used the Internet in the last 14 days to find out about political events?]

Nie						Sehr häufig	<i>Weiß nicht</i>
[Never]						[Very often]	<i>[Don't know]</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Frequency distribution (N = 10)

1 Never	-
2	-
3	-
4	1
5	-
6	1
7 Very often	8
<i>Don't know</i>	-

Cognitive techniques:

None.

Findings:

The vast majority of the test persons (n = 8) stated that they had used the Internet very frequently (scale point 7) in the last 14 days to find out about political events. Test person 08 placed himself one scale point lower (scale point 6) and only one test person (TP 04) placed himself in the middle of the scale (scale point 4) but left this uncommented.

Four of the test persons who stated "very often" (TP 03, 06, 08, 10) justified their answer by saying that they would inform themselves more frequently about political events because of the current Corona pandemic. Test persons 06 and 08 mentioned that they would have selected a lower scale value at a different time:

-
- *“This is a funny question in the current situation.”*¹¹¹ (TP 03)
 - *“Well, very often in the last 14 days. Of course, that’s also due to the whole Corona thing, because I want to keep up to date with the political decisions. [...] Normally, I would have rather taken 6.”*¹¹² (TP 06)
 - *“I only stated that now because of Corona. Normally I am not interested in politics at all.”*¹¹³ (TP 08)
 - *“I use the Internet at home in these times especially.”*¹¹⁴ (TP 10)

Recommendations:

Question: Leave.

Response format: Leave.

¹¹¹ „Das ist eine lustige Frage in der aktuellen Situation.“ (TP 03)

¹¹² „Also, in den letzten 14 Tagen sehr häufig. Das liegt natürlich auch an der ganzen Corona-Sache, weil ich da auf dem Laufenden bleiben will, über die politischen Entscheidungen. [...] Normalerweise hätte ich eher die 6 genommen.“ (TP 06)

¹¹³ „Das habe ich jetzt nur wegen Corona angegeben. Normalerweise interessiert mich Politik überhaupt nicht.“ (TP 08)

¹¹⁴ „Ich benutze das Internet zu Hause in diesen Zeiten ganz besonders.“ (TP 10)

Question 11: Sexual behavior

Wie häufig haben Sie sich in den letzten 14 Tagen pornografische Inhalte angesehen?
 [How often have you viewed pornographic content in the last 14 days?]

Nie **Sehr häufig** **Weiß nicht** **Das möchte ich nicht beantworten**

[Never] **[Very often]** **[I do not want to answer this]**

Frequency distribution (N = 10)

1 Never	8
2	1
3	-
4	-
5	-
6	-
7 Very often	1
<i>Don't know</i>	-
<i>I do not want to answer this</i>	-

Cognitive techniques:

Comprehension Probe, Specific Probe.

Key questions and findings:

Eight out of ten test persons placed themselves on scale point 1, i.e., they stated that they had never viewed pornographic content in the last 14 days. One test person (TP 06) placed himself on scale point 2 ("rarely") and another (TP 01) answered "very often".

Two test persons (TP 09, 10) spontaneously commented on the questions that they could not completely avoid pornographic content, but that they did not consume it intentionally:

- *“So, sometimes you do see something like that, but I never do it.”¹¹⁵ (TP 09)*
- *“After all, that can't be completely avoided. [...] When I'm in my e-mail program, I can't avoid seeing things like that. Even though I don't want to. So I never want to see it actually.”¹¹⁶ (TP 10)*

What do the test persons understand by "pornographic content"?

The majority of the test persons (n = 9) referred exclusively to pornographic content on the Internet in their answer. There may have been a sequence effect here, i.e., the previous question 10, which dealt with Internet use for obtaining political information, radiated to question 11. On the other hand, pornographic content is predominantly consumed on the Internet. Whether this was a sequence effect or a valid response behavior could not be determined on the basis of the cognitive interviews.

Only test person 04 stated that, in addition to Internet content, she had also thought of print media and videocassettes/DVDs: *“There are also magazines, at newsstands and elsewhere. Due to that, you can buy movies and porn magazines. That's exactly what I was thinking of now.”¹¹⁷*

By "pornographic content" most test persons understood the exposure and presentation of men and women as well as depictions of sexual acts:

- *“I say, everything that serves in any way for personal amusement, where people, I say now, expose themselves, present themselves in any way.”¹¹⁸ (TP 01)*
- *“Pictures and videos of naked people.”¹¹⁹ (TP 05)*
- *“Pornographic content is - how should I explain this now - depictions of sexual acts.”¹²⁰ (TP 06)*
- *“Yes, well, probably these pornographic sites that you can just call up. [...] There are due to such sites, YouPorn I once read.”¹²¹ (TP 07)*

¹¹⁵ *„Also, manchmal sieht man so etwas schon, aber ich mache es nie.“ (TP 09)*

¹¹⁶ *„Das lässt sich ja nicht ganz vermeiden. [...] Wenn ich in meinem E-Mail-Programm bin, kann ich es nicht vermeiden, dass ich solche Sachen sehe. Obwohl ich das nicht möchte. Also ich möchte es eigentlich nie sehen.“ (TP 10)*

¹¹⁷ *„Es gibt ja auch Hefte, am Kiosk und sonst wo. Da kann man ja auch Filme und Pornohefte kaufen. Genau daran habe ich jetzt auch gedacht.“ (TP 04)*

¹¹⁸ *„Ich sage mal, alles was in irgendeiner Art und Weise zur persönlichen Belustigung dient, wo sich Personen, sage ich jetzt mal, entblößen, in irgendeiner Art und Weise präsentieren.“ (TP 01)*

¹¹⁹ *„Bilder und Videos von nackten Menschen.“ (TP 05)*

¹²⁰ *„Pornografische Inhalte sind – wie soll ich das jetzt erklären – Darstellungen sexueller Handlungen.“ (TP 06)*

¹²¹ *„Ja nun, wahrscheinlich diese pornografischen Seiten, die man halt so abrufen kann. [...] Es gibt da doch solche Seiten, YouPorn habe ich mal gelesen.“ (TP 07)*

- *“As I said, if I get any content sent over the Internet, in which I am asked to lure me with explicit photos or even animated films, to any pornographic sites.”¹²² (TP 10)*

How sensitive do the test persons perceive the question to be?

The test persons were asked to indicate on a seven-point scale how uncomfortable they found being asked the question (see Table N2_F11). Six test persons (TP 03, 04, 07, 08, 09, 10) indicated that they found it "not at all unpleasant." These test persons justified their answers either by saying that they had been able to answer honestly (due to the fact that they had never looked at pornographic content on the Internet in the last 14 days) and that there had therefore been no reason to feel uncomfortable, or that the question had not triggered any feeling of shame in them:

Table N2_F11. Frequency distribution Specific Probe (N = 10)

1 Überhaupt nicht unangenehm [Not at all unpleasant]	6
2	-
3	1
4	2
5	-
6	-
7 Sehr unangenehm [Very unpleasant]	1

- *“Because I could honestly answer 'never', I didn't find that awkward at all. But I could imagine that this is a very awkward question overall.”¹²³ (TP 03)*
- *“Because in the meantime I find that this is a topic that you can also talk about. Well, I don't have any sense of shame about something like that either, I'm pretty open about it due to.”¹²⁴ (TP 04)*
- *“I find almost nothing unpleasant. You are just asked and give an answer.”¹²⁵ (TP 08)*

¹²² *„Wie gesagt, wenn ich z. B. irgendwelche Inhalte übers Internet geschickt bekomme, in denen ich aufgefordert werde, mit eindeutigen Fotos oder sogar animierten Filmchen, mich auf irgendwelche pornografischen Seiten zu locken.“ (TP 10)*

¹²³ *„Weil ich ehrlich mit ‚nie‘ antworten konnte, fand ich das überhaupt nicht unangenehm. Aber ich könnte mir vorstellen, dass das insgesamt eine sehr unangenehme Frage ist.“ (TP 03)*

¹²⁴ *„Weil ich mittlerweile finde, dass das ein Thema ist, worüber man sich auch unterhalten kann. Also, ich habe bei so etwas auch kein Schamgefühl, ich bin da ziemlich offen.“ (TP 04)*

¹²⁵ *„Ich finde fast nichts unangenehm. Man wird halt gefragt und gibt eine Antwort.“ (TP 08)*

- *“Because that's just part of life. So okay, everyone can see it differently. Men see it differently than women, as everyone knows. We have already had this discussion. But it's nothing negative in and of itself.”¹²⁶ (TP 09)*

Three test persons stated that they found answering the question "somewhat unpleasant" (scale points 3 and 4). They justified their classification by saying that on the one hand they were open in dealing with the topic, but on the other hand it was also very personal or they had been surprised by the question:

- *“Because I personally deal with the topic very openly and I also believe that the consumption of pornographic content - of course, this again depends on the person - is not a big taboo topic. And that's why I don't feel uncomfortable talking about it.”¹²⁷ (TP 01; Answer: Scale point 3)*
- *“I was very slightly embarrassed. But only because I didn't expect the question. But I had no problem answering the question. I was just a little surprised.”¹²⁸ (TP 02; Answer: Scale point 4)*
- *“Because it is very personal, you would rather not talk about it with strangers.”¹²⁹ (TP 05; Answer: Scale point 4)*

Only test person 06 found answering the question "very uncomfortable" (scale point 7), explaining that this was a "very intimate question".

Furthermore, test persons were asked to indicate on a seven-point scale how honestly they thought respondents would answer this question in a real survey (see Table N4_F11). Overall, test persons rated respondent honesty rather low. Most of them placed themselves on the second scale point and justified their answer by saying that most people would be embarrassed to talk about this intimate topic:

- *“Because many people are sure to be embarrassed.”¹³⁰ (TP 03)*
- *“I think a lot of people are ashamed of watching porn or pornographic content.”¹³¹ (TP 04)*

¹²⁶ „Weil das einfach zum Leben dazugehört. Also O. K., jeder kann das anders sehen. Männer sehen das anders als Frauen, das ist ja allseits bekannt. Die Diskussion haben wir auch schon gehabt. Aber es ist ja an und für sich nichts Negatives.“ (TP 09)

¹²⁷ „Weil ich persönlich mit dem Thema sehr offen umgehe und ich auch glaube, dass der Konsum von pornografischen Inhalten – das ist jetzt natürlich wieder von Person zu Person abhängig – jetzt kein großes Tabuthema ist. Und deswegen ist es mir nicht unangenehm, darüber zu reden.“ (TP 01; Antwort: Skalenpunkt 3)

¹²⁸ „Ich war ganz leicht peinlich berührt. Aber nur, weil ich nicht mit der Frage gerechnet habe. Aber ich hatte kein Problem damit, die Frage zu beantworten. Ich war nur etwas überrascht.“ (TP 02; Antwort: Skalenpunkt 4)

¹²⁹ „Weil es sehr persönlich ist, darüber möchte man mit Fremden eher nicht reden.“ (TP 05; Antwort: Skalenpunkt 4)

¹³⁰ „Weil das vielen Leuten sicher peinlich ist.“ (TP 03)

¹³¹ „Ich glaube, viele schämen sich dafür, dass sie Pornos schauen oder pornografische Inhalte.“ (TP 04)

- *“Because it's something private, something embarrassing that you don't want to admit like that.”*¹³²(TP 05)
- *“I don't think most answer that honestly. I think most would be ashamed or would not have the courage.”*¹³³ (TP 09)

Table N4_F11. Frequency distribution Specific Probe (N = 10)

1	Überhaupt nicht ehrlich [Not honest at all]	-
2		4
3		2
4		3
5		1
6		-
7	Sehr ehrlich [Very honest]	-

The remaining test persons justified their answers (in the middle range of the scale) by saying that it depended on the individual or that gender played a role in answering the question honestly:

- *“Because I believe, as I said, that it varies greatly from person to person, that a few people are more willing to give an honest answer due to this. And a few people are more likely to lie in order to, let's say, satisfy the social demand.”*¹³⁴ (TP 01; Answer: Scale point 4)
- *“I think women would answer the question more dishonestly than men. So maybe 30 percent would answer the question honestly.”*¹³⁵ (TP 02; Answer: Scale point 3)

Recommendations:

Question: Leave.

Response format: Leave.

¹³² „Weil es etwas Privates ist, etwas Peinliches, was man nicht so zugeben möchte.“ (TP 05)

¹³³ „Ich glaube, die meisten beantworten das nicht ehrlich. Ich glaube, die meisten würden sich schämen oder nicht den Mut haben.“ (TP 09)

¹³⁴ „Weil ich glaube, wie schon gesagt, dass das sehr unterschiedlich von Person zu Person ist, dass eben ein paar Leute eher gewillt sind, da eine ehrliche Antwort zu geben. Und ein paar Leute eher lügen, um, ich sage jetzt mal, dem sozialen Anspruch genüge zu werden.“ (TP 01; Antwort: Skalenpunkt 4)

¹³⁵ „Ich glaube, Frauen würden die Frage eher unehrlicher beantworten als Männer. Also vielleicht 30 Prozent würden die Frage ehrlich beantworten.“ (TP 02; Antwort: Skalenpunkt 3)

Question 12: Consumption of cleaning agents

Haben Sie in den letzten 4 Wochen Reinigungsmittel für Ihr Zuhause gekauft?

[Have you purchased any cleaning products for your home in the last 4 weeks?]

Ja [Yes]

Nein [No]

Frequency distribution (N = 10)

Yes	9
No	1

Cognitive techniques:

General Probe.

Key questions and findings:

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

The vast majority of the test persons (n = 9) stated that they had bought cleaning products for their homes in the last four weeks. Only one test person (TP 01) denied this and justified her answer by saying that she had not bought anything in the last four weeks because she still had sufficient cleaning products at home.

Eight test persons answered the question correctly, i.e. they correctly stated that they had personally bought cleaning agents for their home within the last four weeks or not:

- TP 02: *“For example, yesterday I cleaned my bathroom and for this I had bought cleaning agents in advance.”*¹³⁶

INT: *“How sure are you that you have done this within the last four weeks and not perhaps earlier?”*¹³⁷

TP 02: *“Pretty sure because the bottle was still pretty full and we clean relatively much at home.”*¹³⁸

¹³⁶ TP 02: *„Ich habe zum Beispiel gestern mein Bad geputzt und dafür hatte ich im Voraus mal Reinigungsmittel gekauft.“*

¹³⁷ INT: *„Wie sicher sind Sie sich, dass Sie das innerhalb der letzten vier Wochen getan haben und nicht vielleicht schon früher?“*

¹³⁸ TP 02: *„Ziemlich sicher, weil die Flasche noch ziemlich voll war und wir relativ viel zu Hause putzen.“*

- TP 03: *“I just thought about what I last bought in DM, and due to rinsing agent was there.”*¹³⁹
INT: *“And that was certainly within the last four weeks?”*¹⁴⁰
TP 03: *“Yes, and detergent is actually also always present within four weeks.”*¹⁴¹

When asked, two test persons (TP 08, 10) stated that it was not they personally, but their spouse who had purchased cleaning products:

- TP 08: *“To get back to Corona. That's why I bought cleaning products. [...] So my wife bought that, not me.”*¹⁴²
INT: *“So you personally have not bought a cleaning product for your home?”*¹⁴³
TP 08: *“No.”*¹⁴⁴
- *“So, I personally have not bought any, but at the moment my husband goes shopping, because he says it only takes one to face this situation. But I have just looked what is missing in the household or what will soon be empty. Yes, and due to I just told him I need scouring milk.”*¹⁴⁵ (TP 10)

Recommendations:

Question: The reasons given by some test persons show that they did not answer the question with regard to their individual purchasing behavior, but with regard to purchasing behavior in a common household. If this distinction is important, we recommend a slight modification of the question and the answer options:

“In the past 4 weeks, have you or anyone else in your household purchased cleaning products for your home?”

Response format: Yes, me personally
Yes, another person
No

¹³⁹ TP 03: *„Ich habe einfach überlegt, was ich zuletzt im DM gekauft habe, und da war Spüli dabei.“*

¹⁴⁰ INT: *„Und das war sicher innerhalb der letzten vier Wochen?“*

¹⁴¹ TP 03: *„Ja, und Waschmittel ist innerhalb von vier Wochen eigentlich auch immer dabei.“*

¹⁴² TP 08: *„Um auf Corona zurückzukommen. Deswegen habe ich Reinigungsmittel gekauft. [...] Also meine Frau hat das gekauft, nicht ich.“*

¹⁴³ INT: *„Also Sie persönlich haben kein Reinigungsmittel für Ihr Zuhause gekauft?“*

¹⁴⁴ TP 08: *„Nein.“*

¹⁴⁵ *„Also, ich persönlich habe keine gekauft, sondern im Moment geht mein Mann einkaufen, weil er sagt, es braucht sich nur einer dieser Situation auszusetzen. Aber ich habe eben geguckt, was im Haushalt fehlt oder was demnächst leer wird. Ja, und da habe ich ihm eben gesagt, ich brauche Scheuermilch.“* (TP 10)

Question 13: Illegal/criminal behavior

Haben Sie jemals etwas aus einem Laden oder etwas, das Ihnen nicht gehört, im Wert von weniger als 50 Euro gestohlen?

[Have you ever stolen something from a store or something that does not belong to you worth less than 50 euros?]

Ja [Yes]

Nein [No]

Wei nicht [Don't know]

Das mchte ich nicht beantworten [I do not want to answer this]

Frequency distribution (N = 10)

Answer	Number TP
Yes	4
No	6
<i>Don't know</i>	-
<i>I do not want to answer this</i>	-

Cognitive techniques:

Specific Probe, Confidence Rating.

Key questions and findings:

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

No test person had problems understanding or answering the question. Four test persons answered it "yes" and six test persons answered it "no."

Those who answered "yes" to the question stated that they had done so in their childhood or teenage years and that it had been things such as chewing gum, a lollipop, trading cards, shot glasses or similar:

- *"That used to be a piece of chewing gum. But I was six years old then."*¹⁴⁶ (TP 02)

¹⁴⁶ „Das war mal ein Kaugummi. Aber da war ich sechs Jahre alt.“ (TP 02)

- *“As teenagers, we thought it was totally cool to steal those Diddl cards. We used to steal one every now and then.”¹⁴⁷ (TP 03)*
- *“Yes, at teen age, chewing gum, the classic. [...] Or in the disco, shot glasses, because they were so pretty.”¹⁴⁸ (TP 05)*
- *“A lollipop or something like that as a child. I don't really remember exactly. I only know that I did it when I was a little boy. [...] It was a test of courage. What people used to do in the old days.”¹⁴⁹ (TP 08)*

Of those who answered "no" to the question, three test persons stated without explanation that they had really never done it before. Two others cited their fear of the consequences as the reason:

- *“No, I was afraid of my grandma. [...] She said she'd beat the crap out of me when I was little.”¹⁵⁰ (TP 04)*
- *“No, I was always too scared. You could have been caught, and I found the consequences unreasonably high in relation to what you could have stolen.”¹⁵¹ (TP 07)*

Test person 09 recounted that she once found a gold "stray" necklace in a playground as a child, but after it was discovered by her mother, she had to return it and track down the person who owned it.

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

All test persons were "very sure" (n = 9) or "rather sure" (n = 1) that they had remembered correctly.

How sensitive do the test persons perceive the question to be?

The test persons were asked to indicate on a seven-point scale how unpleasant they found it to be asked the question (sample N5_F13, see Appendix). The majority of test persons found it "not at all unpleasant" (scale item 1; n = 6) or "rather not unpleasant" (scale items 2 and 3; n = 2) to be asked the question.

¹⁴⁷ *„Als Teenager fanden wir es total cool, diese Diddl-Karten zu klauen. Da haben wir immer mal wieder eine mitgehen lassen.“ (TP 03)*

¹⁴⁸ *„Ja, im Teenie-Alter, Kaugummi, der Klassiker. [...] Oder in der Disco Schnapsgläser, weil die so hübsch waren.“ (TP 05)*

¹⁴⁹ *„So einen Lolli oder so etwas, als Kind. So ganz genau weiß ich das gar nicht mehr. Ich weiß nur, dass ich das gemacht habe, als kleiner Junge. [...] Das war eine Mutprobe. Was man früher halt so gemacht hat.“ (TP 08)*

¹⁵⁰ *„Nein, ich hatte Angst vor meiner Oma. [...] Sie hat gesagt, sie prügelt mich windelweich, als ich klein war.“ (TP 04)*

¹⁵¹ *„Nein, da hatte ich immer viel zu viel Schiss. Man hätte ja erwischt werden können und die Konsequenzen fand ich dann auch im Verhältnis zu dem, was man hätte stehlen können, unangemessen hoch.“ (TP 07)*

Two test persons chose the middle category (scale point 4). One of them gave as her reason that the question somewhat implied having stolen something before (TP 01), but that she had never stolen anything. The other test person, who had stated that she had already stolen something, commented on this as follows: *“You [...] are not allowed to do that, you know it, and then you did it anyway, as a decent person, as you see yourself [...]. But because [the stolen shot glasses] were not of such high quality [and no one] was harmed, it was something in between.”*¹⁵² (TP 05)

The test person who had chosen scale point 3 was somewhat embarrassed: *“Yes, it is a bit unpleasant [...]. Because I'm embarrassed that I even came up with the idea. Maybe it's normal as a child. I do not know.”*¹⁵³ (TP 09)

Those who found answering the question "not at all/not at all uncomfortable" and had stolen something before justified their answer by saying that people do this kind of thing in their childhood/adolescence and can honestly admit to it:

- *“My theft was not that serious. It was just a youthful sin, you can admit that.”*¹⁵⁴ (TP 02)
- *“That was just being a teenager, you do a lot of nonsense. I was not uncomfortable admitting that.”*¹⁵⁵ (TP 03)

Three persons who found the answer to the question "not at all/not at all unpleasant" and who had never stolen anything gave the reason that they could talk openly about it due to the fact that they had never done it before. One of them also stated that she did not think it would be a bad thing to steal something when she was a child (TP 07).

Furthermore, the test persons were asked to indicate on a seven-point scale how honestly they thought respondents would answer this question in a real survey (see Table N7_F13). Six test persons believed that this question would be answered "not at all honestly" (scale point 1; n = 1) or "rather not honestly" (scale points 2 and 3; n = 5) in a questionnaire, one test person chose the middle answer category (TP 08; scale point 4), and three believed that this question would be answered "rather honestly" (scale point 5).

Those who believed that the question would be answered "not at all/mostly honestly" indicated that it was a socially undesirable behavior in which people tended to lie:

- *“Because I believe that people think about what society would expect from them and would not answer honestly.”*¹⁵⁶ (TP 01)

¹⁵² „Man [...] darf das nicht, man weiß es, und dann hat man es aber trotzdem gemacht, als ordentlicher Mensch, als den man sich sieht [...]. Aber weil [die geklauten Schnapsgläser] jetzt nicht so hochwertig war[en] [und niemand] geschädigt wurde, war es so ein Mittelding.“ (TP 05)

¹⁵³ „Ja, so ein bisschen unangenehm schon [...]. Weil es mir peinlich ist, dass ich überhaupt auf die Idee gekommen bin. Vielleicht ist es als Kind normal. Ich weiß es nicht.“ (TP 09)

¹⁵⁴ „Mein Diebstahl war ja jetzt nicht so schwerwiegend. War ja nur eine Jugendsünde, das kann man schon zugeben.“ (TP 02)

¹⁵⁵ „Das war eben im Teenageralter, da macht man einen Haufen Quatsch. Das war mir nicht unangenehm zuzugeben.“ (TP 03)

¹⁵⁶ „Weil ich glaube, dass Menschen darüber nachdenken, was die Gesellschaft da von ihnen erwarten würde und da dann eher nicht ehrlich antworten würden.“ (TP 01)

- *“Because I think that's an uncomfortable topic, that you just don't do that, that people then aren't as honest about it.”¹⁵⁷ (TP 05)*
- *“Because theft, even if it's under 50 euros, is not socially accepted. Even if people would do it, they would not admit it, I think.”¹⁵⁸ (TP 06)*
- *“I think that people tend to cheat because they are embarrassed.”¹⁵⁹ (TP 10)*

Those who believed that the question was answered "rather honestly," whether they had done it themselves or not, indicated that these were only youthful sins of which there was nothing to be ashamed of:

- *“That's like committing a youthful sin. There are no criminal prosecutions for that. It would be stupid to lie about it.”¹⁶⁰ (TP 02)*
- *“I think many people, when they were little, stole a piece of chewing gum from the bakery or something, even small objects. And no one has to be ashamed of it if they did that as a child and messed up.”¹⁶¹ (TP 04)*

Recommendations:

Questions: Leave.

Response format: Leave.

¹⁵⁷ *„Weil ich denke, dass das ein unangenehmes Thema ist, dass man das einfach nicht macht, dass die Leute dann nicht so ehrlich damit umgehen.“ (TP 05)*

¹⁵⁸ *„Weil Diebstahl, auch wenn es unter 50 Euro ist, gesellschaftlich nicht akzeptiert ist. Selbst wenn es die Leute machen würden, würden sie es nicht zugeben, glaube ich.“ (TP 06)*

¹⁵⁹ *„Ich denke, dass da die Leute eher schummeln, weil es ihnen peinlich ist.“ (TP 10)*

¹⁶⁰ *„Das ist ja wie eine Jugendsünde. Das wird ja nicht strafrechtlich verfolgt. Das wäre blöd, wenn man da lügen würde.“ (TP 02)*

¹⁶¹ *„Ich glaube, viele haben, als sie klein waren, mal einen Kaugummi beim Bäcker oder so geklaut, auch kleinere Gegenstände. Und es muss sich ja auch keiner dafür schämen, wenn man das als Kind gemacht hat und da Mist gebaut hat.“ (TP 04)*

Frequency distribution (N = 10)

	Saying this in public would not be embarrassing at all						Saying this in public would be very embarrassing
	1	2	3	4	5	6	7
he/she looks at pornographic content very often?	2	1	-	2	2	2	1
he/she has already stolen something worth less than 50 euros?	-	3	-	2	1	2	2

Cognitive techniques:

Category Selection Probe, Confidence Rating, Specific Probe.

Key questions and findings:

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

All test persons answered question 14 using almost the entire width of the scale. None of the test persons asked spontaneous questions about the question text or showed any other signs of ambiguity.

For both questions, three test persons selected a value to the left of the middle of the scale, indicating that a person would "rather not" or "not at all" be embarrassed (scale values 1 to 3) to admit the respective action publicly. Two test persons chose the mean value (scale value 4), and five test persons chose a value indicating that this was "rather" or "very embarrassing" (scale values 5 to 7).

Eight of the ten test persons used the same side of the response scale when answering the items, i.e. they either chose a value to the left or right of the middle both times or the middle value both times. The two test persons who changed the side of the scale gave the following reasons for doing so:

- TP 02 responded that admitting to pornography use was "rather embarrassing" (scale score 5) because the question spoke of "very frequent" use; she, on the other hand, rated admitting to stealing as "rather not embarrassing" (scale score 2) because she herself admitted to having stolen a piece of gum once as a child, and estimated that most people have such experiences and could admit to it openly as an adult
- TP 09 rated publicly admitting to pornography use as "not at all embarrassing" (scale score 1), because this is allowed to be said much more openly nowadays than when she was young; admitting to theft, on the other hand, she rated as "very embarrassing" (scale score 7), because this is an offense to the general public.

Do respondents understand that this is about assessing how desirable characteristics are in society, not for them personally?

The construct of the question was social desirability, i.e., the test persons were asked to indicate how desirable these characteristics are in society and thus to provide an assessment of social acceptance. Follow-up questions were used to test whether test persons erroneously stated exclusively their personal judgment regarding the actions.

Six of the ten test persons clearly and consciously distinguished between these two facets when answering the question (TP 01, 02, 03, 05, 08, 10). These test persons all chose a scale value between 2 and 6, i.e. one of the possible gradations next to the scale endpoints.

- Test person 10 stated that it was "rather embarrassing" (scale value 5) to admit to viewing pornographic content in public. She justified her answer by saying that this was "still a bit of a taboo subject. When asked whether she would also personally find it embarrassing to admit this in public, she answered in the negative. (*"No. So, if I did that, I would have no problem admitting that in public. I could stand by it."*¹⁶²).
- The two test persons who had chosen the mean explained this by saying that there were both some people who would be very embarrassed and others who would not be embarrassed: *"I think it varies from case to case, and that a few people tend to be more closed off about this issue, and a few people tend to be more open. That's why I couldn't say that as a blanket statement."*¹⁶³ (TP 01)

One test person initially answered the question only in relation to herself but noticed and corrected her mistake directly when answering the probing question (TP 06). When completing the questionnaire, she stated that it was "very embarrassing" (scale value 7) to admit to frequently viewing pornographic content in public. On second read-through, she remarked, *"Due to this, I have to say now, I don't think I answered that correctly. I started from myself."*¹⁶⁴ However, this would have changed her answer only slightly: *"Due to that, I should actually have taken 6. I'm very embarrassed, but whether everyone feels that way, I don't know. Above all, I don't know how it is with young people, whether it has changed. But I do think that when people are asked about it due to that, they tend not to admit it."*¹⁶⁵

Two test persons clearly answered the question based exclusively on their personal feelings and did not include the public's view in their answers. Both selected extreme values on the scale:

¹⁶² „Nein. Also, wenn ich das tun würde, hätte ich keine Probleme, das in der Öffentlichkeit zugeben. Ich könnte dazu stehen.“ (TP 10)

¹⁶³ „Ich glaube, dass es von Fall zu Fall unterschiedlich ist und dass ein paar Menschen eher verschlossener sind, was dieses Thema angeht, und ein paar Menschen eher offener. Deswegen konnte ich das nicht so pauschal sagen.“
(TP 01)

¹⁶⁴ „Da muss ich jetzt sagen, ich glaube, ich habe das nicht richtig beantwortet. Ich bin von mir ausgegangen.“ (TP 06)

¹⁶⁵ „Da hätte ich eigentlich 6 nehmen sollen. Mir ist es sehr peinlich, aber ob das allen Leuten so geht, weiß ich nicht. Ich weiß vor allem nicht, wie das bei Jugendlichen ist, ob sich das geändert hat. Wo bei, ich glaube schon, dass, wenn Leute danach gefragt werden, es eher nicht zugegeben wird.“
(TP 06)

- *“Now I [started] from myself. I think [it's] normal to talk about it, and I don't have any problems talking about it. It may be that many people have problems with it, but I don't find it embarrassing at all.”*¹⁶⁶ (TP 04; Answer: Scale value 1)
- *“I'm starting from myself now. If one of my acquaintances or friends said, 'I often look at pornographic content,' I would find that embarrassing. Yes, definitely.”*¹⁶⁷ (TP 07; Answer: Scale value 7)

Finally, one test person distinguished whether most people would be embarrassed to admit viewing pornographic content from whether society accepts it (TP 09). The test person herself would not be embarrassed to admit this. In her estimation, however, most people would still be embarrassed because they would be afraid of the judgment of others. However, the attitude of society has changed in recent decades to become more tolerant. For this reason, the test person chose the value 1 "not embarrassing at all", because "most people would [indeed] be embarrassed, but it is not actually embarrassing"

Recommendations

Question	Although some test persons answered the question not from the point of view of society but for themselves personally, we recommend leaving the question as it is. In our opinion, there is no problem of understanding here that could be solved by an alternative formulation of the question. Rather, some of the respondents seem to have difficulty reflecting on the attitude of society as a whole, due to the fact that this is a relatively complex cognitive task. On the basis of the cognitive interviews, no statement can be made as to how large the proportion of respondents is who cannot or do not want to perform this cognitive task.
Response options:	Leave.

¹⁶⁶ *„Da bin ich jetzt von mir [ausgegangen]. Ich finde [es] normal, wenn man darüber spricht, und ich habe keine Probleme damit, darüber zu sprechen. Es kann sein, dass viele Leute Probleme damit haben, aber ich finde es gar nicht peinlich.“* (TP 04; Antwort: Skalenwert 1)

¹⁶⁷ *„Ich gehe jetzt von mir aus. Wenn einer meiner Bekannten oder Freunden sagen würde, ‚ich schaue mir häufig pornografische Inhalte an‘, würde ich das peinlich finden. Ja, definitiv.“* (TP 07; Antwort: Skalenwert 7)

Frequency distribution (N = 10)

	Very unlikely	Rather unlikely	Undecided	Rather likely	Very likely	I do not use it
Facebook	4	1	1	1	-	3
Instagram	3	2	1	1	-	3
Twitter	3	1	-	2	-	4
WhatsApp	4	3	1	1	-	1

Cognitive techniques:

Comprehension Probe, Category Selection Probe, Specific Probe.

Key questions and findings**Do the test persons have problems understanding and/or answering the question?**

Three test persons (TP 04, 09, 10) answered the question with "very unlikely" for all four Internet services, although they did not use them or any of them (TP 04, Twitter) (and consequently could or should have selected "I do not use"). However, the answers of these test persons were not necessarily incorrect, due to the fact that all three argued that they would not give their consent even if they used the services:

- *"I'm generally more the type who doesn't upload anything of myself on Facebook, Instagram and so on. I'm there simply to look. But I still find it a bit unpleasant when all the things on Facebook are evaluated somehow, for example, that you also get a lot of personal advertising. That's why I wouldn't give my consent for the scientists to get this data. [...] I don't use Twitter, but if I did, I wouldn't give my consent for the data to be passed on here either."*¹⁶⁸ (TP 04)
- *"So, actually in general, I don't give anything away, I'm not for it."*¹⁶⁹ (TP 09)
- *"I don't use them all, for privacy reasons."*¹⁷⁰(TP 10)

¹⁶⁸ „Ich bin generell eher so der Typ, der auf Facebook, Instagram und so nichts von sich selbst hochlädt. Ich bin da einfach, um zu gucken. Aber ich finde das trotzdem irgendwie ein bisschen unangenehm, wenn bei Facebook die ganzen Sachen ausgewertet werden irgendwie, dass man z. B. auch viel personenbezogene Werbung bekommt. Deswegen würde ich eher nicht mein Einverständnis dafür geben, dass die Wissenschaftler diese Daten bekommen. [...] Twitter benutze ich nicht, aber wenn ich das täte, würde ich auch hier nicht mein Einverständnis geben, dass die Daten weitergegeben werden.“ (TP 04)

¹⁶⁹ „Also, eigentlich generell, ich gebe nichts weiter, ich bin nicht dafür.“ (TP 09)

¹⁷⁰ „Ich nutze die alle nicht, aus datenschutzrechtlichen Gründen.“ (TP 10)

How willing are the test persons to share their (Facebook) data?

Three test persons stated that they did not use Facebook. Of the remaining seven test persons, the majority (n = 5) considered it "rather" or "very unlikely" that they would share their Facebook data. The reasons given were the privacy of the content on Facebook (TP 01), a general rejection of sharing personal data (TP 04), a lack of information about what exactly is done with the data (TP 05), and a general distrust of the storage and use of social media data (TP 09, 10):

- *"I think that very private things are discussed on Facebook, that this is a network in which people tend to regulate or discuss private things. And I personally think that these are not topics that concern research or evaluation."*¹⁷¹ (TP 01)
- *"Because somehow, in the background, you don't know how it all interacts, what really happens with this data. [...] I would rather not make my data available to anyone in such a direct and general way."*¹⁷² (TP 05)

Two test persons justified their indecisiveness or tendency to be willing to share their data by saying that they were resigned due to the fact that their data would already be evaluated anyway:

- *"I don't really know. I basically have no problem with it at all, my data is all tapped anyway. So really, it doesn't matter. I have nothing to hide."*¹⁷³ (TP 02; Answer: "rather likely")
- *"In general, I would say 'unlikely'. But all these services and end devices are so tightly networked and collect so much data. That's why I now think it doesn't matter."*¹⁷⁴ (TP 03; Answer: "undecided")

In general, the willingness to share social media data for the test persons did not differ between the services mentioned. With the exception of test person 01, all persons gave identical answers for the services they use (e.g. TP 05: *"That's unlikely for all four 'more likely than not'."*¹⁷⁵). Test person 01 thought it "very unlikely" to share her Facebook data, "somewhat unlikely" to share her Instagram and WhatsApp data, and "somewhat likely" to share her Twitter data:

- TP 01: *"So with Instagram and WhatsApp, it's more or less the same as with Facebook, that I think it's very private content. And with Twitter, I don't think that's really the case. Personally,*

¹⁷¹ *„Ich finde, dass bei Facebook sehr bzw. eher private Sachen besprochen werden, dass das ein Netzwerk ist, in dem man eher private Sachen regelt oder bespricht. Und ich persönlich finde, dass das keine Thematiken sind, die die Forschung oder Auswertung betreffen.“* (TP 01)

¹⁷² *„Weil man ja irgendwie im Hintergrund dann doch nicht weiß, wie das alles zusammenspielt, was da wirklich mit passiert, mit diesen Daten. [...] Ich möchte eher keinem so direkt pauschal meine Daten zur Verfügung stellen.“* (TP 05)

¹⁷³ *„Ich weiß nicht so recht. Ich habe damit grundsätzlich gar kein Problem, meine Daten sind eh schon alle abgegriffen. Also wirklich, das ist dann auch egal. Ich habe da nichts zu verheimlichen.“* (TP 02; Antwort: „eher wahrscheinlich“)

¹⁷⁴ *„Generell würde ich eher ‚unwahrscheinlich‘ sagen. Aber diese ganzen Dienste und die Endgeräte sind ja so krass miteinander vernetzt und sammeln so viele Daten. Deswegen denke ich inzwischen, ist auch egal.“* (TP 03; Antwort: „unentschieden“)

¹⁷⁵ *„Das ist für alle vier ‚eher unwahrscheinlich‘.“* (TP 05)

*I only use Twitter to follow certain news agencies and certain politicians. And that's why I wouldn't have any problems with it now.*¹⁷⁶

INT: *“But you still gave a different answer on Instagram and WhatsApp than on Facebook, so you made another gradation. So do you see a difference there as well?”*¹⁷⁷

TP 01: *“I see a bit of a difference there. With WhatsApp in particular, I think that if you want to evaluate something, you'd rather measure the usage times, I'd say, or the frequency in general, which I personally don't have that much of a problem with. So, I think with WhatsApp you can analyze less the content. And with Instagram, I think it's the same thing, that it's not so much about the content, but rather about the frequency or the use in general.”*¹⁷⁸

What do the test persons understand by "scientists"? External scientists or also internal ones at the services mentioned?

The term "scientist" was interpreted very heterogeneously by the test persons. While the majority of the test persons associated it with external, independent scientists at universities or institutes (SP 02, 03, 04, 06, 07, 08), others thought primarily of persons employed by the Internet services mentioned (SP 09, 10) or of employees in (advertising) agencies (SP 01, 05) who evaluate corresponding data:

- *“I assume that these are people who evaluate this data for some marketing agencies or for other, I would say, election campaigns or similar. That these are people who evaluate these data and then sell them on or evaluate them for more commercial purposes.”*¹⁷⁹ (TP 01)
- *“I was thinking of external scientists, at the university for example.”*¹⁸⁰ (TP 02)
- *“Yes, scientists are good, but I don't know what kind of scientists they are. [...] What it says, Facebook, Instagram, Twitter, WhatsApp. These are all companies that I don't trust. Because*

¹⁷⁶ TP 01: *„Also bei Instagram und WhatsApp ist das quasi dasselbe wie bei Facebook, dass ich finde, das sind sehr private Inhalte. Und bei Twitter finde ich, ist das nicht so wirklich der Fall. Ich persönlich benutze Twitter auch nur, um gewissen Nachrichtenagenturen und gewissen Politikern zu folgen. Und deswegen hätte ich da jetzt keine Probleme mit.“*

¹⁷⁷ INT: *„Sie haben aber bei Instagram und WhatsApp trotzdem eine andere Antwort angegeben als bei Facebook, also noch mal eine Abstufung gemacht. Also sehen Sie da auch noch mal einen Unterschied?“*

¹⁷⁸ TP 01: *„Ich sehe da schon noch mal ein bisschen einen Unterschied. Gerade bei WhatsApp finde ich, dass man da jetzt, wenn man da irgendetwas auswerten möchte, eher die Nutzungszeiten, sage ich jetzt mal, oder generell die Frequenz messen würde, womit ich jetzt persönlich nicht so ein Problem habe. Also, ich glaube, bei WhatsApp kann man jetzt weniger die Inhalte analysieren. Und bei Instagram glaube ich, ist das dasselbe, dass es da wenige um die Inhalte, sondern eher um die Frequenz oder die Nutzung generell geht.“*

¹⁷⁹ *„Da gehe ich davon aus, dass das dann Leute sind, die diese Daten auswerten für irgendwelche Marketingagenturen oder für andere, ich sage jetzt mal, bei Wahlkämpfen oder Ähnliches. Dass das eben Leute sind, die diese Daten auswerten und dann für eher kommerzielle Zwecke weiterverkaufen oder auswerten.“* (TP 01)

¹⁸⁰ *„Ich dachte an externe Wissenschaftler, an der Uni zum Beispiel.“* (TP 02)

their servers are in the USA, more or less, so anyone can access them. I have nothing to hide, but it's kind of unpleasant that anyone can then access this data, or just the scientists. If someone writes to me privately or you ask me, I have no problem with that. But I don't have a problem with everyone being able to access it as they please."¹⁸¹ (TP 09)

Due to the low variance in the test persons' answers to question 15, no statement can be made as to whether the interpretation of the term "scientist" had an influence on the answer to the question. Test persons 02 and 03, who would be most willing to share their data, mainly thought of external scientists, but they did not justify their answers with a perceived integrity of scientists, but rather with the fact that these data were already stored and analyzed anyway and that it therefore made no difference whether scientists additionally analyzed them.

Recommendations:

Question: If the question is intended to capture the general willingness to share social media data, regardless of whether respondents currently use the individual Internet services, the question can be left as it is. Otherwise, we recommend that this question be preceded by a filter question asking whether the respondents use these four Internet services. Question 15 should then be asked only for those services that are used by the individual respondents.

Response format: Leave. When using an upstream filter question, the answer category "I do not use" should be removed.

¹⁸¹ „Ja, Wissenschaftler sind gut, aber ich weiß nicht, was das für Wissenschaftler sind. [...] Was da steht, Facebook, Instagram, Twitter, WhatsApp. Das sind alles Unternehmen, denen ich nicht traue. Denn deren Server stehen ja in den USA, mehr oder weniger, da kann ja jeder ran. Ich habe ja nichts zu verheimlichen, aber es ist irgendwie unangenehm, dass jeder dann auf diese Daten zugreifen kann, oder halt die Wissenschaftler. Wenn jemand privat anschreibt oder Sie mich fragen, habe ich kein Problem damit. Aber nicht, dass jeder zugreifen kann, wie er gerade will.“ (TP 09)

Question 16: Willingness to share smartphone data

Wären Sie damit einverstanden, Ihre Apple- oder Samsung-Health-Daten mit uns zu teilen, damit wir diese mit Ihren Angaben aus dem Fragebogen für wissenschaftliche Zwecke verknüpfen können?

[Would you agree to share your Apple or Samsung Health data with us so that we can link it to your questionnaire information for scientific purposes?]

- Ja, ich bin einverstanden [Yes, I agree]
- Nein, ich bin nicht einverstanden [No, I do not agree]
- Ich besitze kein Smartphone dieser Hersteller [I do not own a smartphone from these manufacturers]*

Frequency distribution (N = 10)

Yes, I agree	5
No, I do not agree	3
<i>I do not own a smartphone from these manufacturers</i>	2

Cognitive techniques:

Comprehension Probe, Category Selection Probe, Specific Probe.

Key questions and findings:

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

Four test persons had problems understanding the question or did not answer it correctly (TP 03, 04, 05, 09). Test persons 03 and 04 were not aware that this data was collected automatically without actively using the Health app:

- *“I'm actually missing an answer there now. I own an iPhone, but I don't use Apple Health. But probably the iPhone uses that without me doing anything?”¹⁸² (TP 03)*

¹⁸² *„Da fehlt mir jetzt tatsächlich eine Antwort. Ich besitze zwar ein iPhone, nutze aber Apple-Health nicht. Aber wahrscheinlich nutzt das das iPhone, ohne dass ich irgendetwas mache?“ (TP 03)*

- TP 04: *“I didn't, so I don't agree. [...] I don't use these services, but I couldn't check that anywhere. There was only the option ‘I do not own a smartphone from these manufacturers’.”*¹⁸³
INT: *“That is, you own a smartphone from these manufacturers, but you do not use these services, right?”*¹⁸⁴
TP 04: *“Exactly.”*¹⁸⁵

Test persons 05 and 09 did not own an Apple or Samsung smartphone. However, instead of selecting the corresponding answer options, both clicked "No, I do not agree":

- *“Well, I don't have Apple. I have a Huawei.”*¹⁸⁶ (TP 05)
- *“Whether I agree or not, I don't have a smartphone from Apple and I don't have one from Samsung. But wait, I'm lying to you. The tablet I have in front of me is from Samsung, while the phone is from Huawei. O. K., I do not agree.”*¹⁸⁷ (TP 09)

How willing are test persons to share their Apple or Samsung Health data?

Two of the ten test persons stated that they did not own an Apple or Samsung smartphone (TP 06, 07), and two other test persons (TP 05, 09) answered the question with "No, I do not agree," although they do not own a smartphone from these manufacturers. Of the remaining test subjects, the majority (n = 5) were willing to share their Apple or Samsung Health data. The reasons given for this were that these data were not perceived as sensitive or that they generally trusted science or GESIS in particular:

- *“For me, this data is not of great value. How often I move or how I move doesn't have much value to me. And that's why it would be okay for me to share this data.”*¹⁸⁸ (TP 01)
- *“Because it is for a scientific purpose. I trust science.”*¹⁸⁹ (TP 02)

¹⁸³ TP 04: *„Das habe ich nicht, also bin ich nicht einverstanden. [...] Ich benutze diese Dienste nicht, das konnte ich aber nirgends ankreuzen. Da war ja nur die Option ‚Ich besitze kein Smartphone dieser Hersteller‘.“*

¹⁸⁴ INT: *„Das heißt, Sie besitzen ein Smartphone dieser Hersteller, aber Sie nutzen diese Dienste nicht, richtig?“*

¹⁸⁵ TP 04: *„Genau.“*

¹⁸⁶ *„Also, Apple habe ich nicht. Ich habe ein Huawei.“* (TP 05)

¹⁸⁷ *„Ob ich einverstanden bin oder nicht, ich habe kein Smartphone von Apple und keins von Samsung. Aber halt, ich lüge Sie an. Das Tablet, das ich vor mir habe, das ist von Samsung, während das Handy von Huawei ist. O. K., ich bin nicht einverstanden.“* (TP 09)

¹⁸⁸ *„Für mich sind diese Daten nicht von großem Wert. Wie oft ich mich bewege oder wie ich mich bewege, hat keinen großen Wert für mich. Und deswegen wäre es für mich in Ordnung, diese Daten weiterzugeben.“* (TP 01)

¹⁸⁹ *„Weil es für einen wissenschaftlichen Zweck ist. Ich vertraue der Wissenschaft.“* (TP 02)

- *“Because I know GESIS [laughs]. [...] That's what it says, or have I misunderstood? Doesn't that refer to GESIS? Well, I would only agree to it if I know the institution very well...”¹⁹⁰ (TP 10)*

Test person 04 justified her refusal with the fact that she does not use the Health app and does not want to disclose any more data than she already does: *“One is because, as I said, I don't use it. But I couldn't check that off anywhere. And I find that they already know enough. They can always access the cell phones anyway, so to speak, and due to that you don't have to disclose it as well.”¹⁹¹*

What do the test persons understand by "Apple or Samsung Health data"?

With the exception of the two test persons who stated that they did not own an Apple or Samsung smartphone, all were asked to explain what they understood by the term "Apple or Samsung health data". Of these eight test persons, two indicated they did not know the term (TP 05, 09):

- *“So, Apple I do not have. But no idea what this Health data is, no idea. In any case, it's data that goes along in the phone.”¹⁹² (TP 05)*
- *“Maybe you can help me a little bit. I'm going to assume the company, i.e. Samsung or Apple.”¹⁹³ (TP 09)*

The remaining six test persons were able to describe the Health app correctly:

- *“So how often I move, with the smartphone, so all the pedometers or something like that. So in general, I would have associated movement data with it.”¹⁹⁴ (TP 01)*
- *“Well, I have an iPhone and there is an app called Health. There you can enter certain data, such as height, weight, when you got your period, etc. I think you can also upload medical documents.”¹⁹⁵ (TP 02)*
- *“The health data is that, I think. Fitness scores and stuff. The number of steps. I used that once, but I let it stay again.”¹⁹⁶ (TP 08)*

¹⁹⁰ „Weil ich die GESIS kenne [lacht]. [...] Das steht ja da oder habe ich das jetzt falsch verstanden? Das bezieht sich doch auf die GESIS? Also, ich wäre nur damit einverstanden, wenn ich die Institution sehr genau kenne.“ (TP 10)

¹⁹¹ „Zum einen, weil ich es, wie gesagt, nicht benutze. Das konnte ich aber nirgends ankreuzen. Und ich finde, die kriegen schon genug mit. Die können ja eh immer Zugriff auf die Handys sozusagen haben und da muss man das ja nicht auch noch preisgeben.“ (TP 04)

¹⁹² „Also, Apple habe ich nicht. Aber keine Ahnung, was diese Health-Daten sind, keine Ahnung. Es sind in jedem Fall Daten, die im Handy mitlaufen.“ (TP 05)

¹⁹³ „Da können Sie mir vielleicht ein bisschen helfen. Ich gehe jetzt mal von der Firma aus, also Samsung oder Apple.“ (TP 09)

¹⁹⁴ „Also wie oft ich mich bewege, mit dem Smartphone, also die ganzen Schrittzähler oder so etwas. Also ganz generell Bewegungsdaten hätte ich damit verbunden.“ (TP 01)

¹⁹⁵ „Also, ich habe ein iPhone und da gibt es die App Health. Da kann man bestimmte Daten eintragen, wie zum Beispiel Größe, Gewicht, wann man seine Periode bekommen hat usw. Man kann, glaube ich, auch Krankendokumente hochladen.“ (TP 02)

¹⁹⁶ „Die Gesundheitsdaten sind das, denke ich. Fitnesswerte und so. Die Anzahl der Schritte. Das habe ich mal genutzt, habe das aber wieder bleiben lassen.“ (TP 08)

- *“Yes, I use something like that. I have a watch like this that records my health data and it is stored in Health.”*¹⁹⁷ (TP 10)

Recommendations:

Question: We recommend that this question be preceded by a filter question asking whether the respondents own a smartphone from Apple or Samsung. Question 16 should then only be asked of those respondents who answer this filter question in the affirmative. In addition, a short explanation should be added to the question to clarify that the Health app automatically records certain data, even if the app is not actively used.

Alternatively, if the question is intended to capture general willingness to share smartphone data, regardless of whether respondents own an Apple or Samsung smartphone, we recommend rephrasing the question:

"Would you agree to share health data collected from your smartphone with us so that we can link it to your questionnaire information for scientific purposes?"

Response format: Leave. When using an upstream filter question, the answer category "I do not own a smartphone from these manufacturers" should be removed.

¹⁹⁷ „Ja, ich nutze so etwas. Ich habe so eine Uhr, die meine Gesundheitsdaten aufzeichnet und die in der Health gespeichert werden.“ (TP 10)

5 Appendix: Cognitive Guide

Frage 1

- N1_F1 Was verstehen Sie in dieser Frage unter einer „Vollzeitbeschäftigung“?
- N2_F1 Und was verstehen Sie in dieser Frage unter „finanziell unabhängig zu sein“?
- N3_F1 Sie haben angegeben, dass Sie der Aussage [Antwort Frage 1: 1 = überhaupt nicht/2–3 = eher nicht/4 = weder noch/5–6 = eher/7 = voll und ganz] zustimmen. Können Sie mir Ihre Antwort bitte noch näher erläutern?
- N4_F1 *Falls noch nicht erkennbar:*
Warum sind Sie der Meinung, dass eine Vollzeitbeschäftigung [Antwort Frage 1: 1 = nicht/ 2–3 = eher nicht/4 = nicht unbedingt/5–6 = tendenziell/7 = definitiv] der beste Weg für eine Frau ist, finanziell unabhängig zu sein?
- N5_F1 Wie leicht oder schwer ist es Ihnen gefallen, die Frage zu beantworten?
(TL: Vorgaben vorlesen!)
- | | |
|------------------|--------------------------|
| Sehr leicht | <input type="checkbox"/> |
| Eher leicht | <input type="checkbox"/> |
| Eher schwer oder | <input type="checkbox"/> |
| Sehr schwer | <input type="checkbox"/> |
- N6_F1 Warum fanden Sie die Beantwortung der Frage [Antwort N5_F1]?
- N7_F1 *Falls noch nicht erkennbar:*
Haben Sie zu diesem Thema eine feste Meinung oder mussten Sie zunächst überlegen, ob Sie der Aussage zustimmen oder nicht zustimmen?

Frage 2

- N1_F2 Sie haben bei dieser Frage angegeben, dass Sie [Antwort Frage 2: 1 = überhaupt keine/2–3 = eher keine/4 = weder noch/5–6 = eher eine/7 = eine eindeutige] Meinung zu diesem Thema haben. Können Sie mir Ihre Antwort bitte noch näher erläutern?
- N2_F2 Wie leicht oder schwer ist es Ihnen gefallen, die Frage zu beantworten?
(TL: Vorgaben vorlesen!)
- | | |
|------------------|--------------------------|
| Sehr leicht | <input type="checkbox"/> |
| Eher leicht | <input type="checkbox"/> |
| Eher schwer oder | <input type="checkbox"/> |
| Sehr schwer | <input type="checkbox"/> |
- N3_F2 Warum fanden Sie die Beantwortung der Frage [Antwort N2_F2]?

Frage 3

- N1_F3 Was verstehen Sie in dieser Frage unter „Familienleben“?

N4_F5 Warum fanden Sie die Beantwortung von Frage 5 [Antwort Probe N3_F5]?

N5_F5 Und wieder auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht ehrlich“ und 7 „sehr ehrlich“ bedeutet: Was meinen Sie, wie ehrlich beantworten Menschen diese Frage in einem Fragebogen?

Überhaupt nicht ehrlich							Sehr ehrlich
1	2	3	4	5	6	7	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N6_F5 Warum glauben Sie, dass Befragte diese Frage [Antwort Probe N5_F5: 1 = überhaupt nicht/2-3 = eher nicht/4 = mittelmäßig/5-6 = eher/7 = sehr] ehrlich beantworten?

Frage 6

N1_F6 Sie haben bei dieser Frage angegeben, dass Sie [Antwort Frage 6: 1 = überhaupt nicht/2-3 = eher nicht/4 = weder noch/5-6 = eher/7 = voll und ganz] dazu bereit wären, mehr Geld für Trinkwasser zu bezahlen, wenn damit Maßnahmen gegen die Trinkwasserverschmutzung finanziert werden würden. Können Sie mir Ihre Antwort bitte noch näher erläutern?

N2_F6 *Falls noch nicht erkennbar:*
Warum wären Sie [Antwort Frage 6: 1 = nicht/ 2-3 = eher nicht/4 = nicht unbedingt/5-6 = tendenziell/7 = definitiv] dazu bereit, mehr Geld für Ihr Trinkwasser zu bezahlen?

N3_F6 Auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht unangenehm“ und 7 „sehr unangenehm“ bedeutet, wie unangenehm fanden Sie es, Frage 6 gestellt zu bekommen?

Überhaupt nicht unangenehm							Sehr unangenehm
1	2	3	4	5	6	7	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N4_F6 Warum fanden Sie die Beantwortung von Frage 6 [Antwort Probe N3_F6]?

N5_F6 Und wieder auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht ehrlich“ und 7 „sehr ehrlich“ bedeutet: Was meinen Sie, wie ehrlich beantworten Menschen diese Frage in einem Fragebogen?

Überhaupt nicht ehrlich							Sehr ehrlich
1	2	3	4	5	6	7	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N6_F6 Warum glauben Sie, dass Befragte diese Frage [Antwort Probe N5_F6: 1 = überhaupt nicht/2-3 = eher nicht/4 = mittelmäßig/5-6 = eher/7 = sehr] ehrlich beantworten?

Frage 7

N1_F7 Sie haben angegeben, dass Sie glauben, der/die/das [Antwort Frage 7] verbraucht durchschnittlich pro Person und pro km am meisten Energie. Warum haben Sie sich für diese Antwort entschieden?

N2_F7 Wie sicher sind Sie sich, dass Ihre Antwort korrekt ist?

(TL: Antwortoptionen vorlesen!)

Sehr sicher

Eher sicher

Eher unsicher

Sehr unsicher

N3_F7 Angenommen, diese Frage würde in einer Umfrage gestellt: Was glauben Sie, wie viel Prozent der Befragten kennen die richtige Antwort auf diese Frage?

Frage 8

N1_F8 Sie haben angegeben, dass Ihrer Meinung nach für die/das [Antwort Frage 8] in einem privaten Haushalt die meiste Energie verbraucht wird. Warum haben Sie sich für diese Antwort entschieden?

N2_F8 Wie sicher sind Sie sich, dass Ihre Antwort korrekt ist?

(TL: Antwortoptionen vorlesen!)

Sehr sicher

Eher sicher

Eher unsicher

Sehr unsicher

N3_F8 Angenommen, diese Frage würde in einer Umfrage gestellt: Was glauben Sie, wie viel Prozent der Befragten kennen die richtige Antwort auf diese Frage?

Frage 9

N1_F9 Sie haben angegeben, dass der [Antwort Frage 9] das Umweltschutzzeichen des Umweltbundes ist. Warum haben Sie sich für diese Antwort entschieden?

N2_F9 Wie sicher sind Sie sich, dass Ihre Antwort korrekt ist?

(TL: Antwortoptionen vorlesen!)

Sehr sicher

Eher sicher

Eher unsicher

Sehr unsicher

N3_F9 Angenommen, diese Frage würde in einer Umfrage gestellt: Was glauben Sie, wie viel Prozent der Befragten kennen die richtige Antwort auf diese Frage?

Frage 10

Keine Probing-Fragen

Frage 11

N1_F11 Was verstehen Sie in dieser Frage unter „pornografischen Inhalten“?

N2_F11 Auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht unangenehm“ und 7 „sehr unangenehm“ bedeutet, wie unangenehm fanden Sie es, Frage 11 gestellt zu bekommen

Überhaupt nicht unangenehm						Sehr unangenehm
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N3_F11 Warum fanden Sie die Beantwortung von Frage 11 [Antwort Probe N2_F11]?

N4_F11 Und wieder auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht ehrlich“ und 7 „sehr ehrlich“ bedeutet: Was meinen Sie, wie ehrlich beantworteten Menschen diese Frage in einem Fragebogen?

Überhaupt nicht ehrlich						Sehr ehrlich
1	2	3	4	5	6	7
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

N5_F11 Warum glauben Sie, dass Befragte diese Frage [Antwort Probe N4_F11: 1 = überhaupt nicht/2-3 = eher nicht/4 = mittelmäßig/5-6 = eher/7 = sehr] ehrlich beantworteten?

N5_F3 Warum fanden Sie die Beantwortung der Frage [Antwort N4_F3]?

N6_F3 *Falls noch nicht erkennbar:*

Haben Sie zu diesem Thema eine feste Meinung oder mussten Sie zunächst überlegen, ob Sie der Aussage zustimmen oder nicht zustimmen?

Frage 12

N1_F12 Sie haben angegeben, dass Sie in den letzten vier Wochen [Antwort Frage 12: (keine) Reinigungsmittel] für Ihr Zuhause gekauft haben. Können Sie mir Ihre Antwort bitte noch näher erläutern?

Frage 13N1_F13 *Falls „ja“ geantwortet:*

Dürfte ich Sie fragen, was Sie gestohlen haben?

N2_F13 Falls „nein“ geantwortet:

Haben Sie – selbst als Sie noch ein Kind waren – nie etwas im Wert von weniger als 50 Euro aus einem Laden oder von jemandem gestohlen – auch wenn Sie es vielleicht später wieder zurückgegeben haben oder zurückgeben mussten?

N3_F13 Wie sicher sind Sie sich, dass Ihre Antwort korrekt ist, d. h. dass Sie sich richtig erinnert haben?

(TL: Vorgaben vorlesen.)

Sehr sicher

Eher sicher

Eher unsicher

Sehr unsicher

N4_F13 Warum sind Sie sich [Antwort N3_F13]?

N5_F13 Auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht unangenehm“ und 7 „sehr unangenehm“ bedeutet, wie unangenehm fanden Sie es, Frage 13 gestellt zu bekommen?

Überhaupt nicht
unangenehm

1

2

3

4

5

6

Sehr
unangenehm

7

N6_F13 Warum fanden Sie die Beantwortung von Frage 13 [Antwort Probe N5_F13]?

N7_F13 Und wieder auf einer Skala von 1 bis 7, wobei 1 „überhaupt nicht ehrlich“ und 7 „sehr ehrlich“ bedeutet: Was meinen Sie, wie ehrlich beantworten Menschen diese Frage in einem Fragebogen?

Überhaupt nicht
ehrlich

1

2

3

4

5

6

Sehr
ehrlich

7

N8_F13 Warum glauben Sie, dass Befragte diese Frage [Antwort Probe N7_F13: 1 = überhaupt nicht/2-3 = eher nicht/4 = mittelmäßig/5-6 = eher/7 = sehr] ehrlich beantworten?

Frage 14

N1_F14a Wir möchten uns mit der Frage a) noch einmal etwas näher beschäftigen.

Sie haben bei dieser Frage angegeben, dass Sie glauben, dass es [Antwort Frage 14a: 1 = überhaupt nicht/2-3 = eher nicht/4 = weder noch/5-6 = eher/7 = sehr] peinlich wäre, in der Öffentlichkeit zuzugeben, dass man sich sehr häufig pornografische Inhalte ansieht. Warum haben Sie sich für diese Antwort entschieden?

N2_F14a Wie sicher sind Sie sich, dass es [Antwort Frage 14a: 1 = überhaupt nicht/2–3 = eher nicht/4 = weder noch/5–6 = eher/7 = sehr] peinlich wäre, in der Öffentlichkeit zuzugeben, sich sehr häufig pornografische Inhalte anzusehen?

Sehr sicher

Eher sicher

Eher unsicher

Sehr unsicher

N3_F14a Warum sind Sie sich [Antwort Frage N2_F14a]?

N4_F14a Sind Sie selbst auch der Meinung, dass man in der Öffentlichkeit nicht zugeben sollte, dass man sich sehr häufig pornografische Inhalte ansieht?

Frage 15

N1_F15 Was verstehen Sie in dieser Frage unter „Wissenschaftlern“?

N2_F15 *Falls noch nicht erkennbar:*

Haben Sie beim Beantworten an externe Wissenschaftler gedacht, die nicht bei diesen Firmen arbeiten, an Wissenschaftler, die bei diesen Firmen arbeiten, oder an beides?

Externe Wissenschaftler

Wissenschaftler dieser Firmen

Beides

N3_F15 Wir möchten uns mit dem Internetdienst Facebook noch etwas näher beschäftigen. Sie haben angegeben, dass es [Antwort Frage 15] ist, dass Sie Ihr Einverständnis für eine derartige Nutzung Ihrer Daten bei Facebook geben würden. Warum haben Sie sich für diese Antwort entschieden?

N4_F15 *Falls nicht für alle Dienste die gleiche Antwort gegeben wurde:*

Warum haben Sie für die genannten Dienste unterschiedliche Antworten gegeben? Können Sie mir Ihre Antworten bitte kurz erläutern?

Frage 16

N1_F16 *Falls nicht „Ich besitze kein Smartphone dieser Hersteller“:*

Was verstehen Sie in dieser Frage unter „Apple- oder Samsung-Health-Daten“?

N2_F16 Sie haben angegeben, dass Sie [Antwort Frage 16: (nicht) damit] einverstanden wären, Ihre Apple- oder Samsung-Health-Daten mit uns zu teilen. Warum haben Sie sich für diese Antwort entschieden?

N3_F16 *Falls noch nicht erkennbar und „nein“:*

Warum nicht?

6 Glossary: Cognitive Techniques

Think Aloud	Thinking Out Loud Technique: <i>"For the following question, please tell me everything you are thinking about or what is going through your mind before you answer the question. Please also say things that may seem unimportant to you. The question is:"</i>
Comprehension Probing	Follow-up questions for understanding, e.g.: <i>"In this question, what do you understand by 'a professional job with high responsibility'?"</i>
Category Selection Probing	Follow-up questions on the choice of response category, e.g.: <i>"For this question, you indicated that you 'strongly agree.' Can you please justify your answer?"</i>
Information Retrieval Probing	Follow-up questions to gather information, e.g.: <i>"How did you remember going to the doctor [...] times in the last 12 months?"</i>
General/Elaborative Probing	Non-specific follow-up questions, e.g.: <i>"Can you please explain your answer a little more?"</i>
Specific Probing	Specific follow-up questioning, e.g.: <i>"You answered 'yes' to this question. Does this mean that you have already given up opportunities for career advancement for your family, or that you would give up if you had to, but have not yet done so?"</i>
Emergent Probing	Spontaneous follow-up questions in response to a statement or behavior by the test person, e.g.: <i>"You just frowned and laughed when I read the answer options to you. Can you please explain why you did that?"</i>
Difficulty Probing	<i>"How easy or difficult was it for you to answer this question?"</i> If "very/very difficult": <i>"Why did you find answering the question rather difficult/very difficult?"</i>
Paraphrasing	Test persons re-state the question text in their own words: <i>"Please repeat the question I read to you again in your own words."</i>
Confidence Rating	Assessment of reliability of the answer, e.g.: <i>"How sure are you that you have seen a doctor [...] times in the last 12 months?"</i>