

Multi-Item Scale for Project:

FGZ Cohesion Panel: Wave 2 – Questions on climate change, antisemitism, and gender equality (English Version)

Question Text:

To what extent do you feel affected by the following extreme weather events where you live?

[Inwiefern fühlen Sie sich von folgenden Unwetterereignissen an Ihrem Wohnort betroffen?]

Answer Categories:

0 Not affected at all *[Überhaupt nicht betroffen]*

1

2

3

4

5

6

7

8

9

10 Very affected *[Sehr betroffen]*

Findings for Multi-Item Scale:

The three items of question 5 were answered by all 240 subjects, again using the full range of the response scale for all items (see Table 6 and Figure 1). The subjects felt most affected by storms ($M = 6.24$, $SD = 2.48$), followed by heavy rain/floods ($M = 5.44$, $SD = 2.61$) and heat waves/drought ($M = 5.08$, $SD = 2.75$).

The aim of the pretest was to examine how difficult it was for the subjects to select a value on the 11-point scale and whether an answer scale with fewer scale points would be easier to answer. The corresponding cognitive probes (N1_F5, see Appendix) were asked of the 124 test persons who were (randomly) assigned to Group 1. About one-third of these subjects were asked about items a, b, and c, respectively.

The subjects' answers to the cognitive probes did not provide any indication that the number of scale points should be reduced, that is, no subject stated that answering the question or the individual items would have been easier with fewer scale points. Across the items, it was found that the reasons given by the respondents matched the scale

values selected in each case and that the high scale values were selected in particular when extreme weather events had already occurred (e.g., floods or fires).

Recommendations for Multi-Item Scale:

The results of the pretest do not indicate any problems with the question, so it can be left in its current form.

Cognitive Techniques:

Category Selection Probing

All Items for Question(Question Text):

To what extent do you feel affected by the following extreme weather events where you live?

[Inwiefern fühlen Sie sich von folgenden Unwetterereignissen an Ihrem Wohnort betroffen?]

-> Tested Items:

Item Text:

a.Heat waves / drought *[Hitzewelle/Dürre]*

Recommendations:

The results of the pretest do not indicate any problems with the item, so it can be left in its current form.

Findings:

For item a, test persons who selected lower values mostly justified their answers by saying that heat waves or drought had not yet occurred at their place of residence, or had occurred only rarely, and that they had noticed only little change in the average annual temperatures. Test persons who selected higher values, on the other hand, argued that they had registered a noticeable increase in temperatures in recent years and that their place of residence frequently experiences warm winters and summers with little precipitation:

- *"Because it feels like it's always raining here."* (TP566, scale value: 0)
- *"There is hardly any change here."* (TP406, scale value: 2)
- *"Because some of the winter here is already way too warm, and there's little to no precipitation in the summer."* (TP290, scale value: 6)
- *"In Brandenburg, we've had drought summers for five years, causing ever larger forest fires."* (TP370, scale value: 10)

Question Topic:

Environment

Construct:

Affected by climate change

Item Text:

b. Heavy rain/flooding [*Starkregen/Überschwemmungen*]

Recommendations:

The results of the pretest do not indicate any problems with the item, so it can be left in its current form.

Findings:

For item b, those respondents who selected lower values explained that there had not been any floods at their place of residence so far, but only heavy rain from time to time, if at all. Test persons who selected higher values, on the other hand, justified this by saying that they had already experienced flooding at their place of residence or had registered an increase in heavy rain events:

- *"There has been no heavy rain or flooding in our vicinity so far."* (TP254, scale value: 0)
- *"Rain has definitely increased. However, there are no rivers or lakes near here."* (TP439, scale value: 1)
- *"When it does rain, it's much worse than it used to be."* (TP273, scale value: 7)

- *"Our place was affected by the flood disaster last year. I would rate the likelihood of something like that happening again as high."* (TP297, scale value: 10)

Question Topic:

Environment

Construct:

Affected by climate change

Item Text:

c. Storms [*Stürme*]

Recommendations:

The results of the pretest do not indicate any problems with the item, so it can be left in its current form.

Findings:

For item c, lower values were justified by the fact that no storms had occurred at the place of residence so far, while test persons who selected a high value stated that this had already been the case for them and that they would perceive an increase in storms:

- *"Our region is not affected."* (TP265, scale value: 0)
- *"So far, my region has not been affected by strong storms."* (TP277, scale value: 2)
- *"I have been affected by storm damage myself."* (TP534, scale value: 8)
- *"Because the storms are getting stronger here."* (TP364, scale value: 10)

Question Topic:

Environment

Construct:

Affected by climate change