Probing in web surveys & response burden: first results from an international web survey

CSDI London, 24 - 26 March 2011

Dorothée Behr, Wolfgang Bandilla, Lars Kaczmirek,

Michael Braun, and Sandra Majer

GESIS – Leibniz Institute for the Social Sciences, Mannheim

Overview

- Overall project goal

- Main study January 2011

- Focus on response burden

    - Response times

    - Breakoff

- Outlook

Overall project goal

- *Project funded by the German Research Foundation's Priority Programme on 'Survey Methodology'.*

- Development of a method to use cognitive interviewing methods, in particular category-selection probing, in Web surveys. (*supplemental, not replacement method*)

- Investigation of the adequacy of using Web surveys with respondents recruited from online access panels.

- Testing of the approach with substantive survey topics, focusing on detection of interpretation differences in international surveys.

Main Study 1: January 2011

- Participating countries: Canada (English-speaking), Germany (eastern + western as separate regions), Denmark, Hungary, Spain, US.

- Target population defined as country citizens aged btw. 18-65.

- Respondents drawn from online access panel Respondi & international partners.

- Quotas set according to gender, education, age, east/west.

- Targeted completes per country/region 480, but in total 10% increase to compensate for lurkers (*no further costs incurred*).

- n = 3,695 completed interviews.

… and the questionnaire

- Languages: Danish, English, German, Hungarian, Spanish.
- Items to a great part drawn from the
- Introduction, screening questions (4
- Randomization of thematic blocks on
  - *Family (gender roles, child raising, …) (8 items)*
  - *Politics (rights of people in a democra interest, immigrants…) (13 items)*
- Demographic varia   sses
  (1 item).

> 4 of these items probed with category selection probing

> 3 of these items probed with comprehension/specific probing & 1 split comprehension vs. category selection

> + 1 open-ended question for further comments

* Only for Germany to assign respondents to eastern or western Germany.

Category selection probe …

Probing question with respondent's answer

Repetition of closed item, i.e. context provision

Text box

Please explain why you selected "agree".
The statement was: Being a housewife is just as fulfilling as working for pay.

Back   Continue

If you have any questions or problems, please contact: Dorothée Behr – email: webstudien@gesis.org

Comprehension probe …

Reference back to previous question, i.e., context provision

gesis
Leibniz Institute for the Social Sciences

We have just asked you to place yourself on a scale from left to right.

Now please tell us what ideas you associate with the term "left".

Text box for meaning of "left"

And what ideas do you associate with the term "right"?

Text box for meaning of "right"

Continue

If you have any questions or problems, please contact: Dorothée Behr – email: webstudien@gesis.org
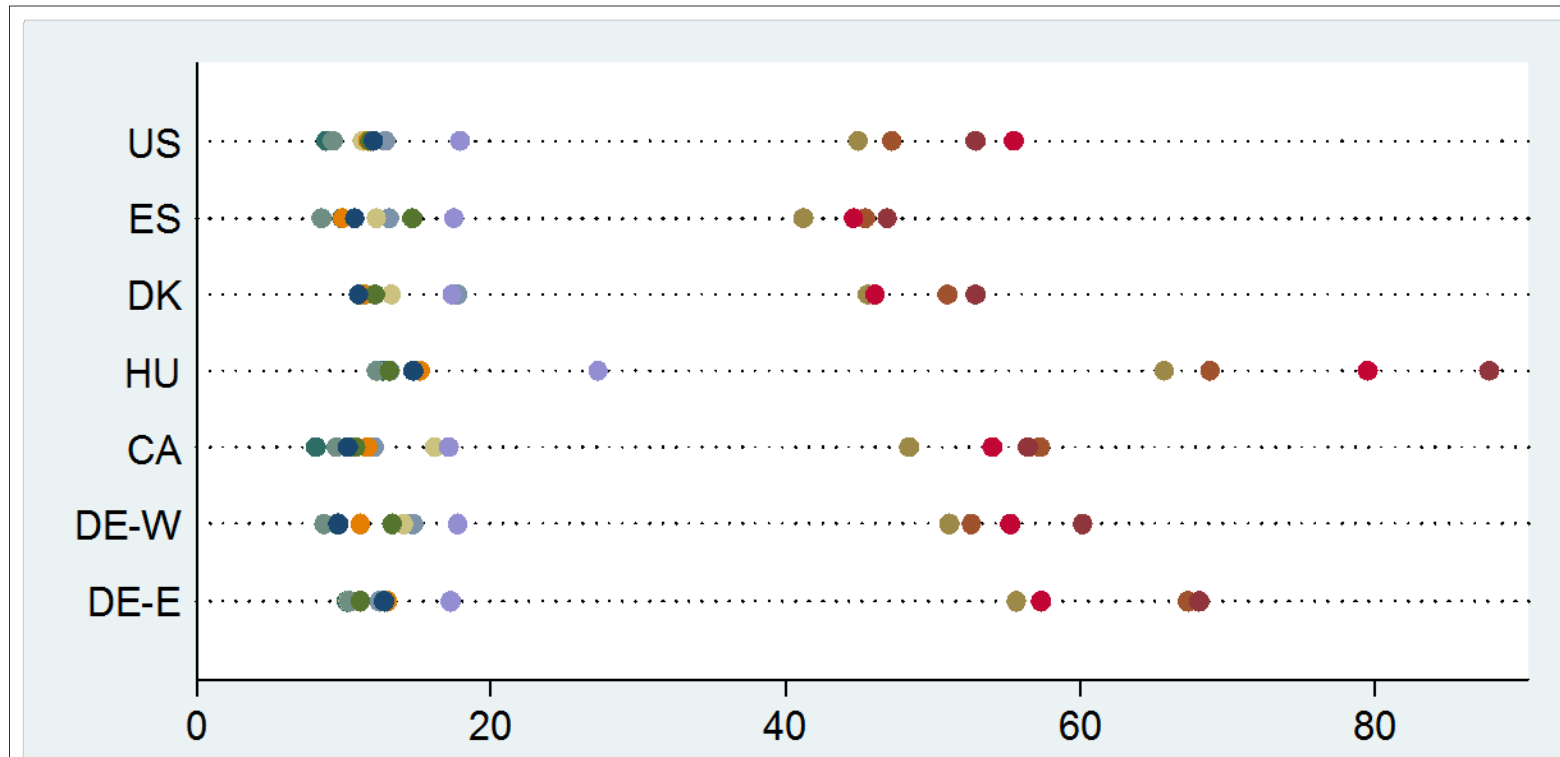
Response burden

- Open-ended questions …
  - Costs for respondents: they require **more time** and higher effort than closed-ended questions (= increased response burden).
  - Consequently, they lead to increased **breakoff** and item nonresponse (e.g., Galesic, 2006; Holland & Christian, 2009).
  - At the same time, interest plays an important role when it comes to answering open-ended questions (Holland & Christian, 2009).

Response times overall*

Country	Mean	Mini - Max
Hungary (504)	18.8 min	2.7 – 47.6
Germany (eastern) (504)	15.5 min	1.7 – 41.8
Germany (western) (478)	14.5 min	2.8 – 35.1
Canada (479)	14.0 min	2.4 – 33.2
Denmark (500)	14.0 min	2.4 – 33.9
US (485)	13.8 min	3.2 – 34.4
Spain (500)	13.7 min	2.3 – 33.7

N = 3,435 respondents, **excluding outliers.** Those who interrupted but eventually completed are not included here.

Family block: mean response time in seconds (x-axis) across countries (y-axis)

Left-hand side → closed items, right-hand side → open items.

Example from the politics block: Civil disobedience

How important is it that citizens may engage in acts of civil disobedience when they oppose government actions?
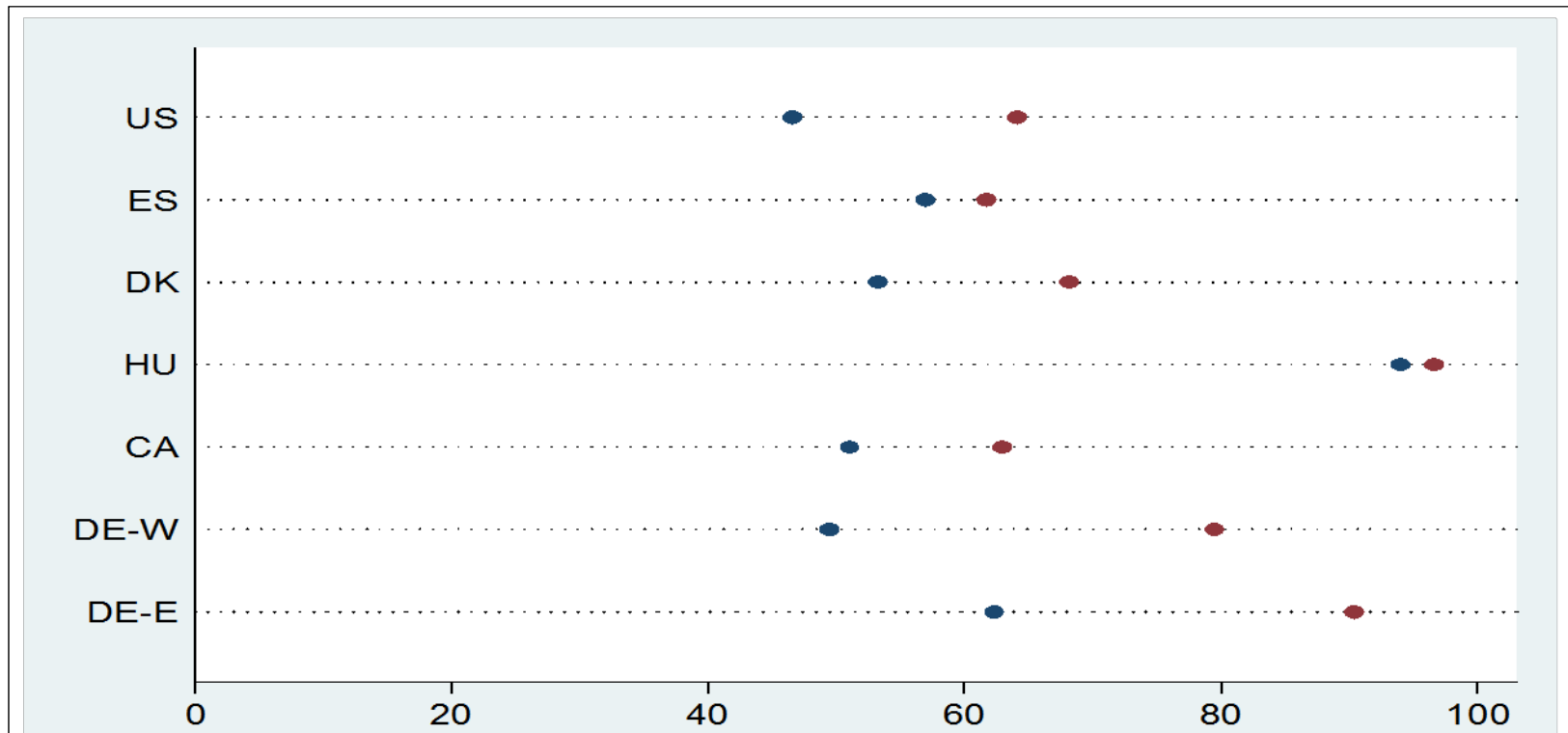
Not at all important (1) …. very important (7) Can't choose

Probe category selection: Please explain why you selected "#v_217|code#". […]

OR

Probe comprehension: What ideas do you associate with the phrase "civil disobedience"? Please give examples. […]

Politics block: mean response time in seconds for civil disobedience probes (x-axis) across countries (y-axis)

Blue → comprehension probe, red→ category selection probe.

Breakoff according to question types & sequence

- Overall breakoff: 11.4% (474 of 4169), thereof:
  - 55.3% at probes (262 of 474)
    - 82.4% (216 of 262) of probe breakoffs occur during the first half of the survey (i.e., during first thematic block no matter whether family or politics).
  - 39.0% at closed items (185 of 474)
  - 5.7% at introductory texts (27 of 474)

To investigate: What differences exist between countries? (culture-specific saliency such as with right-left probe in US or CA…)

Break off across countries in % (in brackets real numbers)

Type	CA	DE – east.	DE – west.	DK	ES	HU	US
TOTAL	12% 70 of 586	9.1% 54 of 591	7.3% 40 of 547	13.1% 81 of 618	12.0% 73 of 611	13.7% 85 of 621	10.4% 61 of 585
Probes	65.7 (46)	66.7 (36)	60.0 (24)	48.1 (39)	50.7 (37)	57.7 (49)	50.8 (31)
Closed items	28.6 (20)	27.8 (15)	30.0 (12)	44.4 (36)	48.0 (35)	37.7 (32)	42.6 (26)
Intro texts	5.7 (4)	5.6 (3)	10.0 (4)	7.4 (6)	1.4 (1)	4.7 (4)	6.6 (4)

NOTE: 9 further breakoffs from Germany not defined as DE-eastern/western since breakoff occurred before screening item on region.

Outlook

- Currently undertaken: Coding of answers to the civil disobedience probe
- Examples …

Thank you!

Any questions or comments?

References

- Galesic, M. (2006). Dropouts on the Web: Effects of Interest and Burden Experienced During an Online Survey. *Journal of Official Statistics*, 22(2), 313-328.

- Holland, J. L., & Christian, L.M. (2009). The Influence of Topic Interest and Interactive Probing on Responses to Open-Ended Questions in Web Surveys. *Social Science Computer Review*, 27(2), 196-212.

Examples for category selection probing

- "I don't beleive civil disobedience accomplishes anything"
  - No benefit from civil disobedience

- "It is a concrete way to express dissatisfaction with decisions being made, as long as the "civil" is maintained and violent methods are not used."
  - Exemplifies how to carry out civil disobedience

- "we are a society of laws! we have procedures in place to air our grievances and they should be used before we break the law."
  - Different means to get the attention of the government

- "sometimes, is the only way to have attention from the authorities"
  - Only way to get attention

- "Sometimes it gets out of hand and people and property gets destroyed. I believe in peaceful demonstration."
  - Negative outcomes

Examples for comprehension probing:

- "riots, damaging strikes, illegal activities"
  - Focus on violence and violent actions

- Going on strike, not following orders-but in a decent fashion, contacting the government offices through phone calls, letters, faxes
  - Implicit peaceful means

- "Civil disobedience can take many forms from quiet forms of protest which is prefered, but it can also take the form of violent disobedience which is an unfortunate form of protest because people lose sight of the reason for their objections to the government's actions."
  - Range of actions or meanings of the term

Satisfaction with survey
(1 very poor
– 5 very good)
means :

DK: 3.75

HU: 3.96

CA: 3.93

DE western: 3.99

US: 4.04

DE eastern: 4.13

ES: 4.16

Response time for probes

Country	Probe – split houshold chores	Probe - one parent raises children as good as two
Germany	60.85 sec	59.89 sec
USA	64.40 sec	55.57 sec
Spain	48.15 sec	47.65 sec
Denmark	53.26 sec	51.42 sec
Hungary	87.55 sec	73.54 sec
Canada	63.98 sec	60.05 sec

Response time for probes – civil disobedience

Country	Comprehension probe	Scale 1-7 without dk	Scale 1-7 with dk
Germany	74.63 sec	94.42 sec	28.91 sec
USA	57.22 sec	91.01 sec	118.35 sec
Spain	60.45 sec	64.78 sec	36.68 sec
Denmark	67.64 sec	79.36 sec	38.42 sec
Hungary	98.89 sec	110.23 sec	76.42 sec
Canada	60.82 sec	72.03 sec	21.63 sec

Breakoff at the beginning or toward the end?

- Overall breakoff: 11.4% (474 of 4169), thereof:
  - 52.3% at probes (262)
    - TOP2: 29.8% due to first-coming probe in family block (78)

First Block	phsjnp		phsjrw		phsjsw	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Family	20	91 %	27	96 %	26	93 %
Politics	2	9 %	1	4%	2	7 %

Breakoff at the beginning or toward the end?

- Overall breakoff: 11.4% (474 of 4169), thereof:
  - 52.3% at probes (262)
    - TOP1: 27.9% due to left-right probe (73)

First Block	Freq.	Percent
Family	16	22 %
Politics	57	78%