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Getting to the Bottom of Response Behavior When Using Forced Answering in Online Surveys

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Session: Response Format and Response Behavior

The forced answering (FA)-option

The FA (or forced response) option forces the respondent to answer or enter a response to each single item.



This question is very important. Please respond to the question.

How many sexual partners did you have in your life?

Continue

- Items cannot be skipped without answering
- Rationale: No missing data

Effects of FA on different quality parameters

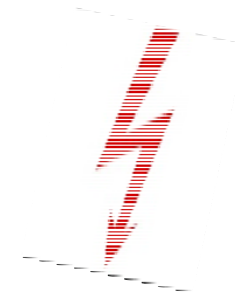
- **Less item-nonresponse** (Albaum et al., 2010, 2011; Roster et al., 2014)

Effects of FA on different quality parameters

- **Less item-nonresponse** (Albaum et al., 2010, 2011; Roster et al., 2014)

- **Higher and earlier dropouts**
 - Higher dropouts (Décieux et al., 2015a, O'Neil, Penrod & Bornstein 2003; Stieger et al. 2007)
 - Earlier dropouts (Décieux et al., 2015b; Mergener et al., 2015)

- **Decrease of validity of answers** (Décieux et al., 2015a)



Psychological explanation?

Reactance effect

- *Reactance appears when an individual's freedom is threatened and cannot be directly restored (Brehm, 1966).*
- Reactance: motivation to restore this loss of freedom.
- FA conditions → respondents are denied the choice to leave a question unanswered → internal pressure to disclose information that respondents might not want to reveal

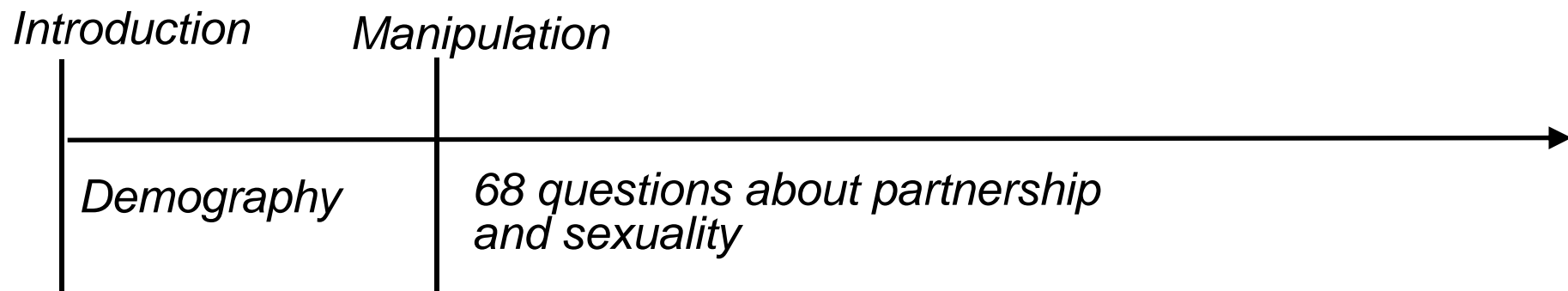
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 - FA conditions → respondents are denied the choice to leave a question unanswered → internal pressure to disclose information that respondents might not want to reveal
- Hypothesis: Forcing respondents to answer will cause reactance, which turns into increasing dropout rates, decreasing answer quality and a satisficing behavior.
- The effect may be exacerbated when sensitive topics are concerned.

Survey design (I)

- Sample: Students at two German universities (contacted via e-mail)
- Cover story / survey topic: romantic relationship and sexuality
- Randomization across NFA and FA conditions (= Manipulation)



Survey design (II)

FA condition

- „You have to answer each question to reach the next page.“

Nun folgen detailliertere Fragen zu Partnerschaft und Sexualität.

Sie **müssen jede Frage beantworten**, um zur nächsten Seite zu gelangen.

Bitte beantworten Sie möglichst alle Fragen wahrheitsgemäß.

Wenn Sie die Befragung abbrechen möchten, nutzen Sie bitten den Button **„Umfrage abbrechen“**.

NFA condition

- „If you do not want to answer a question, you can skip it, without giving an answer.“

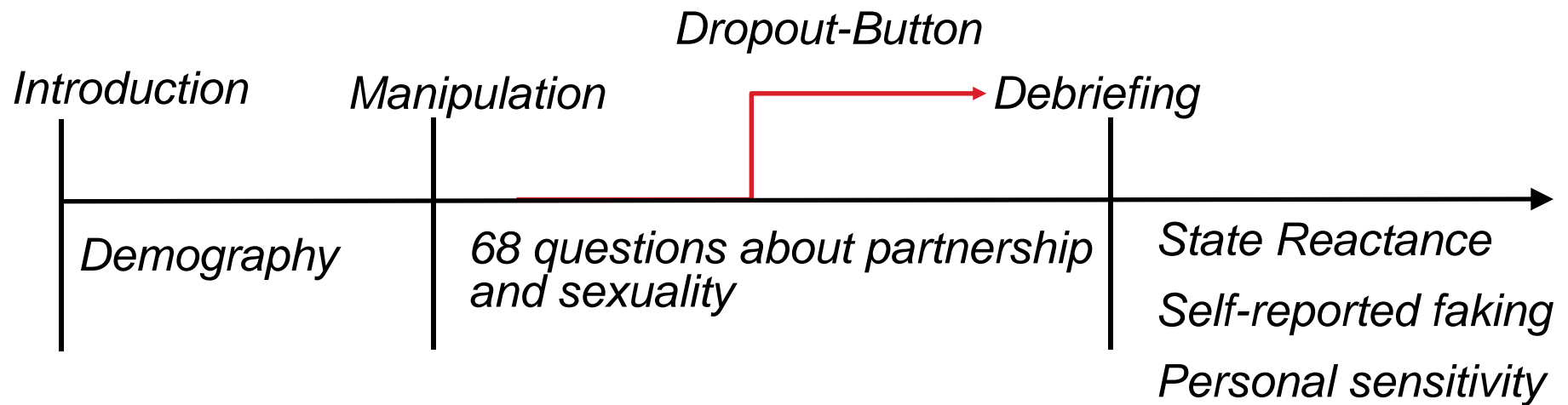
Nun folgen detailliertere Fragen zu Partnerschaft und Sexualität.

Wenn Sie eine Frage nicht beantworten wollen, können Sie diese auch **überspringen** ohne sie zu beantworten und **zur nächsten Frage wechseln**.

Bitte beantworten Sie möglichst alle Fragen wahrheitsgemäß.

Wenn Sie die Befragung abbrechen möchten, nutzen Sie bitten den Button **„Umfrage abbrechen“**.

Survey Design (III)



Survey design (IV)

- State reactance:
 - 4 item scale ($\alpha = .70$)
 - Sample item: „The questionnaire made me angry“. Likert-Scale: 1 to 5

- Self-reported faking:
 - „How many questions did you not answer honestly?“

- Personal sensitivity
 - “How personally sensitive did you find the questions in this survey?”

Sample overview

- Effective sample: $N = 914$
- Age: $M = 26.1$ years, $SD = 6.6$
- Sex: 54.7% females ($n = 498$)
- Median response time = 9.4 minutes

Results (I): Open-ended question

- More non-meaningful answers in FA condition
 - NFA: 0.8%,
 - FA: 3.6%,
 - $r = .09^{**}$, OR = 4.62, 95% CI [1.29; 29.49]
- Respondents in the FA condition gave shorter answers
 - number of characters that had been filled in;
 - NFA: $M = 74.3$, $SD = 67.5$;
 - FA: $M = 54.2$, $SD = 56.6$;
 - $t(456.82) = 3.91$; $d = 0.31$, 95% CI [0.16; 0.47]

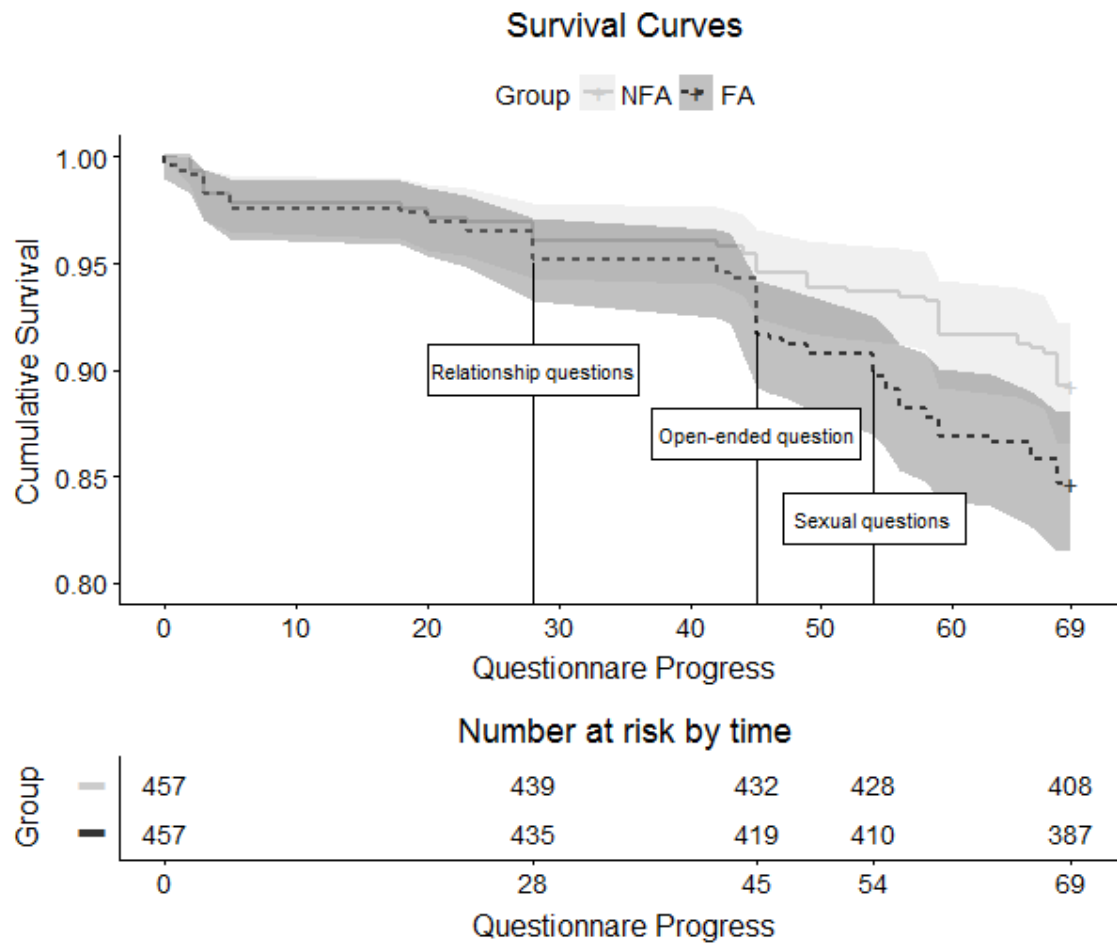
Results (II): Descriptives & intercorrelations

	<i>M</i>	<i>SD</i>	%	(1)	(2)	(3)	Alpha
(1) Condition ^a							n/a
(2) Reactance	1.77	.65		.08*			.70
(3) Dropout ^a			13.0	.07*	.22**		n/a
(4) Faking ^a			25.7	.00	.00	.01	n/a

FA significantly increases reactance of respondents and survey dropouts

Note. * $p < 0.05$, ** $p < 0.01$; ^a higher values depict male sex, FA, dropout, faking respectively

Results (III): Survival analysis



Log-Rank-Test:

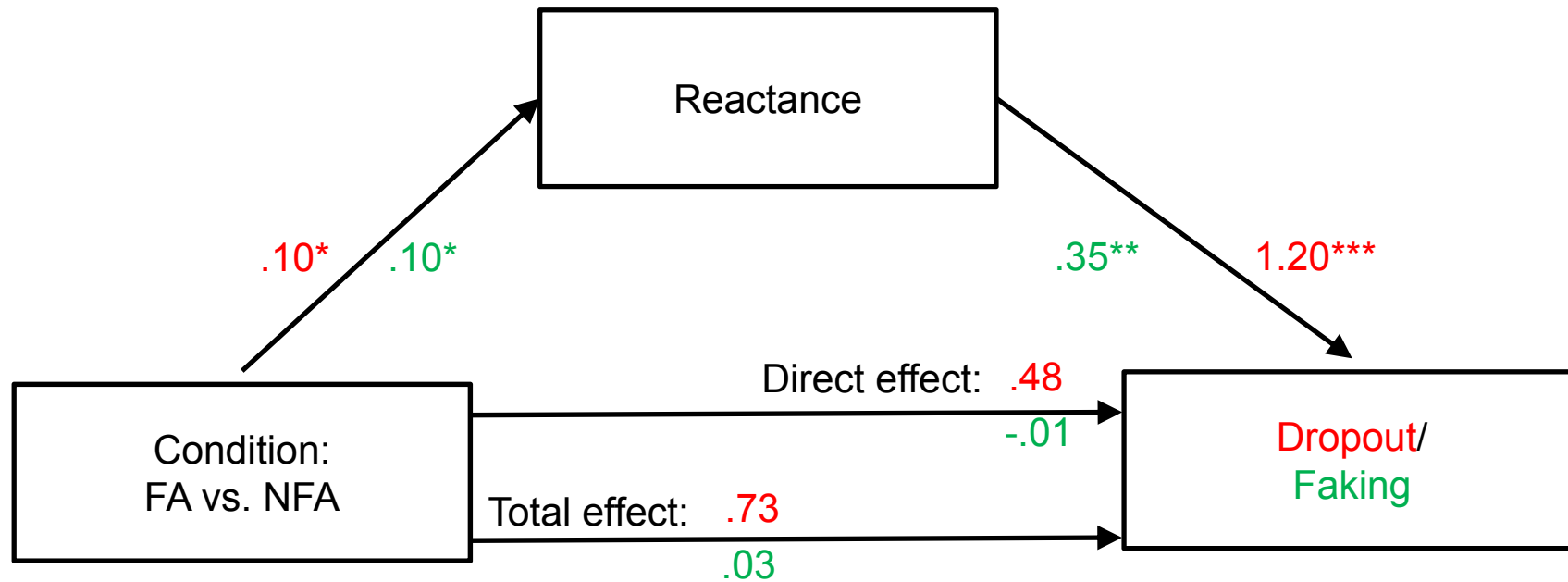
$$\chi^2=4.3, df=1, p < .05$$

Cox regression:

HR = 1.47;

95% CI [1.02; 2.11]

Results (IV): Mediation analysis



Bootstrap results (10.000 samples) for indirect effects [95 % CI]:

$.12^* [.02; .28]$
 $.04^* [.00; .09]$

*FA increases reactance of the respondents mediating the risk of a dropout 13% (OR = 1.13 *) and the risk of a fake answer 4% (OR = 1.04*)*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$; Mediation models. Coefficients of the dropout model are presented above the lines, below the line coefficients for the faking model (square parentheses: 95% confidence interval, round parentheses: OR).

Discussion

Summary & conclusion

■ **Take Home Message:**

Be careful when including forced answering in your online survey.

■ FA has negative effects on response behavior

- More and earlier dropouts

- Increased faking behavior

- Decreased quality of answers in open ended question

■ First support for postulated mediation model: reactance is underlying psychological mechanism effecting response behavior

Discussion

Limitations

- Convenience sample (student population)
- Sensible survey topic
- Relatively long Survey
- Reactance was measured after dropout



Thank you for your attention!

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