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Forced answering in online surveys: Do higher item response rates come at the expense of participation and answer quality?

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Online Research Methodology Track A6: Unit and Item Nonresponse

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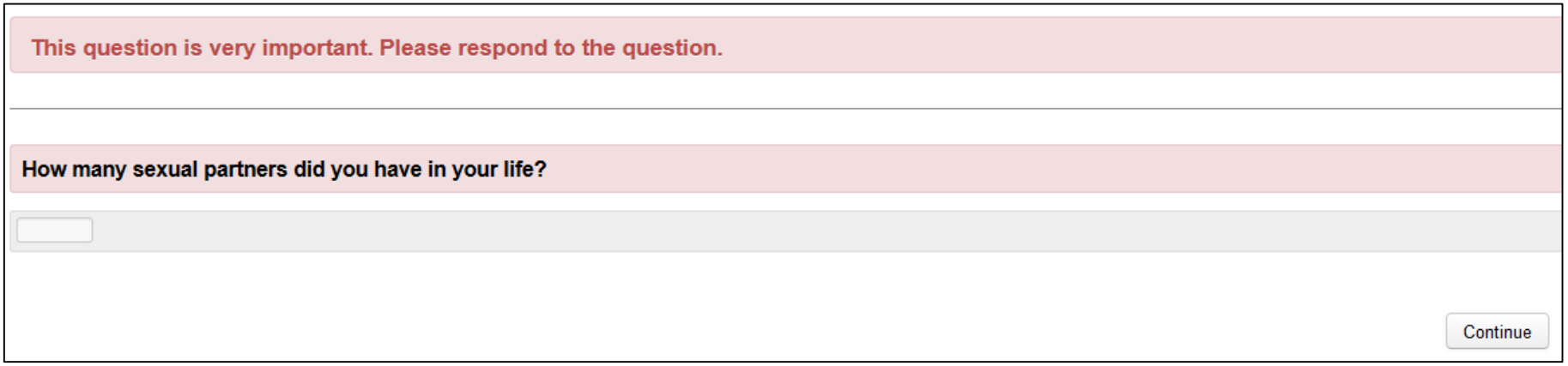
The forced answering (FA)-option

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

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



State of the art

Effects of FA on different quality parameters

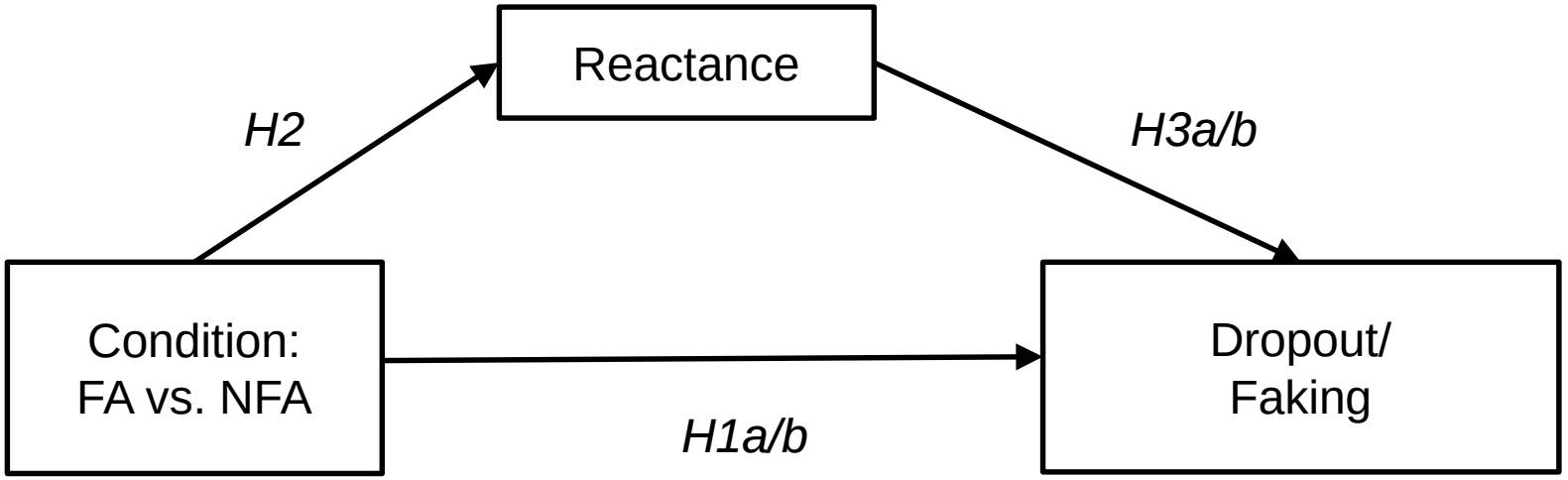
- Less item-nonresponse (Albaum et al., 2010, 2011; Roster et al., 2014)
- Inconclusive results for FA on dropouts
  - No effects on dropouts (Albaum et al., 2010, 2011; Roster et al., 2014)
  - Higher dropouts (Décieux et al., 2015a, O'Neil, Penrod & Bornstein 2003; Stieger et al. 2007)
  - Earlier 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).
- The respondent is denied the choice to let a question unanswered resulting in an internal pressure to disclose information that (s)he actually does not want to offer.
- FA could be experienced as a loss of freedom.
- This may be felt strongly especially when sensitive or personal topics are concerned.

Theoretical model



Study design

Sample overview

- Students at two German universities (contacted via e-mail)
- Effective sample: *N* = 812
- Age*: M* = 25.9 years, *SD* = 6.1
- Sex: 55% females (*n* = 448)

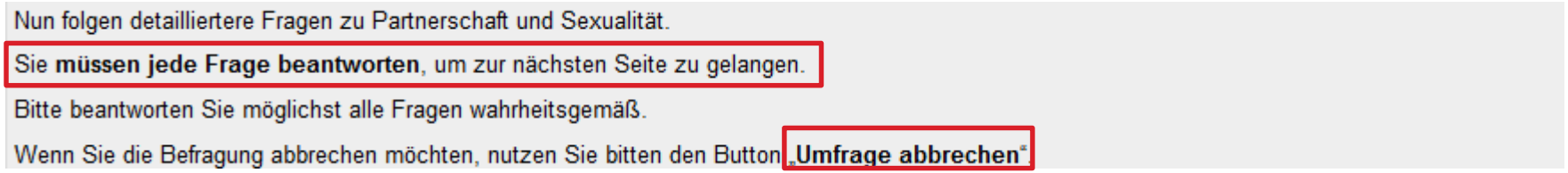
Survey design

- Randomization across two experimental conditions (NFA vs. FA)
- Cover story / survey topic: partnership and sexuality
- 70 items with different types of response formats (Likert-items, open-end questions, etc.)
- no incentives

Survey design (I)

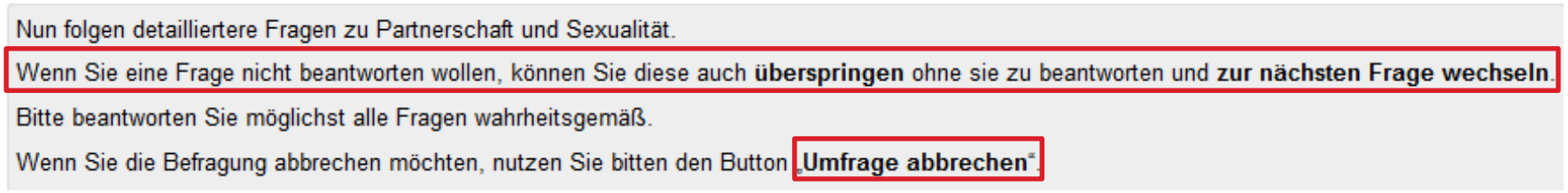
FA condition

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



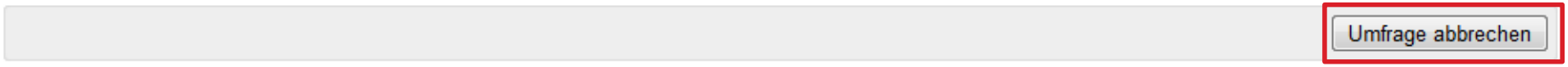
NFA condition

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



Survey design (II)

Quit Participation-Button



Wie lange leben Sie schon in dieser Partnerschaft?

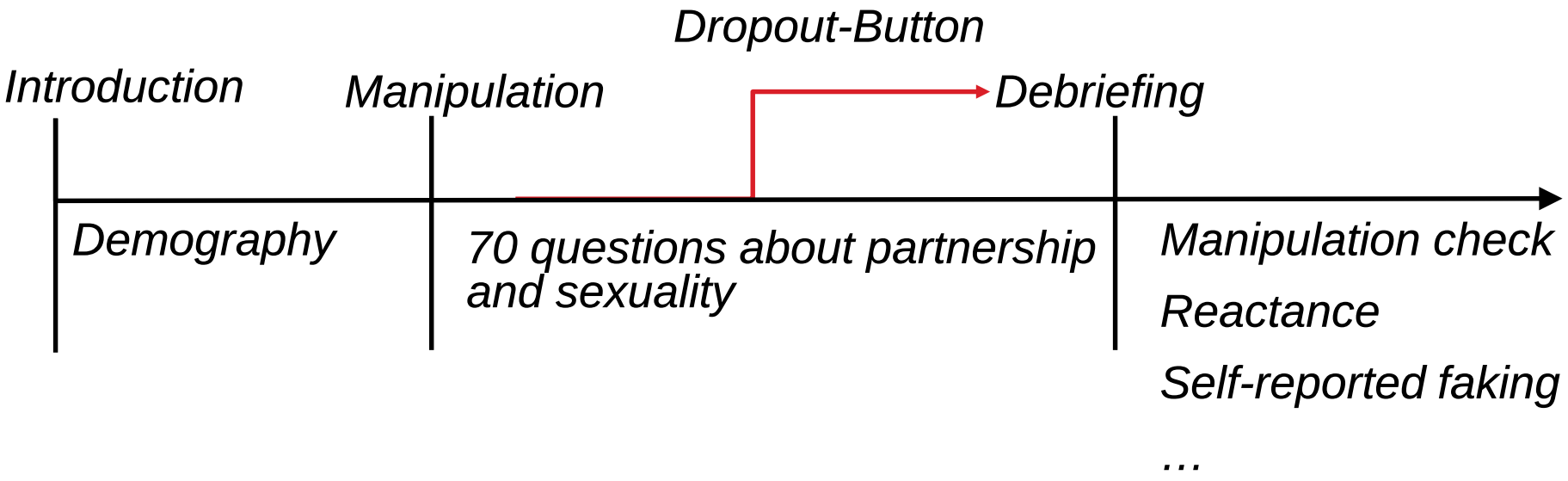
- Weniger als 1 Jahr
- 1 bis unter 2 Jahre
- 2 bis unter 5 Jahre
- 5 bis unter 10 Jahre
- 10 und mehr Jahre

Weiter

Measures

- Reactance:
  - 4 item scale (α = .70)
  - Sample item: „The questionnaire made me angry“.
  - Answer categories from 1 („Totally disagree“) to 5 („Totally agree“)
- Self-reported faking:
  - „How many questions did you not answer honestly?“
- Manipulation check

Questionnaire structure

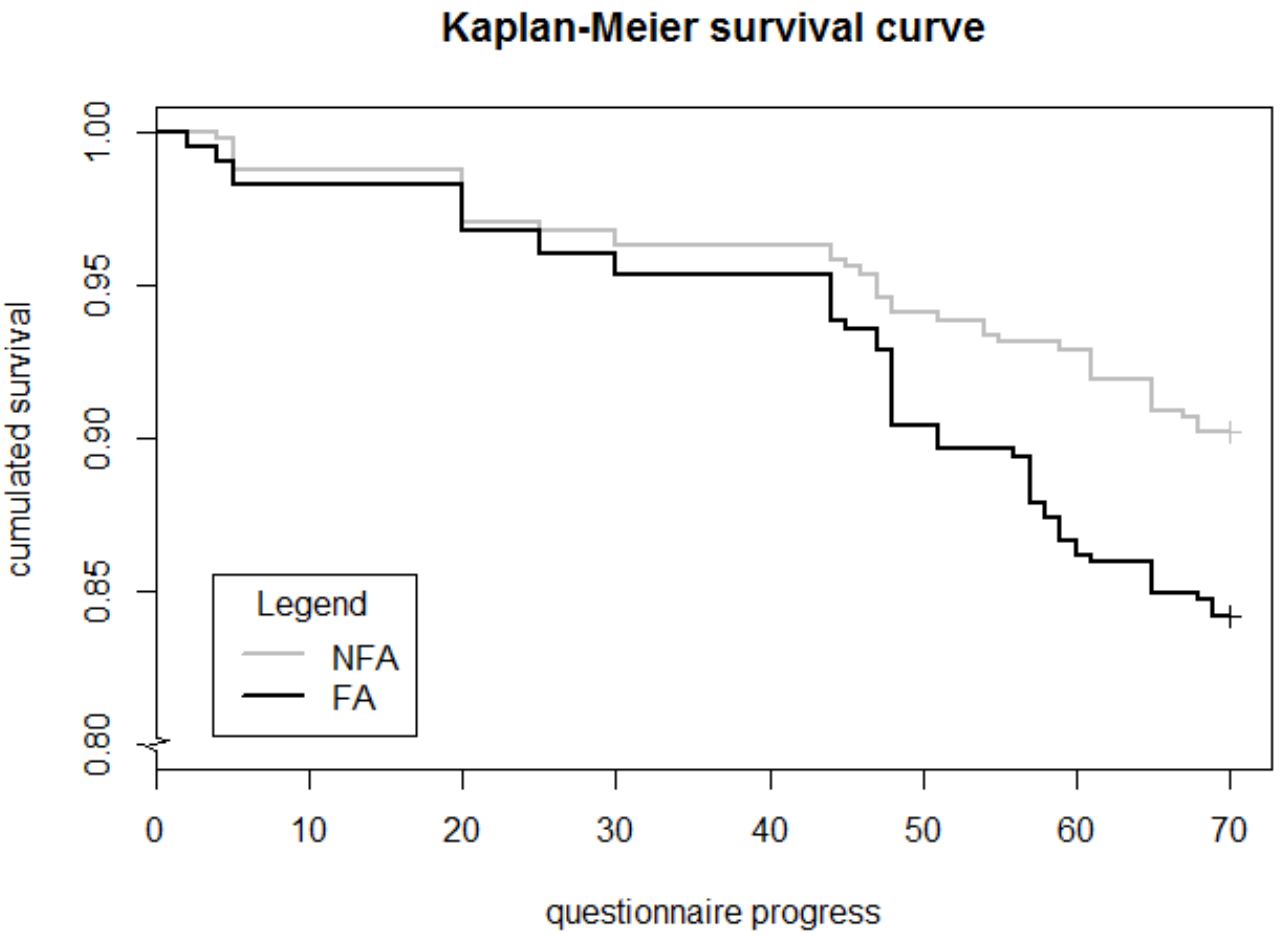


Results (I): Descriptives & intercorrelations

		M	*SD*	%	(1)	(2)	(3)	alpha
(1)	Condition[a]							n/a
(2)	Reactance	1.78	.65		.09*			.70
(3)	Dropout[a]			12.8	.09*	.23**		n/a
(4)	Faking[a]			25.6	-.01	.08*	.00	n/a

*Note. * p < 0.05, **p < 0.01;* [a] higher values depict FA, dropout, faking respectively.

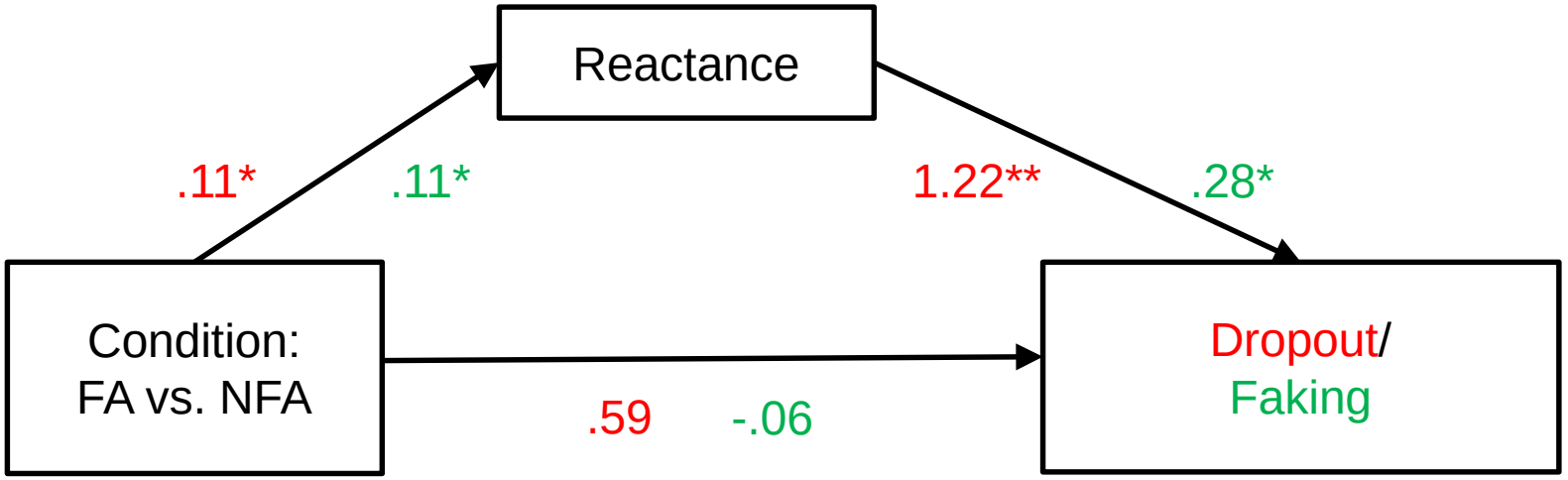
Results (II): Survival analysis



Log-Rank-Test:

χ^2=6.4, *df*=1, $p < .05$

Results (III): Mediation analysis



Bootstrap results for indirect effects (95 % CI): .14 (.03-.30)

.03 (.00-.09)

Limitations, summary & conclusion

Limitations

- Reactance was measured after dropout
- Correlational test of mediation

Summary & conclusion

- Zero-order effects are low
- First support for postulated mediation model: reactance as underlying psychological mechanism

Thank you for your attention!

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Literature

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Appendix (I)

Table 2: Mediation analysis: Effect of Condition (NFA vs. FA) on Dropout mediated through reactance

	Normal theory test				Bootstrap results for indirect effects (BCa; 95% CI)		
Path	Coefficient	SE	t / z	p	Point estimate	Lower	Upper
a	.11	.05	2.30	.02			
b	1.22	.24	4.98	.00			
Total (c)	.84	.50	1.68	.09			
Direct (c‘)	.59	.52	1.14	.26			
axb	.14	.07	2.06	.04	.14	.03	.30

Note. BCa 95% CI = bias corrected and accelerated 95 % confidence intervals.

Appendix (II)

Table 2: Mediation analysis: Effect of Condition (NFA vs. FA) on Faking mediated through reactance

	Normal theory test				Bootstrap results for indirect effects (BCa; 95% CI)		
Path	Coefficient	SE	t / z	p	Point estimate	Lower	Upper
a	.11	.05	2.16	.03			
b	.28	.13	2.10	.04			
Total (c)	-.03	.17	-.19	.85			
Direct (c‘)	-.06	.18	-.37	.71			
axb	.03	.02	1.43	.15	.03	.00	.09

Note. BCa 95% CI = bias corrected and accelerated 95 % confidence intervals.