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Chapter 8: Examining the Utility of Interviewer Observations on the Survey Response Process. Appendix 8

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Chapter 8: Examining the Utility of Interviewer Observations on the Survey Response Process

Appendix 8

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Full book reference:

Olson, K., J. D. Smyth, J. Dykema, A. L. Holbrook, F. Kreuter, B. T. West. 2020. *Interviewer Effects from a Total Survey Error Perspective*. Boca Raton: CRC Press.

Appendix 8A Additional Evaluation of Derived NSFG Classes

Figure A8A.1 shows the predicted probabilities of each response category for the interviewer observation of overall quality on the Y-axis, and the possible categories of this observation on the X-axis. This figure demonstrates the differences in the estimated probabilities of providing excellent, good, or fair/poor quality responses (per this interviewer observation) among the seven derived response quality classes, with clear differences emerging between classes 6 and 7 and the other five classes. Classes 6 and 7 have low conditional probabilities of providing data of excellent overall quality, and higher conditional probabilities of providing data of good or fair/poor quality.

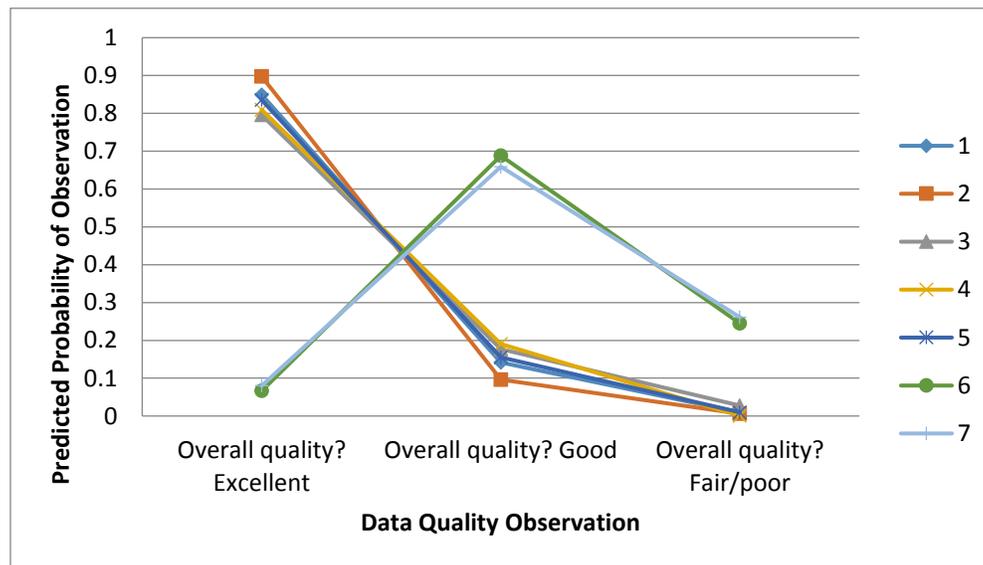


Figure A8A.1 Differences between the seven NSFG classes in terms of the overall quality of the data provided.

Figure A8A.2 uses a similar approach to show predicted probabilities of being hostile/neutral, of being upset, and of being tired, conditional on class membership. This figure shows how NSFG

respondents assigned to the last two classes (6 and 7) tended to be more hostile, tired, and upset, potentially affecting the quality of their responses.

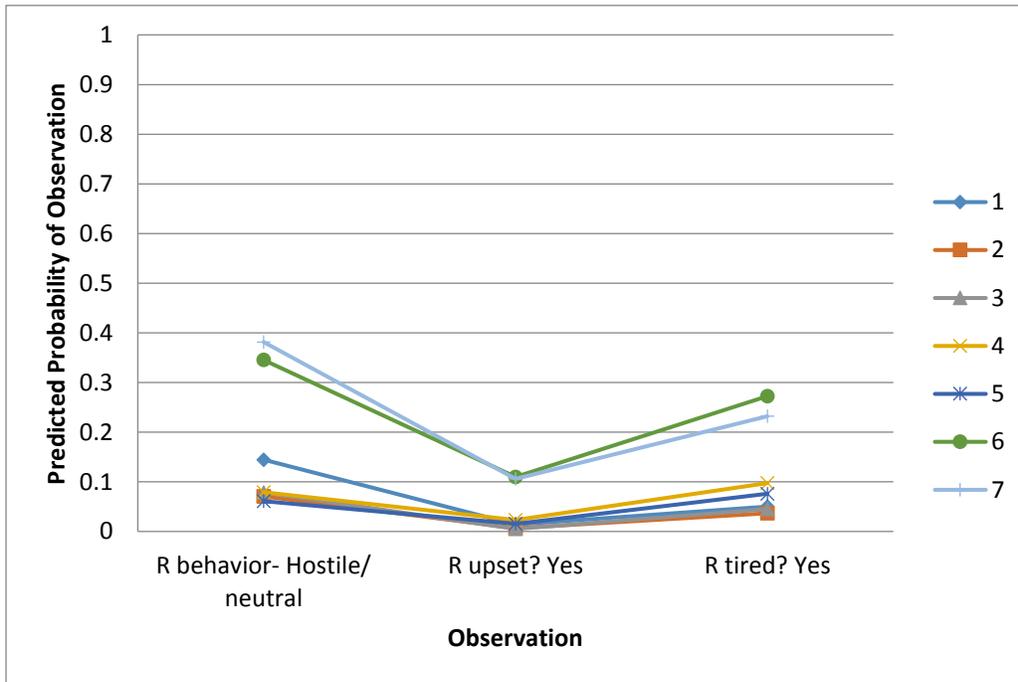


Figure A8A.2 Differences between derived response quality classes in the NSFG in terms of the predicted probabilities of hostile/neutral behavior, being upset, and being tired.

Table A8A.1 presents a comparison of the model fit statistics for the various latent class models considered for the NSFG data. These results provide support for the choice of the model including seven latent classes as providing the best fit to the observed NSFG data.

Table A8A.1 Comparisons of predicted marginal means and proportions of NSFG measures of interest between the seven derived quality classes*.

Number of classes	Log-likelihood	G-squared	AIC	BIC	CAIC	Adjusted BIC	Entropy
2	-158732	81289	81439	82013	82088	81775	0.96
3	-154451	72726	72952	73818	73931	73459	0.90
4	-152278	68381	68683	69840	69991	69360	0.90
5	-151052	65929	66307	67756	67945	67155	0.91
6	-150170	64165	64619	66359	66586	65638	0.90

7	-149366	62557	63087	65118	65383	64276	0.89
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Table A8A.2 presents comparisons of means and proportions for the NSFG dependent variables across the seven derived latent response quality classes, and Table A8A.3 presents the pairwise correlations of the dependent variables analyzed in the ESS.

Table A8A.2. Comparisons of predicted marginal means and proportions for NSFG indicators of data quality across the seven derived quality classes*.

NSFG Variable	Class 1 (High)	Class 2 (High)	Class 3 (Med.)	Class 4 (Med.)	Class 5 (Med.)	Class 6 (Low)	Class 7 (Low)
IW Length, Minutes	62.44 (4, 5, 6)	57.06 (4, 5, 6, 7)	59.76 (4, 5, 6, 7)	78.34 (1, 2, 3)	72.02 (1, 2, 3)	75.97 (1, 2, 3)	70.40 (2, 3)
# of Parts. Incon. (F)	0.10 (7)	0.12 (7)	0.13	0.11 (7)	0.11 (7)	0.14	0.17 (1, 2, 4, 5)
# of Births Incon. (F)	0.09 (4, 5, 6, 7)	0.12 (5, 6)	0.13	0.16 (1)	0.20 (1, 2)	0.19 (1, 2)	0.16 (1)
# of Parts. Incon. (M)	0.12 (6, 7)	0.14 (6)	0.17	0.12 (6)	0.15	0.22 (1, 2, 4)	0.20 (1)
# of Pregs. Incon. (M)	0.21 (4, 5)	0.21 (4, 5)	0.23	0.27 (1, 2)	0.27 (1, 2)	0.24	0.21

* Note: numbers in parentheses indicate other classes from which a particular class is significantly different at the $0.05/21=0.002$ level.

Table A8A.3 Pairwise correlations of the dependent variables measured in the ESS.

ESS Variable	Non-Differentiation	Extreme Responses	Inconsistency	Acquiescence	Item Nonresponse Rate	Seconds per Question
Non-Differentiation	1.00					
Extreme Responses	0.06	1.00				
Inconsistency	0.10	0.28	1.00			
Acquiescence	0.11	0.17	0.11	1.00		
Item Nonresponse Rate	0.16	0.04	0.01	-0.28	1.00	
Seconds per Question	-0.01	0.02	-0.01	-0.01	0.04	1.00

Appendix 8B Additional Details on ESS Items

The specific wording of the five interviewer observations in the ESS (including response options) appears below.

J1. Did the respondent ask for clarification on any questions?

Never 1
Almost never 2
Now and then 3
Often 4
Very often 5
Don't know 8

J2. Did you feel that the respondent was reluctant to answer any questions?

Never 1
Almost never 2
Now and then 3
Often 4
Very often 5
Don't know 8

J3. Did you feel that the respondent tried to answer the questions to the best of his or her ability?

Very often 1
Often 2
Now and then 3
Almost never 4
Never 5
Don't know 8

J4. Overall, did you feel that the respondent understood the questions?

Very often 1
Often 2
Now and then 3
Almost never 4
Never 5
Don't know 8

J5. Was anyone else present who interfered with the interview?

Yes 1
No 0

Next, we clarify the specific ESS items used for the measurement of each of our dependent variables.

Non-differentiation

For these items, response options included: 1 Agree strongly, 2 Agree, 3 Neither agree nor disagree, 4 Disagree, 5 Disagree strongly, 7 Refusal, 8 Don't know, and 9 No answer. We note that there are a minimum of four items in each battery.

gincdif - Government should reduce differences in income levels

freehms - Gays and lesbians free to live life as they wish

prtyban - Ban political parties that wish overthrow democracy

sensenv - Modern science can be relied on to solve environmental problems

-

plcrgwr - Police have the same sense of right and wrong as me

plcipvl - Police stand up for values that are important to people like me

gsupplc - I generally support how the police act

plcplrt - Decisions and actions of police unduly influenced by political pressure

-

ctprpwr - Courts protect rich and powerful over ordinary people

hrshsnta - People who break the law much harsher sentences

dbctvrd - Everyone's duty to back the court's final verdict

lwstrob - All laws should be strictly obeyed

rgbrklw - Doing the right thing sometimes means breaking the law

ctinplt - The courts' decisions are unduly influenced by political pressure

-

For these batteries of items on trust and satisfaction, discrete response options ranged from 0 (low) to 10 (high).

trstlgl - Trust in the legal system ESS5 Codebook 13 of 688

trstpplc - Trust in the police

trstpplt - Trust in politicians

trstep - Trust in the European Parliament

trstprt - Trust in political parties

trstprl - Trust in country's parliament

-

stflife - How satisfied with life as a whole ·

stfecoc - How satisfied with present state of economy in country ·

stfgov - How satisfied with the national government ·

stfdem - How satisfied with the way democracy works in country

Extreme answers

We used responses on the following items (defined above) to compute our measure of extreme answers: gincdif, freehms, prtyban, sensenv, plcrgwr, plcipvl, gsupplc, plciplt, ctprpwr, hrshsnta, dbctvrd, lwstrob, rgrklw, and ctinplt.

Inconsistency

For these items used to measure inconsistent reporting, response options included: 1 Agree strongly, 2 Agree, 3 Neither agree nor disagree, 4 Disagree, 5 Disagree strongly, 7 Refusal, 8 Don't know, and 9 No answer.

lwstrob - All laws should be strictly obeyed

Rgbrklw - Doing the right thing sometimes means breaking the law

Acquiescence

We used responses on the following items (defined above) to compute our measure of extreme answers: gincdif, freehms, prtyban, scsensv, plcrgwr, plcipvl, gsupplc, plciplt, ctpwpwr, hrshsnta, dbctvrd, lwstrob, rgbrklw, and ctinplt. In addition, we used the following items, each with response options that included: 1 Agree strongly, 2 Agree, 3 Neither agree nor disagree, 4 Disagree, 5 Disagree strongly, 7 Refusal, 8 Don't know, and 9 No answer.

wmcpwrk - Women should be prepared to cut down on paid work for sake of family

mnrjtjb - Men should have more right to job than women when jobs are scarce

gvprppv - Government do more to prevent people falling into poverty

wkhrd - Current job: Job requires work very hard

nevdnjb - Current job: Never enough time to get everything done in job

optad - Current job: Good opportunities for advancement

pdaprpa - Considering efforts and achievements in job I feel I get paid appropriately

wkjbndm - I would enjoy working in current job even if did not need money

pdjbndm - I would enjoy having paid job even if did not need money