Appendix K

Imputation of the Planned Missing Items in the NSFB Main Respondent Survey

A single imputation using the Stata ICE program (Royston 2005) was used to impute responses for the main respondent on the items of the following planned missing scales:

V1: Importance of Parenthood (Q2a-Q2e, excluding Q2b)
V2: Life Satisfaction (Q8a-Q8d)
V3: Medical Locus Scale (Q8e-Q8j)
V4: Treatment Series (Q36b-Q36o)
V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h)
V6: Positive Attitude Series (Q39d, Q39h)
V7: Attitudes About Getting Pregnant Series (Q43a-Q43d, deleted Q43b)
V8: Attitudes About Possibility of Getting Pregnant (Passive) Series (Q44a, Q44c)
V10: Childlessness Social Distress Series (Q45a-Q45e)
V11: Feelings About Being Childless Series (Negative) (Q46a-Q46i, excluding Q46d, Q46h)
V12: Feelings About Being Childless Series (Positive) (Q46d, Q46h)
V13: Social Support Scale (Q48a-Q48d)
V14: CESD Scale (Q54a-Q54j)
V15: Medical Science and Pregnancy Scale (Q60a-Q60c)
V16: Stigma Scale (Q60d-Q60f)
V17: Ethics Scale (Q61a-Q61f)
V18: Ethics of Multiple Pregnancy Series (Q62, Q62a)
V19: Self Esteem Scale (Q63a-Q63c)
V20: Religiosity Scale (Q79-Q82)
V21: Economic Hardship Scale (Q87a-Q87c)

A total of 4,712 respondents were first divided into five mutually exclusive groups based the eligibility criteria for having been asked certain scales or not. The five groups are:

Group 1: Not eligible for V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h), not eligible for V6: Positive Attitude Series (Q39d, Q39h) and not eligible for V10: Childlessness Social Distress Series (Q45a-Q45e). Group size = 912.

Group 2: Not eligible for V4: Treatment Series (Q36b-Q36o), eligible for V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h), eligible for V6: Positive Attitude Series (Q39d, Q39h), and not eligible for V10: Childlessness Social Distress Series (Q45a-Q45e). Group size = 1,669

Group 3: Eligible for V4: Treatment Series (Q36b-Q36o), eligible for V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h), eligible for V6: Positive Attitude Series (Q39d, Q39h), and not eligible for V10: Childlessness Social Distress Series (Q45a-Q45e). Group size = 1,118.
Group 4: Not eligible for V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h), not eligible for V6: Positive Attitude Series (Q39d, Q39h), and eligible for V10: Childlessness Social Distress Series (Q45a-Q45e). Group size = 648.

Group 5: Eligible for V5: Depression Series (Q39a-Q39i, excluding Q39d, Q39h), eligible for V6: Positive Attitude Series (Q39d, Q39h), and eligible for V10: Childlessness Social Distress Series (Q45a-Q45e). Group size = 365.

A separate imputation model was constructed for each group. Each model had three sets of variables: (1) auxiliary variables that were questions asked of everyone, included in the imputation for each group (2) specific planned missing scale item, some of which are group specific (3) group specific variables that are highly correlated with the scale items unique to that group. None of the variables were transformed and no interactions are included in the imputation model.

The model for Group 1 included the following variables: ci divorced widowed separated nevermarried lesbianpart cohabiting scr2 scr3 q1a q1c q1d q2a q2c q2d q2e q2f q2g q2k q2l employedPT unemployed retired inschool keepphouse disabled q5a agep race_2black race_3asian race_4amerindian_aknative race_5nativehi_pacisland race_6other race_7DK race_8REF race_9hisip q8a q8b q8c q8d q8e q8f q8g q8h q8i q8j q10 q12 q13 q14a q23 q24 q26 q26a q27 q36b q36c q36d q36f q36g q36h q36i q36j q36k q36l q36m q36m3 q36o q40 q43a q43c q43d q44a q44c q44d q46h q48a q48b q48c q48d q50 q54a q54b q54c q54d q54f q54g q54h q54i q54j q55 q57 q60a q60b q60c q60d q60e q60f q61a q61b q61c q61d q61e q61f q62 q62a q63a q63b q63c q64 q67 q67a q67b q67c q67d q67e q69 q69a q72 q73 q74 q76 q79 q80 q81 q82 catholic jewish islamic else84 none84 otherchristian q85 q87a q87b q87c q88 bmb biokid miscarroy hhpeople Midwest south west ppci pddivorced pwidowed pseparated pnevermarried plesbianpart pcohabiting pscr1a pq1a pq2a pq2c pq2d ppq2e paemployedPT paunemployed paretired paimschool pakeephouse padisabled paother prace_2 prace_3 prace_4 prace_5 prace_6 prace_7 prace_8 prace_9 pq8a pq8b pq8c pq8d pq8e pq8f pq8g pq8h pq8i pq8j pq10 pq22 pq34a pq34b pq34c pq36b pq36c pq36d pq36f pq36g pq36h pq36i pq36j pq36k pq36l pq36m pq36m3 pq36o pq43a pq43c pq43d pq44a pq44c pq45a pq45b pq45c pq45d pq45e pq46a pq46b pq46c pq46e pq46g pq46i pq46d pq46h pq48a pq48b pq48c pq48d pq54a pq54b pq54c pq54d pq54e pq54f pq54g pq54h pq54i pq54j pq60a pq60b pq60c pq60d pq60e pq60f pq61a pq61b pq61c pq61d pq61e pq61f pq62 pq62a pq63a pq63b pq63c pq79 pq80 pq81 pq82 pcatholic pjewish pislamic pelse84 pnone84 potherchristian

The model for Group 2 included the following variables: ci ice ci divorced widowed separated nevermarried lesbianpart cohabiting scr2 scr3 q1a q1c q1d q2a q2c q2d q2e q2f q2g q2k q2l employedPT unemployed retired inschool keepphouse disabled q5a agep race_2black race_3asian race_4amerindian_aknative race_5nativehi_pacisland race_6other race_9hisip q8a q8b q8c q8d q8e q8f q8g q8h q8i q8j q10 q12 q13 q14a q23 q24 q26 q26a q27 q36b q36c q36d q36f q36g q36h q36i q36j q36k q36l q36m q36m3 q36o q40 q43a q43c q43d q44a q44c q44d q46h q48a q48b q48c q48d q50 q54a q54b q54c q54d q54f q54g q54h q54i q54j q55 q57 q60a q60b q60c q60d q60e q60f q61a q61b q61c q61d q61e q61f q62 q62a q63a q63b q63c q64 q67 q67a q67b q67c q67d q67e q69 q69a q72 q73 q74 q76 q79 q80 q81 q82 catholic jewish Islamic
The models for Groups 3-5 were similar to the models above, with the primary difference being the scale items being imputed based on the group eligibility criteria.

All imputations were conducted under the fully normal model assumption and therefore required rounding to integer values to match the original metric of the scale items. Rather than rounding based on a .5 method, a method based on Yucel, He and Zaslavsky’s (2008) design to round imputed values to match the distribution of the known values was employed.

Imputed variables are included in the final dataset listed under original name of the variable with an “i” at the end of the name. For example, the variable $Q45a$ is the original variable including the missing data. The variable $Q45ai$ is the imputed and rounded variable. To determine which cases have imputed values, flag variables were created with the prefix “flag” attached to the original variable name. For example, the variable $flagQ45a$ is a dummy variable (1=imputed) indicating whether or not the values for each respondent on $Q45ai$ is imputed or not.

References:
