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# The Supporting Healthy Marriage Evaluation: Early Impacts on Low-Income Families, Technical Supplement 

OPRE Report 2012-27
November 2012

# Authors: JoAnn Hsueh, Desiree Principe Alderson, Erika Lundquist, Charles Michalopoulos, Daniel Gubits, and David Fein with Noemi Altman, Kristen Faucetta, Jorgen Harris, Amy Lowenstein, Meghan McCormick, Lyndsay McDonough, and Amy Taub 

Submitted to: Nancye Campbell, Project Officer<br>Office of Planning, Research and Evaluation<br>Administration for Children and Families<br>U.S. Department of Health and Human Services<br>Project Directors: JoAnn Hsueh and Virginia Knox MDRC<br>16 East 34th Street<br>New York, NY 10016

Contract Number: HHS-233-03-0034
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Suggested citation: Hsueh, JoAnn, Desiree Principe Alderson, Erika Lundquist, Charles Michalopoulos, Daniel Gubits, and David Fein (2012). The Supporting Healthy Marriage Evaluation: Early Impacts on Low-Income Families, Technical Supplement. OPRE Report 2012-27. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

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MDRC and its subcontractors - Abt Associates, Child Trends, Optimal Solutions Group, and Public Strategies, Inc. - are conducting the Supporting Healthy Marriage evaluation under a contract with the Administration for Children and Families (ACF) in the U.S. Department of Health and Human Services (HHS), funded by HHS under a competitive award, Contract No. HHS-223-03-0034. The ACF project officer is Nancye Campbell.

The findings and conclusions in this report do not necessarily represent the official positions or policies of HHS.

Dissemination of MDRC publications is supported by the following funders that help finance MDRC's public policy outreach and expanding efforts to communicate the results and implications of our work to policymakers, practitioners, and others: The Annie E. Casey Foundation, The George Gund Foundation, Sandler Foundation, and The Starr Foundation.

In addition, earnings from the MDRC Endowment help sustain our dissemination efforts. Contributors to the MDRC Endowment include Alcoa Foundation, The Ambrose Monell Foundation, Anheuser-Busch Foundation, Bristol-Myers Squibb Foundation, Charles Stewart Mott Foundation, Ford Foundation, The George Gund Foundation, The Grable Foundation, The Lizabeth and Frank Newman Charitable Foundation, The New York Times Company Foundation, Jan Nicholson, Paul H. O'Neill Charitable Foundation, John S. Reed, Sandler Foundation, and The Stupski Family Fund, as well as other individual contributors.

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## Overview

The Supporting Healthy Marriage (SHM) evaluation was launched in 2003 to test the effectiveness of a skills-based relationship education program designed to help low-income married couples strengthen their relationships and, in turn, to support more stable and more nurturing home environments and more positive outcomes for parents and their children. The evaluation is led by MDRC, in collaboration with Abt Associates and other partners, and is sponsored by the U.S. Department of Health and Human Services.

The SHM program is a voluntary, yearlong, relationship and marriage education program for lowincome, married couples who have children or are expecting a child. The program provides group workshops based on structured curricula; supplemental activities to build on workshop themes; and family support services to address participation barriers, connect families with other services, and reinforce curricular themes. The study's rigorous random assignment design compares outcomes for families who are offered SHM's services with outcomes for a similar group of families who are not offered SHM's services but can access other services.

This Technical Supplement accompanies the evaluation's 12-month impact report, which presents the estimated impacts of the SHM program on outcomes that were the short-term targets of the intervention. ${ }^{1}$ This supplement provides additional details about the study's research design, data sources, methods used to construct the outcome and subgroup measures, and analytic approach for the 12 -month impact analysis. It also presents a series of sensitivity and robustness tests of the impact estimates presented in the 12 -month impact report. Lastly, it presents the full set of impact results generated when the data are combined across local SHM programs and when the impact results are estimated separately by local SHM program or by subgroup.

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## Acknowledgments

The Supporting Healthy Marriage (SHM) evaluation is made possible by the Administration for Children and Families (ACF) in the U.S. Department of Health and Human Services. As the SHM program officer at ACF, Nancye Campbell provided wise guidance at every step of the report and to the project as a whole. The project has also benefited from the thoughtful insights of Naomi Goldstein, Mark Fucello, Seth Chamberlain, Susan Jekielek, Brendan Kelly, and Lauren Supplee.

We are grateful to the program directors and staff at the eight local SHM programs that participated in this evaluation. They are working tirelessly to deliver high-quality services that meet the needs of their communities and to recruit and retain couples in program services, and they generously gave their time to help MDRC and our research partners collect the data needed for the evaluation.

Many thanks go to our team of dedicated research partners, including Larry Orr of Abt Associates as co-principal investigator in the early stages of the project; Kris Moore, Marty Zaslow, and colleagues at ChildTrends for their roles in designing the baseline and follow-up data collection instruments; Jan Melby from the Institute for Social and Behavioral Research at Iowa State University for training, and Hannah Williamson and Kimberley Hickman for overseeing, the coders of the videotaped observations of couple interactions at the University of California-Los Angeles (UCLA); and, lastly, Donna DeMarco, Brenda Rodriguez, Davyd Roskilly, Ricki Jarmon, and Brianna Roche from Abt SRBI, a subsidiary of Abt Associates, for their tireless efforts collecting the data used in this report.

We have also benefited from the involvement of many noted experts in the field of marital and family process research, program evaluation, and social policy. First, and foremost, it is with much gratitude that we thank Philip Cowan, Carolyn Pape Cowan, and Thomas Bradbury for being sage advisers who lent us their expertise, support, encouragement, guidance, and insights throughout the many phases of this project. Our work has been enriched in innumerable ways as a result of their involvement. We also express great thanks to Thomas Bradbury for leading the coding lab of the videotaped observational data at UCLA. We are grateful to Paul Amato and Benjamin Karney for their helpful insights throughout the project, including during the development of the program model, and for their consultation and review of survey instruments and the 12-month analysis plan. We thank Chalandra Bryant, Rolando Diaz-Loving, Frank Furstenburg, and Charles Negy for providing significant guidance and feedback on the design of the survey instruments.

At MDRC, our thanks go to Virginia Knox, Richard Hendra, and John Hutchins, who provided helpful input and review of the report; Jo Anna Hunter for acting as our liaison with

Abt SRBI's survey team; Electra Small for playing a key role in overseeing the SHM data collection, storage, and processing; Lisa Gennetian, a former colleague at MDRC, for leading the design of the baseline instruments; Alla Chaplygina, Galina Farberova, Joel Gordon, Shirley James, and Ushapriya Narasimhan for developing systems to conduct random assignment and to store the data used in this report; Isabelle Bollendorf and Adam Greeney for their support in processing and checking the analysis for the report; Jennifer Garcia for coordinating the production of the report; Suzanne Finkel, Casey Stein, and Alexander Vazquez for pitching in to help with production tasks; Margaret Bald for acting as our publications liaison; Robert Weber for editing the report; and David Sobel for preparing it for publication.

Finally, we are deeply grateful to the couples and families in the study sample. Whether participating in the SHM program or as members of the control group, these families went through random assignment, participated in multiple waves of data collection, and granted us access to confidential information about themselves as part of the research effort. Without these families, this research would not have been possible.

Appendix A

# Sample Intake Period and Number of Couples Randomly Assigned, by Local SHM Program 

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## The Supporting Healthy Marriage Evaluation

## Appendix Table A. 1

## Sample Intake Period and Number of Couples Randomly Assigned, by Local SHM Program

| Program Location | Sample Intake Period | Program Group | Control Group | Total Research Sample Size |
| :--- | :--- | ---: | ---: | ---: |
| Bronx | Mar 2008 to Dec 2009 | 399 | 400 | 799 |
| Oklahoma City | Feb 2007 to Mar 2009 | 497 | 504 | 1,001 |
| Orlando | Jan 2008 to Oct 2009 | 401 | 400 | 801 |
| Pennsylvania | Apr 2008 to Dec 2009 | 337 | 340 | 677 |
| Seattle | May 2008 to Dec 2009 | 337 | 341 | 678 |
| Shoreline $^{\text {b }}$ | Mar 2008 to Dec 2009 | 390 | 392 | 782 |
| Texas $^{\text {c }}$ | Oct 2007 to Apr 2009 | 398 | 402 | 800 |
| Wichita $^{\text {Oct 2007 to Dec 2009 }}$ | 379 | 381 | 760 |  |
| Sample size (all programs) |  |  | 3,138 | 3,160 |

SOURCE: MDRC calculations based on the SHM management information system (MIS data).
NOTES: ${ }^{\text {a }}$ The Pennsylvania program offered services in Bethlehem and Reading. Intake in Bethlehem started in June 2008 and ended in July 2009. Intake in Reading started in April 2008 and ended in December 2009.
${ }^{\mathrm{b}}$ The Shoreline program was located in a suburb of Seattle.
${ }^{\text {cTThe Texas program offered services in El Paso and San Antonio. Intake in both locations started in }}$ October 2007. Intake ended in El Paso in April 2009 and ended in San Antonio in February 2009.

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Appendix B

## Data Sources Used in This Report

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Appendix B summarizes the rationale and procedures used to collect baseline and 12-month follow-up data for the Supporting Healthy Marriage (SHM) evaluation. The data collection activities consisted of three components: (1) a set of baseline information forms, administered to all adult research participants in person at the time of study entry; (2) a 12-month follow-up survey, administered to adult participants either over the telephone or in person; and (3) an observational study, in which a subset of families in the SHM evaluation participated in videotaped couple interactions and parent-child interactions.

## Baseline Data Collection Activities

When enrolling in the SHM study, and before being randomly assigned to the program group or the control group, all study participants completed a number of baseline data collection activities. The baseline data were collected for a variety of purposes, including assessment of eligibility for study participation and monitoring random assignment. The data were also used to describe the population being served, to define and conduct analyses of key subgroups, to check for response bias, to increase the precision of estimated impacts, and to better understand the mechanisms underlying intervention impacts.

## Baseline Data Collection Components and Procedures

The baseline data consist of five components, described below: an eligibility form, a baseline information form, a self-administered questionnaire, a child information form, and a contact information form. ${ }^{1}$

Eligibility Form. Program staff completed the eligibility form for each spouse who volunteered for the SHM evaluation. Elements of this eligibility checklist included marital status, presence of children in the household, familiarity with a language in which SHM programs were offered, and a screener for domestic violence (administered in private to women only).

Baseline Information Form. Staff administered the baseline information form to each spouse and inquired about basic demographic and socioeconomic information, such as race/ethnicity, education, employment and income, length of U.S. residency, household composition, relationship to children, and relationship history.

[^1]Self-Administered Questionnaire. Study participants were asked to complete a questionnaire in private because many of the questions addressed the respondents' interpersonal relationship with their spouse. The self-administered questionnaire included questions pertaining to acute and chronic stressors, social support, religiosity, mental health, substance abuse, physical health, relationship quality (emotional intimacy, interaction, commitment to the couple, commitment to children, communication, conflict, violence, fidelity, and global ratings of marital happiness), attitudes toward marriage and shared values, prior participation in marriage education programs, family structure of family of origin, and abuse and neglect during childhood.

Child Information Form. One child information form was completed for each couple. On this form, data were collected for each child under age 18 living with the couple at least half the time, including basic demographic information about each child, the presence of any conditions demanding extra attention for a particular child (such as physical disabilities), and full- or part-time residential status of the child in the couple's home.

Contact Information Form. Finally, each spouse was asked to complete a contact information sheet to help ensure that they could be located during the follow-up period.

## 12-Month Follow-Up Data Collection Activities

To assess the short-term impacts of the SHM program on couples and their families approximately 12 months after couples applied for the program, two types of data were collected from both the program group and the control group. First, all adult study participants were asked to complete a 12-month follow-up survey, during which they reported on a host of items concerning marital relationship and child well-being, participation in marriage education services, parenting outcomes, and employment and economic well-being. Second, a subset of families was also selected across both research groups to participate in a series of videotaped observations of couple, coparenting, and parent-child interactions at the 12-month follow-up.

Collecting both self-reported measures and independent observations of couple and family interactions enhances the extent to which the constructs of interest are measured in the SHM evaluation. This is because each of the data sources has limitations but nonetheless can provide a different lens through which to view the lives of couples and families participating in the study and how the SHM program might influence the quality of their relationships.

On the one hand, self-reported data illuminate the nature of couples' and families' relationships and functioning across different contexts, situations, and time, and they capture how study participants themselves view their marital and family interactions. These facets of marital and family processes are not easily captured by other modes of data collection, and they have

## Box B. 1 <br> Marriage Education Curricula Used in Local SHM Programs

Four curricula were used by local SHM programs:*
Within Our Reach (adapted from the Prevention and Relationship Enhancement Program, or PREP) is the curriculum used by the SHM programs in Pennsylvania, Texas, and Wichita. See Stanley and Markman (2008).

For Our Future, For Our Family (adapted from Practical Application of Intimate Relationship Skills, or PAIRS) is the curriculum used by the SHM program in Orlando. See Gordon, DeMaria, Haggerty, and Hayes (2007).
Loving Couples, Loving Children (adapted from Bringing Baby Home) is the curriculum used in the Bronx and Shoreline SHM programs. See Loving Couples Loving Children, Inc. (2009).

Becoming Parents Program (based on PREP and adapted from an earlier version of Becoming Parents) is the curriculum used by SHM providers in Oklahoma City and Seattle. See Jordan and Frei (2007).

NOTE: "For information on how curricula were selected and adapted, see Knox and Fein (2009).
been shown to be important predictors of longer-term marital stability, distress, and happiness. ${ }^{2}$ A potential shortcoming of this measurement approach, however, is that self-reported measures of marital and family functioning can be influenced by the reporters' current well-being, beliefs, and attitudes.

On the other hand, independent observations of couple and family interactions can inform how couples and families integrate the lessons learned from the SHM curricula into their interactions with each other. (See Box B.1.) These independent assessments may also less likely than self-reports to be influenced by family members' current state of well-being, beliefs, and attitudes. A potential shortcoming of this measurement approach, however, is that couples and family members are typically observed for a brief time, and the setup for the videotaped interactions can be somewhat unnatural. As a result, the data may not capture the full range of behaviors and interactions that couples and family members usually exhibit in their everyday lives.

Thus, having both self-reported and observational data of couple and family functioning may result in more complete information about the nature and quality of marital and family relationships across a variety of circumstances and contexts and over time. In the following

[^2]sections, this appendix provides additional details about the procedures used to collect outcome measures in the impact analysis at the 12 -month follow-up point. Because large-scale evaluation research more often collects survey data than videotaped observations of couple and family interactions, aspects of collecting observational data are discussed in greater detail.

## Overview of the 12-Month Follow-Up Survey Interview

Approximately one year after enrolling in SHM, all adult study participants were contacted by telephone by a professionally trained interviewer from Abt SRBI and were asked to complete the 12 -month follow-up survey. (Appendix K presents the survey instrument.) This 50-minute survey was designed to collect information about the short-term impacts of the SHM program and to determine whether program group members received higher amounts of marriage education and related services than control group members received. Appendix Table B. 1 shows the final response rates for the 12-month follow-up survey.

Measures included on the survey were prioritized based on their relevance to the SHM intervention and study population. To the extent possible, measures were drawn from national data sets and experimental evaluations, and they had been tested and validated in prior research with low-income and racially and ethnically diverse populations. Measures were reviewed by academic experts in the field of marital and family process research, who offered intensive consultation during the development of the SHM survey. A series of one-on-one interviews was also conducted with low-income and racially and ethnically diverse couples drawn from Oklahoma, Texas, and Washington, D.C. Respondents participating in these interviews were asked to provide detailed information about their interpretation of each of the questions. This information was subsequently used to refine the survey measures and to understand the extent to which the selected items were culturally relevant and accurately described the intended constructs of interest.

The survey questions were designed to measure outcomes that were hypothesized to be related either to the direct objectives of the SHM intervention (such as marital relationship and child well-being) or to the mediators of those relationships (such as participation in marriage education services, parenting outcomes, and employment and economic well-being). ${ }^{3}$ Appendix Figure B. 1 shows these outcomes within the SHM program model and theory of change.

When answering survey questions about parenting and child well-being, respondents were asked to report on a focal child. For each couple, a child under age 14 who was living at home at study entry (which could include an unborn child) was selected to be the focus of

[^3]
## The Supporting Healthy Marriage Evaluation

Appendix Table B. 1
Response Rates: 12-Month Survey

| Target Group | Fielded Sample |  | Survey Respondents ${ }^{\text {a }}$ |  | Response Rate (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \\ \hline \end{array}$ | Control Group | Program Group | Control Group | Program Group | Control Group |
| Men | 3,137 | 3,158 | 2,418 | 2,510 | 77.1 | 79.5 |
| Women | 3,137 | 3,158 | 2,580 | 2,673 | 82.2 | 84.6 |
| Couples | 3,137 | 3,158 | 2,653 ${ }^{\text {b }}$ | 2,750 ${ }^{\text {b }}$ | 84.6 | 87.1 |

SOURCE: Final response-rate tables from Abt SRBI.
NOTES: ${ }^{\text {a }}$ The sample sizes include individuals who started but did not finish the survey.
${ }^{\text {b }}$ The sample sizes show the number of couples for which at least one spouse completed the survey.
survey questions related to parenting practices, father engagement, and child development and well-being at the 12 -month and 30 -month follow-up points; the focus of videotaped observations of coparenting and parent-child interactions at the 12 -month follow-up point; and the focus of youth surveys and direct assessments of children's outcomes at the 30-month followup point. In the Oklahoma City and Seattle programs, because couples were eligible for SHM only if they were expecting a baby or had a baby younger than 3 months old at study entry, this infant was selected as the focal child. In the remaining local SHM programs, the focal child was selected at random from all the children younger than 14 who were living in the home at study entry.

Depending on the respondent's preference, the survey was administered with a mixedmode methodology, consisting of a combination of computer-assisted telephone interviews (CATI) and computer-assisted in-person interviews (CAPI). Respondents were given the option of using a self-administered digit-grabber technology when answering questions that were deemed to be sensitive (such as questions about domestic violence or marital distress). Rather than answering these items aloud, respondents could use a touch-tone telephone or laptop computer to key in their answers and thus keep them private from anyone in the home who might be listening as they completed the interview.

## Overview of the 12-Month Observational Study

A subset of couples in the full SHM research sample was also targeted to participate in a series of in-home videotaped observations of couple, parent-child, and coparenting interactions. Although outcomes from these videotaped observations were not considered in the 12-

## The Supporting Healthy Marriage Evaluation

Appendix Figure B. 1
The SHM Program Model and Theory of Change

month impact report, they will be included in subsequent analyses, based on theory suggesting that changes in the quality of parents' marital relationships could have implications for their coparenting and parent-child interactions. ${ }^{4}$

In each of the local SHM programs, 306 families were targeted to participate in the observational study. This sample size was aimed at the ultimate goal of achieving a respondent sample for the observational study that represented approximately one-third of couples enrolled in each local program. Couples with infants and with preadolescent and adolescent focal children were oversampled to ensure that the observational study would have sufficient numbers of families with newborns (including yet-unborn children and infants younger than 12 months) and families with preadolescent or adolescent children (between ages 9 and 14) at study entry. This would allow for testing the program's effects on coparenting and parent-child relationships separately for these age groups, in cases where the measures might vary with the age of the focal child. The sampling was done based on theory that the SHM program may have particularly strong effects for parents who are early in their transition to parenthood and for parents whose children are making or have just made the transition to adolescence.

Though families were flagged for the observational study from the full SHM research sample, they were asked whether they would be willing to participate in videotaped observations only after each spouse had completed the 12-month follow-up survey. Appendix Table B. 2 shows the final response rates for the observational study.

## Couple Interactions

Couples who were still married or still in a committed relationship at the 12-month fol-low-up point and who participated in the videotaped interactions were asked to engage in three semistructured, seven-minute discussions. These included a problem-solving interaction, in which the couple was asked to identify a topic of disagreement and then to discuss the topic for seven minutes, and two socially supportive interactions, in which husbands and wives were asked separately to identify something about themselves - something not directly related to their marriage - that they would like to change (for example, work habits, career, something about his/her personality or appearance, some problem with friendships or relationships within his/her family). The protocols for this data collection effort were drawn from prior research with

[^4]
## The Supporting Healthy Marriage Evaluation

Appendix Table B. 2
Response Rates: 12-Month Observational Study

|  | Fielded Sample |  | Observational Study Respondents |  | Response Rate (\%) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program | Control | Program | Control | Program | Control |
| Target Group | Group | Group | Group | Group | Group | Group |
| Couples | 1,222 | 1,227 | 749 | 762 | 61.3 | 62.1 |

SOURCE: Final response-rate tables from Abt SRBI.
low-income and racially and ethnically diverse families, such as the Family Transitions Project. ${ }^{5}$ The three interactions were used to gather information about how couples interact and communicate with one another across different circumstances.

## Coparenting and Parenting Interactions

Two semistructured interactions were used to assess the quality of the coparenting and parent-child relationships. As noted above, these data were not examined as part of the 12month impact analysis but will be featured in subsequent analyses in this evaluation.

The coparenting interactions involved both spouses and the focal child and were conducted with couples who were married or in a committed relationship at the 12-month followup point. The parent-child interactions involved the self-identified primary custodial parent and the focal child, and they were conducted with families who agreed to participate in the observational study, regardless of whether the couples were still together at the 12-month follow-up point.

For each of these interactions, family members were videotaped for 10 minutes as they engaged in a semistructured task that varied with the age of the focal child at the 12 -month follow-up point. The interactions were conducted within study participants' homes, in a location that provided as much privacy as possible. A trained interviewer set up the videotaping equipment and began by explaining the procedures of the task to participants. The interviewer then left the room or gave the study participants as much privacy as possible, given the constraints of the homes, while the interactions were being videotaped.

[^5]With families who had focal children younger than age 2 at the follow-up point, the protocol used to videotape coparenting and parent-child interactions was adapted from the NICHD Study of Early Child Care's "Three Bags" free-play assessment. ${ }^{6}$ In the coparenting task, participants were given three bags of toys, which included a book, a set of building blocks, and an animal and Little People play set. In the parent-child interaction, participants were given three different bags that included a distinct but comparable set of toys. Parents were then given instructions that were intentionally vague, to allow the parents to display naturally occurring parenting and coparenting behaviors.

With families who had focal children between ages 9 and 14 at the follow-up point, the protocol used to videotape coparenting and parent-child interactions involved a family discus-sion-based task, which was adapted from the Family Transitions Project, a longitudinal study of youth and their families. ${ }^{7}$ The semistructured task was designed to facilitate family interaction and discussion, and it was intended to elicit behaviors and emotions expressed by the family during a problem-solving task. A trained interviewer began the task by asking the family members to review a list of common topics of disagreement between parents and children and to select up to three topics for discussion (for example, the fairness of household rules, when homework should be done, curfew times). After completing the instructions, the interviewer left the room or moved out of earshot of the discussion and did not return until 10 minutes had passed. Similar procedures were used for the coparenting and parent-child interaction tasks, though participants were asked to select different topics for discussion for each of the tasks.

## Coding Protocol for the Videotaped Interactions

The videotaped interactions were reviewed by a team of trained observers based at the Relationship Institute at the University of California, Los Angeles, under the supervision of Dr. Thomas Bradbury. The interactions were coded using the Iowa Family Interaction Rating Scales (IFIRS), a global, macroanalytic coding system designed to measure the affect and behavioral characteristics of individual family members and the quality of behavioral exchanges directed from one family member to another particular family member. ${ }^{8}$ The rating scales are intended to tap both verbal and nonverbal behaviors and both positive and negative emotions expressed in the interactions.

One observer was randomly assigned to review each interaction. The observers were blind to the fact that the videotapes came from a random assignment evaluation and, accordingly, were not informed of study participants' research group status. For an interaction, a typical

[^6]coding session consisted of reviewing the videotape three times and stopping it frequently, so that observers were able to take notes about specific behaviors that would be used to inform their final ratings of the interaction.

Several methods were implemented to ensure the validity and reliability of the observers' ratings of couple and family interactions. Before reviewing any interactions, observers participated in approximately 150 hours of training and passed a set of criterion coding tests. Furthermore, on completion of the training and throughout the coding process, observers attended regular team meetings in which they had the opportunity to discuss interactions that were difficult to code and discrepancies in ratings for a given interaction. Regular discussions of the ratings were helpful in minimizing the degree to which observers diverged in their ratings after training and over the course of the coding period.

To minimize idiosyncrasies associated with any individual observer's ratings and to establish interrater reliability of the coding, 20 percent of the tapes were randomly selected and were independently coded by a second trained observer on the coding team. The observers achieved reliability (exact agreement within one point) at 75 percent. The average agreement between observers for each of the observed outcomes (positive communication skills, warmth and support, and anger and hostility in observed couple interactions) is 82 percent when the data for men and women are pooled. After both observers reviewed the interaction, any discrepancies in the ratings were discussed. The final ratings that were entered into the file for the impact analysis were established by consensus.

Appendix C

## Comparison of Baseline Characteristics Across Research Groups

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Appendix C compares the characteristics of sample members in the program group and those in the control group as measured at study entry in the Supporting Healthy Marriage (SHM) evaluation, and it discusses the extent and significance of differences between the two groups. This comparison is typically done in random assignment studies to assess the extent to which random assignment created comparable research groups.

In a random assignment study, the expectation is that the characteristics of the program and control groups, on average, should be similar when they enter the study - "at baseline." To examine the extent to which this assumption is valid, the baseline characteristics of program and control group members were compared. To assess whether any of the differences in baseline characteristics between the two groups are statistically significant, a p-value of less than 10 percent is used. That is, when a difference between the two research groups is found to be statistically significant at this level, it indicates that the difference is so large that the probability that it would occur by sampling variation alone is less than 10 percent. In other words, there is less than a 10 percent chance that a difference of this magnitude would occur if there were no true differences between the two research groups.

Even if the two research groups are similar, however, some statistically significant differences in their baseline characteristics may be found. The chances of this occurring increase as the number of comparisons that are conducted increases. If, for example, 10 independent characteristics are examined, there is a 65 percent chance that one of the tests will be found to be statistically significant at the 10 percent level purely by chance. To guard against the possibility of drawing the wrong conclusions about the extent of differences between the program and control groups, a test of joint significance of the differences across all the baseline characteristics was performed. This test was conducted by using the baseline characteristics of the full SHM sample and running a logistic regression to predict research group status.

As shown in Appendix Table C. 1 and in line with expectations, the characteristics of the program group and control group were similar at baseline. Statistically significant differences were found for only two of the comparisons that were performed. Further, a test of joint significance of the differences across all the baseline characteristics showed that the research groups were not systematically different from one another on the set of observed characteristics.

The Supporting Healthy Marriage Evaluation
Appendix Table C. 1

## Comparison of Selected Baseline Characteristics of Program and Control Group Couples

| Characteristic ${ }^{\text {a }}$ | Program Control |  |  |
| :---: | :---: | :---: | :---: |
|  | Group | Group | Difference |
| Demographics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| Both spouses Hispanic | 43.5 | 43.3 | 0.2 |
| Both spouses African-American, non-Hispanic | 11.0 | 11.5 | -0.5 |
| Both spouses white, non-Hispanic | 20.7 | 20.3 | 0.3 |
| Other/multiracial | 24.8 | 24.8 | -0.1 |
| Both spouses have at least a high school diploma (\%) | 50.7 | 49.9 | 0.7 |
| Average age (years) | 31.3 | 31.6 | -0.3 |
| Both spouses born in the United States (\%) | 54.1 | 54.3 | -0.1 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 30.8 | 30.0 | 0.8 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 62.1 | 58.8 | 3.2 ** |
| 2 years to 9 years, 11 months | 62.1 | 63.2 | -1.0 |
| 10 years or older | 30.2 | 31.4 | -1.2 |
| Average number of children in the household | 2.0 | 2.0 | 0.0 |
| Average number of years married | 6.1 | 6.4 | -0.4 ** |
| Married at the time of random assignment (\%) | 77.5 | 78.8 | -1.3 |
| Either spouse married previously (\%) | 30.2 | 30.3 | -0.2 |
| Stepfamily (\%) | 27.1 | 25.7 | 1.4 |
| Economic status (\%) |  |  |  |
| Men's earnings |  |  |  |
| \$0 | 8.8 | 9.0 | -0.2 |
| \$1 to \$14,999 | 28.8 | 29.1 | -0.3 |
| \$15,000 to \$24,999 | 26.4 | 27.2 | -0.8 |
| \$25,000 or over | 36.0 | 34.6 | 1.4 |
| Women's earnings |  |  |  |
| \$0 | 33.9 | 32.7 | 1.2 |
| \$1 to \$14,999 | 40.6 | 41.9 | -1.3 |
| \$15,000 to \$24,999 | 13.9 | 13.6 | 0.3 |
| \$25,000 or over | 11.5 | 11.7 | -0.2 |
| Either spouse currently employed | 81.9 | 80.9 | 1.1 |
| Income less than 200\% of FPL ${ }^{\text {b }}$ | 82.3 | 82.2 | 0.1 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 80.9 | 80.1 | 0.8 |
| Women report happy or very happy in marriage | 75.0 | 75.1 | -0.1 |
| Men report marriage in trouble | 54.9 | 55.5 | -0.5 |
| Women report marriage in trouble | 56.5 | 57.6 | -1.1 |

## Appendix Table C. 1 (continued)

\(\left.$$
\begin{array}{lrrr}\hline \text { Characteristic }^{\text {a }} & \begin{array}{r}\text { Program } \\
\text { Group }\end{array}
$$ \& \begin{array}{r}Control <br>

Group\end{array} \& Difference\end{array}\right]\)|  |  |  |  |
| :--- | ---: | ---: | ---: |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 23.4 | 23.6 | -0.3 |
| Either spouse reports substance abuse problem | 20.3 | 21.4 | -1.0 |
| Sample size (couples) | 3,138 | 3,160 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t-tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent. Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

Appendix Table C. 2

## Definitions of the Demographic and Socioeconomic Characteristics of Couples in the SHM Evaluation Sample at Study Entry

| Characteristic | How Defined |
| :--- | :--- |
| Race/ethnicity | Couples are categorized as Hispanic, white, or African-American if both <br> spouses self-selected that race/ethnicity. The "other/multiracial" category <br> includes couples who are of different race/ethnicity (70 percent), couples in <br> which at least one spouse has more than one race/ethnicity (15 percent), <br> couples in which both of these conditions are true (8 percent), and couples <br> who both self-identified as only Asian, Pacific Islander, Native American, <br> or other (8 percent). |
| Both spouses born in the | Each spouse was asked whether he or she was born in the <br> United States. |
| Enited States |  |

## Appendix Table C. 2 (continued)

| Characteristic | How Defined |
| :--- | :--- |
| Average number of <br> years married ${ }^{\text {a }}$ | This number represents the mean of the woman's and the man's response. <br> Years married is calculated using responses at enrollment for all couples, <br> including those couples who gave a response on the 12-month survey that <br> they were not married at the time of enrollment. |
| Stepfamily | A family is considered a stepfamily if either spouse responded that any <br> child in the household was his or her stepchild. |
| Happiness in marriage | Individuals are categorized as happy in their marriage if they rated their <br> happiness as 5, 6, or 7 on a scale of 1 to 7, where 1 = "completely unhappy"" <br> and 7 = "completely happy." |
| Marriage in trouble | Individuals are categorized as reporting marriage in trouble if they reported <br> that during the past year they ever thought that their marriage was in trouble. |
| Psychological distress | Psychological distress is measured using the Kessler 6, which is a quantifier <br> of nonspecific psychological distress. It includes six questions, such as <br> "During the past 30 days, how often did you feel: So sad that nothing could <br> cheer you up? Nervous? Restless or fidgety?" Each item is rated on a scale <br> from 0 to 4, where a higher score indicates more frequent distress. The items <br> are summed, and the individual is considered to be distressed if this sum is <br> greater than 12. See Kessler et al. (2003). |
| Substance abuse | Substance abuse is measured using three questions from the CAGE |
| Questionnaire and three similar questions adapted for drug use. |  |
| These include the following: "Have you ever felt you should cut down on |  |
| your drinking/drug use?"; "Have people annoyed you by complaining |  |
| about your drinking/drug use?"; "Have you ever felt bad or guilty about |  |
| your drinking/drug use?" See Ewing (1984). |  |

NOTES: ${ }^{\text {a }}$ In Oklahoma City, this question was not included on the SHM Baseline Information Form but was asked on the SHM 12-Month Follow-Up Survey.
${ }^{\text {b }}$ Participants in the Oklahoma City location were asked whether they had a high school diploma or GED certificate. Response options were: none, high school diploma, GED or high school equivalency certificate, other (specify).

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Appendix D
Analytic Approach for the SHM 12-Month Impact Analysis

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In the Supporting Healthy Marriage (SHM) evaluation, a random assignment research design is used to estimate the effects of the SHM program on the outcomes of interest. Impact estimates for primary survey-reported and observed outcomes are presented in the SHM 12-month impact report. ${ }^{1}$ Appendix D provides details on how the 12 -month impact analysis was performed, including a discussion of (1) the methods used to estimate program impacts, (2) the approach used to estimate impacts by local program and by subgroup, (3) the reasoning for presenting only "intent-to-treat" (ITT) estimates and not "treatment-on-treated" (TOT) estimates, and (4) the procedures used to handle missing data.

## Analytic Approach for Estimating Program Impacts

The differences in mean outcomes between the program and control groups provide unbiased estimates of the effects of offering eligible couples access to the package of SHM program services compared with services that couples and families might normally receive. The impact estimates calculated in the 12-month impact report are often referred to as ITT estimates because they were derived by comparing all the sample members in the program group with all the sample members in the control group, regardless of whether or how long individuals were engaged in SHM services.

The 12-month impact report presents unweighted impact estimates, which were estimated by pooling data across all eight local SHM programs. ${ }^{2}$ Furthermore, for survey-reported and observed outcomes defined at the individual level, each individual was weighted equally in the impact analysis. Likewise, for survey-reported outcomes defined at the couple level, each couple was equally weighted in the impact analysis.

Ordinary least squares (OLS) estimation was used to calculate impacts for both continuous and binary outcomes, using covariates that were expected to increase the statistical precision of the estimated impacts because theory or prior research evidence suggested they were correlated with the outcomes of interest. Estimates were produced using the generalized linear modeling (GLM) procedure in SAS. Neither the survey nor the observational study impacts were estimated using weights to correct for nonresponse or sample selection criteria. ${ }^{3}$

[^7]The following covariates are included in the estimation model for the survey outcomes representing the following baseline characteristics of couples in the SHM evaluation: local SHM program; a series of dummy indicators for men's and women's earnings; whether both spouses are white, Hispanic, non-Hispanic African-American, or mixed race or other race; whether the couple was expecting a child or had a child who was less than 2 years old; whether the couple had a child between ages 2 and 9 ; whether the couple had a child age 10 or older; whether either spouse was 23 years old or younger; whether either spouse was at risk for depression; whether both spouses had at least a high school diploma; the number of years that the couple was married; whether either spouse had a substance abuse problem; the month that the couple was randomly assigned in the evaluation; whether a stepchild of either spouse was present in the household; the couple's average reported commitment to couple and family; the couple's average reported positive marital interactions; the couple's average reported concerns and arguments about infidelity; the couple's average reported destructive tactics for conflict resolution; the husband's and wife's reported marital happiness; and the husband's and wife's reports about whether they thought that their marriage was in trouble.

Because the observational study sample is smaller than the survey sample, a smaller set of covariates was used in the estimation model for the observational study outcomes. ${ }^{4}$ The following covariates are included in this model to represent the following baseline characteristics: local SHM program; whether men's and women's earnings were between $\$ 15,000$ to $\$ 24,999$ or $\$ 25,000$ or more per year; whether both spouses are white, Hispanic, non-Hispanic African-American, or mixed race or other race; whether the couple was expecting a child or had a child less than age 2 ; whether both spouses had at least a high school diploma; whether a stepchild of either spouse was present in household; the couple's average reported commitment to couple and family; the couple's average reported hostile conflict resolution; and the couple's average reported happiness and positive interactions in marriage.

The regression models took the following form:

$$
Y_{i}=\alpha+\beta E_{i}+\gamma X_{i}+e_{i}
$$

where $Y_{i}$ is the outcome for husband, wife, or couple i; $E_{i}$ indicates whether couple i was assigned to the program group; $X_{i}$ is a set of baseline characteristics, including indicators for local SHM programs; ${ }^{e}$ is a random mean-zero error term; $\alpha_{\text {is the intercept; }} \gamma_{\text {is the set of }}$

[^8]coefficients on the covariates; and the coefficient $\beta$ provides the impact estimate. For multicategory outcomes, impacts were estimated using chi-squared tests that were not covariateadjusted.

For each impact estimate, a two-tailed $t$-statistic was used to test the null hypothesis that the impact estimate equals 0 . The associated p -value, which reflects the probability that an estimated impact or a larger one could have occurred if the true impact was equal to 0 , is used to help judge the effectiveness of the program. A p-value level of 0.10 on two-tailed t-tests was used to identify statistically significant impacts.

For continuous outcomes, estimated impacts of the SHM program were also translated into standardized effect sizes by dividing the impact estimate by the standard deviation of the outcome measure for the control group. Effect sizes are one way to interpret the substantive significance of the impact estimates. The magnitude of effect sizes can be interpreted with respect to empirical benchmarks that are relevant to the intervention, target population, and outcome measures being considered. ${ }^{5}$ In the absence of such information, however, one can broadly characterize the potential substantive significance of the impacts by using general rules of thumb suggested by Cohen, whereby effect sizes of 0.20 or less are considered "small"; an effect size of 0.50 is considered "moderate"; and effect sizes of 0.80 or above are considered "large." ${ }^{6}$ Effect sizes are not presented for binary outcomes because percentage point impact estimates are readily interpretable.

## Methods for Estimating Impacts by Local SHM Program and by Subgroup

Along with estimating pooled impacts for the full research sample, impacts were also estimated across local SHM programs and across several subgroups. Two approaches were used: splitsample analysis and full interaction analysis.

## Split-Sample Impact Analysis

Split-sample impact analyses were conducted by dividing the sample by program location or subgroup characteristic and then calculating impacts for each subset of the sample. For example, impacts were estimated for the Bronx SHM program using only data for Bronx sample members, for the Orlando SHM program using only data for Orlando sample members, and so on. The regression model for each subsample was the same as that for the entire sample, except that the variables used to create the subgroup were excluded. The impacts and standard

[^9]errors from the subgroup regressions were then used to generate an H -statistic in order to compare impacts across local SHM programs and across subgroups. The H-statistic is used to assess whether the difference in impacts between the subgroups is statistically significant. The p-value associated with the H -statistic reflects the probability that observed differences in impacts between subgroups could have been generated if the true impacts were identical across sites or subgroups. Differences are considered statistically significant if the p-value level is 0.10 or smaller.

## Impact Analysis with Full Interaction Models

A potential shortcoming of a split-sample approach is that differences across subgroups might be due to factors that are correlated with the subgroup characteristic. For example, if sample members of a certain race or ethnicity tend to be clustered in sites that targeted families with young children, a split-sample analysis of differences in impacts by race/ethnicity might find effects that are actually attributable to differences in children's ages. This is important in SHM because the characteristics of families differed substantially across local programs.

Appendix Tables J. 18 to J. 20 show that a number of key baseline characteristics vary substantially by subgroup. For example, as shown in Appendix Table J.18, Hispanic couples are more likely to be in the moderate or high marital distress subgroups, while white couples are more likely to be in the low marital distress subgroup. Furthermore, as shown in the 12 -month impact report, sample members' characteristics differ substantially across local SHM programs. ${ }^{7}$ Because the subgroups vary systematically across local SHM programs and on a number of other characteristics, it can be difficult using split-sample analytical methods to draw firm conclusions about whether observed differences in impact estimates are driven by the subgroup characteristics of interest or by other, associated characteristics of sample members, differences in local programs, or some other combination of these factors.

In an attempt to isolate SHM's effects on the subgroups of interest, a supplemental analysis adjusted the subgroup impact estimates by taking into account how the impacts also vary with other observable characteristics of the sample (referred to as the "full interaction model"). This was done by including a set of predictors in the model consisting of indicators for the subgroup characteristics of interest, other baseline characteristics, local SHM programs, and research group status as well as a set of two-way interaction terms in which a sample member's subgroup characteristics, baseline characteristics, and local SHM program indicator were separately interacted with an indicator for the sample member's research group status. The regression models that result take on the following form:

[^10]$$
Y_{i}=\alpha+\beta E_{i}+\gamma X_{i}+\sum{ }_{j}\left(\lambda_{j} Z_{i j}\right)+\eta E_{i} X_{i}+\sum{ }_{j}\left(\delta_{j} E_{i} Z_{i j}\right)+e_{i}
$$
where $Y_{i}, E_{i}, e_{i}, \alpha, \beta$, and $\gamma$ are defined as above. For expositional purposes, $X_{i}$ is defined slightly differently than above. Rather than the full set of baseline characteristics, here $X_{i}$ is that set without indicators for the levels of a particular subgroup of interest (the $Z_{i j}$ dummies). $Z_{i j}$ is a set of dummies that defines the subgroup levels of interest (subgroup levels are indexed by j , and one subgroup level is excluded); and ${ }^{\lambda_{j}}, \eta$, and $\delta_{j}$ are sets of coefficients. The $\delta_{j}$ coefficients represent the difference from the overall mean impact for each subgroup level j . In this model, an F-test for the joint significance of the $\delta_{j}$ coefficients is used to test for overall significant differences in impacts by $Z_{j}$ subgroup levels.

When drawing conclusions about the extent to which the impacts of the SHM program vary for subgroups of interest, the results from the full interaction model should be considered as one additional piece of information. Although this approach can help to isolate which family and local program characteristics are associated with larger effects, after adjusting for differences due to other characteristics in the model, the results are sensitive to the specification of the model (that is, which interaction terms of baseline characteristics with treatment status indicator are included in the model). In addition, the statistical power to detect subgroup differences is more limited when compared with a split-sample approach.

## Intent-to-Treat (ITT) Versus Treatment-on-Treated (TOT) Impact Estimates

As discussed above, ITT impact estimates provide an unbiased estimate of the effects of offering the package of SHM program services to study participants (regardless of whether or not participants received services). However, some people might be interested in the impacts of the program for those who actually received SHM program services; these are often referred to as "treatment-on-treated" [TOT] impact estimates, or the impacts per program participant.

TOT impact estimates were not examined as part of the 12-month impact analysis for two main reasons. First, according to the 12-month follow-up survey, 89 percent of couples in the program group attended at least one group relationship workshop - the core service component of the SHM program. ${ }^{8}$ This suggests that any TOT impact estimates would be similar in magnitude to the ITT impact estimates presented in the 12-month impact report. Second, estimating TOT impacts is not a straightforward comparison of outcomes between program group and control group members. Rather, to appropriately estimate TOT impacts, one

[^11]would need to compare the outcomes of program group participants with control group members who would have participated in SHM had they been given an opportunity to do so. However, these control group members cannot readily be identified, which means that a model must be created to estimate who would have participated in services if they had been offered services. This type of analysis is more complicated than an ITT analysis and is susceptible to potential problems, such as the inability to predict participation and the confounding of participation predictors with other couple characteristics that could affect impacts. For this reason, ITT impact estimates remain the primary set of results for most large-scale random assignment studies, even if supplemented by TOT estimates.

## Missing Data

This section explains how missing data were handled in the impact analysis.

## Covariates

Although all participants were asked to complete baseline forms at intake, the SHM evaluation is still missing some baseline data. Overall, 18 percent of the survey respondent sample and 16 percent of the observational study sample were missing at least one covariate, though the extent to which data are missing for any given covariate used in the impact analysis ranges from 0 to 6 percent of sample members. To account for missing data on covariates, the research team used a single stochastic imputation using SAS PROC MI to impute missing covariate values. This method assigns values to missing variables using a regression model that predicts the value of the missing variable based on other characteristics of the sample member and the responses of other study participants who are similar. The method also adds a varying component that is randomly drawn from a distribution with the same variance as the observed values.

Depending on how a covariate was created, the team dealt with missing baseline slightly differently:

1. For covariates that were based on spouses' responses to a single question (for example, either spouse has a high school diploma), values were imputed for the couple-level covariate. The values were generated based on a number of variables from the baseline information forms, including the following.

- Indicator for treatment group status
- Local SHM program
- Husbands earning $\$ 1$ to $14,999, \$ 15,000$ to 24,999 , or $\$ 25,000$ or more per year
- Wives earning $\$ 1$ to $14,999, \$ 15,000$ to 24,999 , or $\$ 25,000$ or more per year
- Both spouses are Hispanic
- Both spouses are non-Hispanic African-American
- Couple is mixed race or other race
- Couple has a child prenatal to age 1
- Couple has a child ages 2 to 9
- Couple has a child age 10 or older
- Either spouse is age 23 or younger
- Both spouses have a high school diploma
- Years married
- Either spouse as a substance abuse problem
- Month of random assignment
- Stepchild in household
- Both spouses born the United States
- Husband is employed
- Wife is employed
- Frequency of attending religious services together

2. For covariates that were scales based on several baseline items (for example, commitment to relationship), imputation was performed at the item level before the scales were created. Scales were then constructed from these
imputed items. The imputation model included an indicator for treatment group status and all the items in the covariate scales.

## Subgroup Variables

For the subgroups defined by race/ethnicity and family poverty level, values were not imputed if the couple was missing data that were needed to determine subgroup membership; couples without sufficient information were dropped from the subgroup analysis. The maritaldistress subgroups were created from five marital-distress scales. (Appendix J presents additional information about how these subgroups were created.) Each of the marital-distress scales was created for individuals if at least two-thirds of the items were available. A couple-level measure of each scale was made by taking the mean of the husband's and the wife's scale; if only one spouse had a nonmissing scale, then that spouse's value was used. If any of the scales were missing, the marital-distress subgroups were not created.

## Outcomes

MDRC's general practice is to not assign values for outcomes that are missing information, though an exception is made in some cases when outcomes are scales are created from several items and most of the items are not missing. The treatment of missing outcome data for the SHM 12-month impact analysis followed this general practice.

Several types of missing outcome data were encountered on outcomes collected at the 12-month follow-up point. Among the questions with missing data, some were meant to be part of multi-item scales; some were meant to be the sole variables used in individual-level outcomes; and some were meant to be combined with the spouses' answers to the same questions, to create couple-level outcomes. The three types of missing data were handled differently, as follows:

- For missing items that were components of multi-item scales (for example, perceived positive communication skills), the scale was created by taking the average of the items if at least 66 percent of the items were present.
- For outcomes that were created as individual-level binary measures based on one or two items, outcomes were not created if the component item(s) were missing.
- Outcomes that were created as couple-level binary measures based on one or two items from each spouse were generally created using the information from one spouse if data were available from only one spouse.

Appendix E describes detailed rules for specific outcomes.

In the observational study, a small number of families were missing particular adult interactions, either because one adult refused to participate in an interaction or because of a technical problem. In these cases, outcome scales were created by taking the average of codes for the existing adult interactions.

Appendix F presents the results of a nonresponse bias analysis to try to understand the implications of data that are missing because of nonresponse.

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Appendix E

# Construction of Participation, Survey, and Observational Outcomes 

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Appendix E describes the analyses that were conducted to assess the reliability and validity of the outcomes examined in the Supporting Healthy Marriage (SHM) evaluation as well as how these outcomes were constructed.

## Participation Outcomes

Participation outcomes were measured using data collected from the 12-month follow-up survey. Although the SHM management information system (MIS) captures more detailed information about program group members' participation in services, it does not include information about control group members; thus, the survey data are more useful for comparing the participation of the program and control group members. Since marriage education is typically engaged in by both spouses together, participation was examined at the couple level.

## Number of Times Attended Group Relationship Services (Percentage)

This outcome measures the number of times that couples reported attending marriage or relationship skills classes or workshops with their spouse in a group session. Individual respondents reported the number of times that they attended workshops in up to two programs to improve their marriage or relationship with their spouses. The survey question captures this information in ranges (once, 2 to 5 times, 6 to 10 times, and more than 10 times). If the respondent reported attending no programs, a value of zero was assigned. The midpoint value of the response range was imputed for number of times attended (with a value of 11 imputed for responses of "more than 10 times"); the values were summed across programs for each respondent (when responses were given for more than one program); and then responses were averaged across the two spouses to create one measure for the couple. (If only one spouse's record was available, that record was used.) The average number of times attended was then assigned to the appropriate range category, using the same ranges as in the original survey question.

In most cases, both spouses attended group relationship services together. In a separate question, respondents were asked how often they attended these services with their spouse, and 86 percent of those who responded said that they always attended together. Some of the sessions - particularly, extended activities — could not have been attended by both spouses because they were segregated by gender, such as "Moms’ Night" or "Dads' Night." If both spouses refused to answer, answered "Don’t Know," or had missing values for all source items (but did not indicate that they had not attended any programs), the outcome was coded as missing. Data were missing on this measure for less than 1 percent of cases.

## Number of Times Attended One-On-One Relationship Services (Percentage)

This outcome measures the number of times that couples reported attending one-on-one services (such as marital therapy, counseling, or couples' counseling) - with or without their spouse - to improve their marriage or relationship. The question asks the respondent to exclude contacts with any SHM staff member, specifically, with family support coordinators. This is because meetings with family support coordinators were not intended to be therapeutic in nature but, rather, to check in about SHM program participation, to address couples' needs through referrals to services in the community, and to provide coaching on the key skills and principles from the workshop curriculum. Individual respondents reported the number of times that they attended up to two services. The survey question captures this information in ranges (once, 2 to 5 times, 6 to 10 times, and more than 10 times). If the respondent reported attending no programs, a value of zero was assigned. The midpoint value of the response range was imputed for number of times attended (with a value of 11 imputed for responses of "more than 10 times"); the values were summed across programs for each respondent (when responses were given for more than one program); and then responses were averaged across the two spouses to create one measure for the couple. (If only one spouse's record was available, that record was used.) The average number of times attended was then assigned to the appropriate range category, using the same ranges as in the original survey question. If both spouses refused to answer, answered "Don’t Know," or had missing values for all source items (but did not indicate that they had not attended any programs), the outcome was coded as missing. There were no missing data for this measure.

## Referrals for Supportive Services

These outcomes measure whether either spouse reported speaking to anyone about supportive services. These measures were not created if more than one-third of their component items were missing.

- Referrals of either spouse for parenting classes and/or child care. This outcome measures whether either spouse reported speaking to anyone about either of the following:
- Participating in any classes, groups, or workshops to help improve parenting skills
- Getting help finding or paying for child care while either spouse worked

Data were missing on this measure for less than 1 percent of cases.

- Referrals of either spouse for assistance with issues related to work readiness and/or financial security. This outcome measures whether either spouse reported speaking to anyone about any of the following:
- Participating in job search or job training
- Participating in classes to finish high school, get a General Educational Development (GED) credential, or go to college
- Taking classes to learn English
- Getting help finding a place to live
- Getting help receiving food stamps, Temporary Assistance for Needy Families (TANF), Medicaid, or medical care
- Getting help handling a financial emergency

There were no missing data for this measure.

- Referrals of either spouse for assistance with issues related to mental health and/or substance abuse. This outcome measures whether either spouse reported speaking to anyone about any of the following:
- Getting services to help with anger management or domestic violence
- Getting services to help with a drug or alcohol problem
- Getting services to help with mental health issues

There were no missing data for this measure.

## The 12-Month Follow-Up Survey: Primary Outcome Measurement Work

Using data from the SHM 12-Month Follow-Up Survey, the research team proposed a series of primary outcomes that would be used to examine the effectiveness of the SHM program in influencing the quality of marital relationships. While some of the outcomes were based on a single survey question, it was intended that others would be multi-item scales created from a number of survey questions. For multi-item scales, the research team reviewed prior empirical evidence and literature related to the validity and reliability of the proposed outcomes. The team also engaged in a series of analyses aimed at creating outcome measures that were conceptually meaningful, that produced stable and reliable measurement of the constructs of interest, and that were empirically distinct from one another. Decisions about the final construction of the primary outcomes were made by weighing the results of the research team's analyses as well as
prior empirical evidence establishing the validity and reliability of the proposed outcome measures.

The measurement work summarized here was conducted on the final SHM 12-Month Follow-Up Survey file with responses from 10,162 individuals, including men and women from both the program group and the control group. The research team weighed several key properties of the proposed measures, including:

1. The extent to which the items appeared to group together to measure the constructs of interest using confirmatory factor analysis (CFA) and exploratory factor analysis (EFA)
2. The internal consistencies of the proposed composite scales used to operationalize the proposed outcome measures, using Cronbach's alphas (OLS)
3. The degree to which the proposed measures appeared to be empirically distinct from one another, using EFA and examining correlations among the composite outcome measures

The results of the analyses were then considered in the context both of prior theory guiding the conceptualization of the constructs of interest and of prior empirical research establishing the validity of the proposed measures, to guide decisions about the final construction of the outcome measures using the 12-month survey data for the impact analysis. Additional details about the analytic approach are available on request.

The 12-month survey outcome measures were developed using a four-step process, while weighing the extent to which the proposed measures have established histories in prior empirical research, have been shown to be valid, and are conceptually meaningful. First, CFA was used to test the appropriateness of a set of a priori hypotheses about the number of factors and the structure of these factors for each construct measured (using SAS PROC CALIS, in which items were restricted to load on one factor). The research team evaluated the appropriateness of the CFA results by examining the magnitude of the factor loadings, to determine whether the items had high loadings on their respective pre-specified factors and model-fit indices. In general, variables with factor loadings of 0.35 or higher were retained; exceptions are noted in the text. Two fit indices were used to evaluate the adequacy of the overall fit of the hypothesized CFA models: the root mean square error of approximation (RMSEA) and the Bentler Comparative Fit Index (CFI). A RMSEA value of less than 0.08 is an indicator of adequate model fit, and a value less than 0.06 is an indicator of good model fit. A CFI value greater than 0.90 is an indicator of adequate model fit, and a value greater than 0.95 is an indicator of good model fit. Most items included in the CFA models were reverse-coded first to
ensure that higher response categories reflected stronger endorsements of the items. See notes about reverse-coding in the tables.

Second, if the CFA results did not provide strong support for the hypothesized model, either because the factor loadings were low or the model-fit statistics were poor, an EFA was used to explore alternative factor structures using SAS PROC FACTOR, though these results were also considered in the context of prior research and theory. The third step in the process involved running a global EFA using all the items across the dimensions of marital functioning that had already been established using SAS PROC FACTOR and evaluating the measurement model using factor loadings. Each item was allowed to load on all factors in the EFA, with factor loadings selected to maximize fit with the data, using maximum likelihood estimation. The factor solution was then rotated to maximize fit with a hypothesized target matrix using oblique Procrustes rotation. This rotation finds the best-fitting model and then rotates it to be as similar as possible to the target matrix, allowing the extracted factors to be correlated with one another. A determination of the number of factors that were appropriate for the given data and set of items was then made by weighing prior empirical evidence establishing the validity and reliability of the extracted factors, the conceptual and theoretical meaning of the extracted factors, the eigenvalues, the magnitude of the factor loadings (using a cutoff of 0.35 ), and internal consistencies of the extracted factors. The fourth and final step was to create composite scales based on the proposed factors and to examine correlations among these scales to determine whether they captured empirically distinct dimensions of marital quality.

Appendix Tables E. 1 to E. 10 present the results of these analyses, in which six empirically distinct factors that reflect different dimensions of marital quality and coparenting, as well as one factor reflecting individual psychological distress, were established. The first of these factors captures individual perceptions of warmth and support expressed in couple relationships. Appendix Table E. 1 shows the results of a CFA conducted with seven items that suggests that the items appropriately loaded onto a single factor, which was labeled "warmth and support." Model-fit indices suggested that the model provided an adequate fit to the data (RMSEA $=0.10$; CFI $=0.95$ ). The survey items that loaded on this factor reflect a positive, loving relationship between spouses.

Appendix Table E. 2 presents the results of a CFA conducted with seven items that capture individual perceptions of positive communication skills in the couple relationship. Results suggest that the items appropriately loaded onto a single factor, which was labeled "positive communication skills." Model-fit indices suggested that the model provided a good fit to the data $($ RMSEA $=0.05 ; \mathrm{CFI}=0.98)$. The survey items that loaded on this factor reflect a respectful and supportive approach to communication between spouses during disagreements.

Appendix Table E. 3 presents the results of a CFA conducted with seven items that capture individual perceptions of negative behavior and emotions in couples' disagreements. Results suggest that all the items appropriately loaded onto a single factor, which was labeled "negative behavior and emotions." Model-fit indices suggested that the model provided an adequate fit to the data ( $\mathrm{RMSEA}=0.09$; CFI $=0.96$ ). The items that loaded on this factor reflect a negative, argumentative pattern of interaction between spouses during disagreements.

Appendix Table E. 4 presents the results of a CFA conducted with six items that reflect the presence of psychological abuse. All the items appropriately loaded onto a single factor, which was labeled "psychological abuse." Model-fit indices suggested that the model provided an adequate fit to the data (RMSEA $=0.08$; CFI $=0.95$ ). The items on this factor reflect the threat or presence of psychological abuse in the couple relationship.

Appendix Table E. 5 presents the results of a CFA conducted with five items that reflect the presence of physical assault in the couple relationship. The items appropriately loaded onto a single factor, which was labeled "physical assault." Model-fit indices suggested that the model provided less-than-adequate fit to the data (RMSEA $=0.18$; CFI $=0.88$ ). This poor model-fit proved not to be an issue, as the decision was made to use a binary measure of physical assault because it is more easily interpretable than a scale and there was relatively little variation in the original measure.

Appendix Table E. 6 presents the results of a CFA conducted with 11 items that reflect individual perceptions of the couple's coparenting relationship and whether the couple disagrees about child rearing. Although it was hypothesized that the 11 items would load onto one factor, they loaded onto two, which were labeled "cooperative coparenting" and "frequency of disagreements." Model-fit indices suggested that the model provided an adequate fit to the data (RMSEA $=0.07 ; \mathrm{CFI}=0.96$ ). The first factor, cooperative coparenting, captures supportive and cooperative aspects of shared child-rearing activities and responsibilities (6 items), while the second factor captures the frequency of disagreements between spouses related to child-rearing activities ( 5 items). While the SHM program is expected to affect how parents handle coparenting issues, it is less clear how it will affect the number of disagreements that couples have about child rearing. In light of this, cooperative coparenting was selected as a primary outcome, and frequency of disagreements was selected as a secondary outcome.

Appendix Table E. 7 presents the results of a CFA conducted with six items taken from the K6 Mental Health Screening Tool, a measure of individual psychological distress. ${ }^{1}$ The six items appropriately loaded onto a single factor, which was labeled "individual psychological distress." Model-fit indices (RMSEA $=0.14$; CFI $=0.93$ ) provided divergent results, with the

[^12]RMSEA suggesting less-than-adequate fit and the CFI suggesting adequate fit. Despite the relatively low indicator of model fit, the measure was constructed and used in the impact analysis because the K6 is a well-established scale that has proven validity and has been used with an array of populations. The items on this factor capture a broad array of symptoms of psychological distress, such as feelings of sadness and anxiety.

To empirically establish that the six primary constructs reflecting marital appraisals, marital quality, and coparenting were distinct from one another, a global EFA was conducted using all the items from the primary measures of relationship quality and coparenting that are summarized above. The results of this EFA are shown in Appendix Table E.8. With few exceptions, the items loaded most strongly on their hypothesized factors, providing support for the hypothesized outcomes.

After measurement work was completed for the above constructs, primary constructs reflecting marital appraisals, marital relationship quality, individual psychological distress, and coparenting were created by averaging the scale items. (See below, "The 12-Month Survey: Construction of Primary Outcomes.") As a final step, correlations among the aforementioned constructs reflecting marital appraisals, marital relationship quality, and coparenting, as well as three other primary outcomes, were examined as another way to establish that the outcome measures were empirically distinct from one another. This analysis excludes the two constructs that do not reflect self-reported marital appraisals, marital relationship quality, or coparenting: individual psychological distress and percentage married. These results are presented in Appendix Table E.9. In general, the correlations among the constructs are in the expected direction. The magnitude of the correlations ranges from 0.12 to 0.70 , reflecting diversity in the associations among the outcomes. Similar correlations have been found in other data sets with measures of marital-relationship quality, suggesting that these correlation levels are appropriate for these outcomes of interest. An examination of correlations between men's and women's reported marital appraisals, marital-quality outcomes, and coparenting outcomes (Appendix Table E.10) revealed associations that range from 0.04 to 0.50 in magnitude.

## The 12-Month Observational Study: Primary Outcome Measurement Work

Using data from the SHM 12-Month Observational Study, the research team proposed a series of primary outcomes that would be used to examine the effectiveness of the SHM program in influencing the quality of marital relationships. It was intended that all these outcomes would be multi-item scales created from a number of observational items. For these multi-item scales, the research team engaged in a series of analyses aimed at creating outcome measures that were conceptually meaningful, that produced stable and reliable measurement of the constructs of interest, and that were empirically distinct from one another. Decisions about the final construc-
tion of the primary outcomes were made by weighing the results of the research team's analysis as well as prior empirical evidence establishing the validity and reliability of the proposed outcome measures. The same four-step process that was used to develop the outcome measures based on the 12-month survey data (described above) was used to develop outcome measures based on the 12-month observational data. This section of Appendix E describes the results of these analyses.

Appendix Tables E. 11 to E. 16 present the results of analyses conducted to establish a set of primary outcomes based on the 12-month observational study. Appendix Table E. 11 presents the results of a CFA conducted with five items from the observed couple interaction that reflect warmth and support in the couple relationship. With one exception (a low factor loading for the item that captures affectionate physical contact, such as hugs, caresses, and pats), the results suggest that the items appropriately loaded onto a single factor, which was labeled "observed warmth and support." Model-fit indices suggested that the model provided a poor fit to the data ( $\mathrm{RMSEA}=0.29 ; \mathrm{CFI}=0.65$ ). Despite this relatively poor fit, however, the scale was created and used in the SHM impact analysis because it had commonly been used in prior nonexperimental research involving the Iowa Family Interaction Rating Scales (IFIRS).

Appendix Table E. 12 presents the results of a CFA conducted with 10 items that reflect observed communication skills in couple interactions. Although it was hypothesized that the 10 items would load onto one factor, they loaded onto two, which were labeled "positive communication skills" and "communication outcomes." Results suggested that the items appropriately loaded onto these two factors, with one exception: a low factor loading for the item that captures the extent to which the individual rejects the existence of or responsibility for a past or present situation. Model-fit indices suggested that the model provided less-than-adequate fit to the data (RMSEA $=0.14 ;$ CFI $=0.83$ ). Because the two scales made theoretical sense, however, they were created despite this less-than-adequate fit. The first factor captures a set of skills that reflect the ability to communicate clearly and effectively ( 7 items), while the second factor captures a set of skills that reflect the ability to reach a positive, goal-oriented solution (3 items). The measure of positive communication skills was used as a primary outcome in the impact analysis because it captures the process by which couples are able to reach solutions to disagreements and because it is more closely aligned with the lessons taught in the SHM curricula; therefore, it was hypothesized to be a more direct target of the intervention than the measure of communication outcomes.

Appendix Table E. 13 presents the results of a CFA conducted with four items that reflect observed anger and hostility in the couple relationship. These four items appropriately loaded onto a single factor, which was labeled "anger and hostility." Model-fit indices suggested that the model provided a good fit to the data (RMSEA $=0.05 ; \mathrm{CFI}=1.00$ ).

To establish empirically that the three primary observed marital-quality constructs were distinct from one another, a global EFA was conducted using all the items from the primary observed measures summarized above. The results of this EFA are shown in Appendix Table E.14. With few exceptions, the items loaded most strongly on their hypothesized factors, providing support for the hypothesized outcomes.

After measurement work was completed for the above constructs, primary constructs were created by averaging the scale items. (See below, "The 12-Month Observational Study: Construction of Primary Outcomes.") As a final step, correlations among the constructs were examined to establish that the outcome measures were empirically distinct from one another. These results are presented in Appendix Table E.15. In general, the correlations among the constructs are in the expected direction. The magnitude of the correlations ranges from 0.14 to 0.47 , suggesting that the proposed measures reflected empirically distinct constructs that warranted examination in the impact analysis as separate outcomes of interest. An examination of correlations between men's and women's outcomes for observed relationship quality revealed associations that range from 0.11 to 0.81 in magnitude (Appendix Table E.16). Finally, an examination of correlations between reported and observed primary outcomes, pooled for men and women, revealed associations that are in the expected direction (Appendix Table E.17). The correlations range from 0.01 to 0.21 in magnitude, providing strong evidence that couples' reported and observed measures of marital appraisals, marital quality, and coparenting relationship quality were empirically distinct from one another and deserved treatment as separate outcomes of interest.

## The 12-Month Survey: Construction of Primary Outcomes

## Married (Percentage)

This outcome is examined at the couple level and measures sample members' responses to a single question about their current relationship status. This question asks respondents to indicate whether they were currently "married to" or "in a committed relationship or romantically involved with" their partner at the time of enrollment. Both spouses' responses were taken into account when creating this binary indicator. If either respondent indicated that the couple was not married, the outcome was coded with a negative (0) response. If both spouses refused to answer or answered "Don't know," the outcome was coded as missing. If one spouse did not answer, refused to answer, or answered "Don't know" and the other spouse answered in the affirmative, then an affirmative (1) response was coded. Data were missing on this measure for less than 1 percent of cases.

## Couples' Average Report of Relationship Happiness

(Scale: 1 to 7; $\mathrm{M}=5.85$; $\mathrm{SD}=1.11$ )
This outcome is examined at the couple level and measures sample members' responses to a direct question about how happy they are with their marriages, on a scale of 1 to 7 . If both spouses responded to this question, the average of the responses was used. If only one spouse responded, the single response was used. If both spouses did not answer the question, refused to answer, or answered "Don't know," the outcome was coded as missing for that couple. Data were missing on this measure for less than 1 percent of cases.

## Either Spouse Reports Marriage in Trouble (Percentage)

This outcome is examined at the couple level and measures whether either respondent indicated that he or she had thought their marriage was in trouble in the past three months. If either spouse answered by saying that the couple "Divorced more than three months ago," the item was coded as missing. In the absence of a divorced response, the following logic was used to code responses. If either spouse indicated that he or she had thought their marriage was in trouble, an affirmative response was coded (indicating that the couple endorsed a statement about their marriage being in trouble). If one spouse indicated that he or she had not thought their marriage was in trouble and the other spouse did not answer, refused to answer, or answered "Don't know," a negative response was coded (indicating that the couple did not endorse a statement about their marriage being in trouble). If both spouses indicated that they had not thought their marriage was in trouble, a negative response was coded. If both spouses did not answer the question, refused to answer, or answered "Don't know," the item was coded as missing for that couple. Data were missing on this measure for less than 1 percent of cases.

## Reports of Warmth and Support

(Scale: 1 to 4; $\alpha=0.86 ; M=3.39 ; S D=0.49$ )
This outcome was examined separately for men and women. The scale for warmth and support was created by taking the average of the responses to seven items aimed at capturing warmth and support in couple relationships. Sample items include: "My spouse expresses love and affection toward me"; "My spouse listens to me when I need someone to talk to"; and "I trust my spouse completely." Appendix Table E. 1 shows the entire list of items. Scale scores were not calculated for respondents with more than one-third of the items missing. Data were missing on this measure for less than 1 percent of cases.

## Reports of Positive Communication Skills

(Scale: 1 to $4 ; \alpha=0.80 ; M=3.20 ; S D=0.57$ )
This outcome was examined separately for men and women. The scale for positive communication skills was created by taking the average of the responses to seven items aimed at capturing how the couple communicates during disagreements. Example items include: "My spouse understands that there are times when I do not feel like talking and times when I do"; "We are good at working out our differences"; and "During arguments, my spouse and I are good at taking breaks when we need them." Appendix Table E. 2 shows the entire list of items. Scale scores were not calculated for respondents with more than one-third of the items missing. ${ }^{2}$ Data were missing on this measure for less than 1 percent of cases.

## Reports of Negative Behavior and Emotions

(Scale: 1 to 4; $\alpha=0.87 ; \mathrm{M}=2.17 ; \mathrm{SD}=0.77$ )
This outcome was examined separately for men and women. The scale for negative behaviors and emotions was created by taking the average of the responses to seven items aimed at capturing negative interactions that occur during disagreements. Example items include: "My spouse was rude and mean to me when we disagreed"; "My spouse seemed to view my words or actions more negatively than I meant them to be"; and "My spouse has yelled or screamed at me." Appendix Table E. 3 shows the entire list of items. Scale scores were not calculated for respondents with more than one-third of the items missing. ${ }^{3}$ Data were missing on this measure for less than 1 percent of cases.

## Reports of Psychological Abuse

(Scale: 1 to $4 ; \alpha=0.76 ; M=1.29 ; S D=0.46$ )
This outcome was examined separately for men and women. The scale for psychological abuse was created by taking the average of the responses to six items aimed at capturing the presence of psychological abuse in the couple relationship. Example items include: "Have you felt afraid that your spouse would hurt you?" "Has your spouse accused you of having an affair?" and "Has your spouse tried to keep you from seeing or talking with your friends or family?" Appendix Table E. 4 shows the entire list of items. Scale scores were not calculated for

[^13]respondents with more than one-third of the items missing. Data were missing on this measure for less than 1 percent of cases.

## Reports of Any Physical Assault (Percentage)

This outcome was examined separately for men and women. It uses answers to five questions drawn from the revised Conflict Tactics Scale to measure respondents’ reports of instances of physical assault in the past three months. ${ }^{4}$ Respondents were asked to indicate the number of times that their spouse had (1) thrown something at them; (2) pushed, shoved, hit, slapped, or grabbed them; (3) used a knife, gun, or weapon on them; (4) choked, slammed, kicked, burned, or beat them; and (5) used threats or force (like hitting, holding down, or using a weapon) to make them have sex (Appendix Table E.5). The decision was made to create a binary outcome reflecting the presence or absence of physical assault because it is more easily interpretable than a scale and there was relatively little variation in the original measure. If the respondent indicated one or more instances of assault in response to all of these questions, a response of 1 was coded. If the respondent indicated zero instances of assault in response to any of these questions, a response of 0 was coded. The outcome was not calculated for respondents with more than one-third of the items missing. More specifically, if the respondent did not answer, refused to answer, or answered "Don't know" in response to more than one of the five items, the outcome was coded as missing. Data were missing on this measure for less than 1 percent of cases.

## Reports of Any Severe Physical Assault (Percentage)

This outcome was examined separately for men and women. It uses answers to two questions from the revised Conflict Tactics Scale to measure respondents' reports of instances of severe physical assault in the past three months. Respondents were asked to indicate the number of times that their spouse had used a knife, gun, or weapon on them and the number of times that their spouse had choked, slammed, kicked, burned, or beat them. If the respondent indicated one or more instances of assault in response to either question, a response of 1 was coded. If the respondent indicated zero instances of assault in response to both questions, a response of 0 was coded. If the respondent did not answer, refused to answer, or answered "Don't know," the outcome was coded as missing. The outcome was also coded as missing if the respondent reported zero instances for one question and did not answer, refused to answer, or answered "Don't know" in response to the other question. Data were missing on this measure for less than 1 percent of cases.

[^14]
## Neither Spouse Reports Infidelity (Percentage)

This outcome was examined at the couple level and measures whether either respondent reported cheating on one's spouse with someone else or whether either respondent believed that the spouse had "definitely" cheated with someone else in the past three months. Responses of "probably yes," "probably no," or "definitely no" to the question about the respondent’s beliefs about the spouse's cheating in the past three months were not treated as evidence of infidelity.

The fidelity outcome was created only if information was collected from either spouse about each spouse’s infidelity behavior. ("Collected" refers to all responses except nonanswers, refusals to answer, and "Don’t know" responses.) For example, if both spouses refused to respond to the question about whether the woman had cheated, the item was coded as missing for that couple. The measure was also not created if either spouse said that the couple was divorced more than three months ago. Data were missing on this measure for less than 1 percent of cases.

## Reports of Cooperative Coparenting

(Scale: 1 to $4 ; \alpha=0.87 ; M=3.37 ; S D=0.56$ )
This outcome was examined separately for men and women. The scale for cooperative coparenting was created by taking the average of the responses to six items aimed at capturing perceptions of a couple's coparenting relationship. Sample items include: "How well the respondent gets along with the spouse when it comes to parenting," "Whether they are able to work out good solutions when there is a problem with the children," and "Whether the respondent can turn to the spouse for support and advice when there's a rough day with the children." Appendix Table E. 6 shows the entire list of items. Scale scores were not calculated for respondents with more than one-third of the items missing. ${ }^{5}$ Data were missing on this measure for less than 1 percent of cases.

## Individual Psychological Distress

(Scale: 1 to 4; $\alpha=0.86 ; M=1.93 ; S D=0.76$ )
The scale for individual psychological distress was created by taking the average of the responses to six items drawn from the K6 Mental Health Screening Tool, a measure of individual psychological distress. ${ }^{6}$ Example items include: "How often in the past 30 days have you

[^15]felt so sad that nothing could cheer you up?" and "How often in the past 30 days have you felt nervous?" Appendix Table E. 7 shows the entire list of items. Scale scores were not calculated for respondents with more than one-third of the items missing. Data were missing on this measure for less than 1 percent of cases.

## The 12-Month Observational Study: Construction of Primary Outcomes

The primary outcomes constructed for the observational study were created by taking the average value of each included Iowa Family Interaction Rating Scales (IFIRS) ${ }^{7}$ code across the husband social support, wife social support, and problem-solving interactions (Appendix B) and then taking the average value across the codes included in each construct. These outcomes were created at an individual level for all spouses who took part in a husband social support, wife social support, or problem-solving activity. While most couples who participated in these interactions completed all three of them, some couples completed some but not all interactions. In such a case, the average value of each included IFIRS code was taken across the interactions completed. No data were missing for any of the observational measures for couples who participated in the adult observational interactions study and for whom the quality of the video and audio recordings allowed observers to code the interactions.

## Observed Warmth and Support

(Scale: 1 to $9 ; \alpha=0.70 ; M=1.97 ; S D=0.66$ )
The scale for observed warmth and support was created by taking the average value of five IFIRS codes that capture warmth and support in the couple interactions across the husband social support, wife social support, and problem-solving activities. Five codes were used:

- Warmth/Support ( $\mathrm{M}=1.74$; $\mathrm{SD}=0.83$ ) includes expressions of liking, appreciation, praise, care, concern, or support for spouse. (Examples: "I love you"; and "You did that well.")
- Humor/Laugh ( $\mathrm{M}=2.63$; $\mathrm{SD}=1.22$ ) includes displays of humor and statements that are lighthearted and good-natured in tone and manner and that decrease tension.
- Positive Mood ( $\mathrm{M}=2.09$; $\mathrm{SD}=1.01$ ) encompasses content, happy, and optimistic displays as well as positive behavior toward self, others, or things in general. (Examples: "I'm content with my life"; and "This is fun!")

[^16]- Group Enjoyment ( $M=2.18 ; \mathrm{SD}=1.20$ ) captures the degree to which enjoyment is evident and displays of pleasure, fun, and satisfaction are present (Example: "I like doing this with you.")
- Physical Affection ( $\mathrm{M}=1.20 ; \mathrm{SD}=0.54$ ) captures any positive, affectionate physical contact, including hugs, caresses, touches, kisses, tickles, and patting or stroking the spouse's arm or back.


## Observed Positive Communication Skills

(Scale: 1 to $9 ; \alpha=0.79 ; M=5.63 ; S D=0.83$ )
The scale for observed positive communication skills was created by taking the average value of the following seven IFIRS codes across the husband social support, wife social support, and problem-solving activities: Assertiveness, Listener Responsiveness, Communication, Effective Process, Disruptive Process (reverse-coded), Denial (reverse-coded), and Avoidant (reverse-coded). Definitions of these codes are provided below. (Based on CFA results indicating that they loaded on a separate factor, three codes were dropped: Agreement on Solution, Solution Quality, and Solution Quantity. See Appendix Table E.12.)

- Assertiveness ( $\mathrm{M}=3.86$; $\mathrm{SD}=1.61$ ) captures confidence, forthrightness, clear and appropriate ways of expressing oneself that are neutral or positive in affect, including verbalizations (for example, "I can do it!"), direct eye contact, or body orientation toward spouse.
- Listener Responsiveness ( $M=4.27$; $\mathrm{SD}=1.25$ ) captures active listening, attending to, acknowledging, or validating another person through verbal or nonverbal displays (such as nodding head or saying "Yeah" or "Mm-hmm" while the spouse is speaking).
- Communication ( $\mathrm{M}=4.67$; $\mathrm{SD}=1.09$ ) encompasses clear expression, in a neutral or positive manner, of one's needs and wants, ideas, explanations, or solicitations of the spouse's point of view and clarifications. (Example: "I'm interested in why you think that is true.")
- Effective Process ( $\mathrm{M}=3.67$; $\mathrm{SD}=1.02$ ) captures behavior that actively facilitates the problem-solving process in a timely and appropriate way, including describing and clarifying the problem or encouraging and soliciting input from the spouse. (Example: "I have a problem, which is that I feel like I'm the only one who cleans the house.")
- Disruptive Process (reverse-coded; $\mathrm{M}=7.67$; $\mathrm{SD}=1.39$ ) captures behavior that actively discourages or obstructs problem solving, including being inat-
tentive, uncooperative, drawing the conversation off topic, belittling or discouraging the spouse's comments. (Example: "If you were home more and would help me, we wouldn't have this problem.")
- Denial (reverse-coded; $\mathrm{M}=8.45$; $\mathrm{SD}=0.80$ ) assesses one’s rejection or denial of personal responsibility for a situation or the situation itself or one's casting blame onto someone else. (Examples: "I got mad because I didn’t feel good"; and "It's all your fault.")
- Avoidant (reverse-coded; $\mathrm{M}=6.80$; $\mathrm{SD}=1.39$ ) captures behavior that conveys avoidance or rejection of, or withdrawal from, conversation (for example, averting one's gaze or orienting one's body away from the spouse).


## Observed Anger and Hostility

(Scale: 1 to $9 ; a=0.82 ; M=1.33 ; S D=0.56$ )
The scale for observed anger and hostility was created by taking the average value of the following four IFIRS codes across the husband social support, wife social support, and problem-solving activities:

- Hostility ( $\mathrm{M}=1.72$; $\mathrm{SD}=1.07$ ) captures hostile, angry, critical, disapproving, and/or rejecting behavior toward the spouse. (Examples: "Go soak your head!" and "Drop dead!")
- Contempt ( $\mathrm{M}=1.39$; $\mathrm{SD}=0.81$ ) encompasses displays of disgust, disdain, or scorn toward the spouse (for example, a nonverbal sneer), including condescending, sarcastic, and superior statements like "You make me sick" and "Whatever . . .," said with a shrug and a turn away.
- Angry Coercion ( $\mathrm{M}=1.12$; $\mathrm{SD}=0.40$ ) assesses attempts to control or change the behavior or opinion of the spouse in a hostile manner, such as power plays, demands, and contingent physical or verbal threats. (Examples: "Shape up, or I'll shape you up!" and "Shut your mouth, or I'll shut it for you!")
- Verbal Attack ( $\mathrm{M}=1.09$; $\mathrm{SD}=0.32$ ) gauges personalized, unqualified disapproval of the spouse and unkind statements that appear to demean, hurt, or embarrass the spouse, such as put-downs, and personally derogatory adjectives and criticisms. (Examples: "You really are sort of stupid"; and "You're lousy with handling money.")


## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 1

## Confirmatory Factor Analysis Loadings for Reported Warmth and Support Based on the 12-Month Survey, Pooled for Men and Women

| Item $^{\mathrm{a}}$ | Factor Loading |
| :--- | ---: |
| The respondent trusts the spouse completely $^{\mathrm{b}}$ | 0.69 |
| The spouse knows and understands the respondent ${ }^{\mathrm{b}}$ | 0.75 |
| The respondent can count on the spouse to be there for him/her ${ }^{\mathrm{b}}$ | 0.72 |
| The respondent feels appreciated by the spouse ${ }^{\mathrm{b}}$ | 0.81 |
| The spouse expresses love and affection toward the respondent $^{\mathrm{b}}$ | 0.76 |
| The spouse listened when the respondent needed someone to talk to $^{\mathrm{c}}$ | 0.57 |
| The couple enjoyed doing ordinary, day-to-day things together $^{\mathrm{c}}$ | 0.49 |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: ${ }^{\text {a }}$ All items were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items
${ }^{\text {b }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree.
${ }^{\text {c The }}$ original response categories for the items (before reverse coding) are as follows: $1=$ often; $2=$ sometimes; 3 = hardly ever; 4 = never.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 2

## Confirmatory Factor Analysis Loadings for Reported Positive Communication Skills Based on the 12-Month Survey, Pooled for Men and Women

Item $^{\text {a }}$
Factor Loading
The spouse understands that there are times when the respondent does not feel like talking and times when he/she does ${ }^{\text {b }}$0.43
The couple was good at working out their differences ${ }^{\text {c }}$ ..... 0.74
When the couple argued, past hurts got brought up again ${ }^{\text {c }}$ ..... 0.47
The respondent felt respected even when the couple disagreed ${ }^{\text {c }}$ ..... 0.69
During arguments, the couple was good at taking breaks when they needed them ${ }^{\mathrm{c}}$ ..... 0.59
The couple discussed disagreements respectfully ${ }^{\text {c }}$ ..... 0.60
During serious disagreements, the couple worked together to find a resolution ${ }^{\text {c }}$ ..... 0.70

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: aExcept for the item "When the couple argued, past hurts got brought up again," all the items were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\text {b }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ strongly agree; $2=$ agree; 3 = disagree; 4 = strongly disagree.
${ }^{\text {c }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ often; $2=$ sometimes; 3 = hardly ever; 4 = never.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 3

## Confirmatory Factor Analysis Loadings for Reported Negative Behavior and Emotions Based on the 12-Month Survey, Pooled for Men and Women

| Item $^{\text {a,b }}$ | Factor Loading |
| :--- | ---: |
| Small issues suddenly became big arguments | 0.70 |
| The spouse was rude and mean to the respondent when they disagreed | 0.79 |
| The spouse seemed to view the respondent's words or actions more negatively | 0.69 |
| than he/she meant them to be | 0.63 |
| The couple stayed mad at each other after an argument | 0.73 |
| The couple's arguments became very heated | 0.72 |
| When they argued, the spouse yelled or screamed at the respondent | 0.69 |
| When they argued, the spouse blamed the respondent for his/her problems |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.

NOTES: ${ }^{\text {a All }}$ items were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\text {b }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ often; 2 = sometimes; 3 = hardly ever; 4 = never.

## The Supporting Healthy Marriage Evaluation

Appendix Table E. 4

## Confirmatory Factor Analysis Loadings for Reported Psychological Abuse Based on the 12-Month Survey, Pooled for Men and Women

| Item $^{\text {a,b }}$ | Factor Loading |
| :--- | ---: |
| The respondent felt afraid that the spouse would hurt him/her | 0.60 |
| The spouse | 0.59 |
| Accused the respondent of having an affair | 0.63 |
| Tried to keep the respondent from seeing or talking with friends or family | 0.59 |
| Kept money from the respondent | 0.60 |
| Made the respondent feel stupid | 0.49 |
| Threatened to hurt the respondent or the children |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: ${ }^{\text {a All }}$ items were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\mathrm{b}}$ The original response categories for the items (before reverse coding) are as follows: $1=$ often; $2=$ sometimes; 3 = hardly ever; 4 = never.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 5

# Confirmatory Factor Analysis Loadings for Reported <br> Physical Assault Based on the 12-Month Survey, Pooled for Men and Women 

| Item $^{\text {a }}$ | Factor Loading |
| :--- | ---: |
| The spouse | 0.58 |
| Threw something at the respondent | 0.69 |
| Pushed, shoved, hit, slapped, or grabbed the respondent | 0.56 |
| Used a knife, gun, or weapon on the respondent | 0.70 |
| Choked, slammed, kicked, burned, or beat the respondent | 0.48 |
| Used threats or force to make the respondent have sex |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTE: ${ }^{\text {a The response categories for the items are as follows: } 1=\text { zero times in the past three months; } 2=}$ one time in the past three months; $3=$ two times in the past three months; $4=$ three to five times in the past three months; $5=$ six or more times in the past three months.

## The Supporting Healthy Marriage Evaluation

Appendix Table E. 6

## Confirmatory Factor Analysis Loadings for Reported Coparenting Relationship Quality Based on the 12-Month Survey, Pooled for Men and Women

| Item | Factor Loading |  |
| :---: | :---: | :---: |
|  | 1 | 2 |
| Cooperative coparenting ${ }^{\text {a }}$ |  |  |
| How well the couple gets along when it comes to parenting ${ }^{\text {b }}$ | 0.62 |  |
| When there is a problem with the children, the couple works out a good solution together ${ }^{\text {c }}$ | 0.77 |  |
| The spouse acts like the kind of parent the respondent wants for his/her children ${ }^{\text {c }}$ | 0.83 |  |
| During a rough day with the children, the respondent can turn to the spouse for parenting support and advice ${ }^{\text {c }}$ | 0.83 |  |
| When the respondent sets rules for the children, he/she can count on the spouse to back him/her up ${ }^{\text {c }}$ | 0.74 |  |
| The spouse takes his/her responsibilities for the children seriously ${ }^{\text {c }}$ | 0.61 |  |
| Frequency of disagreements ${ }^{\text {d }}$ |  |  |
| The couple disagrees about |  |  |
| Setting rules for or disciplining the children |  | 0.54 |
| The activities that the children participate in |  | 0.58 |
| How money is spent on the children |  | 0.63 |
| Who does child care tasks |  | 0.68 |
| The amount of time each spouse spends with the children |  | 0.66 |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Items are allowed to only load on one factor in the confirmatory factor analysis; accordingly, loadings are not shown for the remaining factors in the factor solution.
${ }^{a}$ All items that loaded on the cooperative coparenting factor were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\mathrm{b}}$ The original response categories for the items (before reverse coding) are as follows: 1 = we get along well; 2 = we get along okay; 3 = we do not get along well at all.
${ }^{\text {c }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ strongly agree; 2 = agree; 3 = disagree; 4 = strongly disagree.
${ }^{\text {d }}$ The response categories for the items are as follows: $1=$ never; $2=$ hardly ever; $3=$ sometimes; $4=$ often .

## The Supporting Healthy Marriage Evaluation

Appendix Table E. 7

## Confirmatory Factor Analysis Loadings for Individual Psychological Distress Based on the 12-Month Survey, Pooled for Men and Women

| Item $^{\text {a,b }}$ | Factor Loading |
| :--- | ---: |
| How often in the past 30 days the respondent felt |  |
| So sad that nothing could cheer him/her up | 0.75 |
| Nervous | 0.64 |
| Restless or fidgety | 0.64 |
| Hopeless | 0.84 |
| That everything was an effort | 0.62 |
| Worthless | 0.74 |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: ${ }^{\text {a }}$ All items were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\mathrm{b}}$ The original response categories for the items (before reverse coding) are as follows: $1=$ often; $2=$ sometimes; 3 = hardly ever; 4 = never.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 8

Exploratory Factor Analysis Loadings for Six-Factor Solution for Reported Primary Outcomes Based on the 12-Month Survey, Pooled for Men and Women

| Item | Factor Loading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| Warmth and support in relationship ${ }^{\text {a }}$ |  |  |  |  |  |  |
| The respondent trusts the spouse completely ${ }^{\text {b }}$ | 0.64 | -0.02 | -0.03 | -0.04 | 0.01 | 0.05 |
| The spouse knows and understands the respondent ${ }^{\text {b }}$ | 0.67 | 0.08 | -0.05 | 0.01 | 0.01 | 0.03 |
| The respondent can count on the spouse to be there for him/her ${ }^{\text {b }}$ | 0.70 | 0.00 | 0.12 | -0.04 | -0.01 | 0.12 |
| The respondent feels appreciated by the spouse ${ }^{\text {b }}$ | 0.72 | 0.10 | -0.07 | 0.01 | 0.02 | 0.01 |
| The spouse expresses love and affection toward the respondent ${ }^{\text {b }}$ | 0.74 | 0.08 | -0.02 | 0.03 | 0.01 | -0.02 |
| The spouse listened when the respondent needed someone to talk to ${ }^{\text {c }}$ | 0.30 | 0.39 | 0.02 | -0.07 | 0.00 | 0.05 |
| The couple enjoyed doing ordinary, day-to-day things together ${ }^{\text {c }}$ | 0.21 | 0.42 | -0.01 | 0.01 | 0.00 | 0.06 |
| Positive communication skills in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| The spouse understands that there are times when the respondent does not feel like talking and times when he/she does ${ }^{\text {b }}$ | 0.35 | 0.13 | 0.00 | -0.05 | 0.02 | 0.03 |
| The couple was good at working out their differences ${ }^{\text {c }}$ | 0.23 | 0.58 | -0.02 | 0.01 | 0.00 | -0.06 |
| When the couple argued, past hurts got brought up again ${ }^{\text {c }}$ | 0.02 | 0.10 | -0.72 | 0.07 | -0.01 | -0.05 |
| The respondent felt respected even when the couple disagreed ${ }^{\text {c }}$ | 0.20 | 0.42 | -0.09 | -0.06 | 0.02 | -0.02 |
| During arguments, the couple was good at taking breaks when they needed them ${ }^{\text {c }}$ | 0.05 | 0.49 | -0.11 | 0.03 | -0.01 | -0.05 |
| When they argued, the couple discussed disagreements respectfully ${ }^{\text {c }}$ | 0.11 | 0.55 | 0.04 | 0.04 | -0.01 | -0.02 |
| When they argued, the couple worked together to find a resolution ${ }^{\text {c }}$ | 0.19 | 0.64 | 0.10 | 0.05 | -0.02 | 0.01 |
| Negative behavior and emotions ${ }^{\text {a,c }}$ |  |  |  |  |  |  |
| Small issues suddenly became big arguments | -0.01 | -0.12 | 0.69 | -0.10 | 0.01 | -0.02 |
| The spouse was rude and mean to the respondent when they disagreed | -0.03 | -0.10 | 0.65 | 0.08 | 0.00 | 0.02 |
| The spouse seemed to view the respondent's words or actions more negatively than he/she meant them to be | 0.02 | -0.08 | 0.67 | -0.04 | 0.00 | -0.03 |
| The couple stayed mad at each other after an argument | -0.06 | -0.17 | 0.57 | -0.13 | 0.02 | -0.03 |
| The couple's arguments became very heated | 0.02 | -0.12 | 0.68 | -0.03 | 0.04 | 0.00 |
| When they argued, the spouse yelled or screamed at the respondent | 0.06 | -0.05 | 0.46 | 0.39 | -0.01 | -0.01 |
| When they argued, the spouse blamed the respondent for his/her problems | -0.03 | -0.06 | 0.36 | 0.43 | -0.04 | -0.01 |

## Appendix Table E. 8 (continued)

| Item | Factor Loading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| Psychological abuse ${ }^{\text {a,c }}$ |  |  |  |  |  |  |
| The respondent felt afraid that the spouse would hurt him/her | -0.05 | 0.02 | 0.09 | 0.49 | 0.10 | 0.01 |
| The spouse |  |  |  |  |  |  |
| Accused the respondent of having an affair | -0.03 | 0.03 | 0.17 | 0.51 | 0.00 | 0.07 |
| Tried to keep the respondent from seeing or talking with friends or family | 0.01 | 0.05 | 0.09 | 0.58 | -0.02 | 0.01 |
| Kept money from the respondent | -0.02 | 0.02 | 0.06 | 0.50 | 0.01 | -0.05 |
| Made the respondent feel stupid | -0.02 | -0.05 | 0.30 | 0.43 | -0.04 | -0.01 |
| Threatened to hurt the respondent or the children | 0.02 | 0.02 | -0.03 | 0.45 | 0.17 | -0.06 |
| Physical assault ${ }^{\text {e }}$ |  |  |  |  |  |  |
| The spouse |  |  |  |  |  |  |
| Threw something at the respondent | 0.06 | -0.01 | 0.02 | 0.24 | 0.46 | 0.02 |
| Pushed, shoved, hit, slapped, or grabbed the respondent | 0.04 | -0.03 | 0.01 | 0.31 | 0.56 | 0.02 |
| Used a knife, gun, or weapon on the respondent | -0.01 | 0.02 | 0.02 | -0.20 | 0.67 | -0.01 |
| Choked, slammed, kicked, burned, or beat the respondent | -0.02 | -0.02 | -0.04 | -0.02 | 0.73 | 0.00 |
| Used threats or force to make the respondent have sex | -0.02 | 0.03 | 0.01 | -0.08 | 0.57 | -0.03 |
| Cooperative coparenting ${ }^{\text {a }}$ |  |  |  |  |  |  |
| How well the couple gets along when it comes to parenting ${ }^{\text {f }}$ | 0.01 | 0.10 | -0.10 | -0.01 | 0.01 | 0.49 |
| When there is a problem with the children, the couple works out a good solution together ${ }^{\text {b }}$ | -0.12 | 0.03 | -0.04 | 0.05 | 0.01 | 0.83 |
| The spouse acts like the kind of parent the respondent wants for his/her children ${ }^{\text {b }}$ | 0.00 | -0.08 | -0.02 | 0.00 | 0.00 | 0.85 |
| The respondent can turn to the spouse for parenting support and advice ${ }^{\text {b }}$ | 0.06 | -0.01 | -0.01 | -0.02 | 0.01 | 0.76 |
| When the respondent sets rules for the children, he/she can count on the spouse to back him/her up ${ }^{\text {b }}$ | -0.04 | -0.02 | -0.04 | -0.02 | 0.01 | 0.75 |
| The spouse takes his/her responsibilities for the children seriously ${ }^{\text {b }}$ | 0.40 | -0.15 | 0.12 | -0.02 | -0.03 | 0.42 |

## Appendix Table E. 8 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: ${ }^{\text {a }}$ All items that loaded on this factor were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\mathrm{b}}$ The original response categories for the items (before reverse coding) are as follows: $1=$ strongly agree; $2=$ agree; $3=$ disagree; $4=$ strongly disagree
${ }^{\text {cThe }}$ original response categories for the items (before reverse coding) are as follows: $1=$ often; $2=$ sometimes; $3=$ hardly ever; $4=$ never.
${ }^{\text {d}}$ All items that loaded on this factor except the third item ("When the couple argued, past hurts got brought up again") were reverse-coded to ensure that higher response categories reflect stronger endorsements of the items.
${ }^{\text {e }}$ The response categories for the items are as follows: $1=$ zero times in the past three months; $2=$ one time in the past three months; $3=$ two times in the past three months; $4=$ three to five times in the past three months; $5=$ six or more times in the past three months.
${ }^{\mathrm{f}}$ The original response categories for the items (before reverse coding) are as follows: $1=$ we get along well; $2=$ we get along okay; 3 = we do not get along well at all.

## The Supporting Healthy Marriage Evaluation

Appendix Table E. 9
Correlations Between Reported Primary Outcomes Based on the 12-Month Survey, Pooled for Men and Women

| Outcome ${ }^{\text {a }}$ | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Individual's report of |  |  |  |  |  |  |  |  |  |
| (1) Relationship happiness | 1.00 |  |  |  |  |  |  |  |  |
| (2) Marriage in trouble (\%) | -0.51 | 1.00 |  |  |  |  |  |  |  |
| (3) Warmth and support | 0.64 | -0.47 | 1.00 |  |  |  |  |  |  |
| (4) Positive communication skills | 0.59 | -0.52 | 0.66 | 1.00 |  |  |  |  |  |
| (5) Negative behavior and emotions | -0.58 | 0.59 | -0.57 | -0.70 | 1.00 |  |  |  |  |
| (6) Psychological abuse | -0.46 | 0.48 | -0.49 | -0.52 | 0.66 | 1.00 |  |  |  |
| (7) Any physical assault (\%) | -0.24 | 0.27 | -0.23 | -0.29 | 0.36 | 0.43 | 1.00 |  |  |
| (8) No infidelity (\%) | 0.20 | -0.22 | 0.18 | 0.25 | -0.21 | -0.23 | -0.12 | 1.00 |  |
| (9) Cooperative coparenting | 0.52 | -0.42 | 0.69 | 0.60 | -0.51 | -0.41 | -0.21 | 0.19 | 1.00 |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: The table column numbers (1-9) correspond to the numbered outcomes in the leftmost column.
${ }^{\text {a }}$ Detailed notes on the construction of these outcomes are presented in this appendix.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 10

## Correlations Between Men's and Women's Reported Primary Outcomes Based on the 12-Month Survey

|  | Women's report of |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Outcome $^{\mathrm{a}}$ | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |  |
| Men's report of |  |  |  |  |  |  |  |  |  |  |
| (1) Relationship happiness | 0.40 | -0.30 | 0.35 | 0.36 | -0.36 | -0.26 | -0.11 | 0.06 | 0.27 |  |
| (2) Marriage in trouble (\%) | -0.36 | 0.42 | -0.32 | -0.38 | 0.40 | 0.28 | 0.16 | -0.14 | -0.28 |  |
| (3) Warmth and support | 0.34 | -0.27 | 0.38 | 0.35 | -0.34 | -0.25 | -0.13 | 0.07 | 0.31 |  |
| (4) Positive communication skills | 0.34 | -0.33 | 0.34 | 0.45 | -0.41 | -0.27 | -0.14 | 0.14 | 0.33 |  |
| (5) Negative behavior and emotions | -0.37 | 0.38 | -0.35 | -0.45 | 0.50 | 0.32 | 0.19 | -0.13 | -0.32 |  |
| (6) Psychological abuse | -0.28 | 0.30 | -0.29 | -0.32 | 0.36 | 0.33 | 0.18 | -0.14 | -0.24 |  |
| (7) Any physical assault (\%) | -0.15 | 0.18 | -0.16 | -0.20 | 0.23 | 0.20 | 0.22 | -0.05 | -0.12 |  |
| (8) No infidelity (\%) | 0.09 | -0.13 | 0.09 | 0.18 | -0.14 | -0.10 | -0.04 | 0.28 | 0.12 |  |
| (9) Cooperative coparenting | 0.27 | -0.26 | 0.33 | 0.32 | -0.31 | -0.25 | -0.12 | 0.10 | 0.36 |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: The table column numbers (1-9) correspond to the numbered outcomes in the leftmost column.
${ }^{\text {a }}$ Detailed notes on the construction of these outcomes are presented in this appendix.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 11

## Confirmatory Factor Analysis Loadings for Warmth and Support Based on Observed Couple Interactions, Pooled for Men and Women

| Item $^{\text {a }}$ | Factor Loading |
| :--- | ---: |
| Individual displays |  |
| Happiness toward self, others, or things in general (Positive Mood) | 0.55 |
| Care, concern, support, or encouragement toward others (Warmth/Support) | 0.35 |
| Individual expresses | 0.79 |
| Enjoyment and satisfaction during group interaction (Group Enjoyment) | 0.71 |
| Good-natured, nonsarcastic, lighthearted behaviors that help lighten interactions (Humor/Laugh) | 0.27 |
| Affectionate physical contact such as hugs, caresses, and pats (Physical Affection) |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The codes used in the observational study come from the Iowa Family Interaction Rating Scales (IFIRS). The name of each code in the IFIRS is given in parentheses.
${ }^{\text {a }}$ The response categories for the items are as follows: 1 = not at all characteristic; 3 = minimally characteristic; 5 = somewhat characteristic; $7=$ moderately characteristic; $9=$ mainly characteristic.

# Confirmatory Factor Analysis Loadings for Positive Communication Outcomes Based on Observed Couple Interactions, Pooled for Men and Women 

| Item | Factor Loading |  |
| :---: | :---: | :---: |
|  | 1 | 2 |
| Positive communication skills |  |  |
| Individual's |  |  |
| Ability to speak in a clear, appropriate, and open way (Assertiveness) ${ }^{\text {a }}$ | 0.68 |  |
| Ability to positively or neutrally express point of view (Communication) ${ }^{\text {b }}$ | 0.83 |  |
| Behavior actively hinders or obstructs problem-solving process (Disruptive Process) ${ }^{\text {a,c }}$ | 0.47 |  |
| Behavior actively assists general problem-solving process (Effective Process) ${ }^{\text {a }}$ | 0.70 |  |
| Ability to listen attentively (Listener Responsiveness) ${ }^{\text {a }}$ | 0.66 |  |
| Individual orients self away from others to avoid interaction (Avoidant) ${ }^{\text {a,c }}$ | 0.44 |  |
| Individual rejects existence or responsibility for a past or present situation (Denial) ${ }^{\text {a,c }}$ | 0.30 |  |
| Communication outcome ${ }^{\text {a }}$ |  |  |
| Individual's |  |  |
| Ability to resolve and/or reach an agreement on a solution with spouse (Agreement on Solution) |  | 0.45 |
| Solutions are reasonable, nonexploitive, or achievable (Solution Quality) |  | 0.93 |
| Number of suggested proposed solutions toward a goal (Solution Quantity) |  | 0.78 |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The codes used in the observational study come from the Iowa Family Interaction Rating Scales (IFIRS). The name of each code in the IFIRS is given in parentheses.

Items are allowed to only load on one factor in the confirmatory factor analysis; accordingly, loadings are not shown for the remaining factors in the factor solution.
${ }^{\text {a }}$ The original response categories for the items (before reverse coding) are as follows: $1=$ not at all characteristic; $3=$ minimally characteristic; $5=$ somewhat characteristic; $7=$ moderately characteristic; $9=$ mainly characteristic.
${ }^{\mathrm{b}}$ The response categories for the items are as follows: $1=$ rarely or never; $3=$ occasionally or seldom; $5=$ intermittently; 7 = fairly often; $9=$ frequently.
${ }^{\text {c }}$ This item was reverse coded.

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## Appendix Table E. 13

## Confirmatory Factor Analysis Loadings for Anger and Hostility Based on Observed Couple Interactions, Pooled for Men and Women

| Item $^{\text {a }}$ | Factor Loading |
| :--- | ---: |
| Individual attempts to control, including hostile or blaming behavior (Angry Coercion) | 0.64 |
| Individual displays hostility, characterized by disgust, disdain, or scorn toward others (Contempt) | 0.83 |
| Individual's hostile behavior is directed toward others (Hostility) | 0.97 |
| Individual's disapproval of another's personal characteristics is personalized and unqualified |  |
| $\quad$ (Verbal Attack) | 0.51 |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The codes used in the observational study come from the Iowa Family Interaction Rating Scales (IFIRS). The name of each code in the IFIRS is given in parentheses.
${ }^{\text {a }}$ The response categories for the items are as follows: $1=$ not at all characteristic ; $3=$ minimally characteristic; 5 = somewhat characteristic; 7 = moderately characteristic; 9 = mainly characteristic.

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## Appendix Table E. 14

Exploratory Factor Analysis Loadings for Three-Factor Solution for Primary Outcomes Based on Observed Couple Interactions

| Item | Factor Loading |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| Warmth and support ${ }^{\text {a }}$ |  |  |  |
| Individual displays |  |  |  |
| Happiness toward self, others, or things in general (Positive Mood) | 0.45 | -0.01 | 0.15 |
| Care, concern, support, or encouragement toward others (Warmth/Support) | 0.22 | 0.05 | 0.24 |
| Individual expresses |  |  |  |
| Enjoyment and satisfaction during group interaction (Group Enjoyment) | 0.78 | -0.08 | 0.02 |
| Good-natured, nonsarcastic, lighthearted behaviors that help lighten interactions (Humor/Laugh) | 0.81 | 0.05 | -0.13 |
| Affectionate physical contact such as hugs, caresses, and pats (Physical Affection) | 0.25 | 0.06 | 0.00 |

Positive communication skills
Individual's

| Ability to speak in a clear, appropriate, and open way (Assertiveness) ${ }^{\text {a }}$ | 0.10 | 0.67 | 0.14 |
| :---: | :---: | :---: | :---: |
| Ability to positively or neutrally express point of view (Communication) ${ }^{\text {b }}$ | -0.01 | 0.87 | 0.09 |
| Behavior actively hinders or obstructs problem-solving process (Disruptive Process) ${ }^{\text {a,c }}$ | -0.11 | 0.42 | -0.50 |
| Behavior actively assists general problem-solving process (Effective Process) ${ }^{\text {a }}$ | 0.01 | 0.70 | 0.10 |
| Ability to listen attentively (Listener Responsiveness) ${ }^{\text {a }}$ | 0.17 | 0.59 | -0.02 |
| Individual orients self away from others to avoid interaction (Avoidant) ${ }^{\text {a,c }}$ | 0.09 | 0.36 | -0.12 |
| Individual rejects existence or responsibility for a past or present situation (Denial) ${ }^{\text {a,c }}$ | 0.03 | 0.18 | -0.42 |

## Anger and hostility ${ }^{\text {a }}$

| Individual attempts to control, including hostile or blaming behavior (Angry Coercion) | 0.03 | -0.13 |
| :--- | :--- | :---: |
| Individual displays hostility, characterized by disgust, disdain, or scorn toward others (Contempt) | -0.05 | -0.14 |
| Individual's hostile behavior is directed toward others (Hostility) | -0.03 | -0.18 |

Individual's hostile behavior is directed toward others (Hostility)
0.10
-0.10

## Appendix Table E. 14 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The codes used in the observational study come from the Iowa Family Interaction Rating Scales (IFIRS). The name of each code in the IFIRS is given in parentheses.
${ }^{\text {a }}$ The response categories for the items are as follows: $1=$ not at all characteristic; $3=$ minimally characteristic; $5=$ somewhat characteristic; $7=$ moderately characteristic; 9 = mainly characteristic.
${ }^{\mathrm{b}}$ The response categories for the items are as follows: $1=$ rarely or never; $3=$ occasionally or seldom; $5=$ intermittently; $7=$ fairly often; $9=$ frequently.
${ }^{\text {c }}$ This item was reverse coded.

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## Appendix Table E. 15

## Correlations Between Primary Outcomes Based on Observed Couple Interactions, Pooled for Men and Women

| Outcome $^{\mathrm{a}}$ | $(1)$ | $(2)$ | (3) |
| :--- | ---: | ---: | ---: |
| Observed |  |  |  |
| (1) Warmth and support | 1.00 |  |  |
| (2) Positive communication skills | 0.38 | 1.00 |  |
| (3) Anger and hostility | -0.14 | -0.47 | 1.00 |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The table column numbers (1-3) correspond to the numbered outcomes in the leftmost column. ${ }^{\text {a }}$ Detailed notes on the construction of these outcomes are presented in this appendix.

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## Appendix Table E. 16

## Correlations Between Men's and Women's Primary Outcomes Based on Observed Couple Interactions

| Outcome $^{\mathrm{a}}$ | Women's observed |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Men's observed $^{4}$ (2) | $(3)$ |  |  |
| (1) Warmth and support |  |  |  |
| (2) Positive communication skills | 0.81 | 0.28 | -0.11 |
| (3) Anger and hostility | 0.30 | 0.57 | -0.38 |
|  | -0.11 | -0.36 | 0.60 |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: The table column numbers (1-3) correspond to the numbered outcomes in the leftmost column. ${ }^{\text {a }}$ Detailed notes on the construction of these outcomes are presented in this appendix.

## The Supporting Healthy Marriage Evaluation

## Appendix Table E. 17

## Correlations Between Reported and Observed Primary Outcomes, Pooled for Men and Women

|  | Observed |  |  |
| :--- | :--- | :--- | ---: |
| Outcome $^{\mathrm{a}}$ | Warmth and Support | Positive Communication Skills | Anger and Hostility |
| Individual's report of |  |  |  |
| Relationship happiness | 0.16 | 0.05 | -0.15 |
| Marriage in trouble (\%) | -0.13 | -0.07 | 0.16 |
| Warmth and support | 0.21 | 0.17 | -0.17 |
| Positive communication skills | 0.17 | 0.16 | -0.18 |
| Negative behavior and emotions | -0.18 | -0.13 | 0.20 |
| Psychological abuse | -0.14 | -0.14 | 0.16 |
| Any physical assault (\%) | -0.07 | -0.07 | 0.05 |
| No infidelity (\%) | 0.04 | 0.01 | -0.03 |
| Cooperative coparenting | 0.21 | 0.16 | -0.15 |

SOURCES: MDRC calculations based on the SHM 12-Month Follow-Up Survey and the SHM 12-Month Observational Study.

NOTE: a Detailed notes on the construction of these outcomes are presented in this appendix.

Appendix F
Nonresponse and Sample Selection Bias, Comparability, and Sensitivity Analyses

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The Supporting Healthy Marriage (SHM) 12-month impact report contains impact estimates that are calculated for respondents to the 12-month follow-up survey and the videotaped observations. ${ }^{1}$ Appendix F examines (1) the extent to which causal inferences can be drawn from impact estimates using the respondent samples for each of these data sources and (2) the degree to which the impact estimates from the two respondent samples are generalizable to each other and to the full SHM sample.

The use of a random assignment design means that the SHM program and control groups are expected to be similar when they first entered the study. The main strength of this design is that any differences that emerge after random assignment can be attributed to the sample members' treatment group status. However, because follow-up data were not collected from all study participants in the evaluation, nonresponse or sample selection bias could weaken the extent to which causal inferences can be drawn and the generalizability of the study's findings in the following ways:

- There could be systematic differences (unrelated to the intervention) between program and control group members who responded to the 12month follow-up data collection activities. If there are systematic differences that make the two groups not well matched at the time of random assignment, then it would not be possible to disentangle any preexisting differences between the two research groups from differences at follow-up that are attributable to treatment group status.
- There could be systematic differences between the individuals who participated in the 12-month follow-up data collection activities and those who did not. If there are differences between sample members who responded and those who did not, then the impact results for the respondent samples may not be generalizable to the fielded samples or to the full SHM sample; the results may be valid only for the group that responded to a particular data collection effort. For the observational study, this issue may be compounded by sample selection bias because the fielded observational study sample was chosen through stratified random subsampling of the full SHM sample. That is, equal numbers of couples in each of the local SHM programs were selected, and couples who had infants or preadolescent or adolescent focal children were oversampled, rather than being selected through simple random sampling. The selection criteria that were used to identify the fielded observational study sample may have implications for the generalizability of the impact estimates from the observational study respondent sam-

[^17]ple. It is important to note that these sources of bias do not weaken the extent to which causal inferences about the effectiveness of the SHM program can be drawn. Rather, they may limit the population for whom the inferences hold.

Most importantly, this appendix suggests that the impact analysis for outcomes assessed with the 12 -month survey and the observational study are, indeed, internally valid. That is, there is no evidence to suggest that nonresponse or sample selection bias compromised the extent to which causal inferences about the effectiveness of the SHM program can be drawn from the respondent sample. But, as is often the case when participation in follow-up data collection activities is optional, there are differences in the baseline characteristics of the survey respondent sample and the full SHM research sample, and there are differences between the observational study respondent sample and the survey respondent and full SHM samples. At the same time, the impact estimates do not appear to be highly sensitive to differential patterns of nonresponse to the survey and observational study or to the criteria used to select the fielded observational study sample. This suggests that the impact estimates from the respondent data can likely be generalized to the full SHM sample (or, as in the case of the observational data, from the observational study respondent sample to the survey respondent sample). However, some caution is needed because there may still be other differences between the respondent and nonrespondent samples that cannot be accounted for but could change the impact results.

The remainder of this appendix first describes the flow of sample members through the data collection activities at the 12 -month follow-up point, including the selection of the fielded survey and fielded observational study samples and their response rates. Then the appendix presents the results of nonresponse bias analysis for the survey and the observational study. Two final sections present a series of analyses assessing the comparability of the observational study respondent sample to the survey respondent sample and then to the full SHM sample.

## Selection and Response Rates of the Fielded Survey Sample and the Fielded Observational Study Sample

Appendix Figure F. 1 presents the flow of study participants through the various data collection activities at the 12-month follow-up point and the breakdown of the fielded, respondent, and nonrespondent study samples for each of these data collection components.

## The Fielded Survey, Respondent, and Nonrespondent Samples

The full SHM sample includes 6,298 couples who were randomly assigned to either the SHM program group or the control group. The full SHM sample is also the fielded survey

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## Appendix Figure F. 1

Flow of Study Participants Through 12-Month Data Collection Activities


SOURCES: MDRC calculations based on the SHM 12-Month Follow-Up Survey and the SHM 12-Month Observational Study.

NOTE: ${ }^{\text {a }}$ This sample includes only couples in which both spouses completed the SHM 12-Month Follow-Up Survey.
sample, because all study participants who were randomly assigned in the SHM evaluation were asked to complete the 12 -month follow-up survey. Individuals who responded to the survey are referred to as the "survey respondents," or the survey respondent sample, while sample members who did not respond to the survey are referred to as "survey nonrespondents," or the survey nonrespondent sample. A total of 10,162 individuals ( 81 percent of the fielded sample) responded to the 12 -month follow-up survey.

## The Fielded Observational Study, Respondent, and Nonrespondent Samples

A subsample of families was selected to participate in the observational study. These families make up the fielded observational study sample. In each local SHM program, about 300 families across program and control groups were selected to participate in the observational study. Because equal numbers of families did not enroll in each of the local SHM programs (Appendix A, Appendix Table A.1), families in smaller local SHM programs were oversampled to meet this targeted sample-size goal. Furthermore, families with infants or with preadolescent or adolescent focal children were oversampled to participate in the observational study so that there would be sufficient samples of families with children in these age ranges for any future impact analysis that focuses on the effects of the SHM program on outcomes like parenting or child outcomes in which the measures vary with the age of the focal child. Thus, the fielded observational sample differs to a certain extent from the full SHM sample in its distribution of sample members across SHM program locations and the age categories of focal children. In total, 2,449 families, or approximately 39 percent of the full SHM sample, were selected to participate in the observational study.

Though the selection criteria for the fielded observational study sample was not contingent on response to the 12 -month follow-up survey, couples in this sample were invited by the interviewers to participate in the observational study only after both members of the couple completed the 12 -month survey. ${ }^{2}$ Of these couples, some agreed to participate in the observational study, while others declined. Couples who completed at least one of the videotaped couple interactions are referred to as "observational study respondents," or the observational study respondent sample. ${ }^{3}$ A total of 1,397 couples participated in the observational study ( 57 percent of the fielded observational study sample).

[^18]Thus, in the full SHM sample, couples may be missing observational data at the 12month follow-up point for two primary reasons. First, couples in the full SHM sample may not have observational data available because they were not selected for the fielded observational study sample; a total of 3,849 couples fall into this group. Second, once selected for the fielded observational study sample, a couple's observed interaction data might not be available because both members of the couple did not complete the 12-month survey or they declined the invitation to participate in the observational study; a total of 1,052 couples fall into this group. Collectively, these couples are referred to as "observational study nonrespondents," or the observational study nonrespondent sample.

## Nonresponse Bias

The analysis of nonresponse bias assesses potential bias in the survey and observational study respondent samples by addressing three questions:

- Are there systematic differences between program and control group members in the survey and the observational study respondent samples? To examine this, comparisons are conducted between the baseline characteristics of the research groups in each of the respondent samples.
- Are there systematic differences between those who completed the 12month survey or the observational study data collection components, respectively, and those who did not? To examine this, comparisons are conducted between the baseline characteristics of respondents and nonrespondents in the fielded survey sample and the fielded observational study sample.
- Is there evidence that nonresponse has biased the impact estimates for the survey respondent sample? To explore this question, an analysis was performed assessing the sensitivity of the impact estimates on surveyreported outcomes when the respondent sample is weighted to be more representative of the full SHM sample. Below in this appendix, a sensitivity analysis examines whether nonresponse or sample selection bias influenced the impact estimates drawn from the observational study respondent sample.
analyses in this appendix, these couples are considered "nonrespondents" to the observational study since all of the observational outcomes that are discussed in the 12-month impact report came from the couple interactions (Hsueh et al., 2012).


## Nonresponse Bias Analysis for the 12-Month Survey

## Comparison of Research Groups in the Survey Respondent Sample

Baseline characteristics were compared for program and control group survey respondents. Comparisons were conducted separately for women (Appendix Table F.1) and for men (Appendix Table F.2). Both tables show that the two groups were generally similar at study entry. To confirm that there were no systematic differences between the program and control group survey respondents, a logistic regression was run using baseline variables to predict research group status among survey respondents. The analysis was conducted separately for women and for men. A joint test indicates that the baseline characteristics collectively did not significantly predict research group status ( $p$-values $=0.997$ for women and 0.998 for men). This is consistent with a null hypothesis of no systematic differences between program and control group respondents on observed baseline characteristics.

## Comparison of Respondents and Nonrespondents in the Fielded Survey Sample

Comparisons of selected baseline characteristics of survey respondents and nonrespondents are shown for women and men in Appendix Tables F. 3 and F.4. An indicator for survey response was regressed on baseline variables (separately for women and men), and then a test of the joint significance of the baseline variables was performed. The tests show that the baseline coefficients as a group significantly predicted survey response ( p -values $=$ less than 0.001 for both women and men), indicating that there were systematic differences between respondents and nonrespondents.

Survey respondents and nonrespondents differed on most baseline characteristics. Compared with nonrespondents, survey respondents were less economically disadvantaged (more of them had high school diplomas, and they were more likely to be employed); respondents were less distressed in their marriages (as evidenced by all the marital-quality measures); and they were psychologically healthier (respondents were less likely to have substance abuse problems or to be psychologically distressed). Survey respondents and nonrespondents also differed in their family structure: respondents were older, had been married longer, and had older children.

## Weighted Impact Estimates on Survey Outcomes for the Survey Respondent Sample

Given evidence that the survey respondent sample differs from the nonrespondent sample on baseline characteristics, the analysis explores the extent to which the impact estimates for the survey-reported outcomes differ systematically for survey respondents and nonrespondents.

This is done by examining the sensitivity of the survey-reported impact estimates when the survey respondent sample is weighted to be more representative of the baseline characteristics of the full SHM sample.

The weights adjusting for survey nonresponse were generated with the following steps. First, the probability that a sample member would respond to the survey was calculated by modeling response to the 12 -month follow-up survey as a function of a set of baseline characteristics. ${ }^{4}$ Then, an individual's weight was calculated by dividing the overall probability of a response to the survey by the individual's predicted probability of response. ${ }^{5}$ Higher weights were thus given to individuals with characteristics that were underrepresented among the survey respondent sample. A new set of impact estimates was then calculated incorporating the weights.

If the impact estimates on survey-reported outcomes change substantially when weights for nonresponse are applied, this suggests that the unweighted impact estimates from the survey respondent sample cannot be generalized to the full SHM sample with confidence. If the impact estimates on survey-reported outcomes do not change much when weighted for nonresponse, the results of the sensitivity analysis suggest that the impact estimates may be generalized to the full SHM sample. Some caution is still warranted, however, because weighting may not have adjusted appropriately for differences between the respondent and nonrespondent samples. The sensitivity analysis adjusts only for differences in observed characteristics between respondents and nonrespondents; it cannot rule out the possibility of nonresponse bias being introduced in the impact estimates due to differences in unobserved characteristics between the groups.

To assess the extent to which the weighted and the unweighted impact estimates differ from each other, confidence intervals were used. This approach was used because the researchers know of no formal tests that can assess how much impact estimates might change with weighting. Here, 95 percent confidence intervals were calculated to represent the uncertainty

[^19]surrounding the impact estimates. If the confidence intervals for the impact estimates when calculated with and without weights for nonresponse show considerable overlap, this would be evidence that the impact estimates do not differ substantially from each other and that the unweighted impact estimates are not sensitive to weighting. If, however, the confidence intervals do not show considerable overlap, this would be evidence that the impact estimates are sensitive to weighting.

Appendix Table F. 5 shows the unweighted impact estimates on the survey-reported outcomes for the survey respondent sample. This table includes estimates of 95 percent confidence intervals for the unweighted impact estimates. Appendix Table F. 6 shows the weighted impact estimates on the survey-reported outcomes when the survey respondent sample is weighted to be representative of the full SHM research sample. A comparison of the confidence intervals for the unweighted and weighted impact estimates suggests that weighting does little to change the impact estimates.

In sum, the nonresponse bias analysis shows evidence of systematic differences between survey respondents and nonrespondents. The results of the sensitivity analysis, however, suggest that the impact estimates do not change much when weighted to reflect the baseline characteristics of the full SHM sample, suggesting that the impact estimates for the respondent sample can likely be generalized to the full SHM sample. Nonetheless, some caution is needed because there may still be differences between the respondent and nonrespondent samples that are unaccounted for.

## Nonresponse Bias Analysis for the Observational Study

A similar set of analyses as described above was used to evaluate the presence of nonresponse bias for the observational study. However, because the observational study measures and the measures of baseline characteristics were defined at the couple level, the response bias analysis for the observational study was conducted at the couple level, rather than separately for men and women.

## Comparison of Research Groups in the Observational Study Respondent Sample

Baseline characteristics of the program and control groups among the observational study respondents were compared. Appendix Table F. 7 shows that the two groups are similar. To test for systematic differences between them, a logistic regression was run using baseline characteristics to predict research group status. A joint test of these baseline characteristics is not statistically significant ( p -value $=0.687$ ), implying that program group and control group
respondents were similar at baseline and showing that there is no evidence that nonresponse has adversely affected the comparability of the groups.

## Comparison of Respondents and Nonrespondents in the Fielded Observational Study Sample

Comparisons of baseline characteristics for respondents and nonrespondents in the fielded observational study sample are shown in Appendix Table F.8. In order to test whether differences between respondents and nonrespondents were systematic, a model was estimated using baseline characteristics to predict response to the observational study. A test of the joint significance of all baseline characteristics is statistically significant ( p -value $=$ less than 0.001 , indicating that there were systematic differences between respondents and nonrespondents in the fielded observational study sample. Within that sample, respondents were less disadvantaged than nonrespondents: they showed fewer signs of marital distress, were healthier psychologically, had higher educational attainment, and were more likely to be employed. At baseline, respondents were also older than nonrespondents, were more likely to have an adolescent child, had been married longer, and were less likely to have a stepchild living in the household.

## Comparability of the Observational Study Respondents and the Survey Respondents

This section of the appendix examines the extent to which the observational study and survey respondent samples are comparable to each other. As discussed above, two potential sources of bias might influence the generalizability of the impact estimates calculated using the observational study respondent sample. Bias could be introduced by differential patterns of nonresponse. In addition, bias could be introduced because the fielded observational study sample was not selected to be representative of the full SHM sample; rather, equal numbers of couples in each local SHM program were selected, and couples who had infants or preadolescent or adolescent focal children were oversampled. It is important, therefore, to examine the extent to which the estimated impact results on observed outcomes can be generalized to the respondent survey sample.

This analysis has three major components. The same set of criteria that was used to evaluate the results of the nonresponse bias analysis for the 12 -month survey was used to evaluate the results of the analyses described below.

- Are there systematic differences between observational study respondents and other sample members within the survey respondent sample? Comparisons were conducted between the baseline characteristics of observational study respondents and other sample members in the survey respon-
dent sample. The "other sample members" are a group of individuals who responded to the 12 -month follow-up survey but who did not participate in the observational study because of nonresponse or because they were not selected for the fielded observational study sample. This analysis informs the extent to which the observational study respondent sample is representative of the broader survey respondent sample.
- Are there systematic differences in impact estimates between observational study respondents and other sample members within the survey respondent sample? The impact estimates on survey-reported outcomes for the observational study respondents and the other survey respondents were compared. This analysis helps to inform whether the estimated impacts for the observational study respondents can be generalized to the survey respondent sample.
- Is there evidence that impact estimates for observational study respondents are sensitive to weighting for nonresponse and the sampling criteria for the observational study? A set of analyses was performed to see whether the impact estimates for the observational study respondents are sensitive to a set of weights that adjust for nonresponse and the sampling criteria used to select the fielded observational study sample. In doing so, the observational study respondent sample is weighted to be more representative of the survey respondent sample. The sensitivity of the impact estimates for the observational study respondent sample was assessed separately for surveyreported and observed outcomes. This analysis aims to inform the extent to which the estimated impacts from the observational study respondents can be generalized to the survey respondent sample.


## Comparison of Respondent Samples for the Survey and Observational Study

Comparisons between the baseline characteristics of observational study respondents and the other sample members within the survey respondent sample are shown for women in Appendix Table F. 9 and for men in Appendix Table F.10. ${ }^{6}$ An indicator for group membership - either observational study respondent or survey respondent who did not complete the observational study - was regressed on baseline variables (separately for women and men),

[^20]and then a test of the joint significance of the baseline variables was performed. Results are statistically significant $(p$-value $=$ less than 0.001$)$ for both women and men, indicating that the baseline characteristics of the observational study respondent sample are systematically different from the baseline characteristics of other sample members in the survey respondent sample. These differences may result partly from how the fielded observational study sample was selected (described above) and partly from different patterns of nonresponse to the observational study and the survey. ${ }^{7}$ Overall, observational study respondents at baseline were older and had been married longer and had more children who tended to be older than other sample members within the survey respondent samples. Observational study respondents also showed signs of higher marital quality at study entry; particularly, the men reported more satisfaction, and the women reported less distress.

## Comparison of Survey Impacts for the Observational Study Respondent Sample and the Survey Respondent Sample

Comparisons were conducted between the impact estimates on survey-reported outcomes for the observational study respondent sample and other sample members in the survey respondent sample. Appendix Table F. 11 shows the estimated impact results on survey-reported outcomes for three samples: (1) all the survey respondents, (2) the observational study respondents, and (3) the other sample members in the survey respondent sample who did not complete the videotaped observations of couple interactions. Daggers in this table denote statistically significant differences between the survey impacts for observational study respondents and the rest of the survey respondents.

Of the 20 outcomes examined, the estimated impacts on 3 survey-reported outcomes differ significantly between observational study respondents and other sample members in the survey respondent sample. The differences are quite small, however. Moreover, the ways in which the impact estimates differed for these outcomes did not appear to show a consistent pattern. The impact estimates were not consistently larger and more positive for either the observational study respondents or the other sample members in the survey respondent sample. Thus, no strong evidence suggests that there are systematic differences in the impact estimates for the observational study respondents and for other sample members in the survey respondent sample.

[^21]
## Impact Estimates for Observational Study Respondents When Weighted to Be Representative of the Survey Respondent Sample

In the results discussed above, there is evidence suggesting that observational study respondents and other sample members in the survey respondent sample differ from each other on observable baseline characteristics. There is also some evidence that the impact estimates on survey-reported outcomes may differ for these two groups. In this section, the sensitivity of the impact estimates on survey-reported and observed outcomes is explored when the observational study respondent sample is weighted to be more representative of the survey respondent sample. Weights were constructed to adjust for nonresponse in the observational study and for the sampling criteria for the fielded observational study sample. The weights were constructed in the same manner as for the survey nonresponse adjustment (described above), but two additional baseline characteristics were included in the logistic regression: couple's focal child is 1 year to 7 years old and couple's focal child is 8 to 13 years old.

For the observational study respondents, Appendix Table F. 12 shows the unweighted impact estimates on the survey-reported outcomes, and Appendix Table F. 13 shows the unweighted impact estimates on the observed outcomes.

Appendix Table F. 14 shows the weighted impact estimates on the survey-reported outcomes when the observational study respondent sample is weighted to be representative of the survey respondent sample. There is considerable overlap of the confidence intervals around the unweighted and weighted impact estimates (Appendix Tables F. 12 and F.14), suggesting that weighting does little to change the impact estimates.

Appendix Table F. 15 shows the weighted impact estimates on the observed outcomes when the observational study respondent sample is weighted to be representative of the survey respondent sample. Again, there is considerable overlap of the confidence intervals around the unweighted and weighted impact estimates (Appendix Tables F. 13 and F.15), suggesting that weighting does little to change the impact estimates.

In sum, although some differences in impact estimates on survey-reported outcomes between observational study respondents and other sample members were found, the results do not provide strong evidence of systematic differences in the impact estimates between the two groups. The results from these sensitivity analyses also do not suggest that the unweighted impact estimates change much when weighted to reflect the baseline characteristics of the survey respondent sample. At the same time - because there is evidence of systematic differences between the baseline characteristics of observational study respondents and other sample members - the collective results suggest that the impact estimates from the observational study respondent sample may be generalized to the survey respondent sample. Yet some caution is
needed because there may still be differences that cannot be accounted for in the weighted analyses.

## Comparability of the Observational Study Respondents and the Full SHM Sample

This section of the appendix examines the extent to which findings from the observational study respondent sample may be generalized to the full SHM sample. As discussed above, bias might be evident because of nonresponse and the sample selection criteria used to identify the fielded observational study sample. This analysis has two major components. The same set of criteria that was used to evaluate the results of the nonresponse bias analysis for the 12-month survey was used to evaluate the results of the analyses described below.

- Are there systematic differences between observational study respondents and other sample members in the full SHM sample? Comparisons were made between the baseline characteristics of observational study respondents and other sample members in the full SHM sample. The "other sample members" in this analysis are a group of individuals in the full SHM sample who did not participate in the observational study because of nonresponse or because they were not selected for the fielded observational study sample. This analysis aims to inform the extent to which the observational study respondent sample is representative of the full SHM sample.
- Is there evidence that impact estimates for observational study respondents are sensitive when weighted to be more representative of the full SHM sample? A set of analyses was performed to see whether the impact estimates that were derived using data from the observational study respondents are sensitive to a set of weights that adjust for nonresponse and the sampling criteria used to select the fielded observational study sample. In doing so, the observational study respondent sample was weighted to be more representative of the baseline characteristics of the full SHM sample. The sensitivity of the impact estimates for the observational study respondent sample was assessed separately for survey-reported and observed outcomes. This analysis aims to inform whether the estimated impacts from the observational study data may be generalized to the full SHM sample.


## Comparison of Observational Study Respondents and Other Sample Members in the Full SHM Sample

Comparisons between the baseline characteristics of observational study respondents and other sample members in the full SHM sample are shown in Appendix Table F.16. An indicator for membership in each of the two groups was regressed on baseline variables, and a test of the joint significance of the baseline variables was performed. The analysis was conducted at the couple level because participation in both the observational study sample and the full SHM sample are defined at the couple level. The test result is statistically significant ( p -value $=$ less than 0.001 ), indicating that there are systematic differences between the baseline characteristics of observational study respondents and other sample members in the full SHM sample. Compared with other sample members, observational study respondents tended to be older at study entry, to have more children who tended to be older, to have been married longer, and to have had lower levels of marital distress, as displayed in all the marital-quality measures.

## Impact Estimates for Observational Study Respondents When Weighted to Be Representative of the Full SHM Sample

The sensitivity to the impact estimates on survey-reported and observed outcomes was examined by weighting the observational study respondent sample so that it is representative of the baseline characteristics of the full SHM sample. The weights were constructed in the same manner as for the survey nonresponse adjustment (described above), and, again, the two additional baseline characteristics reflecting the focal child's age were included in the logistic regression. ${ }^{8}$

Appendix Tables F. 12 and F. 13 (above) show the unweighted impact estimates on the survey-reported and observed outcomes for the observational study respondent sample. Appendix Tables F. 17 and F. 18 show the impact estimates when the observational study respondent sample is weighted to be representative of the full SHM sample. The confidence intervals around the unweighted and weighted impact estimates (Appendix Tables F. 12 and Table F. 17 for survey outcomes; Appendix Tables F. 13 and F. 18 for observed outcomes) show considerable overlap, suggesting that weighting does little to change the impact estimates.

In sum, the results from these sensitivity analyses do not suggest that the unweighted impact estimates change much when weighted to reflect the baseline characteristics of the full SHM sample. At the same time, there is evidence of systematic differences between the baseline characteristics of observational study respondents and other sample members in the full SHM sample. Thus, the findings from the observational respondent sample can likely be

[^22]generalized to the full SHM sample. However, because the weighted analyses cannot rule out the possibility that unobserved differences might still influence the impact estimates that are drawn from the observational study respondent sample, some caution is needed when generalizing the results to the full SHM sample.

## The Supporting Healthy Marriage Evaluation

Appendix Table F. 1

## Comparison of Selected Baseline Characteristics Between Program and Control Groups Among Survey Respondents, Women

| Characteristic ${ }^{\text {a }}$ | ProgramGroup | Control |  |
| :---: | :---: | :---: | :---: |
|  |  | Group | Difference |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| Both spouses Hispanic | 44.7 | 42.7 | 1.9 |
| Both spouses African-American, non-Hispanic | 10.5 | 11.7 | -1.2 |
| Both spouses white, non-Hispanic | 21.0 | 20.8 | 0.2 |
| Other/mulitracial | 23.8 | 24.8 | -1.0 |
| Both spouses have at least a high school diploma (\%) | 51.9 | 50.5 | 1.4 |
| Average age (years) | 31.6 | 31.7 | -0.1 |
| Income less than 200\% of FPL (\%) | 81.4 | 82.0 | -0.6 |
| Either spouse currently employed (\%) | 83.0 | 81.6 | 1.4 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 29.4 | 29.0 | 0.4 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 61.0 | 58.7 | 2.3 * |
| 2 years to 9 years, 11 months | 62.9 | 63.2 | -0.3 |
| 10 years or older | 31.0 | 31.8 | -0.9 |
| Average number of children in the household | 2.0 | 2.1 | 0.0 |
| Average number of years married | 6.3 | 6.4 | -0.1 |
| Stepfamily (\%) | 25.9 | 26.1 | -0.3 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 81.5 | 80.5 | 1.0 |
| Women report happy or very happy in marriage | 75.3 | 76.1 | -0.8 |
| Men report marriage in trouble | 53.8 | 54.8 | -1.0 |
| Women report marriage in trouble | 55.3 | 56.6 | -1.2 |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 22.5 | 22.6 | -0.1 |
| Either spouse reports substance abuse problem | 19.9 | 20.6 | -0.8 |
| Sample size (women) | 2,575 | 2,668 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t-tests were used for continuous variables.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 2

## Comparison of Selected Baseline Characteristics Between Program and Control Groups Among Survey Respondents, Men

| Characteristic $^{\text {a }}$ | Program <br> Group | Control <br> Group | Difference |
| :--- | ---: | ---: | ---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| $\quad$ Both spouses Hispanic | 44.1 | 42.1 | 1.9 |
| Both spouses African-American, non-Hispanic | 10.8 | 11.7 | -1.0 |
| Both spouses white, non-Hispanic | 21.4 | 21.2 | 0.1 |
| $\quad$ Other/mulitracial | 23.8 | 24.9 | -1.1 |
| Both spouses have at least a high school diploma (\%) | 52.4 | 51.5 | 0.9 |
| Average age (years) | 31.8 | 31.7 | 0.1 |
| Income less than 200\% of FPL (\%) | 81.8 | 81.9 | -0.2 |
| Either spouse currently employed (\%) | 83.3 | 81.9 | 1.4 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 29.2 | 28.9 | 0.3 |
| Couple has a child between the ages of (\%) |  |  |  |
| $\quad$ Prenatal to 1 year, 11 months | 60.2 | 58.6 | 1.6 |
| 2 years to 9 years, 11 months | 63.5 | 63.4 | 0.1 |
| 10 years or older | 31.7 | 31.4 | 0.3 |
| Average number of children in the household | 2.0 | 2.1 | 0.0 |
| Average number of years married | 6.4 | 6.4 | 0.0 |
| Stepfamily (\%) | 26.1 | 25.7 | 0.4 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 81.7 | 81.0 | 0.7 |
| Women report happy or very happy in marriage | 75.7 | 76.3 | -0.6 |
| Men report marriage in trouble |  | 54.0 | -0.3 |
| Women report marriage in trouble | 54.6 | -1.3 |  |
| Adult well-being (\%) |  | 55.9 |  |
| Either spouse has psychological distress |  |  |  |
| Either spouse reports substance abuse problem | 22.1 | 22.6 | -0.5 |
| Sample size (men) | 19.3 | 20.0 | -0.7 |
| SOUR | 2,415 | 2,504 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t -tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

# The Supporting Healthy Marriage Evaluation 

## Appendix Table F. 3

## Comparison of Selected Baseline Characteristics Between Survey Respondents and Nonrespondents, Women

| Characteristic ${ }^{\text {a }}$ | Respondents | Nonrespondents | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| Both spouses Hispanic | 43.7 | 42.2 | 1.5 |
| Both spouses African-American, non-Hispanic | 11.1 | 11.9 | -0.8 |
| Both spouses white, non-Hispanic | 20.9 | 18.7 | 2.2 |
| Other/mulitracial | 24.3 | 27.2 | -2.9 |
| Both spouses have at least a high school diploma (\%) | 51.2 | 46.0 | 5.2 *** |
| Average age (years) | 31.6 | 30.3 | 1.3 *** |
| Income less than 200\% of FPL (\%) | 81.7 | 84.5 | -2.8** |
| Either spouse currently employed (\%) | 82.3 | 77.0 | 5.3 *** |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 29.2 | 36.4 | -7.2 *** |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 59.8 | 63.6 | -3.8** |
| 2 years to 9 years, 11 months | 63.1 | 60.4 | 2.7 |
| 10 years or older | 31.4 | 27.7 | 3.8 ** |
| Average number of children in the household | 2.0 | 1.9 | 0.1 ** |
| Average number of years married | 6.3 | 5.7 | 0.6 *** |
| Stepfamily (\%) | 26.0 | 28.4 | -2.4 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 81.0 | 77.8 | 3.2 ** |
| Women report happy or very happy in marriage | 75.7 | 71.8 | 3.9 *** |
| Men report marriage in trouble | 54.3 | 59.7 | -5.4 *** |
| Women report marriage in trouble | 56.0 | 62.5 | -6.5 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 22.6 | 28.1 | -5.5 *** |
| Either spouse reports substance abuse problem | 20.2 | 23.8 | -3.6 ** |
| Sample size (women) | 5,243 | 1,055 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t -tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 4

## Comparison of Selected Baseline Characteristics Between Survey Respondents and Nonrespondents, Men

| Characteristic ${ }^{\text {a }}$ | Respondents | Nonrespondents | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | ** |
| Both spouses Hispanic | 43.1 | 44.6 | -1.6 |
| Both spouses African-American, non-Hispanic | 11.3 | 11.2 | 0.0 |
| Both spouses white, non-Hispanic | 21.3 | 17.7 | 3.7 |
| Other/mulitracial | 24.3 | 26.5 | -2.1 |
| Both spouses have at least a high school diploma (\%) | 51.9 | 44.4 | 7.5 *** |
| Average age (years) | 31.8 | 30.2 | 1.5 *** |
| Income less than 200\% of FPL (\%) | 81.9 | 83.5 | -1.7 |
| Either spouse currently employed (\%) | 82.6 | 77.2 | 5.4 *** |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 29.1 | 35.2 | -6.2 *** |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 59.4 | 64.1 | -4.7 *** |
| 2 years to 9 years, 11 months | 63.4 | 59.9 | 3.5 ** |
| 10 years or older | 31.5 | 28.2 | 3.3 ** |
| Average number of children in the household | 2.0 | 1.9 | 0.1 *** |
| Average number of years married | 6.4 | 5.7 | 0.7 *** |
| Stepfamily (\%) | 25.9 | 28.3 | -2.4* |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 81.4 | 77.2 | 4.2 *** |
| Women report happy or very happy in marriage | 76.0 | 71.5 | 4.5 *** |
| Men report marriage in trouble | 53.8 | 60.2 | -6.4*** |
| Women report marriage in trouble | 55.3 | 63.4 | -8.1 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 22.4 | 27.5 | -5.1 *** |
| Either spouse reports substance abuse problem | 19.7 | 25.0 | -5.3 *** |
| Sample size (men) | 4,919 | 1,379 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed $t$-tests were used for continuous variables.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 5

## Unweighted Estimated Impacts on Primary 12-Month Survey Outcomes for the Survey Respondent Sample

| Outcome ${ }^{\text {a }}$ | Program Control Difference |  |  | P -Value | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group | Group | (Impact) |  | LB | UB |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {b }}$ (\%) | 90.0 | 89.3 | 0.8 | 0.329 | -0.8 | 2.4 |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {c }}$ | 5.93 | 5.77 | 0.15 *** | 0.000 | 0.10 | 0.20 |
| Either spouse reports marriage in trouble (\%) | 47.7 | 52.9 | -5.2 *** | 0.000 | -7.6 | -2.8 |
| Warmth and support in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.42 | 0.04 *** | 0.000 | 0.02 | 0.07 |
| Women's report of warmth and support | 3.37 | 3.32 | 0.05 *** | 0.000 | 0.02 | 0.07 |
| Positive communication skills in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.24 | 3.19 | 0.05 *** | 0.000 | 0.02 | 0.08 |
| Women's report of positive communication skills | 3.22 | 3.15 | 0.07 *** | 0.000 | 0.04 | 0.09 |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.16 | 2.23 | -0.07 *** | 0.000 | -0.10 | -0.03 |
| Women's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.10 | 2.19 | -0.09 *** | 0.000 | -0.13 | -0.06 |
| Men's report of psychological abuse ${ }^{\text {d }}$ | 1.30 | 1.34 | -0.04 *** | 0.001 | -0.07 | -0.02 |
| Women's report of psychological abuse ${ }^{\text {d }}$ | 1.25 | 1.28 | -0.04 *** | 0.002 | -0.06 | -0.01 |
| Men's report of any physical assault (\%) | 11.3 | 13.4 | -2.2** | 0.021 | -4.0 | -0.3 |
| Women's report of any physical assault (\%) | 8.6 | 9.2 | -0.5 | 0.497 | -2.1 | 1.0 |
| Men's report of any severe physical assault (\%) | 1.5 | 1.9 | -0.3 | 0.370 | -1.1 | 0.4 |
| Women's report of any severe physical assault (\%) | 1.6 | 1.6 | 0.0 | 0.979 | -0.7 | 0.7 |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 92.4 | 91.3 | 1.1 | 0.137 | -0.3 | 2.5 |
| Individual psychological distress ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of psychological distress | 1.85 | 1.90 | -0.05 ** | 0.021 | -0.08 | -0.01 |
| Women's report of psychological distress | 1.95 | 2.02 | -0.07 *** | 0.000 | -0.11 | -0.03 |
| Coparenting relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.43 | 0.02 | 0.193 | -0.01 | 0.04 |
| Women's report of cooperative coparenting | 3.33 | 3.30 | 0.02 | 0.107 | -0.01 | 0.05 |
| Sample size |  |  |  |  |  |  |
| Couples | 2,650 | 2,745 |  |  |  |  |
| Men | 2,415 | 2,504 |  |  |  |  |
| Women | 2,575 | 2,668 |  |  |  |  |

## Appendix Table F. 5 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\text {b }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
"The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## The Supporting Healthy Marriage Evaluation

Appendix Table F. 6

## Estimated Impacts on Primary 12-Month Survey Outcomes for Survey Respondents Weighted to the Full SHM Sample

| Outcome ${ }^{\text {a }}$ | Program Control Difference |  |  | P -Value | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group | Group | (Impact) |  | LB | UB |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {b }}$ (\%) | 90.0 | 89.3 | 0.7 | 0.364 | -0.9 | 2.3 |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {c }}$ | 5.93 | 5.77 | 0.15 *** | 0.000 | 0.10 | 0.21 |
| Either spouse reports marriage in trouble (\%) | 47.8 | 52.9 | -5.1 *** | 0.000 | -7.6 | -2.7 |
| Warmth and support in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.42 | 0.04 *** | 0.000 | 0.02 | 0.07 |
| Women's report of warmth and support | 3.37 | 3.32 | 0.05 *** | 0.000 | 0.02 | 0.07 |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.24 | 3.19 | $0.05^{* * *}$ | 0.000 | 0.02 | 0.08 |
| Women's report of positive communication skills | 3.22 | 3.15 | 0.07 *** | 0.000 | 0.04 | 0.09 |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.16 | 2.23 | -0.07 *** | 0.000 | -0.10 | -0.03 |
| Women's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.10 | 2.19 | -0.09 *** | 0.000 | -0.13 | -0.06 |
| Men's report of psychological abuse ${ }^{\text {d }}$ | 1.30 | 1.34 | -0.04 *** | 0.001 | -0.07 | -0.02 |
| Women's report of psychological abuse ${ }^{\text {d }}$ | 1.25 | 1.28 | -0.04 *** | 0.002 | -0.06 | -0.01 |
| Men's report of any physical assault (\%) | 11.3 | 13.5 | -2.2 ** | 0.023 | -4.1 | -0.3 |
| Women's report of any physical assault (\%) | 8.7 | 9.2 | -0.5 | 0.522 | -2.1 | 1.1 |
| Men's report of any severe physical assault (\%) | 1.5 | 1.9 | -0.4 | 0.366 | -1.1 | 0.4 |
| Women's report of any severe physical assault (\%) | 1.6 | 1.5 | 0.1 | 0.878 | -0.7 | 0.8 |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 92.5 | 91.3 | 1.2 | 0.106 | -0.3 | 2.7 |
| Individual psychological distress ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of psychological distress | 1.85 | 1.90 | -0.05 ** | 0.016 | -0.09 | -0.01 |
| Women's report of psychological distress | 1.95 | 2.02 | -0.07 *** | 0.000 | -0.11 | -0.03 |
| Coparenting relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.43 | 0.02 | 0.168 | -0.01 | 0.04 |
| Women's report of cooperative coparenting | 3.33 | 3.30 | 0.03 * | 0.090 | 0.00 | 0.06 |
| Sample size |  |  |  |  |  |  |
| Couples | 2,650 | 2,745 |  |  |  |  |
| Men | 2,415 | 2,504 |  |  |  |  |
| Women | 2,575 | 2,668 |  |  |  |  |

## Appendix Table F. 6 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were calculated using ordinary least squares, are weighted so that survey respondents were more representative of the full SHM sample, and were regression-adjusted for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.

${ }^{\mathrm{d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 7

## Comparison of Selected Baseline Characteristics Between Program and Control Groups Among Observational Study Respondents

| Characteristic $^{\text {a }}$ | Program <br> Group | Control <br> Group | Difference |
| :--- | ---: | ---: | ---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| $\quad$ Both spouses Hispanic | 47.2 | 45.4 | 1.8 |
| Both spouses African-American, non-Hispanic | 10.3 | 10.8 | -0.6 |
| Both spouses white, non-Hispanic | 20.7 | 1.7 | 1.0 |
| $\quad$ Other/mulitracial | 21.9 | 24.1 | -2.3 |
| Both spouses have at least a high school diploma (\%) | 50.0 | 48.2 | 1.8 |
| Average age (years) | 32.7 | 32.8 | -0.1 |
| Income less than 200\% of FPL (\%) | 82.0 | 82.6 | -0.6 |
| Either spouse currently employed (\%) | 83.1 | 82.7 | 0.4 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 29.2 | 28.5 | 0.7 |
| Couple has a child between the ages of (\%) |  |  |  |
| $\quad$ Prenatal to 1 year, 11 months | 57.9 | 51.8 | $6.1 * *$ |
| 2 years to 9 years, 11 months | 61.4 | 62.8 | -1.4 |
| 10 years or older | 43.7 | 41.9 | 1.8 |
| Average number of children in the household | 2.2 | 2.2 | 0.0 |
| Average number of years married | 6.9 | -0.5 |  |
| Stepfamily (\%) | 28.4 | 27.6 | 0.9 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 83.3 | 83.2 | 0.1 |
| Women report happy or very happy in marriage | 76.8 | 7.9 | -1.1 |
| Men report marriage in trouble | 52.7 | 52.1 | 0.7 |
| Women report marriage in trouble | 50.0 | 54.2 | -4.2 |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 23.0 | 22.9 | 0.1 |
| Either spouse reports substance abuse problem | 18.2 | 19.6 | -1.4 |
| Sample size (couples) | 695 | 702 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t -tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 8

## Comparison of Selected Baseline Characteristics Between Observational Study Respondents and Nonrespondents

| Characteristic ${ }^{\text {a }}$ | Respondents | Nonrespondents | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | * |
| Both spouses Hispanic | 46.3 | 41.1 | 5.1 |
| Both spouses African-American, non-Hispanic | 10.6 | 13.7 | -3.2 |
| Both spouses white, non-Hispanic | 20.2 | 19.3 | 0.9 |
| Other/mulitracial | 23.0 | 25.8 | -2.8 |
| Both spouses have at least a high school diploma (\%) | 49.1 | 45.1 | 4.0 * |
| Average age (years) | 32.8 | 31.5 | 1.3 *** |
| Income less than 200\% of FPL (\%) | 82.3 | 80.8 | 1.5 |
| Either spouse currently employed (\%) | 82.9 | 79.3 | 3.7 ** |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 28.9 | 31.8 | -2.9 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 54.9 | 57.4 | -2.6 |
| 2 years to 9 years, 11 months | 62.1 | 61.2 | 0.9 |
| 10 years or older | 42.8 | 38.1 | 4.7 ** |
| Average number of children in the household | 2.2 | 2.0 | 0.2 *** |
| Average number of years married | 7.1 | 6.1 | 1.1 *** |
| Stepfamily (\%) | 28.0 | 33.9 | -5.9 *** |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 83.2 | 78.4 | 4.9 *** |
| Women report happy or very happy in marriage | 77.4 | 71.5 | 5.8 *** |
| Men report marriage in trouble | 52.4 | 60.5 | -8.1 *** |
| Women report marriage in trouble | 52.1 | 62.6 | -10.5 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 23.0 | 26.1 | -3.1* |
| Either spouse reports substance abuse problem | 18.9 | 24.2 | -5.3 *** |
| Sample size (couples) | 1,397 | 1,052 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed $t$-tests were used for continuous variables.

Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 9

## Comparison of Selected Baseline Characteristics Between Observational Study Respondents and Other Sample Members Among Survey Respondents, Women

| Characteristic ${ }^{\text {a }}$ | Respondents | Other Sample Members | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  |  |
| Both spouses Hispanic | 46.4 | 42.7 | 3.7 |
| Both spouses African-American, non-Hispanic | 10.5 | 11.4 | -0.9 |
| Both spouses white, non-Hispanic | 20.2 | 21.1 | -0.9 |
| Other/mulitracial | 22.9 | 24.8 | -2.0 |
| Both spouses have at least a high school diploma (\%) | 49.1 | 51.9 | -2.9* |
| Average age (years) | 32.8 | 31.2 | 1.5 *** |
| Income less than $200 \%$ of $\mathrm{FPL}^{\text {b }}$ (\%) | 82.3 | 81.5 | 0.8 |
| Either spouse currently employed (\%) | 82.9 | 82.1 | 0.8 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 28.7 | 29.4 | -0.7 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 54.7 | 61.7 | -7.0 *** |
| 2 years to 9 years, 11 months | 62.2 | 63.4 | -1.3 |
| 10 years or older | 42.7 | 27.2 | 15.5 *** |
| Average number of children in the household | 2.2 | 2.0 | 0.2 *** |
| Average number of years married | 7.2 | 6.1 | 1.1 *** |
| Stepfamily (\%) | 27.8 | 25.3 | 2.5 * |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 83.4 | 80.1 | 3.3 *** |
| Women report happy or very happy in marriage | 77.3 | 75.1 | 2.2 |
| Men report marriage in trouble | 52.3 | 55.0 | -2.8* |
| Women report marriage in trouble | 52.2 | 57.3 | -5.2 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 22.9 | 22.5 | 0.4 |
| Either spouse reports substance abuse problem | 18.8 | 20.8 | -2.0 |
| Sample size (women) | 1,386 | 3,857 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed $t$-tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

The Supporting Healthy Marriage Evaluation
Appendix Table F. 10

## Comparison of Selected Baseline Characteristics Between Observational Study Respondents and Other Sample Members Among Survey Respondents, Men

| Characteristic ${ }^{\text {a }}$ | Respondents | Other Sample Members | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | ** |
| Both spouses Hispanic | 46.3 | 41.8 | 4.5 |
| Both spouses African-American, non-Hispanic | 10.6 | 11.5 | -0.9 |
| Both spouses white, non-Hispanic | 20.0 | 21.8 | -1.8 |
| Other/mulitracial | 23.0 | 24.9 | -1.9 |
| Both spouses have at least a high school diploma (\%) | 49.1 | 53.0 | -3.9 ** |
| Average age (years) | 32.8 | 31.3 | 1.5 *** |
| Income less than $200 \%$ of $\mathrm{FPL}^{\mathrm{b}}$ (\%) | 82.4 | 81.7 | 0.7 |
| Either spouse currently employed (\%) | 82.8 | 82.5 | 0.4 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 28.9 | 29.1 | -0.2 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 54.9 | 61.2 | -6.3 *** |
| 2 years to 9 years, 11 months | 62.2 | 63.9 | -1.7 |
| 10 years or older | 42.9 | 26.9 | 16.0 *** |
| Average number of children in the household | 2.2 | 2.0 | 0.2 *** |
| Average number of years married | 7.2 | 6.1 | 1.1 *** |
| Stepfamily (\%) | 27.9 | 25.1 | 2.8 * |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 83.5 | 80.5 | 3.0 ** |
| Women report happy or very happy in marriage | 77.6 | 75.4 | 2.2 |
| Men report marriage in trouble | 52.0 | 54.5 | -2.4 |
| Women report marriage in trouble | 51.9 | 56.6 | -4.8 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 22.7 | 22.3 | 0.5 |
| Either spouse reports substance abuse problem | 19.0 | 20.0 | -1.0 |
| Sample size (men) | 1,378 | 3,541 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed t-tests were used for continuous variables.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 11

## Comparison of Estimated Impacts on Primary 12-Month Survey Outcomes Between Observational Study

 Respondents and Other Sample Members in the Survey Respondent Sample| Outcome ${ }^{\text {a }}$ | Survey Respondents' <br> Impact | Observational Study <br> Respondents' Impact | Other Sample <br> Members' Impact | $\dagger^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\underline{\text { Relationship status }}$ |  |  |  |  |
| Married ${ }^{\text {c }}$ (\%) | 0.8 | 0.1 | 1.0 |  |
| Marital appraisals |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {d }}$ | 0.15 *** | 0.14 *** | 0.16 *** |  |
| Either spouse reports marriage in trouble (\%) | -5.2 *** | -2.8 | -6.1 *** |  |
| Warmth and support in relationship ${ }^{\text {e }}$ |  |  |  |  |
| Men's report of warmth and support | 0.04 *** | 0.04 ** | 0.04 *** |  |
| Women's report of warmth and support | 0.05 *** | 0.03 | 0.06 *** |  |
| Positive communication skills in relationship ${ }^{\text {e }}$ |  |  |  |  |
| Men's report of positive communication skills | 0.05 *** | 0.06 ** | 0.04 *** |  |
| Women's report of positive communication skills | 0.07 *** | 0.03 | 0.08 *** | $\dagger$ |
| Negative interactions in relationship |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {e }}$ | -0.07 *** | -0.06 | -0.07 *** |  |
| Women's report of negative behavior and emotions ${ }^{\text {e }}$ | -0.09 *** | -0.07 ** | -0.10 *** |  |
| Men's report of psychological abuse ${ }^{\text {e }}$ | -0.04 *** | -0.02 | -0.05 *** |  |
| Women's report of psychological abuse ${ }^{\text {e }}$ | -0.04 *** | -0.05 ** | -0.03 ** |  |
| Men's report of any physical assault (\%) | -2.2 ** | -2.0 | -2.4** |  |
| Women's report of any physical assault (\%) | -0.5 | 0.1 | -0.7 |  |
| Men's report of any severe physical assault (\%) | -0.3 | 1.3 * | -1.1 ** | $\dagger \dagger$ |
| Women's report of any severe physical assault (\%) | 0.0 | -1.3* | 0.6 | $\dagger$ |

## Appendix Table F. 11 (continued)

|  | Survey Respondents' | Observational Study | Other Sample |  |
| :---: | :---: | :---: | :---: | :---: |
| Outcome ${ }^{\text {a }}$ | Impact | Respondents' Impact | Members' Impact | $\dagger^{\text {b }}$ |
| Fidelity |  |  |  |  |
| Neither spouse reported infidelity (\%) | 1.1 | -0.5 | 1.7 * |  |
| Individual psychological distress ${ }^{\text {e }}$ |  |  |  |  |
| Men's report of psychological distress | -0.05 ** | -0.02 | -0.06 ** |  |
| Women's report of psychological distress | -0.07 *** | -0.04 | -0.08 *** |  |
| Coparenting relationship ${ }^{\text {e }}$ |  |  |  |  |
| Men's report of cooperative coparenting | 0.02 | 0.02 | 0.02 |  |
| Women's report of cooperative coparenting | 0.02 | 0.00 | 0.03 * |  |
| Sample size ${ }^{\text {f }}$ |  |  |  |  |
| Couples | 5,395 | 1,392 | 4,003 |  |
| Men | 4,919 | 1,378 | 3,541 |  |
| Women | 5,243 | 1,386 | 3,857 |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.
Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; $*=10$ percent.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\text {c }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.

${ }^{\mathrm{e}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.
${ }^{\text {f }}$ Observational study particpants who did not respond to the SHM 12-Month Follow-Up Survey are not included in the impacts for observational study respondents.

The Supporting Healthy Marriage Evaluation
Appendix Table F. 12

## Unweighted Estimated Impacts on Primary 12-Month Survey Outcomes for Observational Study Respondents

| Outcome ${ }^{\text {a }}$ | Program Control Difference |  |  |  | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group | Group | (Impact) | P-Value | LB | UB |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {b }}$ (\%) | 97.2 | 97.1 | 0.1 | 0.871 | -1.6 | 1.9 |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {c }}$ | 5.97 | 5.83 | 0.14 *** | 0.004 | 0.05 | 0.23 |
| Either spouse reports marriage in trouble (\%) | 46.1 | 48.8 | -2.8 | 0.255 | -7.5 | 2.0 |
| Warmth and support in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.43 | 0.04 ** | 0.049 | 0.00 | 0.08 |
| Women's report of warmth and support | 3.37 | 3.34 | 0.03 | 0.208 | -0.02 | 0.08 |
| Positive communication skills in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.30 | 3.24 | 0.06 ** | 0.011 | 0.01 | 0.11 |
| Women's report of positive communication skills | 3.27 | 3.24 | 0.03 | 0.298 | -0.02 | 0.08 |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.09 | 2.15 | -0.06 | 0.104 | -0.12 | 0.01 |
| Women's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.07 | 2.13 | -0.07 ** | 0.047 | -0.13 | 0.00 |
| Men's report of psychological abuse ${ }^{\text {d }}$ | 1.31 | 1.33 | -0.02 | 0.316 | -0.07 | 0.02 |
| Women's report of psychological abuse ${ }^{\text {d }}$ | 1.23 | 1.29 | -0.05 ** | 0.023 | -0.10 | -0.01 |
| Men's report of any physical assault (\%) | 11.0 | 13.0 | -2.0 | 0.254 | -5.3 | 1.4 |
| Women's report of any physical assault (\%) | 8.7 | 8.6 | 0.1 | 0.945 | -2.9 | 3.1 |
| Men's report of any severe physical assault (\%) | 2.4 | 1.1 | 1.3 * | 0.070 | -0.1 | 2.7 |
| Women's report of any severe physical assault (\%) | 1.2 | 2.5 | -1.3* | 0.083 | -2.7 | 0.2 |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 94.3 | 94.8 | -0.5 | 0.671 | -2.9 | 1.8 |
| Individual psychological distress ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of psychological distress | 1.86 | 1.88 | -0.02 | 0.614 | -0.09 | 0.05 |
| Women's report of psychological distress | 1.96 | 2.00 | -0.04 | 0.251 | -0.12 | 0.03 |
| Coparenting relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.47 | 3.44 | 0.02 | 0.286 | -0.02 | 0.07 |
| Women's report of cooperative coparenting | 3.36 | 3.35 | 0.00 | 0.889 | -0.05 | 0.05 |
| Sample size |  |  |  |  |  |  |
| Couples | 695 | 702 |  |  |  |  |
| Men | 695 | 702 |  |  |  |  |
| Women | 695 | 702 |  |  |  |  |

## Appendix Table F. 12 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\text {b }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {c }}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## The Supporting Healthy Marriage Evaluation <br> Appendix Table F. 13

## Unweighted Estimated Impacts on Primary 12-Month Observed Outcomes for Observational Study Respondents

| Outcome ${ }^{\text {a,b }}$ | Program <br> Group | Control <br> Group | Difference <br> (Impact) | P-Value | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | LB | UB |
| Observed in couple interactions |  |  |  |  |  |  |
| Men's warmth and support | 1.98 | 1.95 | 0.03 | 0.340 | -0.03 | 0.10 |
| Women's warmth and support | 1.98 | 1.98 | 0.00 | 0.983 | -0.06 | 0.07 |
| Men's positive communication skills | 5.57 | 5.49 | 0.08 * | 0.060 | 0.00 | 0.17 |
| Women's positive communication skills | 5.76 | 5.68 | 0.08 * | 0.059 | 0.00 | 0.15 |
| Men's anger and hostility | 1.25 | 1.28 | -0.03 | 0.265 | -0.08 | 0.02 |
| Women's anger and hostility | 1.37 | 1.42 | -0.06 * | 0.079 | -0.12 | 0.01 |
| Sample size |  |  |  |  |  |  |
| Men | 695 | 702 |  |  |  |  |
| Women | 695 | 702 |  |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective observed outcomes: warmth and support, positive communication skills, and anger and hostility.

The Supporting Healthy Marriage Evaluation
Appendix Table F. 14

## Estimated Impacts on Primary Survey Outcomes for Observational Study Respondents Weighted to the Survey Respondent Sample

| Outcome ${ }^{\text {a }}$ | Program Control Difference |  |  | P -Value | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group | Group | (Impact) |  | LB | UB |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {b }}$ (\%) | 97.0 | 96.7 | 0.3 | 0.739 | -1.6 | 2.2 |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {c }}$ | 5.95 | 5.81 | 0.15 *** | 0.004 | 0.05 | 0.24 |
| Either spouse reports marriage in trouble (\%) | 48.3 | 47.9 | 0.4 | 0.873 | -4.4 | 5.2 |
| Warmth and support in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.44 | 0.03 | 0.246 | -0.02 | 0.07 |
| Women's report of warmth and support | 3.37 | 3.35 | 0.02 | 0.316 | -0.02 | 0.07 |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.30 | 3.23 | 0.07 *** | 0.008 | 0.02 | 0.12 |
| Women's report of positive communication skills | 3.26 | 3.24 | 0.03 | 0.331 | -0.03 | 0.08 |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.12 | 2.15 | -0.03 | 0.360 | -0.10 | 0.04 |
| Women's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.09 | 2.14 | -0.05 | 0.149 | -0.12 | 0.02 |
| Men's report of psychological abuse ${ }^{\text {d }}$ | 1.33 | 1.32 | 0.00 | 0.843 | -0.04 | 0.05 |
| Women's report of psychological abuse ${ }^{\text {d }}$ | 1.24 | 1.28 | -0.04 * | 0.088 | -0.09 | 0.01 |
| Men's report of any physical assault (\%) | 11.8 | 13.9 | -2.1 | 0.254 | -5.7 | 1.5 |
| Women's report of any physical assault (\%) | 8.4 | 8.8 | -0.4 | 0.797 | -3.5 | 2.7 |
| Men's report of any severe physical assault (\%) | 2.8 | 1.1 | 1.6 ** | 0.036 | 0.1 | 3.2 |
| Women's report of any severe physical assault (\%) | 1.2 | 2.7 | -1.5 ** | 0.041 | -3.0 | -0.1 |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.3 | 94.6 | -1.3 | 0.312 | -3.9 | 1.2 |
| Individual psychological distress ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of psychological distress | 1.87 | 1.87 | 0.00 | 0.984 | -0.07 | 0.07 |
| Women's report of psychological distress | 1.96 | 1.99 | -0.03 | 0.451 | -0.11 | 0.05 |
| Coparenting relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.47 | 3.46 | 0.02 | 0.495 | -0.03 | 0.06 |
| Women's report of cooperative coparenting | 3.38 | 3.37 | 0.01 | 0.738 | -0.04 | 0.06 |
| Sample size ${ }^{\text {e }}$ |  |  |  |  |  |  |
| Couples | 692 | 700 |  |  |  |  |
| Men | 690 | 688 |  |  |  |  |
| Women | 688 | 698 |  |  |  |  |

## Appendix Table F. 14 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were calculated using ordinary least squares, were weighted so that observational study
respondents are more representative of the survey respondent sample, and were regression-adjusted for prerandom assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\text {b }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {c }}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and 7 = "completely happy."
${ }^{\mathrm{d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.
${ }^{\text {e }}$ This table does not include observational study participants who did not respond to the SHM 12-Month Follow-Up Survey.

## The Supporting Healthy Marriage Evaluation

Appendix Table F. 15
Estimated Impacts on Primary 12-Month Observed Outcomes for Observational Study Respondents Weighted to the Survey Respondent Sample

|  | Program | Control | Difference |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outcome ${ }^{\text {a,b }}$ | Group | Group | (Impact) | P-Value | LB | UB |
| Observed in couple interactions |  |  |  |  |  |  |
| Men's warmth and support | 1.99 | 1.95 | 0.04 | 0.233 | -0.03 | 0.11 |
| Women's warmth and support | 2.01 | 2.00 | 0.01 | 0.807 | -0.06 | 0.08 |
| Men's positive communication skills | 5.56 | 5.50 | 0.06 | 0.205 | -0.03 | 0.14 |
| Women's positive communication skills | 5.76 | 5.73 | 0.03 | 0.394 | -0.04 | 0.11 |
| Men's anger and hostility | 1.24 | 1.27 | -0.03 | 0.270 | -0.08 | 0.02 |
| Women's anger and hostility | 1.37 | 1.41 | -0.04 | 0.190 | -0.11 | 0.02 |
| Sample size ${ }^{\text {c }}$ |  |  |  |  |  |  |
| Men | 690 | 688 |  |  |  |  |
| Women | 688 | 698 |  |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were calculated using ordinary least squares, were weighted so that observational study respondents are more representative of the survey respondent sample, and were regression-adjusted for prerandom assignment characteristics of sample members.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective observed outcomes: warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c This }}$ table does not include observational study participants who did not respond to the SHM 12-Month Follow-Up Survey.

# The Supporting Healthy Marriage Evaluation 

Appendix Table F. 16

## Comparison of Selected Baseline Characteristics Between Observational Study Respondents and Other Sample Members in the Full SHM Sample

| Characteristic ${ }^{\text {a }}$ | Respondents | Other Sample Members | Difference |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | * |
| Both spouses Hispanic | 46.3 | 42.6 | 3.7 |
| Both spouses African-American, non-Hispanic | 10.6 | 11.5 | -0.9 |
| Both spouses white, non-Hispanic | 20.2 | 20.6 | -0.4 |
| Other/mulitracial | 23.0 | 25.3 | -2.3 |
| Both spouses have at least a high school diploma (\%) | 49.1 | 50.6 | -1.5 |
| Average age (years) | 32.8 | 31.0 | 1.7 *** |
| Income less than 200\% of FPL ${ }^{\text {b }}$ (\%) | 82.3 | 82.2 | 0.1 |
| Either spouse currently employed (\%) | 82.9 | 81.0 | 2.0 * |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 28.9 | 30.9 | -2.0 |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 54.9 | 62.1 | -7.2 *** |
| 2 years to 9 years, 11 months | 62.1 | 62.8 | -0.7 |
| 10 years or older | 42.8 | 27.3 | 15.6 *** |
| Average number of children in the household | 2.2 | 2.0 | 0.2 *** |
| Average number of years married | 7.1 | 6.0 | 1.1 *** |
| Stepfamily (\%) | 28.0 | 25.9 | 2.1 |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 83.2 | 79.7 | 3.6 *** |
| Women report happy or very happy in marriage | 77.4 | 74.4 | 3.0 ** |
| Men report marriage in trouble | 52.4 | 56.0 | -3.6 ** |
| Women report marriage in trouble | 52.1 | 58.5 | -6.4 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 23.0 | 23.7 | -0.7 |
| Either spouse reports substance abuse problem | 18.9 | 21.4 | -2.5* |
| Sample size (couples) | 1,397 | 4,901 |  |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: To assess differences across research groups, chi-square tests were used for categorical variables, and two-tailed $t$-tests were used for continuous variables.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ Appendix Table C. 2 describes how these characteristics are defined.

The Supporting Healthy Marriage Evaluation
Appendix Table F. 17

## Estimated Impacts on Primary Survey Outcomes for Observational Study Respondents Weighted to the Full SHM Sample

| Outcome ${ }^{\text {a }}$ | Program Control Difference |  |  |  | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Group | Group | (Impact) | P-Value | LB | UB |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {b }}$ (\%) | 97.0 | 96.6 | 0.4 | 0.681 | -1.5 | 2.3 |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {c }}$ | 5.95 | 5.80 | 0.15 *** | 0.003 | 0.05 | 0.25 |
| Either spouse reports marriage in trouble (\%) | 48.5 | 48.2 | 0.4 | 0.880 | -4.5 | 5.2 |
| Warmth and support in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.44 | 0.03 | 0.229 | -0.02 | 0.07 |
| Women's report of warmth and support | 3.37 | 3.34 | 0.03 | 0.289 | -0.02 | 0.07 |
| Positive communication skills in relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.30 | 3.22 | 0.07 *** | 0.005 | 0.02 | 0.12 |
| Women's report of positive communication skills | 3.26 | 3.24 | 0.03 | 0.315 | -0.03 | 0.08 |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.12 | 2.16 | -0.03 | 0.326 | -0.10 | 0.03 |
| Women's report of negative behavior and emotions ${ }^{\text {d }}$ | 2.09 | 2.14 | -0.05 | 0.143 | -0.12 | 0.02 |
| Men's report of psychological abuse ${ }^{\text {d }}$ | 1.33 | 1.33 | 0.00 | 0.931 | -0.05 | 0.05 |
| Women's report of psychological abuse ${ }^{\text {d }}$ | 1.24 | 1.28 | -0.04 * | 0.077 | -0.09 | 0.00 |
| Men's report of any physical assault (\%) | 11.9 | 14.2 | -2.3 | 0.222 | -6.0 | 1.4 |
| Women's report of any physical assault (\%) | 8.5 | 8.9 | -0.4 | 0.785 | -3.6 | 2.7 |
| Men's report of any severe physical assault (\%) | 2.8 | 1.2 | 1.6 ** | 0.039 | 0.1 | 3.2 |
| Women's report of any severe physical assault (\%) | 1.2 | 2.8 | -1.6 ** | 0.035 | -3.1 | -0.1 |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.2 | 94.6 | -1.4 | 0.292 | -4.0 | 1.2 |
| Individual psychological distress ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of psychological distress | 1.87 | 1.87 | 0.00 | 0.924 | -0.08 | 0.07 |
| Women's report of psychological distress | 1.96 | 1.99 | -0.03 | 0.390 | -0.11 | 0.04 |
| Coparenting relationship ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.47 | 3.46 | 0.02 | 0.477 | -0.03 | 0.06 |
| Women's report of cooperative coparenting | 3.38 | 3.37 | 0.01 | 0.698 | -0.04 | 0.06 |
| Sample size |  |  |  |  |  |  |
| Couples | 695 | 702 |  |  |  |  |
| Men | 695 | 702 |  |  |  |  |
| Women | 695 | 702 |  |  |  |  |

## Appendix Table F. 17 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and UB = lower bound and upper bound of the 95 percent confidence interval.
Estimates were calculated using ordinary least squares, were weighted so that observational study respondents are more representative of the full SHM sample, and were regression-adjusted for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\text {b }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {c }}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\text {d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective survey-reported outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## The Supporting Healthy Marriage Evaluation

## Appendix Table F. 18

## Estimated Impacts on Primary 12-Month Observed Outcomes for Observational Study Respondents Weighted to the Full SHM Sample

| Outcome ${ }^{\text {a,b }}$ | Program Group | Control Group | Difference <br> (Impact) | P-Value | 95\% CI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | LB | UB |
| Observed in couple interactions |  |  |  |  |  |  |
| Men's warmth and support | 2.00 | 1.96 | 0.05 | 0.185 | -0.02 | 0.11 |
| Women's warmth and support | 2.01 | 2.00 | 0.01 | 0.801 | -0.06 | 0.08 |
| Men's positive communication skills | 5.56 | 5.51 | 0.05 | 0.257 | -0.04 | 0.14 |
| Women's positive communication skills | 5.76 | 5.72 | 0.03 | 0.385 | -0.04 | 0.11 |
| Men's anger and hostility | 1.25 | 1.28 | -0.03 | 0.241 | -0.08 | 0.02 |
| Women's anger and hostility | 1.37 | 1.41 | -0.05 | 0.175 | -0.11 | 0.02 |
| Sample size |  |  |  |  |  |  |
| Men | 695 | 702 |  |  |  |  |
| Women | 695 | 702 |  |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: $95 \% \mathrm{CI}=95$ percent confidence intervals around the impact estimates.
LB and $\mathrm{UB}=$ lower bound and upper bound of the 95 percent confidence interval.
Estimates were calculated using ordinary least squares, were weighted so that observational study
respondents are more representative of the full SHM sample, and were regression-adjusted for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: $* * *=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See Appendix }} \mathrm{E}$ for detailed notes on the construction of these outcomes.
${ }^{\text {b }}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective observed outcomes: warmth and support, positive communication skills, and anger and hostility.

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## Appendix G

## Diagnostic Tests to Assess Truncation by Separation in the Impact Analysis

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Appendix G discusses a potential source of bias in the Supporting Healthy Marriage (SHM) impact analysis that can occur when married couples separate or divorce over the 12 -month follow-up period, the approach employed to test for this bias, and the results of these tests. No statistically significant evidence of bias due to truncation by separation was found.

## The Analytic Issues Raised by Truncation by Separation

One strength of a random assignment research design is that it allows researchers to make causal inferences about the effectiveness of an intervention. This is because a random assignment research design creates two groups - a program group that is offered the intervention and a control group that is not offered the intervention - and the groups are similar at baseline, when they enter the study. (Appendix C compares the baseline characteristics across program and control groups in the SHM evaluation.) Hence, after random assignment, any differences in outcomes between the two groups can reliably be attributed to the intervention - in this case, the SHM program. However, if certain outcomes can be defined or are available only for a subset of sample members, such as those who remain married at the follow-up point, and if the likelihood of being in that subset is influenced by the intervention itself, then the strength of the random assignment research design can be undermined. This potential threat is commonly referred to as "truncation bias" in program evaluation research. ${ }^{1}$

In the context of the SHM evaluation, truncation bias could occur in several ways. Truncation bias could be an issue if the intervention influenced the extent to which couples in the program group stayed together at the 12-month follow-up point and if key outcomes of interest could not be defined for couples who have split up. For example, the SHM program might have encouraged more couples in the program group to stay together at the 12-month follow-up point, thereby influencing the number of couples in each of the research groups for whom key outcomes of interest are defined. As a result, the program group might include more intact couples who are distressed in their marriages at the follow-up point than the control group includes. Yet, because relationship-quality outcomes, like relationship happiness, cannot be defined for couples who have split up, comparisons between program and control group couples at the follow-up point may appear to show that control group couples, on average, have higher scores for relationship happiness than program group couples do. These results, however, would be somewhat misleading, because nonintact couples in the control group were not included in the impact analysis due to missing data on the outcome of interest. Alternatively, the SHM program might not have influenced the number of couples for whom key marital-quality outcome measures are available, but it might have influenced the types of couples for whom the

[^23]measures are available. For instance, the SHM program might have encouraged some program group couples who were in distressed marriages to stay together, while such couples in the control group split up. At the same time, the program might have convinced other couples who were in unhealthy relationships to split up, while similar couples in the control group stayed together. In this scenario, the SHM program led to different types of couples remaining intact in the program and control groups, which would lead to biased impact estimates.

The potential for truncation bias exists in many of the present study's follow-up measures. The survey-derived measures of relationship happiness, marriage in trouble, warmth and support, psychological abuse, physical assault, severe physical assault, and fidelity are truncated for survey respondents who were separated, divorced, or had their marriages annulled because these couples were not asked questions about the quality of their marital relationship on the 12 -month survey. All three of the primary observation study measures (warmth and support, communication skills, and anger/hostility) are truncated because nonintact couples did not participate in the couple interactions.

## Approach to Assessing Potential Truncation Bias

To assess the extent to which truncation of key outcome measures due to separation is an issue that could bias the SHM impact results, the research team first analyzed whether the SHM program affected the percentage of couples who stayed together (and who, therefore, had nonmissing outcomes). Second, the team checked for significant differences in the baseline characteristics of program and control group members for whom the key marital-quality outcome measures were available at the 12-month follow-up. This second step investigates the potential for bias that might occur even if the intervention did not affect the number of couples who stayed together but did affect the types of couples who stayed together.

- Test 1. In both the survey respondent sample and the observational study respondent sample, SHM's impact on the number of sample members for whom key marital-quality outcomes were available was tested using an ordinary least squares (OLS) regression model, which included an indicator for sample members' research group status and a set of covariates for the sample's baseline characteristics. The dependent variable was an indicator of whether or not a respondent had nonmissing outcome data. These regressions were run for men and women separately. For the survey respondent sample, the analysis was also conducted by local SHM program. If the SHM program has a significant impact on the number of respondents who are missing key marital-quality outcomes of interest, then this would constitute evidence of truncation bias.
- Test 2. To test the extent to which there are systematic differences in baseline characteristics between program and control group members who have nonmissing outcome data, a logistic regression was conducted in which baseline variables were used to predict the research group status of respondents with nonmissing outcome data. This was analyzed for men and women separately for both the survey respondent sample and the observational study respondent sample. For the survey respondent sample, this analysis was also conducted by local SHM program. If there are statistically significant differences in the baseline characteristics of program and control group members for whom key marital-quality outcomes are available, that would provide evidence of truncation bias.


## Results of Analyses Assessing Potential Truncation Bias

The results of Tests 1 and 2 do not provide any statistically significant evidence of truncation bias at the 12-month follow-up point. No significant differences were found between program and control group couples in the percentage of either survey respondents or observational study respondents for whom key marital-quality outcomes are available. Further, no significant differences were found in the baseline characteristics between program and control group members for whom key marital-quality outcomes are available among survey respondents, observational study respondents, or any of the subsamples tested.

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Appendix H
Estimated Impacts, by Local SHM Program

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## The Supporting Healthy Marriage Evaluation

Appendix Table H. 1
Estimated Impacts on Couple's Participation in Relationship Services and Referrals Since Random Assignment, by Local SHM Program

| Outcome ${ }^{\text {a }}$ | Program Location |  |  |  |  |  |  |  | LocalProgramDifference $^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oklahoma |  |  |  |  |  |  |  |  |
|  | Bronx | City | Orlando | Pennsylvania | Seattle | Shoreline | Texas | Wichita |  |

## Receipt of group

## relationship services ${ }^{\text {c }}$ (\%)

| Number of times attended |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | -61.5 *** | -66.2 *** | -73.1 *** | -69.8 *** | -56.4*** | -67.8 *** | -57.6 *** | -68.8 *** | $\dagger \dagger$ |
| 1 | -7.5 *** | -4.3 *** | -8.7 *** | -2.0 | -11.9 *** | -9.4 *** | -5.7 *** | -1.0 | $\dagger \dagger$ |
| 2-5 | 9.8 *** | -0.4 | 10.9 *** | 6.9 *** | 11.0 *** | 9.9 *** | -0.3 | 3.2 | $\dagger \dagger$ |
| 6-10 | 33.8 *** | 30.1 *** | 26.9 *** | 25.3 *** | 26.9 *** | 29.5 *** | 21.5 *** | 17.6 *** | $\dagger \dagger$ |
| More than 10 | 25.3 *** | 40.8 *** | 44.0 *** | 39.6 *** | 30.5 *** | 37.9 *** | 42.1 *** | 49.0 *** | $\dagger \dagger$ |

## Receipt of one-on-one

## Number of times attended

0
1
$2-5$
$6-10$

| -3.8 | -2.2 |
| ---: | ---: |
| 1.1 | -0.9 |
| 0.3 | 1.7 |
| 1.6 | 1.7 |
| 0.8 | -0.3 |

-1.3
$0.5-0.5$
$-7.2 * * \quad-1.7$

| 1.6 | 1.7 | -0.5 | -3.4 | 2.4 | $3.1 *$ | 0.0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0.8 | -0.3 | $2.0 * *$ | -1.2 | 1.8 | $3.6 * * *$ | 0.3 |

More than $10--0.8$
Referrals for either spouse for (\%)
Parenting classes and/or child care
Assistance with issues related to work
readiness and/or financial security
Assistance with issues related to mental health and/or substance abuse $\quad-2.0$

| $12.3 * * *$ | $6.7 *$ |
| :---: | :---: |
| $-9.8 * * *$ | $-11.9 * * *$ |

15.0 *** $1.0 \quad 5.1 \quad 7.2 * \quad 4.5$
$683 \quad 842$
709

| 567 | 554 | 679 | 691 | 670 |
| :--- | :--- | :--- | :--- | :--- |

## Appendix Table H. 1 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Program impacts were calculated separately for each local SHM program, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates for each local SHM program were then compared to see whether their magnitude and direction differ significantly by local SHM program.

Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ Tests of differences across local SHM programs were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
c"Group relationship services" includes marriage or relationship skills education services that are conducted in a group session and received with a spouse.
d"One-on-one relationship services" includes services received outside SHM with or without a spouse.

# The Supporting Healthy Marriage Evaluation 

## Appendix Table H. 2

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Local SHM Program

| Outcome ${ }^{\text {a }}$ | Bronx |  |  |  |  | LocalProgramDifference $^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard <br> Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 83.8 | 86.1 | -2.2 | - | 2.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.76 | 5.59 | 0.17 | 0.15 ** | 0.08 |  |
| Either spouse reports marriage in trouble (\%) | 57.7 | 61.3 | -3.6 | - | 3.6 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.40 | 3.36 | 0.04 | 0.09 | 0.04 |  |
| Women's report of warmth and support | 3.26 | 3.20 | 0.06 | 0.12 | 0.04 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.18 | 3.14 | 0.04 | 0.07 | 0.04 |  |
| Women's report of positive communication skills | 3.13 | 3.05 | 0.08 | 0.14 * | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.38 | 2.43 | -0.05 | -0.06 | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.32 | 2.39 | -0.07 | -0.09 | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.43 | 1.46 | -0.03 | -0.05 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.38 | -0.08 | -0.16 ** | 0.04 |  |
| Men's report of any physical assault (\%) | 15.3 | 18.0 | -2.8 | - | 3.1 | $\dagger$ |
| Women's report of any physical assault (\%) | 10.3 | 11.4 | -1.1 | - | 2.6 |  |
| Men's report of any severe physical assault (\%) | 2.0 | 4.1 | -2.1 | - | 1.5 |  |
| Women's report of any severe physical assault (\%) | 1.6 | 2.5 | -0.9 | - | 1.2 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 84.6 | 84.7 | -0.1 | - | 2.8 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.95 | 1.95 | 0.00 | 0.00 | 0.06 |  |
| Women's psychological distress | 2.03 | 2.05 | -0.01 | -0.01 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.43 | 3.45 | -0.02 | -0.04 | 0.04 |  |
| Women's report of cooperative coparenting | 3.27 | 3.27 | 0.00 | -0.01 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 336 | 347 |  |  |  |  |
| Men | 301 | 316 |  |  |  |  |
| Women | 321 | 342 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Oklahoma City |  |  |  |  | LocalProgramDifference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | StandardError |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 95.4 | 93.9 | 1.4 | - | 1.5 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.15 | 6.07 | 0.08 | 0.07 | 0.06 |  |
| Either spouse reports marriage in trouble (\%) | 38.8 | 37.4 | 1.4 | - | 3.0 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.57 | 3.54 | 0.02 | 0.05 | 0.03 |  |
| Women's report of warmth and support | 3.52 | 3.50 | 0.01 | 0.03 | 0.03 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.32 | 3.27 | 0.05 | 0.09 | 0.03 |  |
| Women's report of positive communication skills | 3.35 | 3.28 | 0.06 | 0.11 * | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.02 | 2.09 | -0.07 | -0.09 | 0.04 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.93 | 1.97 | -0.05 | -0.06 | 0.04 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.23 | 1.23 | 0.00 | 0.00 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.20 | 1.21 | -0.01 | -0.02 | 0.03 |  |
| Men's report of any physical assault (\%) | 10.9 | 10.5 | 0.4 | - | 2.2 | $\dagger$ |
| Women's report of any physical assault (\%) | 6.6 | 7.1 | -0.5 | - | 1.8 |  |
| Men's report of any severe physical assault (\%) | 1.0 | 1.6 | -0.6 | - | 0.8 |  |
| Women's report of any severe physical assault (\%) | 1.2 | 1.3 | -0.1 | - | 0.8 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 96.4 | 94.4 | 2.0 | - | 1.4 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.73 | 1.78 | -0.05 | -0.06 | 0.04 |  |
| Women's psychological distress | 1.78 | 1.82 | -0.04 | -0.05 | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.57 | 3.56 | 0.01 | 0.02 | 0.03 |  |
| Women's report of cooperative coparenting | 3.50 | 3.49 | 0.01 | 0.02 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 426 | 416 |  |  |  |  |
| Men | 395 | 383 |  |  |  |  |
| Women | 418 | 409 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Orlando |  |  |  |  | LocalProgramDifference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | ndard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.5 | 92.9 | -1.3 | - | 2.0 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.88 | 5.76 | 0.12 | 0.10 | 0.08 |  |
| Either spouse reports marriage in trouble (\%) | 46.6 | 51.0 | -4.4 | - | 3.3 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.48 | 3.45 | 0.03 | 0.06 | 0.03 |  |
| Women's report of warmth and support | 3.38 | 3.37 | 0.02 | 0.03 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.22 | 3.22 | 0.00 | 0.00 | 0.04 |  |
| Women's report of positive communication skills | 3.26 | 3.20 | 0.06 | 0.11 | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.19 | 2.18 | 0.01 | 0.01 | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.04 | 2.14 | -0.10 | -0.13 ** | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.32 | 1.31 | 0.00 | 0.01 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.19 | 1.22 | -0.03 | -0.07 | 0.03 |  |
| Men's report of any physical assault (\%) | 12.2 | 10.5 | 1.7 | - | 2.5 | $\dagger$ |
| Women's report of any physical assault (\%) | 6.6 | 7.6 | -1.0 | - | 2.0 |  |
| Men's report of any severe physical assault (\%) | 2.0 | 0.8 | 1.2 | - | 1.0 |  |
| Women's report of any severe physical assault (\%) | 0.4 | 0.5 | -0.2 | - | 0.5 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.1 | 93.8 | -0.7 | - | 1.9 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.89 | 1.87 | 0.02 | 0.02 | 0.05 |  |
| Women's psychological distress | 1.86 | 1.96 | -0.10 | -0.13 * | 0.05 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.49 | 3.50 | -0.01 | -0.02 | 0.04 |  |
| Women's report of cooperative coparenting | 3.36 | 3.36 | 0.00 | 0.01 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 348 | 361 |  |  |  |  |
| Men | 329 | 344 |  |  |  |  |
| Women | 342 | 357 |  |  |  |  |

(continued)

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Pennsylvania |  |  |  |  | LocalProgramDifference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \end{array}$ | Control <br> Group | Difference (Impact) | $\begin{aligned} & \hline \text { Effect } \\ & \text { Size }^{\text {b }} \end{aligned}$ | tandard <br> Error |  |
|  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.1 | 91.9 | -0.8 | - | 2.3 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.07 | 5.84 | 0.23 | 0.20 *** | 0.09 |  |
| Either spouse reports marriage in trouble (\%) | 41.9 | 51.0 | -9.1 | - ** | 3.9 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.34 | 3.34 | 0.00 | 0.00 | 0.04 |  |
| Women's report of warmth and support | 3.31 | 3.19 | 0.12 | 0.24 *** | 0.04 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.29 | 3.19 | 0.10 | 0.17 ** | 0.04 |  |
| Women's report of positive communication skills | 3.24 | 3.21 | 0.03 | 0.04 | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.92 | 2.02 | -0.10 | -0.12 * | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.00 | 2.10 | -0.10 | -0.13 * | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.24 | 1.27 | -0.02 | -0.05 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.22 | 1.27 | -0.05 | -0.09 | 0.04 |  |
| Men's report of any physical assault (\%) | 6.9 | 14.6 | -7.7 | - *** | 2.8 | $\dagger$ |
| Women's report of any physical assault (\%) | 9.2 | 8.0 | 1.1 | - | 2.5 |  |
| Men's report of any severe physical assault (\%) | 0.8 | 1.7 | -0.8 | - | 1.0 |  |
| Women's report of any severe physical assault (\%) | 1.9 | 4.0 | -2.1 | - | 1.5 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.7 | 91.4 | 2.3 | - | 2.3 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.83 | 1.86 | -0.03 | -0.04 | 0.06 |  |
| Women's psychological distress | 2.07 | 2.08 | -0.01 | -0.01 | 0.07 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.32 | 3.29 | 0.03 | 0.05 | 0.04 |  |
| Women's report of cooperative coparenting | 3.27 | 3.16 | 0.11 | 0.20 ** | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 277 | 290 |  |  |  |  |
| Men | 250 | 258 |  |  |  |  |
| Women | 271 | 280 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Seattle |  |  |  |  | LocalProgramDifference $^{\mathrm{c}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard <br> Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 87.1 | 88.0 | -0.9 | - | 2.8 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.86 | 5.84 | 0.02 | 0.01 | 0.09 |  |
| Either spouse reports marriage in trouble (\%) | 48.4 | 52.4 | -4.0 | - | 3.9 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.55 | 3.48 | 0.08 | 0.15 ** | 0.04 |  |
| Women's report of warmth and support | 3.43 | 3.42 | 0.01 | 0.02 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.21 | 3.21 | 0.00 | 0.00 | 0.05 |  |
| Women's report of positive communication skills | 3.14 | 3.18 | -0.04 | -0.07 | 0.05 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.27 | 2.24 | 0.03 | 0.04 | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.16 | 2.19 | -0.03 | -0.04 | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.33 | 1.37 | -0.03 | -0.07 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.26 | 1.28 | -0.02 | -0.04 | 0.04 |  |
| Men's report of any physical assault (\%) | 16.3 | 14.9 | 1.4 | - | 3.4 | $\dagger$ |
| Women's report of any physical assault (\%) | 8.8 | 9.0 | -0.1 | - | 2.6 |  |
| Men's report of any severe physical assault (\%) | 2.0 | 1.6 | 0.5 | - | 1.3 |  |
| Women's report of any severe physical assault (\%) | 3.1 | 0.9 | 2.2 | -* ${ }^{\text {g }}$ | 1.3 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.1 | 92.3 | 0.8 | - | 2.3 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.83 | 1.85 | -0.03 | -0.04 | 0.06 |  |
| Women's psychological distress | 1.91 | 1.93 | -0.03 | -0.03 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.55 | 3.54 | 0.01 | 0.01 | 0.04 |  |
| Women's report of cooperative coparenting | 3.40 | 3.41 | -0.01 | -0.02 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 266 | 288 |  |  |  |  |
| Men | 226 | 258 |  |  |  |  |
| Women | 254 | 278 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Shoreline |  |  |  |  | LocalProgramDifference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 90.6 | 89.1 | 1.5 | - | 2.3 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.83 | 5.72 | 0.11 | 0.09 | 0.07 |  |
| Either spouse reports marriage in trouble (\%) | 48.5 | 55.0 | -6.5 | - * | 3.5 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.43 | 3.38 | 0.05 | 0.09 | 0.03 |  |
| Women's report of warmth and support | 3.35 | 3.29 | 0.06 | 0.12 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.22 | 3.24 | -0.01 | -0.02 | 0.04 |  |
| Women's report of positive communication skills | 3.23 | 3.13 | 0.09 | 0.16 ** | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.15 | 2.23 | -0.08 | -0.10 * | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.12 | 2.18 | -0.05 | -0.07 | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.34 | -0.05 | -0.11 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.26 | 1.25 | 0.01 | 0.02 | 0.03 |  |
| Men's report of any physical assault (\%) | 9.5 | 12.0 | -2.6 | - | 2.6 | $\dagger$ |
| Women's report of any physical assault (\%) | 10.0 | 6.9 | 3.1 | - | 2.3 |  |
| Men's report of any severe physical assault (\%) | 0.4 | 1.2 | -0.8 | - | 0.8 |  |
| Women's report of any severe physical assault (\%) | 1.7 | 0.3 | 1.3 | - | 0.8 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.5 | 91.9 | 1.7 | - | 2.0 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.89 | 1.98 | -0.09 | -0.12 | 0.06 |  |
| Women's psychological distress | 2.03 | 2.07 | -0.04 | -0.06 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.36 | 3.35 | 0.01 | 0.02 | 0.04 |  |
| Women's report of cooperative coparenting | 3.27 | 3.23 | 0.04 | 0.07 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 335 | 344 |  |  |  |  |
| Men | 307 | 318 |  |  |  |  |
| Women | 327 | 328 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Texas |  |  |  |  | LocalProgramDifference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control |  | (Impact) | Effect | $\begin{gathered} \text { tandard } \\ \text { Error } \end{gathered}$ |  |
|  | Group | Group |  | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.5 | 87.6 | 1.8 | - | 2.4 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.98 | 5.74 | 0.24 | 0.21 *** | 0.08 |  |
| Either spouse reports marriage in trouble (\%) | 51.3 | 59.4 | -8.1 | - ** | 3.5 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.41 | 3.33 | 0.08 | 0.16 ** | 0.03 |  |
| Women's report of warmth and support | 3.32 | 3.22 | 0.09 | 0.18 ** | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.25 | 3.13 | 0.12 | 0.21 *** | 0.04 |  |
| Women's report of positive communication skills | 3.22 | 3.09 | 0.13 | 0.22 *** | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.16 | 2.30 | -0.14 | -0.18 *** | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.12 | 2.30 | -0.18 | -0.22 *** | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.41 | -0.12 | -0.24 *** | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.26 | 1.33 | -0.07 | -0.14 * | 0.04 |  |
| Men's report of any physical assault (\%) | 6.8 | 14.4 | -7.6 | - *** | 2.5 | $\dagger$ |
| Women's report of any physical assault (\%) | 9.3 | 11.9 | -2.7 | - | 2.5 |  |
| Men's report of any severe physical assault (\%) | 2.3 | 2.9 | -0.6 | - | 1.3 |  |
| Women's report of any severe physical assault (\%) | 1.7 | 1.6 | 0.0 | - | 1.1 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.4 | 91.7 | 1.6 | - | 2.1 |  |
| Individual psychological distress ${ }^{\mathrm{f}}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.85 | 1.89 | -0.04 | -0.05 | 0.06 |  |
| Women's psychological distress | 1.89 | 2.12 | -0.23 | -0.29 *** | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.38 | 3.32 | 0.06 | 0.10 | 0.04 |  |
| Women's report of cooperative coparenting | 3.25 | 3.19 | 0.06 | 0.10 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 340 | 351 |  |  |  |  |
| Men | 312 | 315 |  |  |  |  |
| Women | 333 | 338 |  |  |  |  |

## Appendix Table H. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Wichita |  |  |  |  | LocalProgramDifference $^{\mathrm{c}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect S |  |  |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 88.4 | 84.5 | 4.0 | - | 2.6 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.79 | 5.58 | 0.21 | 0.18 *** | 0.08 |  |
| Either spouse reports marriage in trouble (\%) | 50.5 | 59.3 | -8.8 | - ** | 3.7 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.48 | 3.44 | 0.04 | 0.08 | 0.03 |  |
| Women's report of warmth and support | 3.34 | 3.33 | 0.01 | 0.02 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.19 | 3.14 | 0.05 | 0.09 | 0.04 |  |
| Women's report of positive communication skills | 3.14 | 3.08 | 0.06 | 0.11 | 0.05 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.27 | 2.33 | -0.06 | -0.07 | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.15 | 2.32 | -0.17 | -0.21 *** | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.39 | -0.09 | -0.19 ** | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.37 | -0.06 | -0.13 | 0.04 |  |
| Men's report of any physical assault (\%) | 12.7 | 14.9 | -2.2 | - | 2.9 | $\dagger$ |
| Women's report of any physical assault (\%) | 9.7 | 12.0 | -2.3 | - | 2.6 |  |
| Men's report of any severe physical assault (\%) | 1.9 | 1.4 | 0.4 | - | 1.1 |  |
| Women's report of any severe physical assault (\%) | 1.4 | 2.1 | -0.8 | - | 1.1 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 90.2 | 90.3 | 0.0 | - | 2.4 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.88 | 2.03 | -0.14 | -0.19 ** | 0.06 |  |
| Women's psychological distress | 2.08 | 2.13 | -0.05 | -0.07 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.42 | 3.38 | 0.03 | 0.06 | 0.04 |  |
| Women's report of cooperative coparenting | 3.24 | 3.26 | -0.03 | -0.05 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 322 | 348 |  |  |  |  |
| Men | 295 | 312 |  |  |  |  |
| Women | 309 | 336 |  |  |  |  |

## Appendix Table H. 2 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Program impacts were calculated separately for each local SHM program, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates for each local SHM program were then compared to see whether their magnitude and direction differ significantly by local SHM program.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See Appendix }} \mathrm{E}$ for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across local SHM programs were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\text {d }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {e }}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\text {f }}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.
${ }^{\mathrm{g}}$ A higher percentage of women in Seattle's program group (3.1 percent) reported experiencing any severe physical assault in the past three months than the percentage of women in the control group ( 0.9 percent). To investigate this result, the research team examined the raw data and determined that seven women in the program group, as opposed to two women in the control group, reported experiencing any severe physical assaults. The impacts in the Seattle program do not suggest that the impact on women's reports of any severe physical assault is part of a pattern of negative effects in that location. Furthermore, SHM's impact on women's reports of any severe physical assault is not statistically significant for the pooled sample; nor does it differ significantly across local programs. This suggests that this impact is not part of a broader pattern of impacts from this study, which identifies a consistent pattern of positive effects on marital relationship quality. Therefore, this impact should likely be interpreted as a statistical anomaly that occurred by chance, and it should not be taken as any concrete evidence of potential unintended effects of the SHM program.

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Appendix I

## Estimated Impacts: Individual-Level, Couple-Level, and SHM Programs Weighted Equally

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## Appendix Table I. 1

## Estimated Impacts on Individual-Level Primary Outcomes Based on the 12-Month Survey, Pooled for Men and Women

| Outcome ${ }^{\text {a }}$ | Program Group | Control <br> Group | Difference (Impact) | Effect Size ${ }^{\text {b }}$ | Standard Error |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Warmth and support in relationship |  |  |  |  |  |
| Individual's report of warmth and support ${ }^{\text {c }}$ | 3.42 | 3.37 | 0.04 | 0.09 *** | 0.01 |
| Positive communication skills in relationship |  |  |  |  |  |
| Individual's report of positive communication skills ${ }^{\text {c }}$ | 3.23 | 3.17 | 0.06 | 0.10 *** | 0.01 |
| Negative interactions in relationship |  |  |  |  |  |
| Individual's report of negative behavior and emotions ${ }^{\text {c }}$ | 2.13 | 2.21 | -0.08 | -0.10 *** | 0.01 |
| Individual's report of psychological abuse ${ }^{\text {c }}$ | 1.27 | 1.31 | -0.04 | -0.08*** | 0.01 |
| Individual's report of any physical assault (\%) | 9.9 | 11.3 | -1.4 | - ** | 0.7 |
| Individual's report of any severe physical assault (\%) | 1.6 | 1.7 | -0.2 | - | 0.3 |
| Individual psychological distress |  |  |  |  |  |
| Individual's psychological distress ${ }^{\text {c }}$ | 1.90 | 1.96 | -0.06 | -0.08 *** | 0.01 |
| Coparenting relationship |  |  |  |  |  |
| Individual's report of cooperative coparenting ${ }^{\text {c }}$ | 3.39 | 3.36 | 0.02 | 0.04 * | 0.01 |
| Sample size (individuals) | 4,990 | 5,172 |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
Standard errors were adjusted for nonindependence of men and women when pooled for the impact analysis.
${ }^{\text {a See Appendix E for detailed notes on the construction of these outcomes. }}$
${ }^{\mathrm{b}} \mathrm{A}$ dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c The scale ranges from } 1 \text { to } 4 \text {, where higher scores indicate higher levels of the respective outcomes: warmth }}$ and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## The Supporting Healthy Marriage Evaluation

## Appendix Table I. 2

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, Local SHM Programs Weighted Equally

| Outcome ${ }^{\text {a }}$ | Program Group | Control <br> Group | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {b }} \end{gathered}$ | Standard <br> Error |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Warmth and support in relationship ${ }^{\text {c }}$ |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.42 | 0.04 | 0.09 *** | 0.01 |
| Women's report of warmth and support | 3.37 | 3.32 | 0.05 | 0.10 *** | 0.01 |
| Positive communication skills in relationship ${ }^{\text {c }}$ |  |  |  |  |  |
| Men's report of positive communication skills | 3.24 | 3.19 | 0.05 | 0.08 *** | 0.01 |
| Women's report of positive communication skills | 3.22 | 3.16 | 0.06 | 0.11 *** | 0.01 |
| Negative interactions in relationship |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {c }}$ | 2.16 | 2.23 | -0.07 | -0.08 *** | 0.02 |
| Women's report of negative behavior and emotions ${ }^{\text {c }}$ | 2.10 | 2.19 | -0.09 | -0.12 *** | 0.02 |
| Men's report of psychological abuse ${ }^{\text {c }}$ | 1.30 | 1.34 | -0.04 | -0.09 *** | 0.01 |
| Women's report of psychological abuse ${ }^{\text {c }}$ | 1.25 | 1.28 | -0.04 | -0.08 *** | 0.01 |
| Men's report of any physical assault (\%) | 11.2 | 13.5 | -2.3 | -** | 0.9 |
| Women's report of any physical assault (\%) | 8.7 | 9.2 | -0.5 | - | 0.8 |
| Men's report of any severe physical assault (\%) | 1.5 | 1.9 | -0.3 | - | 0.4 |
| Women's report of any severe physical assault (\%) | 1.6 | 1.6 | 0.0 | - | 0.4 |
| Individual psychological distress ${ }^{\text {c }}$ |  |  |  |  |  |
| Men's psychological distress | 1.85 | 1.90 | -0.05 | -0.06 ** | 0.02 |
| Women's psychological distress | 1.95 | 2.02 | -0.07 | -0.09 *** | 0.02 |
| Coparenting relationship ${ }^{\text {c }}$ |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.43 | 0.02 | 0.03 | 0.01 |
| Women's report of cooperative coparenting | 3.33 | 3.30 | 0.03 | 0.04 * | 0.02 |
| Sample size |  |  |  |  |  |
| Men | 2,415 | 2,504 |  |  |  |
| Women | 2,575 | 2,668 |  |  |  |

## Appendix Table I. 2 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Estimates were calculated using ordinary least squares, were weighted so that each local SHM program contributes equally to the impact estimates, and were regression-adjusted for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{c}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## Appendix Table I. 3

## Estimated Impacts on Couple-Level Primary Outcomes Based on the 12-Month Survey, Separately for Men and Women

| Outcome $^{\mathrm{a}}$ | Program <br> Group | Control <br> Group | Difference <br> (Impact) | Effect <br> Size $^{\mathrm{b}}$ | Standard <br> Error |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Relationship status (\%) |  |  |  |  |  |
| Men report being married | 93.6 | 93.6 | 0.0 | - | 0.7 |
| Women report being married | 91.8 | 91.0 | 0.8 | - | 0.8 |
| Marital appraisals |  |  |  |  |  |
| Men's average report of relationship happiness $^{\mathrm{c}}$ | 6.06 | 5.93 | 0.13 | $0.10 * * *$ | 0.03 |
| Women's average report of relationship happiness $^{\mathrm{c}}$ | 5.85 | 5.69 | 0.16 | $0.12 * * *$ | 0.03 |
| Men report marriage in trouble (\%) | 30.8 | 35.1 | -4.3 | $-* * *$ | 1.2 |
| Women report marriage in trouble (\%) | 38.6 | 43.7 | -5.1 | $-* * *$ | 1.2 |
| Fidelity (\%) |  |  |  |  |  |
| Men report no infidelity | 96.9 | 95.5 | 1.4 | $-* *$ | 0.6 |
| Women report no infidelity | 94.2 | 94.1 | 0.0 | - | 0.7 |
| Sample size |  |  |  |  |  |
| $\quad$ Men | 2,415 | 2,504 |  |  |  |
| $\quad$ Women | 2,575 | 2,668 |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See Appendix E for detailed notes on the construction of these outcomes. }}$
${ }^{\mathrm{b}} \mathrm{A}$ dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{c}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."

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## Appendix Table I. 4

## Estimated Impacts on Primary Outcomes Based on Observed Couple Interactions, Pooled for Men and Women

| Outcome $^{\text {a,b }}$ | Program <br> Group | Control <br> Group |  | Difference <br> (Impact) | Effect <br> Size $^{\mathrm{c}}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | | Standard |
| ---: |
| Error |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
Standard errors were adjusted for nonindependence of men and women when pooled for the impact analysis.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.

## Appendix Table I. 5

## Estimated Impacts on Primary Outcomes Based on Observed Couple Interactions, Local SHM Programs Weighted Equally

| Outcome ${ }^{\text {a,b }}$ | Program Group | $\begin{aligned} & \hline \text { Control } \\ & \text { Group } \end{aligned}$ | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {c }} \end{gathered}$ | Standard Error |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Observed in couple interactions |  |  |  |  |  |
| Men's warmth and support | 1.98 | 1.95 | 0.03 | 0.05 | 0.03 |
| Women's warmth and support | 1.98 | 1.98 | 0.00 | 0.00 | 0.03 |
| Men's positive communication skills | 5.57 | 5.49 | 0.08 | 0.10 * | 0.04 |
| Women's positive communication skills | 5.76 | 5.69 | 0.07 | 0.09 * | 0.04 |
| Men's anger and hostility | 1.25 | 1.28 | -0.03 | -0.05 | 0.03 |
| Women's anger and hostility | 1.36 | 1.43 | -0.06 | -0.10 * | 0.03 |
| Sample size |  |  |  |  |  |
| Men | 695 | 702 |  |  |  |
| Women | 695 | 702 |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Impacts presented in this table are weighted so that each local program contributes equally to the estimate.

Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.

Appendix J
Subgroup Analyses

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As presented in the Supporting Healthy Marriage (SHM) 12-month impact report, the analysis includes three primary subgroups of couples defined by the following characteristics at study entry: level of marital distress, family income-to-poverty level, and race/ethnicity. ${ }^{1}$ Appendix J presents more detailed information about the impact estimates on participation and primary survey-reported and observed measures for subgroups of the sample. It also describes how these subgroups were defined and validated. Lastly, it presents information about how these subgroup characteristics correspond with each other and with other characteristics of the sample.

## Level of Marital Distress

Appendix Tables J. 1 to J. 5 show the results of the split-sample and full interaction model approaches to estimating subgroup impacts of the SHM program, by couples' levels of marital distress at study entry.

Based on the levels of marital distress that they exhibited when they entered the study, couples were categorized as experiencing (1) low levels of marital distress, (2) moderate levels of marital distress, or (3) high levels of marital distress. In line with prior research - which points to the importance of taking a multifaceted approach to characterizing positive and negative processes that may operate within marriages ${ }^{2}$ - marital distress at study entry is measured by a cumulative index of risk (and absence of protective) processes in marital relationships. How this index and resulting marital distress subgroups were created is discussed below.

Indicators of risk and protective processes in marital relationships at study entry were created from husbands' and wives' responses to 27 items on a self-administered baseline questionnaire. The research team used exploratory factor analysis as a data-reduction technique to create composite scales representing positive and negative relationship dimensions from the individual questions asked at baseline that were hypothesized to be relevant indicators of marital distress, in line with prior research. From this measurement work, five composite scales were identified, capturing the following: (1) positive marital interactions, (2) frequency of disagreements, (3) commitment to couple and family relationships, (4) destructive tactics for conflict resolution, and (5) concerns and arguments about infidelity. Appendix Table J. 6 presents descriptive information (for example, means [M] and standard deviations [SD]) and internal consistencies for composite scales (Cronbach's alphas [ $\alpha]$ ), as well as the factor loadings from a five-factor solution exploratory factor analysis for each of the items on the respective factors, using individual-level data pooled across husbands and wives. In addition, two questions

[^24]capturing study participants' marital appraisals - including how happy spouses reported being in their marriages and whether they thought that their marriages were in trouble in the past year - were considered on their own as separate indicators of protective and risk relationship dimensions.

To create a cumulative marital distress index at baseline, husbands' and wives' reports for the five composite scales and two questions discussed above were averaged to create couple-level indicators of protective and risk relationship dimensions. In line with many studies employing cumulative risk indices, a couple's overall level of marital distress was calculated as a count of the seven couple-level risk factors that were present (or, conversely, of the protective factors that were absent) in the marital relationship at study entry. Cutoffs marking the presence of risk or absence of protective factors are as follows:

- Couples were given a "risk point" each time their score was more than half a standard deviation below the mean for the sample for any of the following measures: positive marital interactions, marital appraisals of how happy spouses reported being in their marriages, and commitment to couple and family relationships.
- Couples were given a risk point each time their score was more than half a standard deviation above the mean for the sample for any of the following measures: concerns and arguments about infidelity, destructive tactics for conflict resolution, and frequency of disagreements.
- Couples in which at least one spouse reported thinking that their marriage was in trouble in the past year were also given a risk point.

The scores on the cumulative risk index ranged from zero to seven points. The average score for the cumulative risk index for marital distress at study entry in the sample was 2.3 with a standard deviation of 2.3 . Based on this, the sample was then divided into three subgroup levels reflecting couples' index scores, with the goal of identifying approximately 33 percent of couples for each level of risk for marital distress at study entry. The subgroup levels were defined as follows:

- Low marital distress. Couples displaying no risks for marital distress (31 percent)
- Moderate marital distress. Couples displaying between one to three risks for marital distress (37 percent)
- High marital distress. Couples displaying four or more risks for marital distress (31 percent)

Appendix Table J. 7 presents comparisons of mean values of reported marital-quality measures at study entry across the constructed marital distress subgroups. The purpose of these comparisons is to establish the extent to which the subgroups appropriately distinguish couples who may be experiencing low, moderate, or high levels of risk factors for marital distress. The table shows that there are statistically significant differences in the mean values of the reported marital-quality measures at study entry across the marital distress subgroups. For example, about 15 percent of couples in the low marital distress group reported that their marriage was in trouble, compared with 59 percent of couples in the moderate marital distress group and 94 percent of couples in the high marital distress group. These findings help to build confidence in the approach used to construct the marital distress subgroups and suggest that the subgroups appropriately identify couples who experience different levels of risk for marital distress.

If more than one-third of the items in a marital distress construct were missing for both the husband and the wife, the construct was not created. Less than 2 percent of couples were not assigned to a marital distress subgroup because of missing data on the marital distress constructs.

## Family Income-to-Poverty Level

Appendix Tables J. 8 to J. 12 show the results of the split-sample and full interaction model approaches to estimating subgroup impacts of the SHM program by the family's income-topoverty level. ${ }^{3}$

To define subgroups based on families' income at baseline, the following three groups were created: (1) those with incomes below 100 percent of the federal poverty line (FPL), (2) those with incomes between 100 percent and less than 200 percent of the FPL, and (3) those with incomes 200 percent or more of the FPL.

A family's income-to-poverty level was calculated by dividing the family's total annual household income by the federal poverty guideline for the family's household size and the year that the couple was randomly assigned in the study. The baseline information forms asked respondents to report their total household income, including such sources as earnings, public assistance, and family or friends. Adults reported either a specific value or a range of values in $\$ 5,000$ or $\$ 10,000$ increments, ranging from $\$ 0$ to " $\$ 70,000$ or more." If household income was

[^25]reported as a range, the family's total annual household income was calculated as though the income was at the midpoint of that range. The number of adults and children living in the household was also collected through reports on the baseline information forms. If a wife was pregnant at the time of random assignment, the unborn child was included in the household size.

Wives' baseline reports were the primary source of information used to define couples' family income-to-poverty subgroup status, except when insufficient information was available. For these cases, husbands' baseline reports were used. For cases where neither spouse reported family income and household size, the couple was not included in the analysis of poverty subgroups.

In the local SHM program that operated in Oklahoma City, a family's income-topoverty level was calculated slightly differently because participants completed a different set of baseline information forms. In Oklahoma City, participants were not asked how many adults lived in the household or their total household income at study entry. Rather, families' total household incomes were calculated from husbands' and wives' reports of their individual earnings, which were reported in $\$ 5,000$ increments up to $\$ 24,999$. Individuals were also given the option of reporting that they earned from $\$ 25,000$ to $\$ 34,999$ or earned $\$ 35,000$ or more. Total household income was the sum of the midpoints of the husband's and wife's earnings. If either spouse was missing earnings or the couple did not report the number of children in their household, the couple was not included in the analysis of poverty subgroups.

As a proxy for household size in Oklahoma City, it was assumed that each household had two adults (as did 77 percent of households in the other SHM locations). Therefore, household size was calculated as two adults plus the number of children reported living in the household (including the unborn child if the wife was pregnant). To assess the extent to which the modified approach to calculating families' income-to-poverty level might have affected couples' subgroup membership in Oklahoma City, a check of the consistency of values using the two approaches discussed above was conducted in the other SHM locations. The results suggest that there is a fairly high level of agreement in families' income-to-poverty level when calculated with the two approaches ( $\mathrm{r}=0.77$ ), suggesting that the approach used in Oklahoma City closely proxies the approach used in the other local SHM programs.

## Race/Ethnicity

Appendix Tables J. 13 to J. 17 show the results of the split-sample and full interaction model approaches to estimating subgroup impacts of the SHM program by couples' racial and ethnic backgrounds.

Four categories were created to define subgroups of couples based on their racial or ethnic composition: (1) both spouses identified as Hispanic; (2) both spouses identified as African-American, non-Hispanic; (3) both spouses identified as white, non-Hispanic; and (4) all other couples. These categories were created using two questions on the baseline information form as answered by both husbands and wives at study entry: "Do you consider yourself Spanish/Hispanic/Latino?" and "Do you consider yourself (select all that apply) ... White? Black/African American? Asian? American Indian or Alaskan Native? Native Hawaiian or Pacific Islander? Other?"

Couples were considered to be Hispanic if both spouses considered themselves to be Hispanic, regardless of their responses to the race item. Couples were considered to be AfricanAmerican, non-Hispanic, if both spouses selected black/African-American, if neither spouse selected any other racial category, and if neither spouse selected Hispanic. Couples were considered to be white, non-Hispanic, if both spouses selected white, if neither spouse selected any other racial category, and if neither spouse selected Hispanic. Couples were categorized as other/multiracial if they did not fit into any of the above categories. If one spouse was missing race/ethnicity data but the other spouse's responses made it clear which category the couple belonged in, the couple was put into that category. For example, if the husband's responses on the race/ethnicity questions were missing but the wife's responses indicated that she was Asian and not Hispanic, then the couple was put into the other/multiracial category. If both spouses were missing race/ethnicity information or if one spouse's responses were not sufficient to determine how the couple should be categorized, then the couple was not included in the analysis of race/ethnicity subgroups. Less than 1 percent of couples were dropped from this analysis.

## Correspondence Among Subgroup Characteristics of Interest

As discussed in detail in Appendix D, two approaches are used in the impact analysis of subgroups - a split-sample approach and a full interaction model approach - to estimate how the effects of the SHM program might vary by subgroup characteristics of interest. These two approaches are used because the characteristics of the sample differ substantially across local SHM programs. ${ }^{4}$ In addition, the subgroups vary systematically on a number of other baseline characteristics. (See Appendix Tables J. 18 to J.20.)

[^26]The Supporting Healthy Marriage Evaluation

| Estimated Impacts on Couples' Participation in Relationship Services and Referrals, by Level of Marital Distress at Random Assignment: Subgroup Analysis Using Split Samples |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Outcome ${ }^{\text {a }}$ | Low M <br> Control <br> Group | ital Distress Difference (Impact) | $\begin{gathered} \hline \text { Moderate } \\ \hline \text { Control } \\ \text { Group } \\ \hline \end{gathered}$ | arital Distress Difference (Impact) | High M Control Group | rital Distress Difference (Impact) | Subgroup Difference |
| Receipt of group relationship services ${ }^{\text {c }}$ (\%) |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |
| 0 | 78.9 | -67.4 *** | 76.2 | -64.1 *** | 73.9 | -64.5 *** |  |
| 1 | 9.1 | -6.6 *** | 8.9 | -6.4 *** | 9.2 | -6.2 *** |  |
| 2-5 | 5.5 | 7.2 *** | 7.1 | 5.5 *** | 7.9 | 5.2 *** |  |
| 6-10 | 4.6 | 26.6 *** | 5.5 | 26.7 *** | 5.5 | 26.5 *** |  |
| More than 10 | 1.8 | 40.1 *** | 2.4 | 38.4 *** | 3.5 | 38.9 *** |  |
| Receipt of one-on-one |  |  |  |  |  |  |  |
| relationship services ${ }^{\text {d }}$ (\%) |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |
| 0 | 90.6 | -5.7 *** | 80.6 | 2.1 | 74.5 | -4.1 * | $\dagger \dagger$ |
| 1 | 2.1 | 0.2 | 2.9 | -0.4 | 4.0 | -1.1 |  |
| 2-5 | 4.4 | 3.2 *** | 9.5 | -1.2 | 11.6 | 2.2 | $\dagger$ |
| 6-10 | 2.5 | 1.5 * | 5.2 | -0.5 | 6.5 | 2.6 * |  |
| More than 10 | 0.5 | 0.8 * | 1.8 | -0.1 | 3.4 | 0.4 |  |
| Referrals for either spouse for (\%) |  |  |  |  |  |  |  |
| Parenting classes and/or child care | 35.8 | 6.4 *** | 36.0 | 8.8 *** | 40.2 | 5.0 ** |  |
| Assistance with issues related to work readiness and/or financial security | 73.8 | -6.8 *** | 75.5 | -3.8 ** | 74.8 | $-6.1^{* * *}$ |  |
| Assistance with issues related to mental health and/or substance abuse | 12.8 | 2.8 * | 21.6 | 2.5 | 29.1 | 1.8 |  |
| Sample size (program and control group totals) Couples |  | 1,711 |  | 1,981 |  | 1,619 |  |

Appendix Table J. 1 (continued)
NOTES: Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment
characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly
by subgroup level.
Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
${ }^{\text {a See Appendix E for detailed notes on the construction of these outcomes. }}$
bTests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent;
$\dagger=10$ percent.
c"Group relationship services" includes marriage or relationship skills education services that are conducted in a group session and received with a
spouse.
d"One-on-one relationship services" includes services received outside SHM with or without a spouse.

## The Supporting Healthy Marriage Evaluation

## Appendix Table J. 2

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Level of Marital Distress at Random Assignment: <br> Subgroup Analysis Using Split Samples

| Outcome ${ }^{\text {a }}$ | Low Marital Distress |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard | Subgroup |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 95.2 | 95.6 | -0.4 | - | 1.0 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.40 | 6.30 | 0.11 | $0.09^{* * *}$ | 0.04 | $\dagger \dagger$ |
| Either spouse reports marriage in trouble (\%) | 24.5 | 29.9 | -5.4 | - ** | 2.1 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.65 | 3.60 | 0.04 | $0.09^{* *}$ | 0.02 |  |
| Women's report of warmth and support | 3.61 | 3.58 | 0.03 | 0.05 | 0.02 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.45 | 3.42 | 0.03 | 0.06 | 0.02 |  |
| Women's report of positive communication skills | 3.50 | 3.45 | 0.05 | 0.09 ** | 0.02 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.82 | 1.86 | -0.04 | -0.04 | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.73 | 1.77 | -0.05 | -0.06 | 0.03 | $\dagger \dagger$ |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.15 | 1.16 | -0.01 | -0.03 | 0.01 | $\dagger \dagger$ |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.09 | 1.12 | -0.03 | -0.06 ** | 0.01 |  |
| Men's report of any physical assault (\%) | 6.2 | 7.0 | -0.8 | - | 1.3 |  |
| Women's report of any physical assault (\%) | 3.6 | 4.6 | -1.0 | - | 1.0 |  |
| Men's report of any severe physical assault (\%) | 0.4 | 0.5 | -0.2 | - | 0.3 |  |
| Women's report of any severe physical assault (\%) | 0.6 | 0.9 | -0.4 | - | 0.4 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 96.3 | 95.8 | 0.5 | - | 1.0 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.64 | 1.65 | -0.02 | -0.02 | 0.03 |  |
| Women's psychological distress | 1.66 | 1.73 | -0.07 | $-0.08 * *$ | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.64 | 3.62 | 0.02 | 0.04 | 0.02 |  |
| Women's report of cooperative coparenting | 3.58 | 3.57 | 0.01 | 0.02 | 0.02 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 850 | 861 |  |  |  |  |
| Men | 792 | 818 |  |  |  |  |
| Women | 833 | 846 |  |  |  |  |

Appendix Table J. 2 (continued)

| Outcome ${ }^{\text {a }}$ | Moderate Marital Distress |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Subgroup |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.9 | 89.9 | 1.9 | - | 1.3 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.97 | 5.86 | 0.11 | 0.10 ** | 0.04 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 48.2 | 53.3 | -5.1 | - ** | 2.2 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.43 | 0.04 | 0.08 ** | 0.02 |  |
| Women's report of warmth and support | 3.39 | 3.33 | 0.06 | 0.12 *** | 0.02 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.27 | 3.21 | 0.06 | 0.11 *** | 0.02 |  |
| Women's report of positive communication skills | 3.25 | 3.17 | 0.07 | 0.12 *** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.14 | 2.20 | -0.06 | -0.08 ** | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.05 | 2.16 | -0.11 | -0.14 *** | 0.03 | $\dagger$ |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.33 | -0.04 | -0.07 * | 0.02 | $\dagger$ |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.21 | 1.26 | -0.05 | -0.11 *** | 0.02 |  |
| Men's report of any physical assault (\%) | 10.5 | 13.8 | -3.3 | - ** | 1.6 |  |
| Women's report of any physical assault (\%) | 7.5 | 8.5 | -1.0 | - | 1.3 |  |
| Men's report of any severe physical assault (\%) | 1.3 | 2.2 | -0.8 | - | 0.6 |  |
| Women's report of any severe physical assault (\%) | 1.7 | 1.5 | 0.2 | - | 0.6 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.7 | 92.5 | 1.2 | - | 1.1 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.85 | 1.91 | -0.06 | -0.07 * | 0.03 |  |
| Women's psychological distress | 1.95 | 2.02 | -0.07 | -0.09 ** | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.44 | 0.01 | 0.01 | 0.02 |  |
| Women's report of cooperative coparenting | 3.36 | 3.32 | 0.04 | 0.06 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 955 | 1,026 |  |  |  |  |
| Men | 871 | 932 |  |  |  |  |
| Women | 929 | 1,002 |  |  |  |  |

Appendix Table J. 2 (continued)

| Outcome ${ }^{\text {a }}$ | High Marital Distress |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect S |  |  |  | tandard Subgroup |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 82.8 | 81.3 | 1.5 | - | 1.9 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.32 | 5.00 | 0.32 | 0.28 *** | 0.07 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 71.4 | 78.1 | -6.6 | - *** | 2.2 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.25 | 3.16 | 0.09 | 0.17 *** | 0.03 |  |
| Women's report of warmth and support | 3.07 | 3.00 | 0.08 | 0.15 ** | 0.03 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 2.98 | 2.90 | 0.08 | 0.14 ** | 0.03 |  |
| Women's report of positive communication skills | 2.91 | 2.79 | 0.12 | 0.21 *** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.57 | 2.71 | -0.14 | -0.18 *** | 0.04 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.54 | 2.71 | -0.17 | -0.21 *** | 0.04 | $\dagger \dagger$ |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.50 | 1.62 | -0.12 | -0.24 *** | 0.03 | $\dagger$ |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.47 | 1.52 | -0.05 | -0.11 | 0.03 |  |
| Men's report of any physical assault (\%) | 17.8 | 21.3 | -3.6 | - | 2.2 |  |
| Women's report of any physical assault (\%) | 15.3 | 16.3 | -1.0 | - | 2.0 |  |
| Men's report of any severe physical assault (\%) | 3.2 | 3.5 | -0.3 | - | 1.0 |  |
| Women's report of any severe physical assault (\%) | 2.6 | 2.5 | 0.1 | - | 0.9 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 86.8 | 84.4 | 2.4 | - | 1.8 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 2.09 | 2.18 | -0.08 | -0.11 ** | 0.04 |  |
| Women's psychological distress | 2.23 | 2.34 | -0.11 | -0.14 *** | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.23 | 3.17 | 0.06 | 0.10 * | 0.03 |  |
| Women's report of cooperative coparenting | 3.03 | 2.98 | 0.05 | 0.10 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 801 | 818 |  |  |  |  |
| Men | 710 | 719 |  |  |  |  |
| Women | 771 | 781 |  |  |  |  |

## Appendix Table J. 2 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level. Statistical significance levels are indicated as follows: *** $=1$ percent; ${ }^{* *}=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\mathrm{d}}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {e}}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{f}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## Appendix Table J. 3

## Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Level of Marital Distress at Random Assignment: Subgroup Analysis Using Split Samples

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | Program Group | Control <br> Group | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {c }} \end{gathered}$ | Standard Error | $\begin{array}{r} \text { Subgroup } \\ \text { Difference }{ }^{\text {d }} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low marital distress |  |  |  |  |  |  |
| Men's warmth and support | 2.14 | 2.09 | 0.05 | 0.08 | 0.07 |  |
| Women's warmth and support | 2.12 | 2.11 | 0.01 | 0.02 | 0.06 |  |
| Men's positive communication skills | 5.80 | 5.64 | 0.17 | 0.20 ** | 0.07 |  |
| Women's positive communication skills | 5.92 | 5.86 | 0.06 | 0.07 | 0.07 |  |
| Men's anger and hostility | 1.15 | 1.22 | -0.07 | -0.12 * | 0.04 |  |
| Women's anger and hostility | 1.29 | 1.31 | -0.02 | -0.04 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Men | 231 | 234 |  |  |  |  |
| Women | 231 | 234 |  |  |  |  |
| Moderate marital distress |  |  |  |  |  |  |
| Men's warmth and support | 1.96 | 1.97 | -0.01 | -0.02 | 0.06 |  |
| Women's warmth and support | 1.99 | 2.00 | -0.02 | -0.03 | 0.06 |  |
| Men's positive communication skills | 5.49 | 5.49 | 0.00 | 0.00 | 0.07 |  |
| Women's positive communication skills | 5.68 | 5.65 | 0.03 | 0.03 | 0.07 |  |
| Men's anger and hostility | 1.24 | 1.25 | -0.01 | -0.03 | 0.04 |  |
| Women's anger and hostility | 1.36 | 1.44 | -0.07 | -0.13 | 0.06 |  |
| Sample size |  |  |  |  |  |  |
| Men | 262 | 252 |  |  |  |  |
| Women | 262 | 252 |  |  |  |  |
| High marital distress |  |  |  |  |  |  |
| Men's warmth and support | 1.83 | 1.72 | 0.11 | 0.17 * | 0.06 |  |
| Women's warmth and support | 1.82 | 1.77 | 0.04 | 0.07 | 0.06 |  |
| Men's positive communication skills | 5.41 | 5.31 | 0.10 | 0.12 | 0.09 |  |
| Women's positive communication skills | 5.66 | 5.55 | 0.11 | 0.13 | 0.08 |  |
| Men's anger and hostility | 1.38 | 1.39 | -0.01 | -0.01 | 0.06 |  |
| Women's anger and hostility | 1.46 | 1.54 | -0.08 | -0.13 | 0.07 |  |
| Sample size |  |  |  |  |  |  |
| Men | 191 | 204 |  |  |  |  |
| Women | 191 | 204 |  |  |  |  |

## Appendix Table J. 3 (Continued)

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level. Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\mathrm{d}}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.

## The Supporting Healthy Marriage Evaluation

## Appendix Table J. 4

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Level of Marital Distress at Random Assignment: Subgroup Analysis with Full Interactions

| Outcome ${ }^{\text {a }}$ | Low Marital Distress |  |  |  |  | Subgroup Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 93.4 | 94.8 | -1.3 | - | 1.2 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.40 | 6.29 | 0.11 | 0.09 ** | 0.04 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 26.1 | 33.0 | -6.9 | - *** | 2.4 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.64 | 3.59 | 0.04 | 0.09 ** | 0.02 |  |
| Women's report of warmth and support | 3.58 | 3.55 | 0.03 | 0.07 | 0.02 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.45 | 3.41 | 0.04 | 0.06 | 0.02 |  |
| Women's report of positive communication skills | 3.48 | 3.43 | 0.05 | 0.09 * | 0.02 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.84 | 1.87 | -0.03 | -0.04 | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 1.75 | 1.81 | -0.06 | -0.08 * | 0.03 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.16 | 1.19 | -0.03 | -0.06 | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.10 | 1.15 | -0.05 | -0.10 ** | 0.02 |  |
| Men's report of any physical assault (\%) | 6.4 | 8.3 | -1.9 | - | 1.5 |  |
| Women's report of any physical assault (\%) | 4.0 | 5.5 | -1.6 | - | 1.2 |  |
| Men's report of any severe physical assault (\%) | 0.3 | 0.5 | -0.2 | - | 0.5 |  |
| Women's report of any severe physical assault (\%) | 0.6 | 1.4 | -0.8 | - | 0.5 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 94.6 | 94.1 | 0.4 | - | 1.2 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.69 | 1.73 | -0.04 | -0.05 | 0.03 |  |
| Women's psychological distress | 1.74 | 1.81 | -0.07 | -0.09 * | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.62 | 3.61 | 0.01 | 0.02 | 0.02 |  |
| Women's report of cooperative coparenting | 3.55 | 3.54 | 0.02 | 0.03 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 850 | 861 |  |  |  |  |
| Men | 792 | 818 |  |  |  |  |
| Women | 833 | 846 |  |  |  |  |

(continued)

## Appendix Table J. 4 (continued)

| Outcome ${ }^{\text {a }}$ | Moderate Marital Distress |  |  |  |  | Subgroup <br> Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.6 | 89.8 | 1.9 | - | 1.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.96 | 5.84 | 0.12 | 0.10 ** | 0.06 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 48.5 | 53.8 | -5.3 | -** | 3.2 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.43 | 0.04 | 0.08 ** | 0.03 |  |
| Women's report of warmth and support | 3.39 | 3.33 | 0.06 | 0.12 *** | 0.03 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.26 | 3.20 | 0.06 | 0.11 *** | 0.03 |  |
| Women's report of positive communication skills | 3.24 | 3.17 | 0.07 | 0.13 *** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.15 | 2.22 | -0.06 | -0.08 ** | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.06 | 2.17 | -0.11 | -0.14 *** | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.33 | -0.04 | -0.08 * | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.22 | 1.27 | -0.06 | -0.12 *** | 0.02 |  |
| Men's report of any physical assault (\%) | 10.7 | 14.0 | -3.3 | -** | 2.1 |  |
| Women's report of any physical assault (\%) | 7.7 | 8.9 | -1.2 | - | 1.7 |  |
| Men's report of any severe physical assault (\%) | 1.3 | 2.1 | -0.8 | - | 0.8 |  |
| Women's report of any severe physical assault (\%) | 1.5 | 1.6 | -0.1 | - | 0.7 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.7 | 92.3 | 1.3 | - | 1.6 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.86 | 1.93 | -0.07 | -0.09 ** | 0.05 |  |
| Women's psychological distress | 1.97 | 2.04 | -0.07 | -0.09 ** | 0.05 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.46 | 3.45 | 0.01 | 0.02 | 0.03 |  |
| Women's report of cooperative coparenting | 3.36 | 3.32 | 0.04 | 0.07 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 955 | 1,026 |  |  |  |  |
| Men | 871 | 932 |  |  |  |  |
| Women | 929 | 1,002 |  |  |  |  |

## Appendix Table J. 4 (continued)

| Outcome ${ }^{\text {a }}$ | High Marital Distress |  |  |  |  | $\begin{array}{r} \text { Subgroup } \\ \text { Difference }^{\text {c }} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard <br> Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 84.0 | 82.1 | 2.0 | - | 2.4 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.34 | 5.02 | 0.32 | 0.28 *** | 0.09 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 70.5 | 75.4 | -5.0 | -** | 3.7 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.25 | 3.17 | 0.08 | 0.16 *** | 0.04 |  |
| Women's report of warmth and support | 3.09 | 3.02 | 0.07 | 0.14 ** | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 2.98 | 2.90 | 0.08 | 0.13 *** | 0.04 |  |
| Women's report of positive communication skills | 2.91 | 2.81 | 0.10 | 0.18 *** | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.56 | 2.70 | -0.14 | -0.18 *** | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.54 | 2.68 | -0.15 | -0.19 *** | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.50 | 1.60 | -0.10 | -0.21 *** | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.47 | 1.50 | -0.03 | -0.07 | 0.04 |  |
| Men's report of any physical assault (\%) | 18.7 | 21.2 | -2.5 | - | 2.9 |  |
| Women's report of any physical assault (\%) | 15.8 | 15.4 | 0.3 | - | 2.6 |  |
| Men's report of any severe physical assault (\%) | 3.6 | 3.7 | -0.1 | - | 1.3 |  |
| Women's report of any severe physical assault (\%) | 2.9 | 1.9 | 1.0 | - | 1.0 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 88.1 | 85.9 | 2.2 | - | 2.2 |  |
|  |  |  |  |  |  |  |
| Men's psychological distress | 2.04 | 2.10 | -0.06 | -0.08 | 0.06 |  |
| Women's psychological distress | 2.15 | 2.25 | -0.10 | -0.13 *** | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.24 | 3.19 | 0.06 | 0.10 ** | 0.04 |  |
| Women's report of cooperative coparenting | 3.05 | 3.00 | 0.05 | 0.09 * | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 801 | 818 |  |  |  |  |
| Men | 710 | 719 |  |  |  |  |
| Women | 771 | 781 |  |  |  |  |

## Appendix Table J. 4 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey

NOTES: Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{d}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
eThe scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{f}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## Appendix Table J. 5

## Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Level of Marital Distress at Random Assignment: <br> Subgroup Analysis with Full Interactions

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \\ \hline \end{array}$ | Control Group | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {c }} \end{gathered}$ | Standard <br> Error | $\begin{array}{r} \text { Subgroup } \\ \text { Difference }^{\mathrm{d}} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low marital distress |  |  |  |  |  |  |
| Men's warmth and support | 2.09 | 2.03 | 0.06 | 0.09 | 0.09 |  |
| Women's warmth and support | 2.04 | 2.02 | 0.02 | 0.04 | 0.09 |  |
| Men's positive communication skills | 5.72 | 5.56 | 0.16 | 0.19 ** | 0.10 |  |
| Women's positive communication skills | 5.85 | 5.73 | 0.11 | 0.13 | 0.10 |  |
| Men's anger and hostility | 1.16 | 1.23 | -0.07 | -0.12 | 0.06 |  |
| Women's anger and hostility | 1.32 | 1.34 | -0.02 | -0.03 | 0.08 |  |
| Sample size |  |  |  |  |  |  |
| Men | 231 | 234 |  |  |  |  |
| Women | 231 | 234 |  |  |  |  |
| Moderate marital distress |  |  |  |  |  |  |
| Men's warmth and support | 1.96 | 1.97 | -0.01 | -0.02 | 0.06 |  |
| Women's warmth and support | 1.99 | 2.01 | -0.01 | -0.02 | 0.06 |  |
| Men's positive communication skills | 5.52 | 5.52 | 0.00 | 0.00 | 0.07 |  |
| Women's positive communication skills | 5.71 | 5.67 | 0.04 | 0.05 | 0.07 |  |
| Men's anger and hostility | 1.23 | 1.25 | -0.02 | -0.03 | 0.04 |  |
| Women's anger and hostility | 1.37 | 1.43 | -0.06 | -0.10 | 0.06 |  |
| Sample size |  |  |  |  |  |  |
| Men | 262 | 252 |  |  |  |  |
| Women | 262 | 252 |  |  |  |  |
| High marital distress |  |  |  |  |  |  |
| Men's warmth and support | 1.88 | 1.79 | 0.09 | 0.14 | 0.09 |  |
| Women's warmth and support | 1.90 | 1.86 | 0.04 | 0.05 | 0.09 |  |
| Men's positive communication skills | 5.47 | 5.34 | 0.12 | 0.15 | 0.12 |  |
| Women's positive communication skills | 5.70 | 5.60 | 0.10 | 0.11 | 0.11 |  |
| Men's anger and hostility | 1.37 | 1.38 | -0.01 | -0.02 | 0.07 |  |
| Women's anger and hostility | 1.43 | 1.54 | -0.11 | -0.19 * | 0.10 |  |
| Sample size |  |  |  |  |  |  |
| Men | 191 | 204 |  |  |  |  |
| Women | 191 | 204 |  |  |  |  |

## Appendix Table J. 5 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: *** = 1 percent; ** $=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\mathrm{d}}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
The Supporting Healthy Marriage Evaluation
Exploratory Factor Analysis Loadings for Five-Factor Solution for Reported Marital-Quality Measures at Study Entry

| Item | Factor Loading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| Commitment to couple and family relationships ${ }^{\text {a,b }}(\mathrm{M}=3.43, \mathrm{SD}=0.42, \alpha=0.85)$ |  |  |  |  |  |
| The respondent can count on the spouse to be there for him/her | 0.51 | -0.05 | 0.04 | 0.00 | 0.31 |
| The respondent views the relationship as lifelong | 0.60 | -0.09 | -0.11 | 0.14 | 0.20 |
| The spouse is the type of parent the respondent wants for his/her children | 0.80 | 0.05 | 0.11 | -0.16 | -0.08 |
| The respondent believes the relationship can stay strong even through hard times | 0.54 | -0.11 | -0.01 | 0.06 | 0.30 |
| The spouse is completely committed to being there for the children | 0.83 | 0.04 | -0.05 | -0.02 | -0.14 |
| The respondent's family respects and values the respondent's marriage | 0.48 | -0.08 | 0.22 | 0.13 | -0.07 |
| Frequency of disagreements ${ }^{\text {c }}$ ( $M=\mathbf{2 . 3 0}, \mathrm{SD}=\mathbf{0 . 5 5}, \alpha=0.79$ ) |  |  |  |  |  |
| How often does the respondent and their spouse have arguments about |  |  |  |  |  |
| Household chores | -0.12 | 0.45 | 0.20 | -0.12 | 0.18 |
| Sex | -0.14 | 0.57 | -0.07 | 0.06 | 0.20 |
| Spending time together | -0.17 | 0.60 | -0.11 | 0.17 | 0.24 |
| Managing money, bills, and debt | -0.10 | 0.51 | 0.25 | -0.03 | 0.04 |
| In-laws, other relatives, and friends | -0.01 | 0.34 | 0.32 | 0.12 | -0.15 |
| Religion | 0.08 | 0.66 | -0.15 | 0.00 | -0.23 |
| Raising children | 0.18 | 0.68 | 0.02 | -0.13 | -0.10 |
| Destructive conflict resolution tactics ( $M=2.32, S D=0.68, \alpha=0.84$ ) |  |  |  |  |  |
| The couple's arguments get very heated ${ }^{\text {b,d }}$ | 0.06 | 0.04 | 0.56 | 0.08 | 0.08 |
| In the past year, how often has the spouse ${ }^{\text {c }}$ |  |  |  |  |  |
| Yelled or screamed at the respondent | 0.03 | 0.10 | 0.78 | 0.00 | -0.01 |
| Blamed the respondent for his/her problems | 0.06 | 0.16 | 0.58 | 0.02 | 0.11 |

Appendix Table J. 6 (continued)

| Item | Factor Loading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| Concerns and arguments about infidelity ( $M=1.87, \mathrm{SD}=0.71, \alpha=0.68$ ) |  |  |  |  |  |
| The respondent worries about the spouse cheating ${ }^{\text {a,b }}$ | 0.11 | 0.07 | -0.10 | 0.69 | -0.01 |
| How often do the respondent and spouse argue about other women or men ${ }^{\text {c }}$ | 0.02 | -0.01 | 0.22 | 0.60 | -0.01 |
| $\underline{\text { Positive marital interactions ( } \mathrm{M}=2.87, \mathrm{SD}=\mathbf{0 . 5 8}, \alpha=0.92 \text { ) }}$ |  |  |  |  |  |
| It is hard for the respondent to talk with the spouse about the important things in their life ${ }^{\text {a }}$ | 0.14 | 0.10 | -0.04 | 0.18 | 0.42 |
| The respondent and the spouse get along well together ${ }^{\text {b,d }}$ | 0.00 | -0.03 | 0.20 | -0.03 | 0.70 |
| The respondent and the spouse have similar views about what is important in life ${ }^{\text {b,d }}$ | 0.16 | 0.05 | -0.04 | 0.01 | 0.56 |
| The respondent is satisfied with the way the couple handles their problems and disagreements ${ }^{\text {b,d }}$ | 0.01 | -0.07 | 0.27 | -0.01 | 0.67 |
| The couple enjoys doing even ordinary, day-to-day things together ${ }^{\text {b,d }}$ | 0.03 | 0.06 | -0.12 | -0.07 | 0.89 |
| The spouse expresses love and affection toward the respondent ${ }^{\text {b,d }}$ | 0.01 | 0.02 | -0.09 | -0.06 | 0.90 |
| The spouse listens to the respondent when the respondent needs someone to talk to ${ }^{\mathrm{b}, \mathrm{d}}$ | 0.08 | -0.01 | 0.00 | -0.02 | 0.80 |

> SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
 ${ }^{\mathrm{b}}$ This item was reverse coded.
${ }^{\mathrm{c}}$ Response categories for this question are as follows: $1=$ never; $2=$ hardly ever; $3=$ sometimes; $4=$ often.


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## Appendix Table J. 7

## Mean Values of Reported Marital-Quality Measures at Study Entry, by Level of Marital Distress at Random Assignment

| Measure $^{\mathrm{a}}$ | Low Marital <br> Distress | Moderate Marital <br> Distress | High Marital <br> Distress |
| :--- | ---: | ---: | ---: |
| Marriage in trouble $^{\mathrm{b}}(\%)$ | 14.80 | 58.78 | $94.32 * * *$ |
| Happiness in marriage $^{\mathrm{c}}$ | 6.52 | 5.61 | 4.10 *** |
| Commitment to couple and family relationships $^{\mathrm{d}}$ | 3.75 | 3.49 | $3.03 * * *$ |
| Frequency of disagreements $^{\mathrm{d}}$ | 1.84 | 2.29 | $2.78 * * *$ |
| Destructive conflict resolution tactics $^{\mathrm{d}}$ | 1.73 | 2.26 | $2.99^{* * *}$ |
| Concerns and arguments about infidelity $^{\mathrm{d}}$ | 1.35 | 1.85 | 2.43 *** |
| Positive marital interactions $^{\mathrm{d}}$ | 3.39 | 2.95 | $2.24^{* * *}$ |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; ${ }^{* *}=5$ percent; $*=10$ percent.
${ }^{\text {a }}$ The measures listed in this table were used to create the marital distress categories shown in the table. Couples were assigned to the low, moderate, or high distress category based on the number of indicators for which they were more than half a standard deviation more distressed than the mean.
${ }^{\text {b }}$ Response categories for this question are as follows: $0=$ no $; 1=$ yes.
${ }^{\text {c }}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{d}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective measures: commitment to couple and family relationships, frequency of disagreements, destructive conflict resolution tactics, concerns and arguments about infidelity, and positive marital interactions.
The Supporting Healthy Marriage Evaluation

| Estimated Impacts on Couples' Participation in Relationship Services and Referrals, by Income Relative to Poverty Level at Random Assignment: Subgroup Analysis Using Split Samples |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less Than | 100\% of FPL | 100\% to Less | Than 200\% of FPL | 200\% | r More of FPL |  |
| Outcome ${ }^{\text {a }}$ | Control Group | Difference (Impact) | Control Group | Difference (Impact) | $\begin{aligned} & \hline \text { Control } \\ & \text { Group } \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline \text { Difference } \\ \text { (Impact) } \\ \hline \end{array}$ | Subgroup Difference ${ }^{\text {b }}$ |
| Receipt of group |  |  |  |  |  |  |  |
| relationship services ${ }^{\text {c }}$ (\%) |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |
| 0 | 76.4 | -64.7 *** | 77.8 | -67.2 *** | 74.4 | -64.0 *** |  |
| 1 | 9.1 | -6.2 *** | 8.5 | -6.0 *** | 9.6 | -6.9 *** |  |
| 2-5 | 7.0 | 6.8 *** | 6.0 | $6.3^{* * *}$ | 8.0 | 4.4 ** |  |
| 6-10 | 4.9 | 25.4 *** | 5.4 | 26.1 *** | 5.4 | 28.7 *** |  |
| More than 10 | 2.6 | 38.6 *** | 2.3 | 40.8 *** | 2.6 | 37.8 *** |  |
| Receipt of one-on-one |  |  |  |  |  |  |  |
| relationship services ${ }^{\text {d }}$ (\%) |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |
| 0 | 82.8 | -2.1 | 82.8 | -4.1 ** | 78.4 | 0.8 |  |
| 1 | 3.3 | -0.4 | 2.5 | 0.2 | 3.5 | -1.7 |  |
| 2-5 | 7.7 | 1.3 | 8.9 | 2.1 | 9.4 | 0.0 |  |
| 6-10 | 4.6 | 0.6 | 4.0 | 1.6 * | 6.1 | 1.0 |  |
| More than 10 | 1.7 | 0.5 | 1.8 | 0.2 | 2.7 | -0.1 |  |
| Referrals for either spouse for (\%) |  |  |  |  |  |  |  |
| Parenting classes and/or child care | 37.4 | 7.8 *** | 35.7 | 9.1 *** | 37.7 | 1.8 |  |
| Assistance with issues related to work readiness and/or financial security | 82.6 | -3.2 * | 75.0 | -6.5 *** | 55.6 | -6.8** |  |
| Assistance with issues related to mental health and/or substance abuse | 28.2 | 2.0 | 16.1 | 3.8 ** | 15.8 | -0.2 |  |
| Sample size (program and control group totals) Couples |  | 2,139 |  | 2,074 |  | 943 |  |

Appendix Table J. 8 (continued)
NOTES: "FPL" = federal poverty level. The poverty level was calculated using federal poverty guidelines for the year that the couple entered the study.
Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment
characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly
by subgroup level.
Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
aSee Appendix E for detailed notes on the construction of these outcomes.
bTests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent;
$\dagger=10$ percent.
c"Group relationship services" includes marriage or relationship skills education services that are conducted in a group session and received with a
spouse.
d"One-on-one relationship services" includes services received outside SHM with or without a spouse.

## Appendix Table J. 9

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Income Relative to Poverty Level at Random Assignment: Subgroup Analysis Using Split Samples

| Outcome ${ }^{\text {a }}$ | Less Than 100\% of FPL |  |  |  |  | Subgroup |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | ndard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 90.1 | 87.1 | 3.1 | -** | 1.4 | $\dagger$ |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.97 | 5.81 | 0.16 | 0.14 *** | 0.04 |  |
| Either spouse reports marriage in trouble (\%) | 51.1 | 56.5 | -5.4 | - *** | 2.0 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.45 | 3.41 | 0.04 | 0.09 ** | 0.02 |  |
| Women's report of warmth and support | 3.35 | 3.30 | 0.05 | 0.11 ** | 0.02 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.26 | 3.19 | 0.07 | 0.11 *** | 0.02 |  |
| Women's report of positive communication skills | 3.21 | 3.12 | 0.08 | 0.14 *** | 0.02 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\mathrm{f}}$ | 2.18 | 2.23 | -0.06 | -0.07 * | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.11 | 2.21 | -0.11 | -0.13 *** | 0.03 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.33 | 1.38 | -0.05 | -0.10 ** | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.28 | 1.33 | -0.06 | -0.12 *** | 0.02 |  |
| Men's report of any physical assault (\%) | 12.4 | 16.4 | -4.0 | -** | 1.6 |  |
| Women's report of any physical assault (\%) | 10.0 | 10.3 | -0.2 | - | 1.4 |  |
| Men's report of any severe physical assault (\%) | 1.6 | 2.5 | -0.9 | - | 0.7 |  |
| Women's report of any severe physical assault (\%) | 2.0 | 2.3 | -0.2 | - | 0.7 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 92.2 | 90.0 | 2.2 | -* | 1.2 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.93 | 1.98 | -0.05 | -0.06 | 0.03 |  |
| Women's psychological distress | 2.02 | 2.12 | -0.10 | -0.13 *** | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.43 | 3.41 | 0.03 | 0.05 | 0.02 |  |
| Women's report of cooperative coparenting | 3.29 | 3.26 | 0.03 | 0.05 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,053 | 1,086 |  |  |  |  |
| Men | 951 | 986 |  |  |  |  |
| Women | 1,020 | 1,060 |  |  |  |  |

## Appendix Table J. 9 (continued)

| Outcome ${ }^{\text {a }}$ | 100\% to Less Than 200\% of FPL |  |  |  |  | Subgroup <br> Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { Control D } \\ & \text { Group } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { ifference } \\ \text { (Impact) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {b }} \end{gathered}$ | Standard |  |
|  |  |  |  |  |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 90.3 | 91.0 | -0.7 | - | 1.2 | $\dagger$ |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.87 | 5.74 | 0.13 | $0.11^{* * *}$ | 0.04 |  |
| Either spouse reports marriage in trouble (\%) | 46.2 | 52.3 | -6.1 | - *** | 2.0 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.45 | 3.40 | 0.05 | 0.09 ** | 0.02 |  |
| Women's report of warmth and support | 3.36 | 3.33 | 0.03 | 0.05 | 0.02 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.22 | 3.18 | 0.04 | 0.07 * | 0.02 |  |
| Women's report of positive communication skills | 3.22 | 3.17 | 0.05 | 0.09 ** | 0.02 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.16 | 2.24 | -0.08 | -0.10 *** | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.11 | 2.20 | -0.09 | -0.11 *** | 0.03 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.34 | -0.05 | -0.10 *** | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.25 | 1.26 | -0.02 | -0.04 | 0.02 |  |
| Men's report of any physical assault (\%) | 10.3 | 11.0 | -0.7 | - | 1.4 |  |
| Women's report of any physical assault (\%) | 7.6 | 9.0 | -1.4 | - | 1.3 |  |
| Men's report of any severe physical assault (\%) | 1.4 | 1.8 | -0.3 | - | 0.6 |  |
| Women's report of any severe physical assault (\%) | 1.1 | 0.9 | 0.2 | - | 0.5 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 91.8 | 91.7 | 0.2 | - | 1.2 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.81 | 1.87 | -0.06 | -0.08 * | 0.03 |  |
| Women's psychological distress | 1.93 | 1.97 | -0.04 | -0.05 | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.43 | 3.41 | 0.02 | 0.03 | 0.02 |  |
| Women's report of cooperative coparenting | 3.32 | 3.30 | 0.02 | 0.04 | 0.02 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,018 | 1,056 |  |  |  |  |
| Men | 946 | 973 |  |  |  |  |
| Women | 989 | 1,027 |  |  |  |  |

Appendix Table J. 9 (continued)

| Outcome ${ }^{\text {a }}$ | 200\% or More of FPL |  |  |  |  | Subgroup Difference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program | Control | Difference | Effect | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.0 | 90.2 | -1.3 | - | 1.9 | $\dagger$ |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.89 | 5.70 | 0.19 | 0.16 *** | 0.06 |  |
| Either spouse reports marriage in trouble (\%) | 44.1 | 47.1 | -3.0 | - | 2.8 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.50 | 3.48 | 0.03 | 0.05 | 0.03 |  |
| Women's report of warmth and support | 3.41 | 3.35 | 0.06 | 0.12 ** | 0.03 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.25 | 3.21 | 0.04 | 0.08 | 0.03 |  |
| Women's report of positive communication skills | 3.25 | 3.17 | 0.07 | 0.13 ** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.16 | 2.24 | -0.08 | -0.11 ** | 0.04 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.08 | 2.17 | -0.09 | -0.11 ** | 0.04 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.25 | 1.27 | -0.02 | -0.04 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.19 | 1.22 | -0.03 | -0.06 | 0.02 |  |
| Men's report of any physical assault (\%) | 10.7 | 11.6 | -0.9 | - | 2.2 |  |
| Women's report of any physical assault (\%) | 7.8 | 6.1 | 1.7 | - | 1.7 |  |
| Men's report of any severe physical assault (\%) | 1.4 | 0.6 | 0.7 | - | 0.7 |  |
| Women's report of any severe physical assault (\%) | 1.5 | 1.9 | -0.4 | - | 0.9 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.7 | 94.4 | -0.8 | - | 1.5 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.77 | 1.78 | -0.01 | -0.02 | 0.04 |  |
| Women's psychological distress | 1.84 | 1.90 | -0.06 | -0.08 | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.51 | 3.52 | -0.01 | -0.02 | 0.03 |  |
| Women's report of cooperative coparenting | 3.41 | 3.38 | 0.03 | 0.05 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 469 | 474 |  |  |  |  |
| Men | 423 | 432 |  |  |  |  |
| Women | 458 | 457 |  |  |  |  |

## Appendix Table J. 9 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: "FPL" = federal poverty level. The poverty level was calculated using federal poverty guidelines for the year that the couple entered the study.

Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level.

Statistical significance levels are indicated as follows: *** = 1 percent; ${ }^{* *}=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{c}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\mathrm{d}}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {e}}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\text {f }}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## Appendix Table J. 10

Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Income Relative to Poverty Level at Random Assignment: Subgroup Analysis Using Split Samples

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { Control } \\ & \text { Group } \\ & \hline \end{aligned}$ | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {c }} \end{gathered}$ | Standard Error | $\begin{array}{r} \text { Subgroup } \\ \text { Difference }{ }^{\text {d }} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than 100\% of FPL |  |  |  |  |  |  |
| Men's warmth and support | 1.92 | 1.92 | 0.00 | 0.00 | 0.05 |  |
| Women's warmth and support | 1.90 | 1.94 | -0.04 | -0.05 | 0.05 |  |
| Men's positive communication skills | 5.52 | 5.40 | 0.12 | 0.14 * | 0.07 |  |
| Women's positive communication skills | 5.64 | 5.56 | 0.08 | 0.10 | 0.06 |  |
| Men's anger and hostility | 1.25 | 1.31 | -0.05 | -0.09 | 0.04 |  |
| Women's anger and hostility | 1.38 | 1.50 | -0.11 | -0.19 ** | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Men | 295 | 287 |  |  |  |  |
| Women | 295 | 287 |  |  |  |  |
| 100\% to less than $200 \%$ of FPL |  |  |  |  |  |  |
| Men's warmth and support | 1.93 | 1.90 | 0.03 | 0.04 | 0.05 |  |
| Women's warmth and support | 1.93 | 1.97 | -0.04 | -0.06 | 0.05 |  |
| Men's positive communication skills | 5.54 | 5.41 | 0.12 | 0.15 * | 0.07 |  |
| Women's positive communication skills | 5.80 | 5.68 | 0.12 | 0.14 * | 0.07 |  |
| Men's anger and hostility | 1.24 | 1.27 | -0.03 | -0.06 | 0.04 |  |
| Women's anger and hostility | 1.33 | 1.39 | -0.07 | -0.11 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Men | 256 | 269 |  |  |  |  |
| Women | 256 | 269 |  |  |  |  |
| $\mathbf{2 0 0 \%}$ or more of FPL |  |  |  |  |  |  |
| Men's warmth and support | 2.16 | 2.04 | 0.11 | 0.17 | 0.09 |  |
| Women's warmth and support | 2.20 | 2.04 | 0.16 | 0.25 * | 0.09 |  |
| Men's positive communication skills | 5.76 | 5.75 | 0.01 | 0.01 | 0.11 |  |
| Women's positive communication skills | 6.00 | 5.96 | 0.04 | 0.05 | 0.10 |  |
| Men's anger and hostility | 1.27 | 1.23 | 0.04 | 0.06 | 0.05 |  |
| Women's anger and hostility | 1.41 | 1.34 | 0.07 | 0.13 | 0.08 |  |
| Sample size |  |  |  |  |  |  |
| Men | 121 | 117 |  |  |  |  |
| Women | 121 | 117 |  |  |  |  |

## Appendix Table J. 10 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: "FPL" = federal poverty level. The poverty level was calculated using federal poverty guidelines for the year that the couple entered the study.

Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level.

Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{d}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.

## Appendix Table J. 11

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Income Relative to Poverty Level at Random Assignment: Subgroup Analysis with Full Interactions

| Outcome ${ }^{\text {a }}$ | Less Than 100\% of FPL |  |  |  |  | Subgroup Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.4 | 88.3 | 3.1 | -** | 1.4 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.96 | 5.81 | 0.15 | 0.13 *** | 0.05 |  |
| Either spouse reports marriage in trouble (\%) | 49.4 | 54.2 | -4.7 | - ** | 2.1 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.42 | 0.05 | 0.11 *** | 0.02 |  |
| Women's report of warmth and support | 3.37 | 3.32 | 0.05 | 0.10 ** | 0.02 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.27 | 3.19 | 0.08 | 0.14 *** | 0.02 |  |
| Women's report of positive communication skills | 3.23 | 3.15 | 0.09 | 0.15 *** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.16 | 2.23 | -0.07 | -0.09 ** | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\mathrm{f}}$ | 2.09 | 2.19 | -0.10 | -0.13 *** | 0.03 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.33 | 1.38 | -0.05 | -0.11 ** | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.27 | 1.32 | -0.05 | -0.10 ** | 0.02 |  |
| Men's report of any physical assault (\%) | 12.5 | 16.3 | -3.9 | -** | 1.7 |  |
| Women's report of any physical assault (\%) | 9.7 | 9.9 | -0.3 | - | 1.5 |  |
| Men's report of any severe physical assault (\%) | 1.5 | 2.6 | -1.0 | - | 0.7 |  |
| Women's report of any severe physical assault (\%) | 1.6 | 2.2 | -0.6 | - | 0.7 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 92.9 | 91.1 | 1.8 | - | 1.2 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.91 | 1.96 | -0.05 | -0.06 | 0.03 |  |
| Women's psychological distress | 1.99 | 2.09 | -0.10 | -0.13 *** | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.42 | 0.03 | 0.05 | 0.02 |  |
| Women's report of cooperative coparenting | 3.32 | 3.29 | 0.03 | 0.05 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,053 | 1,086 |  |  |  |  |
| Men | 951 | 986 |  |  |  |  |
| Women | 1,020 | 1,060 |  |  |  |  |

## Appendix Table J. 11 (continued)

| Outcome ${ }^{\text {a }}$ | 100\% to Less Than 200\% of FPL |  |  |  |  | Subgroup |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.6 | 90.1 | -0.5 | - | 1.9 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.85 | 5.69 | 0.15 | 0.13 *** | 0.07 |  |
| Either spouse reports marriage in trouble (\%) | 47.5 | 54.0 | -6.6 | *** | 3.0 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.43 | 3.38 | 0.05 | 0.10 ** | 0.03 |  |
| Women's report of warmth and support | 3.34 | 3.31 | 0.04 | 0.07 * | 0.03 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.21 | 3.16 | 0.05 | 0.08 ** | 0.03 |  |
| Women's report of positive communication skills | 3.20 | 3.14 | 0.07 | 0.12 *** | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.19 | 2.27 | -0.09 | -0.11 *** | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.13 | 2.24 | -0.11 | -0.14 *** | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.31 | 1.37 | -0.05 | -0.11 *** | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.26 | 1.30 | -0.03 | -0.07 | 0.03 |  |
| Men's report of any physical assault (\%) | 11.2 | 12.2 | -1.0 | - | 2.2 |  |
| Women's report of any physical assault (\%) | 8.5 | 10.0 | -1.6 | - | 2.0 |  |
| Men's report of any severe physical assault (\%) | 1.6 | 2.0 | -0.4 | - | 0.9 |  |
| Women's report of any severe physical assault (\%) | 1.3 | 1.0 | 0.3 | - | 0.9 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 91.1 | 90.6 | 0.5 | - | 1.8 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.83 | 1.88 | -0.05 | -0.07 * | 0.05 |  |
| Women's psychological distress | 1.94 | 1.99 | -0.05 | -0.07 | 0.05 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.41 | 3.39 | 0.02 | 0.03 | 0.03 |  |
| Women's report of cooperative coparenting | 3.32 | 3.28 | 0.03 | 0.06 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,018 | 1,056 |  |  |  |  |
| Men | 946 | 973 |  |  |  |  |
| Women | 989 | 1,027 |  |  |  |  |

Appendix Table J. 11 (continued)

| Outcome ${ }^{\text {a }}$ | 200\% or More of FPL |  |  |  |  | Subgroup Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard <br> Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 87.3 | 88.6 | -1.3 | - | 2.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.87 | 5.62 | 0.25 | 0.22 *** | 0.09 |  |
| Either spouse reports marriage in trouble (\%) | 47.0 | 52.4 | -5.4 |  | 4.1 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.43 | 0.03 | 0.07 | 0.04 |  |
| Women's report of warmth and support | 3.34 | 3.27 | 0.07 | 0.15 ** | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.22 | 3.18 | 0.04 | 0.07 | 0.05 |  |
| Women's report of positive communication skills | 3.19 | 3.12 | 0.07 | 0.12 * | 0.05 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.20 | 2.29 | -0.09 | -0.11* | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.12 | 2.24 | -0.12 | -0.15 ** | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.33 | -0.04 | -0.09 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.23 | 1.28 | -0.05 | -0.10 | 0.04 |  |
| Men's report of any physical assault (\%) | 12.0 | 13.4 | -1.5 | - | 3.1 |  |
| Women's report of any physical assault (\%) | 9.4 | 7.8 | 1.6 | - | 2.7 |  |
| Men's report of any severe physical assault (\%) | 1.7 | 0.7 | 1.0 | - | 1.1 |  |
| Women's report of any severe physical assault (\%) | 2.5 | 2.2 | 0.4 | - | 1.3 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 92.9 | 93.1 | -0.1 | - | 2.3 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.79 | 1.84 | -0.05 | -0.07 | 0.06 |  |
| Women's psychological distress | 1.87 | 1.95 | -0.08 | -0.11 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.48 | 3.47 | 0.01 | 0.03 | 0.04 |  |
| Women's report of cooperative coparenting | 3.35 | 3.30 | 0.05 | 0.08 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 469 | 474 |  |  |  |  |
| Men | 423 | 432 |  |  |  |  |
| Women | 458 | 457 |  |  |  |  |

(continued)

## Appendix Table J. 11 (continued)

## SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.

NOTES: "FPL" = federal poverty level. The poverty level was calculated using federal poverty guidelines for the year that the couple entered the study.

Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: *** $=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See }}$ Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\mathrm{d}}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {e}}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\mathrm{T}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

Appendix Table J. 12

## Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Income Relative to Poverty Level at Random Assignment: Subgroup Analysis with Full Interactions

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \\ \hline \end{array}$ | Control <br> Group | $\begin{array}{r} \hline \text { Difference } \\ \text { (Impact) } \\ \hline \end{array}$ | $\begin{gathered} \text { Effect } \\ \text { Size }^{\mathrm{c}} \\ \hline \end{gathered}$ | Standard Error | $\begin{array}{r} \text { Subgroup } \\ \text { Difference }^{\text {d }} \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Less than $100 \%$ of FPL |  |  |  |  |  |  |
| Men's warmth and support | 1.95 | 1.95 | 0.00 | 0.00 | 0.06 |  |
| Women's warmth and support | 1.94 | 1.98 | -0.04 | -0.06 | 0.06 | $\dagger$ |
| Men's positive communication skills | 5.59 | 5.46 | 0.13 | 0.15 * | 0.07 |  |
| Women's positive communication skills | 5.69 | 5.63 | 0.06 | 0.07 | 0.06 |  |
| Men's anger and hostility | 1.23 | 1.29 | -0.05 | -0.09 | 0.04 |  |
| Women's anger and hostility | 1.36 | 1.46 | -0.10 | -0.17 * | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Men | 295 | 287 |  |  |  |  |
| Women | 295 | 287 |  |  |  |  |
| 100\% to less than $\mathbf{2 0 0 \%}$ of FPL |  |  |  |  |  |  |
| Men's warmth and support | 1.96 | 1.92 | 0.04 | 0.06 | 0.08 |  |
| Women's warmth and support | 1.95 | 1.97 | -0.03 | -0.04 | 0.08 | $\dagger$ |
| Men's positive communication skills | 5.53 | 5.41 | 0.12 | 0.14 | 0.10 |  |
| Women's positive communication skills | 5.78 | 5.67 | 0.11 | 0.13 * | 0.09 |  |
| Men's anger and hostility | 1.24 | 1.28 | -0.04 | -0.07 | 0.06 |  |
| Women's anger and hostility | 1.34 | 1.42 | -0.08 | -0.13 | 0.08 |  |
| Sample size |  |  |  |  |  |  |
| Men | 256 | 269 |  |  |  |  |
| Women | 256 | 269 |  |  |  |  |
| $\mathbf{2 0 0 \%}$ or more of FPL |  |  |  |  |  |  |
| Men's warmth and support | 2.12 | 1.98 | 0.14 | 0.22 | 0.11 |  |
| Women's warmth and support | 2.14 | 1.95 | 0.19 | 0.29 ** | 0.11 | $\dagger$ |
| Men's positive communication skills | 5.63 | 5.62 | 0.01 | 0.01 | 0.14 |  |
| Women's positive communication skills | 5.93 | 5.79 | 0.13 | 0.16 | 0.13 |  |
| Men's anger and hostility | 1.29 | 1.24 | 0.05 | 0.08 | 0.07 |  |
| Women's anger and hostility | 1.44 | 1.37 | 0.07 | 0.12 | 0.11 |  |
| Sample size |  |  |  |  |  |  |
| Men | 121 | 117 |  |  |  |  |
| Women | 121 | 117 |  |  |  |  |

## Appendix Table J. 12 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: "FPL" = federal poverty level. The poverty level was calculated using federal poverty guidelines for the year that the couple entered the study.

Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\mathrm{d}}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger$ = 1 percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
The Supporting Healthy Marriage Evaluation

| Outcome ${ }^{\text {a }}$ | Both Hispanic |  | Both African-American |  | Both White |  | Other/Multiracial |  | $\begin{array}{r} \text { Subgroup } \\ \text { Difference } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { Control } \\ \text { Group } \end{array}$ | $\begin{array}{r} \text { Difference } \\ \text { (Impact) } \end{array}$ | $\begin{array}{r} \hline \text { Control } \\ \text { Group } \\ \hline \end{array}$ | Difference (Impact) | Control Group | Difference (Impact) | $\begin{aligned} & \hline \text { Control } \\ & \text { Group } \\ & \hline \end{aligned}$ | Difference (Impact) |  |
| Receipt of group |  |  |  |  |  |  |  |  |  |
| relationship services ${ }^{\text {c }}$ (\%) |  |  |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |  |  |
| 0 | 76.4 | -66.3 *** | 76.3 | -61.1 *** | 78.3 | -69.6 *** | 74.0 | -61.5 *** | $\dagger \dagger$ |
| 1 | 8.7 | -6.1 *** | 12.6 | -11.0 *** | 7.3 | -4.6 *** | 9.9 | -6.3 *** | $\dagger$ |
| 2-5 | 7.0 | 6.8 *** | 6.2 | 9.9 *** | 7.2 | 4.4 ** | 6.4 | 4.9 *** |  |
| 6-10 | 5.3 | 26.9 *** | 3.3 | 31.1 *** | 5.4 | 25.1 *** | 6.5 | 24.6 *** |  |
| More than 10 | 2.7 | 38.8 *** | 1.6 | 31.2 *** | 1.8 | 44.7 *** | 3.2 | 38.3 *** | $\dagger \dagger$ |
| Receipt of one-on-one |  |  |  |  |  |  |  |  |  |
| relationship services ${ }^{\text {d }}$ (\%) |  |  |  |  |  |  |  |  |  |
| Number of times attended |  |  |  |  |  |  |  |  |  |
| 0 | 87.7 | -4.6 *** | 79.7 | -1.0 | 74.7 | 4.3 * | 78.6 | -3.3 | $\dagger \dagger$ |
| 1 | 3.6 | -1.8 *** | 5.0 | -1.7 | 1.7 | 0.0 | 2.3 | 2.0 ** | $\dagger \dagger$ |
| 2-5 | 5.4 | 3.1 *** | 9.9 | 0.6 | 12.9 | -2.1 | 10.1 | 0.3 | $\dagger$ |
| 6-10 | 2.4 | 2.3 *** | 4.8 | 2.0 | 7.6 | -2.2 | 6.1 | 1.4 | $\dagger$ |
| More than 10 | 0.9 | 1.0 ** | 0.6 | 0.1 | 3.2 | 0.0 | 3.0 | -0.5 |  |
| Referrals for either spouse for (\%) |  |  |  |  |  |  |  |  |  |
| Parenting classes and/or child care | 31.4 | 12.2 *** | 40.9 | 0.8 | 39.2 | 5.0 * | 43.6 | 3.1 | $\dagger \dagger$ |
| Assistance with issues related to work readiness and/or financial security | 73.8 | -4.6 ** | 77.1 | -2.5 | 70.1 | -3.1 | 79.9 | -10.3 *** |  |
| Assistance with issues related to mental health and/or substance abuse | 14.6 | 9.0 *** | 22.8 | 0.3 | 25.2 | -2.1 | 27.6 | -3.4 | $\dagger \dagger$ |
| Sample size (program and control group totals) |  |  |  |  |  |  |  |  |  |
| Couples |  | 2,322 |  | 598 |  | 1,129 |  | 1,324 |  |

Appendix Table J. 13 (continued)
NOTES: Couples are categorized as Hispanic, white, or African-American if both spouses self-selected that race/ethnicity. Nearly 80 percent of couples in
the category "other/multiracial" are mixed-race couples.
Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly
by subgroup level.
Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent;
$\dagger=10$ percent.
c"Group relationship services" includes marriage or relationship skills education services that are conducted in a group session and received with a
d"One-on-one relationship services" includes services received outside SHM with or without a spouse.

## Appendix Table J. 14

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Race/Ethnicity: Subgroup Analysis Using Split Samples

| Outcome ${ }^{\text {a }}$ | Both Hispanic |  |  |  |  | Subgroup |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control |  | Difference Effect |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 91.3 | 90.5 | 0.8 | - | 1.2 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.07 | 5.89 | 0.18 | 0.16 *** | 0.04 |  |
| Either spouse reports marriage in trouble (\%) | 46.7 | 52.6 | -5.9 | - *** | 1.9 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.42 | 3.39 | 0.03 | 0.07 * | 0.02 |  |
| Women's report of warmth and support | 3.35 | 3.26 | 0.08 | 0.16 *** | 0.02 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.30 | 3.22 | 0.08 | 0.13 *** | 0.02 |  |
| Women's report of positive communication skills | 3.28 | 3.19 | 0.09 | 0.16 *** | 0.02 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.05 | 2.14 | -0.09 | -0.11 *** | 0.03 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.03 | 2.14 | -0.12 | -0.15 *** | 0.03 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.27 | 1.32 | -0.06 | -0.12 *** | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.22 | 1.27 | -0.05 | -0.10 *** | 0.02 |  |
| Men's report of any physical assault (\%) | 8.2 | 12.9 | -4.7 | - *** | 1.3 | $\dagger$ |
| Women's report of any physical assault (\%) | 8.1 | 9.5 | -1.4 | - | 1.2 |  |
| Men's report of any severe physical assault (\%) | 1.6 | 1.8 | -0.2 | - | 0.6 |  |
| Women's report of any severe physical assault (\%) | 2.0 | 1.9 | 0.1 | - | 0.6 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.6 | 93.1 | 0.5 | - | 1.0 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.84 | 1.89 | -0.05 | -0.06 | 0.03 |  |
| Women's psychological distress | 1.92 | 2.01 | -0.09 | -0.11 *** | 0.03 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.40 | 3.38 | 0.02 | 0.03 | 0.02 |  |
| Women's report of cooperative coparenting | 3.31 | 3.25 | 0.06 | 0.10 ** | 0.02 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,159 | 1,163 |  |  |  |  |
| Men | 1,059 | 1,052 |  |  |  |  |
| Women | 1,144 | 1,136 |  |  |  |  |

Appendix Table J. 14 (continued)

| Outcome ${ }^{\text {a }}$ | Both African-American |  |  |  |  | Subgroup |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 87.7 | 86.6 | 1.1 | - | 2.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.66 | 5.65 | 0.02 | 0.01 | 0.09 |  |
| Either spouse reports marriage in trouble (\%) | 54.6 | 60.4 | -5.8 | - | 3.8 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.41 | 3.41 | 0.00 | 0.00 | 0.04 |  |
| Women's report of warmth and support | 3.30 | 3.26 | 0.04 | 0.07 | 0.04 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.18 | 3.16 | 0.02 | 0.04 | 0.04 |  |
| Women's report of positive communication skills | 3.07 | 3.05 | 0.02 | 0.03 | 0.05 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.37 | 2.39 | -0.02 | -0.03 | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.28 | 2.30 | -0.02 | -0.03 | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.38 | 1.42 | -0.04 | -0.08 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.32 | -0.03 | -0.06 | 0.04 |  |
| Men's report of any physical assault (\%) | 13.7 | 15.6 | -1.9 | - | 3.2 | $\dagger$ |
| Women's report of any physical assault (\%) | 9.8 | 10.2 | -0.3 | - | 2.6 |  |
| Men's report of any severe physical assault (\%) | 1.1 | 3.5 | -2.4 | -* | 1.4 |  |
| Women's report of any severe physical assault (\%) | 1.7 | 2.8 | -1.1 | - | 1.3 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 88.8 | 85.8 | 2.9 | - | 2.7 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.84 | 1.91 | -0.07 | -0.09 | 0.06 |  |
| Women's psychological distress | 1.94 | 2.03 | -0.09 | -0.12 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.46 | 3.48 | -0.01 | -0.02 | 0.04 |  |
| Women's report of cooperative coparenting | 3.30 | 3.32 | -0.03 | -0.05 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 283 | 315 |  |  |  |  |
| Men | 259 | 293 |  |  |  |  |
| Women | 270 | 311 |  |  |  |  |

## Appendix Table J. 14 (continued)

| Outcome ${ }^{\text {a }}$ | Both White |  |  |  |  | Subgroup |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program | Control | Difference | Effect | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error | Difference ${ }^{\text {c }}$ |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 90.5 | 89.3 | 1.2 | - | 1.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.90 | 5.73 | 0.16 | 0.14 *** | 0.06 |  |
| Either spouse reports marriage in trouble (\%) | 41.6 | 48.8 | -7.2 | - *** | 2.7 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.55 | 3.49 | 0.06 | 0.11 ** | 0.03 |  |
| Women's report of warmth and support | 3.48 | 3.46 | 0.02 | 0.04 | 0.03 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.25 | 3.22 | 0.03 | 0.06 | 0.03 |  |
| Women's report of positive communication skills | 3.27 | 3.19 | 0.09 | 0.15 *** | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.12 | 2.19 | -0.07 | -0.09 * | 0.04 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.05 | 2.15 | -0.10 | -0.13 ** | 0.04 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.23 | 1.26 | -0.04 | -0.07 | 0.02 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.20 | 1.26 | -0.06 | -0.12 ** | 0.02 |  |
| Men's report of any physical assault (\%) | 11.2 | 9.6 | 1.6 | - | 2.0 | $\dagger$ |
| Women's report of any physical assault (\%) | 7.2 | 6.8 | 0.4 | - | 1.6 |  |
| Men's report of any severe physical assault (\%) | 1.3 | 1.1 | 0.2 | - | 0.7 |  |
| Women's report of any severe physical assault (\%) | 0.3 | 0.5 | -0.2 | - | 0.4 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 94.0 | 93.0 | 1.0 | - | 1.5 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.87 | 1.87 | 0.00 | 0.00 | 0.04 |  |
| Women's psychological distress | 1.92 | 2.01 | -0.09 | -0.12 ** | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.51 | 3.47 | 0.04 | 0.06 | 0.03 |  |
| Women's report of cooperative coparenting | 3.40 | 3.39 | 0.01 | 0.01 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 557 | 572 |  |  |  |  |
| Men | 514 | 530 |  |  |  |  |
| Women | 538 | 552 |  |  |  |  |

## Appendix Table J. 14 (continued)

| Outcome ${ }^{\text {a }}$ | Other/Multiracial |  |  |  |  | SubgroupDifference $^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 88.3 | 88.4 | -0.1 | - | 1.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.82 | 5.65 | 0.17 | 0.15 *** | 0.06 |  |
| Either spouse reports marriage in trouble (\%) | 51.5 | 53.9 | -2.3 | - | 2.5 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.49 | 3.42 | 0.07 | 0.13 *** | 0.02 |  |
| Women's report of warmth and support | 3.36 | 3.34 | 0.02 | 0.04 | 0.03 |  |
|  |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.16 | 3.14 | 0.03 | 0.05 | 0.03 |  |
| Women's report of positive communication skills | 3.13 | 3.12 | 0.02 | 0.03 | 0.03 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.31 | 2.35 | -0.04 | -0.05 | 0.04 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.20 | 2.27 | -0.07 | -0.09 * | 0.04 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.39 | 1.42 | -0.03 | -0.07 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.31 | 0.00 | -0.01 | 0.03 |  |
| Men's report of any physical assault (\%) | 16.0 | 17.0 | -1.0 | - | 2.2 | $\dagger$ |
| Women's report of any physical assault (\%) | 10.4 | 10.1 | 0.4 | - | 1.8 |  |
| Men's report of any severe physical assault (\%) | 1.5 | 2.2 | -0.7 | - | 0.8 |  |
| Women's report of any severe physical assault (\%) | 2.0 | 1.1 | 0.9 | - | 0.7 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 90.8 | 89.1 | 1.7 | - | 1.6 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.86 | 1.95 | -0.09 | -0.12 ** | 0.04 |  |
| Women's psychological distress | 2.02 | 2.03 | -0.01 | -0.02 | 0.04 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.45 | 3.45 | 0.00 | 0.01 | 0.03 |  |
| Women's report of cooperative coparenting | 3.32 | 3.32 | 0.00 | 0.01 | 0.03 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 638 | 686 |  |  |  |  |
| Men | 572 | 621 |  |  |  |  |
| Women | 610 | 660 |  |  |  |  |

## Appendix Table J. 14 (continued)

## SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.

NOTES: Couples are categorized as Hispanic, white, or African-American if both spouses self-selected that race/ethnicity. Nearly 80 percent of couples in the category "other/multiracial" are mixed-race couples.

Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\text {d }}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {e}}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and 7 = "completely happy."
${ }^{\mathrm{f}}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

Appendix Table J. 15

## Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Race/Ethnicity: Subgroup Analysis Using Split Samples

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | $\begin{array}{r} \hline \text { Program } \\ \text { Group } \end{array}$ | Contro <br> Group | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\mathrm{c}} \end{gathered}$ | Standard Error | Subgroup Difference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both Hispanic |  |  |  |  |  |  |
| Men's warmth and support | 1.87 | 1.78 | 0.09 | 0.14 ** | 0.05 |  |
| Women's warmth and support | 1.84 | 1.82 | 0.02 | 0.03 | 0.04 |  |
| Men's positive communication skills | 5.45 | 5.25 | 0.20 | 0.24 *** | 0.06 | $\dagger$ |
| Women's positive communication skills | 5.68 | 5.47 | 0.21 | 0.25 *** | 0.06 | $\dagger$ |
| Men's anger and hostility | 1.24 | 1.27 | -0.03 | -0.05 | 0.03 |  |
| Women's anger and hostility | 1.36 | 1.42 | -0.07 | -0.11 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Men | 326 | 318 |  |  |  |  |
| Women | 326 | 318 |  |  |  |  |
| Both African-American |  |  |  |  |  |  |
| Men's warmth and support | 2.05 | 2.07 | -0.02 | -0.03 | 0.12 |  |
| Women's warmth and support | 2.00 | 2.04 | -0.03 | -0.05 | 0.11 |  |
| Men's positive communication skills | 5.51 | 5.63 | -0.12 | -0.14 | 0.14 | $\dagger$ |
| Women's positive communication skills | 5.60 | 5.72 | -0.12 | -0.14 | 0.13 | $\dagger \dagger$ |
| Men's anger and hostility | 1.32 | 1.31 | 0.01 | 0.02 | 0.09 |  |
| Women's anger and hostility | 1.52 | 1.47 | 0.06 | 0.09 | 0.12 |  |
| Sample size |  |  |  |  |  |  |
| Men | 71 | 76 |  |  |  |  |
| Women | 71 | 76 |  |  |  |  |
| Both white |  |  |  |  |  |  |
| Men's warmth and support | 2.15 | 2.15 | -0.01 | -0.01 | 0.08 |  |
| Women's warmth and support | 2.18 | 2.18 | 0.00 | 0.00 | 0.08 |  |
| Men's positive communication skills | 5.77 | 5.79 | -0.02 | -0.02 | 0.09 | $\dagger$ |
| Women's positive communication skills | 5.98 | 6.00 | -0.02 | -0.02 | 0.09 | $\dagger \dagger$ |
| Men's anger and hostility | 1.21 | 1.25 | -0.04 | -0.07 | 0.05 |  |
| Women's anger and hostility | 1.30 | 1.38 | -0.08 | -0.13 | 0.08 |  |
| Sample size |  |  |  |  |  |  |
| Men | 143 | 138 |  |  |  |  |
| Women | 143 | 138 |  |  |  |  |

## Appendix Table J. 15 (continued)

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | Program <br> Group | Control <br> Group | Difference <br> (Impact) | Effect <br> Size $^{\mathrm{c}}$ | Standard <br> Error | Subgroup <br> Difference |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Other/multiracial |  |  |  |  |  |  |
| Men's warmth and support | 2.02 | 2.02 | -0.01 | -0.01 | 0.08 |  |
| Women's warmth and support | 2.04 | 2.07 | -0.02 | -0.03 | 0.08 |  |
| Men's positive communication skills | 5.66 | 5.63 | 0.03 | 0.04 | 0.10 | $\dagger$ |
| Women's positive communication skills | 5.80 | 5.84 | -0.03 | -0.04 | 0.09 | $\dagger \dagger$ |
| Men's anger and hostility | 1.26 | 1.30 | -0.03 | -0.05 | 0.06 |  |
| Women's anger and hostility | 1.40 | 1.41 | -0.01 | -0.02 | 0.07 |  |
| Sample size |  |  |  |  |  |  |
| $\quad$ Men | 151 | 169 |  |  |  |  |
| $\quad$ Women | 151 | 169 |  |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Couples are categorized as Hispanic, white, or African-American if both spouses self-selected that race/ethnicity. Nearly 80 percent of couples in the category "other/multiracial" are mixed-race couples.

Program impacts were calculated separately for each subgroup level, using an ordinary least squares model adjusting for pre-random assignment characteristics of sample members. Impact estimates from each level were then compared to see whether their magnitude and direction differ significantly by subgroup level.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {d }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.

# The Supporting Healthy Marriage Evaluation 

## Appendix Table J. 16

## Estimated Impacts on Primary Outcomes Based on the 12-Month Survey, by Race/Ethnicity: Subgroup Analysis with Full Interactions

| Outcome ${ }^{\text {a }}$ | Both Hispanic |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error | Subgroup Difference ${ }^{\text {c }}$ |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.7 | 89.2 | 0.5 | - | 3.2 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 6.09 | 5.87 | 0.22 | 0.19 *** | 0.11 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 47.8 | 53.5 | -5.8 | - ** | 4.8 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.42 | 0.04 | 0.08 * | 0.05 |  |
| Women's report of warmth and support | 3.38 | 3.31 | 0.07 | 0.15 *** | 0.05 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.29 | 3.20 | 0.09 | 0.15 *** | 0.06 |  |
| Women's report of positive communication skills | 3.29 | 3.19 | 0.10 | 0.17 *** | 0.06 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.12 | 2.21 | -0.09 | -0.11 ** | 0.08 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.02 | 2.16 | -0.15 | -0.19 *** | 0.08 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.29 | 1.36 | -0.07 | -0.15 *** | 0.05 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.22 | 1.28 | -0.06 | -0.11 ** | 0.05 |  |
| Men's report of any physical assault (\%) | 9.5 | 14.7 | -5.2 | - *** | 3.7 |  |
| Women's report of any physical assault (\%) | 7.5 | 10.7 | -3.2 | -** | 3.1 |  |
| Men's report of any severe physical assault (\%) | 1.6 | 1.4 | 0.2 | - | 1.5 |  |
| Women's report of any severe physical assault (\%) | 2.3 | 2.1 | 0.2 | - | 1.3 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 93.8 | 93.4 | 0.4 | - | 2.7 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.82 | 1.90 | -0.08 | -0.10 ** | 0.08 |  |
| Women's psychological distress | 1.89 | 1.96 | -0.08 | -0.10 ** | 0.08 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.46 | 3.42 | 0.04 | 0.07 | 0.06 |  |
| Women's report of cooperative coparenting | 3.35 | 3.31 | 0.04 | 0.07 | 0.06 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 1,159 | 1,163 |  |  |  |  |
| Men | 1,059 | 1,052 |  |  |  |  |
| Women | 1,144 | 1,136 |  |  |  |  |

## Appendix Table J. 16 (continued)

| Outcome ${ }^{\text {a }}$ | Both African-American |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error | Subgroup <br> Difference |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.7 | 87.5 | 2.2 | - | 3.6 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.61 | 5.67 | -0.06 | -0.05 | 0.12 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 52.7 | 59.3 | -6.6 | - | 5.2 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.38 | 3.39 | -0.02 | -0.03 | 0.05 |  |
| Women's report of warmth and support | 3.26 | 3.24 | 0.03 | 0.05 | 0.06 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.19 | 3.18 | 0.01 | 0.02 | 0.06 |  |
| Women's report of positive communication skills | 3.06 | 3.05 | 0.02 | 0.03 | 0.07 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.28 | 2.33 | -0.05 | -0.06 | 0.08 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.24 | 2.26 | -0.02 | -0.02 | 0.08 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.35 | 1.40 | -0.05 | -0.10 | 0.05 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.30 | 1.32 | -0.02 | -0.05 | 0.05 |  |
| Men's report of any physical assault (\%) | 12.5 | 15.8 | -3.3 | - | 4.1 |  |
| Women's report of any physical assault (\%) | 11.2 | 9.8 | 1.5 | - | 3.3 |  |
| Men's report of any severe physical assault (\%) | 1.4 | 3.3 | -1.9 | - | 1.6 |  |
| Women's report of any severe physical assault (\%) | 1.8 | 2.7 | -0.8 | - | 1.5 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 89.8 | 86.5 | 3.3 | - | 3.3 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.83 | 1.88 | -0.05 | -0.07 | 0.08 |  |
| Women's psychological distress | 1.92 | 2.06 | -0.13 | -0.17 ** | 0.08 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.43 | 3.45 | -0.02 | -0.03 | 0.06 |  |
| Women's report of cooperative coparenting | 3.29 | 3.30 | -0.01 | -0.02 | 0.07 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 283 | 315 |  |  |  |  |
| Men | 259 | 293 |  |  |  |  |
| Women | 270 | 311 |  |  |  |  |

Appendix Table J. 16 (continued)

| Outcome ${ }^{\text {a }}$ | Both White |  |  |  |  | Subgroup Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ | Error |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 90.3 | 88.2 | 2.1 | - | 2.3 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.76 | 5.57 | 0.18 | 0.16 ** | 0.08 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 45.3 | 54.6 | -9.4 | - *** | 3.3 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.47 | 3.39 | 0.08 | 0.15 ** | 0.03 |  |
| Women's report of warmth and support | 3.38 | 3.32 | 0.06 | 0.11 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.21 | 3.16 | 0.05 | 0.08 | 0.04 |  |
| Women's report of positive communication skills | 3.21 | 3.10 | 0.11 | 0.20 *** | 0.04 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.14 | 2.24 | -0.10 | -0.12 * | 0.05 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.15 | 2.24 | -0.09 | -0.12 * | 0.05 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.27 | 1.31 | -0.04 | -0.07 | 0.03 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.26 | 1.33 | -0.08 | -0.16 ** | 0.03 |  |
| Men's report of any physical assault (\%) | 12.8 | 11.0 | 1.8 | - | 2.5 |  |
| Women's report of any physical assault (\%) | 9.7 | 7.8 | 1.8 | - | 2.1 |  |
| Men's report of any severe physical assault (\%) | 2.1 | 2.3 | -0.2 | - | 1.0 |  |
| Women's report of any severe physical assault (\%) | 0.2 | 0.6 | -0.4 | - | 0.7 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 91.9 | 90.4 | 1.6 | - | 1.9 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.97 | 1.93 | 0.04 | 0.05 | 0.05 |  |
| Women's psychological distress | 2.00 | 2.12 | -0.12 | -0.16 ** | 0.05 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.42 | 3.39 | 0.03 | 0.06 | 0.04 |  |
| Women's report of cooperative coparenting | 3.31 | 3.25 | 0.06 | 0.11 | 0.04 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 557 | 572 |  |  |  |  |
| Men | 514 | 530 |  |  |  |  |
| Women | 538 | 552 |  |  |  |  |

Appendix Table J. 16 (continued)

| Outcome ${ }^{\text {a }}$ | Other/Multiracial |  |  |  |  | Subgroup Difference ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Program Control Difference Effect |  |  |  | Standard Error |  |
|  | Group | Group | (Impact) | Size ${ }^{\text {b }}$ |  |  |
| Relationship status |  |  |  |  |  |  |
| Married ${ }^{\text {d }}$ (\%) | 89.8 | 89.5 | 0.3 | - | 2.7 |  |
| Marital appraisals |  |  |  |  |  |  |
| Couple's average report of relationship happiness ${ }^{\text {e }}$ | 5.83 | 5.64 | 0.19 | 0.16 *** | 0.09 | $\dagger$ |
| Either spouse reports marriage in trouble (\%) | 49.6 | 52.3 | -2.7 | - | 4.0 |  |
| Warmth and support in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of warmth and support | 3.46 | 3.39 | 0.08 | 0.16 *** | 0.04 |  |
| Women's report of warmth and support | 3.33 | 3.30 | 0.03 | 0.06 | 0.04 |  |
| Positive communication skills in relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of positive communication skills | 3.18 | 3.14 | 0.04 | 0.07 | 0.05 |  |
| Women's report of positive communication skills | 3.14 | 3.12 | 0.02 | 0.04 | 0.05 |  |
| Negative interactions in relationship |  |  |  |  |  |  |
| Men's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.26 | 2.32 | -0.06 | -0.08 | 0.06 |  |
| Women's report of negative behavior and emotions ${ }^{\text {f }}$ | 2.19 | 2.26 | -0.07 | -0.09 | 0.06 |  |
| Men's report of psychological abuse ${ }^{\text {f }}$ | 1.38 | 1.42 | -0.04 | -0.08 | 0.04 |  |
| Women's report of psychological abuse ${ }^{\text {f }}$ | 1.31 | 1.32 | -0.01 | -0.02 | 0.04 |  |
| Men's report of any physical assault (\%) | 15.2 | 16.6 | -1.4 | - | 3.0 |  |
| Women's report of any physical assault (\%) | 10.8 | 9.7 | 1.1 | - | 2.5 |  |
| Men's report of any severe physical assault (\%) | 1.5 | 2.6 | -1.1 | - | 1.0 |  |
| Women's report of any severe physical assault (\%) | 1.8 | 1.4 | 0.5 | - | 1.0 |  |
| Fidelity |  |  |  |  |  |  |
| Neither spouse reported infidelity (\%) | 90.8 | 89.0 | 1.8 | - | 2.3 |  |
| Individual psychological distress ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's psychological distress | 1.86 | 1.95 | -0.09 | -0.11 ** | 0.06 |  |
| Women's psychological distress | 2.04 | 2.06 | -0.02 | -0.03 | 0.06 |  |
| Coparenting relationship ${ }^{\text {f }}$ |  |  |  |  |  |  |
| Men's report of cooperative coparenting | 3.42 | 3.41 | 0.01 | 0.02 | 0.04 |  |
| Women's report of cooperative coparenting | 3.30 | 3.28 | 0.03 | 0.05 | 0.05 |  |
| Sample size |  |  |  |  |  |  |
| Couples | 638 | 686 |  |  |  |  |
| Men | 572 | 621 |  |  |  |  |
| Women | 610 | 660 |  |  |  |  |

## Appendix Table J. 16 (continued)

SOURCE: MDRC calculations based on the SHM 12-Month Follow-Up Survey.
NOTES: Couples are categorized as Hispanic, white, or African-American if both spouses self-selected that race/ethnicity. Nearly 80 percent of couples in the category "other/multiracial" are mixed-race couples.

Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; $*=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a See Appendix }} \mathrm{E}$ for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ A dash indicates that a value is not shown for dichotomous outcomes because percentage point differences are readily interpretable. Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {c }}$ Tests of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.
${ }^{\mathrm{d}}$ This includes couples who, at follow-up, were still married or still in a committed relationship with the same partner they had when they entered the study.
${ }^{\text {T}}$ The scale ranges from 1 to 7 , where $1=$ "completely unhappy" and $7=$ "completely happy."
${ }^{\text {f }}$ The scale ranges from 1 to 4 , where higher scores indicate higher levels of the respective outcomes: warmth and support, positive communication skills, negative behavior and emotions, psychological abuse, individual psychological distress, and cooperative coparenting.

## Appendix Table J. 17

## Estimated Impacts on Marital Quality Based on Observed Couple Interactions at 12 Months, by Race/Ethnicity: Subgroup Analysis with Full Interactions

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | Program Group | Control Group | Difference (Impact) | $\begin{gathered} \hline \text { Effect } \\ \text { Size }^{\text {c }} \end{gathered}$ | Standard <br> Error | Subgroup Difference ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Both Hispanic |  |  |  |  |  |  |
| Men's warmth and support | 1.96 | 1.86 | 0.10 | 0.15 | 0.15 |  |
| Women's warmth and support | 1.90 | 1.89 | 0.01 | 0.01 | 0.14 |  |
| Men's positive communication skills | 5.49 | 5.32 | 0.18 | 0.21 ** | 0.17 |  |
| Women's positive communication skills | 5.73 | 5.53 | 0.20 | 0.24 *** | 0.16 |  |
| Men's anger and hostility | 1.26 | 1.28 | -0.01 | -0.02 | 0.10 |  |
| Women's anger and hostility | 1.39 | 1.42 | -0.03 | -0.05 | 0.13 |  |
| Sample size |  |  |  |  |  |  |
| Men | 326 | 318 |  |  |  |  |
| Women | 326 | 318 |  |  |  |  |
| Both African-American |  |  |  |  |  |  |
| Men's warmth and support | 2.02 | 2.04 | -0.02 | -0.03 | 0.16 |  |
| Women's warmth and support | 2.01 | 2.03 | -0.02 | -0.03 | 0.15 |  |
| Men's positive communication skills | 5.54 | 5.53 | 0.01 | 0.01 | 0.18 |  |
| Women's positive communication skills | 5.66 | 5.68 | -0.02 | -0.03 | 0.17 |  |
| Men's anger and hostility | 1.28 | 1.33 | -0.05 | -0.08 | 0.11 |  |
| Women's anger and hostility | 1.40 | 1.47 | -0.07 | -0.12 | 0.15 |  |
| Sample size |  |  |  |  |  |  |
| Men | 71 | 76 |  |  |  |  |
| Women | 71 | 76 |  |  |  |  |
| Both white |  |  |  |  |  |  |
| Men's warmth and support | 2.01 | 2.04 | -0.03 | -0.05 | 0.10 |  |
| Women's warmth and support | 2.08 | 2.06 | 0.02 | 0.02 | 0.10 |  |
| Men's positive communication skills | 5.66 | 5.70 | -0.04 | -0.05 | 0.12 |  |
| Women's positive communication skills | 5.83 | 5.88 | -0.05 | -0.05 | 0.11 |  |
| Men's anger and hostility | 1.20 | 1.25 | -0.05 | -0.08 | 0.07 |  |
| Women's anger and hostility | 1.29 | 1.46 | -0.16 | -0.28 * | 0.10 |  |
| Sample size |  |  |  |  |  |  |
| Men | 143 | 138 |  |  |  |  |
| Women | 143 | 138 |  |  |  |  |

## Appendix Table J. 17 (continued)

| Outcome Observed in Couple Interactions ${ }^{\text {a,b }}$ | Program <br> Group | Control <br> Group | Difference (Impact) | Effect Size ${ }^{\text {c }}$ | Standard <br> Error | $\begin{aligned} & \text { Subgroup } \\ & \text { Difference } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other/multiracial |  |  |  |  |  |  |
| Men's warmth and support | 1.98 | 1.98 | 0.00 | 0.00 | 0.12 |  |
| Women's warmth and support | 2.02 | 2.02 | 0.00 | 0.00 | 0.12 |  |
| Men's positive communication skills | 5.67 | 5.61 | 0.06 | 0.07 | 0.14 |  |
| Women's positive communication skills | 5.79 | 5.80 | 0.00 | 0.00 | 0.14 |  |
| Men's anger and hostility | 1.23 | 1.29 | -0.06 | -0.10 | 0.09 |  |
| Women's anger and hostility | 1.37 | 1.40 | -0.03 | -0.06 | 0.12 |  |
| Sample size |  |  |  |  |  |  |
| Men | 151 | 169 |  |  |  |  |
| Women | 151 | 169 |  |  |  |  |

SOURCE: MDRC calculations based on the SHM 12-Month Observational Study.
NOTES: Couples are categorized as Hispanic, white, or African-American if both spouses self-selected that race/ethnicity. Nearly 80 percent of couples in the category "other/multiracial" are mixed-race couples. Impact estimates from these subgroup analyses were calculated using an ordinary least squares model that includes a program dummy, covariates created from pre-random assignment characteristics of sample members (including dummy variables for the other subgroups being tested), and a series of interaction terms of the program group dummy and the covariates.

Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent. Rounding may cause slight discrepancies in sums and differences.
${ }^{\text {a }}$ See Appendix E for detailed notes on the construction of these outcomes.
${ }^{\mathrm{b}}$ The scale ranges from 1 to 9 , where higher scores indicate higher levels of the respective outcomes: observed warmth and support, positive communication skills, and anger and hostility.
${ }^{\text {c }}$ Effect size is calculated by dividing the impact of the program (the difference between the means for the program group and the control group) by the standard deviation for the control group.
${ }^{\text {d Tests }}$ of differences across subgroup levels were conducted, and statistical significance levels are indicated as follows: $\dagger \dagger \dagger=1$ percent; $\dagger \dagger=5$ percent; $\dagger=10$ percent.

## The Supporting Healthy Marriage Evaluation

Appendix Table J. 18

## Comparison of Selected Baseline Characteristics, by Level of Marital Distress at Random Assignment

| Characteristic ${ }^{\text {a }}$ | Low Marital Distress | Moderate Marital <br> Distress | High Marital Distress |
| :---: | :---: | :---: | :---: |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | *** |
| Both spouses Hispanic | 36.7 | 45.6 | 46.7 |
| Both spouses African-American, non-Hispanic | 10.0 | 12.8 | 11.1 |
| Both spouses white, non-Hispanic | 28.1 | 17.0 | 17.4 |
| Other/mulitracial | 25.2 | 24.6 | 24.8 |
| Both spouses have at least a high school diploma (\%) | 58.5 | 47.0 | 46.7 *** |
| Average age (years) | 30.6 | 31.4 | 32.2 *** |
| Income 100\% to less than $200 \%$ of FPL (\%) | 39.9 | 38.9 | 39.3 |
| Income less than 100\% of FPL (\%) | 37.8 | 45.8 | 44.3 *** |
| Either spouse currently employed (\%) | 82.2 | 80.3 | 81.6 |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 45.4 | 30.7 | 13.6 *** |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 72.4 | 60.4 | 47.6 *** |
| 2 years to 9 years, 11 months | 53.3 | 63.2 | 71.5 *** |
| 10 years or older | 24.4 | 30.3 | 37.6 *** |
| Average number of children in the household | 1.7 | 2.0 | 2.3 *** |
| Married at the time of random assignment (\%) | 81.8 | 74.5 | 79.7 *** |
| Average number of years married | 5.6 | 6.3 | 6.8 *** |
| Stepfamily (\%) | 21.0 | 27.1 | 31.7 *** |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 98.8 | 87.7 | 53.3 *** |
| Women report happy or very happy in marriage | 98.7 | 83.7 | 40.9 *** |
| Men report marriage in trouble | 16.1 | 56.7 | 93.7 *** |
| Women report marriage in trouble | 13.9 | 62.2 | 95.2 *** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 6.0 | 19.5 | 45.3 *** |
| Either spouse reports substance abuse problem | 10.9 | 21.1 | 30.5 *** |
| Sample size (couples) | 1,971 | 2,282 | 1,933 |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.

NOTES: Tests of differences across subgroup levels were conducted.
Statistical significance levels are indicated as follows: $* * *=1$ percent; $* *=5$ percent; $*=10$ percent.
Sample sizes may not equal the full SHM sample because of missing values on baseline measures used to define the subgroup characteristics.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

Appendix Table J. 19

## Comparison of Selected Baseline Characteristics, by Income Relative to Poverty Level at Random Assignment

|  | Less Than | 100\% to Less | $200 \%$ or |
| :---: | :---: | :---: | :---: |
| Characteristic ${ }^{\text {a }}$ | $100 \%$ of FPL | 200\% of FPL | More of FPL |
| Socioeconomic characteristics |  |  |  |
| Race/ethnicity (\%) |  |  | ** |
| Both spouses Hispanic | 46.5 | 45.8 | 30.0 |
| Both spouses African-American, non-Hispanic | 13.1 | 9.4 | 11.5 |
| Both spouses white, non-Hispanic | 16.7 | 19.4 | 32.7 |
| Other/mulitracial | 23.7 | 25.4 | 25.7 |
| Both spouses have at least a high school diploma (\%) | 35.5 | 54.9 | 75.9 *** |
| Average age (years) | 31.1 | 31.5 | 32.7 *** |
| Income 100\% to less than $200 \%$ of FPL (\%) | 0.0 | 100.0 | 0.0 - |
| Income less than 100\% of FPL (\%) | 100.0 | 0.0 | 0.0 - |
| Either spouse currently employed (\%) | 64.5 | 92.7 | 96.4 *** |
| Family characteristics |  |  |  |
| Expecting a child (\%) | 28.5 | 26.9 | 34.9 *** |
| Couple has a child between the ages of (\%) |  |  |  |
| Prenatal to 1 year, 11 months | 61.3 | 57.3 | 58.4 ** |
| 2 years to 9 years, 11 months | 66.7 | 65.9 | 49.7 *** |
| 10 years or older | 33.7 | 31.6 | 25.2 *** |
| Average number of children in the household | 2.4 | 2.0 | 1.3 *** |
| Married at the time of random assignment (\%) | 73.4 | 81.5 | 83.8 *** |
| Average number of years married | 6.1 | 6.5 | 6.3 |
| Stepfamily (\%) | 31.9 | 24.8 | 20.0 *** |
| Marital appraisals (\%) |  |  |  |
| Men report happy or very happy in marriage | 80.0 | 80.6 | 80.3 |
| Women report happy or very happy in marriage | 73.7 | 74.6 | 76.3 |
| Men report marriage in trouble | 56.8 | 56.0 | 52.6 * |
| Women report marriage in trouble | 58.8 | 58.4 | 54.3 ** |
| Adult well-being (\%) |  |  |  |
| Either spouse has psychological distress | 28.6 | 22.2 | 16.3 *** |
| Either spouse reports substance abuse problem | 22.9 | 19.8 | 17.7 *** |
| Sample size (couples) | 2,577 | 2,372 | 1,071 |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: Tests of differences across subgroup levels were conducted.
Statistical significance levels are indicated as follows: ${ }^{* * *}=1$ percent; $* *=5$ percent; * $=10$ percent.
Rounding may cause slight discrepancies in sums and differences.
Dashes indicate that tests of statistically significant differences by income were not conducted.
Sample sizes may not equal the full SHM sample because of missing values on baseline measures used to define the subgroup characteristics.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

## The Supporting Healthy Marriage Evaluation

Appendix Table J. 20

## Comparison of Selected Baseline Characteristics, by Race/Ethnicity

| Characteristic ${ }^{\text {a }}$ | Both | Both | Both | Other/ |
| :---: | :---: | :---: | :---: | :---: |
|  | Hispanic | African-American | White | Multiracial |
| Socioeconomic characteristics |  |  |  |  |
| Race/ethnicity (\%) |  |  |  |  |
| Both spouses Hispanic | 100.0 | 0.0 | 0.0 | 0.0 - |
| Both spouses African-American, non-Hispanic | 0.0 | 100.0 | 0.0 | 0.0 - |
| Both spouses white, non-Hispanic | 0.0 | 0.0 | 100.0 | 0.0 - |
| Other/mulitracial | 0.0 | 0.0 | 0.0 | 100.0 - |
| Both spouses have at least a high school diploma (\%) | 39.6 | 54.3 | 65.1 | 54.7 *** |
| Average age (years) | 32.4 | 34.0 | 29.7 | 30.0 *** |
| Income 100\% to less than $200 \%$ of FPL (\%) | 41.7 | 32.5 | 37.2 | 40.5 *** |
| Income less than 100\% of FPL (\%) | 46.0 | 49.4 | 34.7 | 41.1 *** |
| Either spouse currently employed (\%) | 86.1 | 71.6 | 80.3 | 78.4 *** |
| Family characteristics |  |  |  |  |
| Expecting a child (\%) | 16.3 | 26.4 | 46.7 | 43.3 *** |
| Couple has a child between the ages of (\%) |  |  |  |  |
| Prenatal to 1 year, 11 months | 48.1 | 52.9 | 73.1 | 74.1 *** |
| 2 years to 9 years, 11 months | 71.1 | 66.2 | 53.4 | 54.4 *** |
| 10 years or older | 38.9 | 41.7 | 18.9 | 22.2 *** |
| Average number of children in the household | 2.3 | 2.2 | 1.6 | 1.8 *** |
| Married at the time of random assignment (\%) | 78.2 | 75.4 | 83.2 | 75.5 *** |
| Average number of years married | 8.2 | 6.0 | 4.5 | 4.4 *** |
| Stepfamily (\%) | 23.1 | 36.8 | 24.3 | 29.6 *** |
| Marital appraisals (\%) |  |  |  |  |
| Men report happy or very happy in marriage | 79.7 | 78.8 | 82.1 | 81.2 |
| Women report happy or very happy in marriage | 72.1 | 75.2 | 78.3 | 77.6 *** |
| Men report marriage in trouble | 55.5 | 57.4 | 52.0 | 56.4 * |
| Women report marriage in trouble | 56.4 | 60.5 | 53.2 | 59.8 *** |
| Adult well-being (\%) |  |  |  |  |
| Either spouse has psychological distress | 26.0 | 18.6 | 21.9 | 22.8 *** |
| Either spouse reports substance abuse problem | 20.4 | 20.5 | 20.0 | 22.6 |
| Sample size (couples) | 2,723 | 706 | 1,286 | 1,556 |

SOURCE: MDRC calculations based on the SHM Baseline Information Forms.
NOTES: Tests of differences across subgroup levels were conducted.
Statistical significance levels are indicated as follows: *** = 1 percent; $* *=5$ percent; * $=10$ percent. Dashes indicate that tests of statistically significant differences by race/ethnicity were not conducted.
Sample sizes may not equal the full SHM sample because of missing values on baseline measures used to define the subgroup characteristics.
${ }^{a}$ Appendix Table C. 2 describes how these characteristics are defined.

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Appendix K
The Supporting Healthy Marriage Project
12-Month Follow-Up Survey

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# Supporting Healthy Marriage Project: SHM 12-Month Follow-Up Survey <br> MASTER 

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## Introduction

## (ALL)

Hello (this is/my name is) $\qquad$ . I'm (here/ calling) from Abt Associates on behalf of the Supporting Healthy Marriage project.
IF NEEDED: May I please speak to (RESPONDENT NAME)?
INTERVIEWER: IF NECESSARY, READ: "(RESPONDENT) has agreed to help with a study on marriages in (CATI: INSERT SITE).

1 RESPONDENT AVAILABLE - CONTINUE
2 RESPONDENT NOT AVAILABLE - ARRANGE CALLBACK AND ENTER CALL NOTE
8 REFUSED - ENTER DISPOSITION CODE AND CALL NOTE DESCRIBING SITUATION IN THE CALL RECORD TEXT BOX

## (ALL) <br> <INTRO1> <br> Hello, my name is [NAME] and l'm (here/calling) from Abt Associates Inc. I'm (contacting /calling) you about the Supporting Healthy Marriage study you joined about a year ago. You may have already received a letter letting you know that we would be calling. Did you receive that letter? <br> 1 YES (DISPLAY SECOND TEXT CHOICE IN PARENTHESES BELOW) 2 NO (DISPLAY FIRST TEXT CHOICE IN PARENTHESES BELOW) 7 DON'T KNOW (DISPLAY FIRST TEXT CHOICE IN PARENTHESES BELOW) 8 REFUSED (DISPLAY FIRST TEXT CHOICE IN PARENTHESES BELOW)

\{IF INTRO 1=2,7,8: The letter explained that\} \{IF INTRO1=1 Good! As we mentioned in the letter,\}
When you joined the study, you and your [husband/wife] were each asked to complete a short questionnaire and we told you that we would be contacting each of you again to learn how you are doing.

## <INTRO 2>

The interview will take about 50 minutes and you will receive $\$ 30$ (if treatment)/ $\$ 50$ (if control) for completing it. Your spouse will also receive $\$ 30$ (if treatment)/\$50 (if control) for completing the survey. The interview will ask about your marriage, how well you are getting along with your spouse, your relationship with your children and your experiences [IF R=Experimental: with SITE Program].

Participation in this study is voluntary. All information you provide will be kept secure and strictly confidential. You may refuse to answer any individual questions.

IF NEEDED: Is now a good time to do the interview?

$$
\begin{aligned}
& \text { OK to continue (SKIP TO R_DOB)................................................... } \square_{1} \\
& \text { Not a good time (SKIP to CALL BACK INFO) ......................................................................................................................................................................................................... }
\end{aligned}
$$

## (INTRO2=2)

## IF NOT A GOOD TIME:

When would be a good time to reach you? When would be a good time to do the interview?
INSTRUCTION: RECORD DATE AND TIME FOR CALL BACK

## Call back date:

## SCREENER

## (ALL)

<R_DOB>
First I just need to verify that I am speaking with the correct person.
What is your date of birth?
INTERVIEWER: ENTER DATE USING FORMAT BELOW.
ENTER DOB EVEN IF IT MATCHES THE SAMPLE INFO
CATI NOTE: DISPLAY DOB

Respondent's Birthday: $\qquad$ 1 $\qquad$ / MM DD YYYY
DON'T KNOW -1
REFUSED. $\qquad$
CATI: COMPARE RESPONSE GIVEN TO THE BIRTH DATE ON SAMPLE FILE. IF IT AGREES WITH THE BIRTH DATE ON THE FILE, SKIP TO <R_NAME>. ELSE, CONTINUE.
(R_DOB $\ddagger$ sample DOB)
<R_SSN>

What are the last 4 digits of your Social Security Number?
RECORD LAST 4 DIGITS: $\qquad$
$\qquad$
$\qquad$
CATI NOTE: DISPLAY LAST 4 DIGITS SSN
INTERVIEWER - ENTER SSN EVEN IF IT MATCHES THE SAMPLE INFO
CATI: COMPARE RESPONSE GIVEN TO LAST FOUR DIGITS OF SSN ON SAMPLE FILE. IF THE 4 DIGITS GIVEN BY R AGREE WITH THE NUMBER ON THE FILE, SKIP <R_NAME>

IF THEY DO NOT AGREE, DISCONTINUE THE INTERVIEW.
IF SSN IS MISSING IN THE SAMPLE AND THERE IS A MISMATCH IN DOB, SKIP TO DISCONTINUED TEXT.
CATI: IF INTERVIEW DISCONTINUED: I'm sorry. I was unable to pull up the correct questionnaire. I will need to check with my supervisor to look into the problem. I will recontact you when the problem is resolved. Thank you for your time.

CATI NOTE: ANY CASES WITH MISMATCHES ON DOB AND SSN, SHOULD TERMINATE TO "UNABLE TO CONFIRM RESPONDENT". REPORT SHOULD BE generated with the new info collected so we can verify info with THE SITES.
<R_NAME>
IF INFORMATION IS CORRECT:
I would also like to make sure we have your name recorded correctly.
I have your name as ..

First Name Last Name

INTERVIEWER: CONFIRM SPELLING OF THE FULL NAME
Is this correct?

$$
\begin{aligned}
& \text { Yes (SKIP TO R_NICKNAME) ......................................................................................................................... } \text { 口 }_{2} \\
& \text { No, Update Name ........... }
\end{aligned}
$$

$\qquad$
REFUSED 8
<R_NEW NAME>
If No, What is your name? [First, Middle, Last]
INTERVIEWER: CONFIRM SPELLING OF THE FULL NAME

First Name
Last Name

## CATI NOTE: NEW NAME WILL UPDATE PROJECT DATABASE.

<R_NICKNAME>
Are you usually called [Respondent's First Name] or do you go by another name?
INSTRUCTION: IF SAME, CONTINUE
INSTRUCTION: IF DIFFERENT NAME, CHANGE TO USUAL NAME WHICH WILL BE USED TO FILL IN THE REMAINDER OF SURVEY

PROBE: Can you spell that for me please?
Alternative Name of Respondent: $\qquad$

## CATI NOTE: NICKNAME WILL UPDATE PROJECT DATABASE.

## <R_SPOUSE>

Our records indicate that you were married when you first entered the study. Before we get started, I would like to make sure that I have the correct name of your spouse at that time.

I have the name of your <husband/wife> as ...
$\qquad$ DON'T KNOW

REFUSED $\square 8$
<S_NEW NAME>
If No, What is his/her name? [First, Middle, Last]

First Name Last Name

## INTERVIEWER: CONFIRM SPELLING OF THE FULL NAME CATI NOTE: NEW NAME WILL UPDATE PROJECT DATABASE.

## <S_NICKNAME>

Is he/she usually called [Respondent's First Name] or does h/she go by another name?
INSTRUCTION: IF SAME, CONTINUE
INSTRUCTION: IF DIFFERENT NAME, CHANGE TO USUAL NAME WHICH WILL BE USED TO FILL IN THE REMAINDER OF SURVEY

PROBE: Can you spell that for me please?
Alternative Name of Spouse/Former Spouse:

CATI NOTE: NICKNAME WILL UPDATE PROJECT DATABASE.

## (ALL)

The following questions are about your marital status at the time you enrolled in the study.
When you enrolled in the study in [ENTER MONTH/YEAR]....
<NEW SCREENER 1>
Were you and [BASELINE SPOUSE] married? YES
NO (ASK RESPONDENT OPTION 6 IN B1)................................... $\square_{2}$ REFUSED.................................................................................... $\square_{7}$ DON'T KNOW.............................................................................. 口 $_{8}$

## (ALL)

<TOGETHER>
Are you and [SPOUSE] currently living together most of the time?

| Yes | $\square_{1}$ |
| :---: | :---: |
| No ......................................................................................... $\square_{2}$ |  |
| WIDOW (SKIP TO SCRIPT)..................................................... $\square_{3}$ |  |
| REFUSED. | $\square_{7}$ |
| DON'T KNOW. | $\square_{8}$ |

WIDOW SCRIPT: "I am so sorry to hear about your loss.
WAIT FOR RESPONSE. Do you think that it would be alright for me to ask you a few questions about you and your children? WAIT FOR RESPONSE, IF RESPONDENT ANSWERS "NO," SAY: "Would another time be better?"
OTHERWISE SKIP TO SECTION A ; AFTER COMPLETING SECTION A; SKIP TO SECTION F.

CATI NOTE: IF WIDOW, THE OTHER MEMBER OF THE COUPLE NEEDS TO HAVE A "DECEASED" DISPOSITION.

Let's get started with some questions I have for you about your family.

## Section A: Household Structure

CATI NOTE:
IF <TOGETHER>=1 ASK SECTION A ONLY OF THE FIRST RESPONDENT (EITHER HUSBAND OR WIFE) AND THEIR RESPONSES WILL SET FLAG FOR FOCAL CHILD FOR BOTH MEMBERS OF THE COUPLE.


#### Abstract

IF <TOGETHER>=2,7,8 ASK SECTION A TO BOTH HUSBANDS AND WIVES, BUT THE FIRST RESPONDENT WILL BE ASKED ALL THE QUESTIONS IN SECTION A AND WILL SET THE FLAG FOR THE FOCAL CHILD FOR BOTH MEMBERS OF THE COUPLE. THE SECOND MEMBER OF THE COUPLE WILL ONLY BE ASKED QUESTIONS A3-A10.


CATI NOTE:
IF WOMAN WAS PREGNANT AT BASELINE <PREGDUETYPEID=2 OR 3> ASK A1, OTHERWISE SKIP TO INTRODUCTION BEFORE A3.

## (UNBORN CHILD LOGIC)

## PREGDUEDATETYPEID

$\qquad$
Pregnant, due date provided........................... 2
Pregnant, no due date...................................... 3
Refused......................................................... . 97
Don't Know........................................................ 98

## WHICHFOCALCHILDSELECTED

None ............................................... 1
First Newly Born Child....................... 2
Child 1, ^f('CxxxFNAME')['1']^ $\ldots . . . . . . .3$
Child 2, f('CxxxFNAME')['2']^^............ 4
Child 3, ^f('CxxxFNAME')['3']^ $\ldots . . . . . . . .5$
Child 4, ^f('CxxxFNAME')['4']^ ........... 6
Child 5, ^f('CxxxFNAME')['5']^^.......... 7
Child 6, ^f('CxxxFNAME')['6']^ $\ldots . . . . . . .8$
Child 7, ^f('CxxxFNAME')['7']^ $\ldots . . . . . . . .9$
Child 8, ^f('CxxxFNAME')['8']^ $\ldots . . . . . .$.
Child 9, ^f('CxxxFNAME')['9']^ ........... 11
Child 10, ^f('CxxxFNAME')['10']^^ ....... 12
Child 11, ^f('CxxxFNAME')['11']^ $\ldots . . .$.
Child 12, ^f('CxxxFNAME')['12']^ ...... 14

## (PREGDUEDATETYPEID=2 or 3)

A1. TEXT FOR WIVES: During your initial interview with \{PROGRAM NAME\} you were pregnant [IF PREGDUEDATE=PACKED and your estimated due date was \{BABYDUE DATE\}]. Did that pregnancy result in a live birth?

TEXT FOR HUSBANDS: During your initial interview with \{PROGRAM NAME\} your wife, <SPOUSE> was pregnant [IF PREGDUEDATE=PACKED and her estimated due date was \{BABYDUE DATE\}]. Did that pregnancy result in a live birth?

> Yes (SKIP TO QUESTION A1a)..................................................... $\square_{1}$
> No (SKIP TO CONDOLENCE SCRIPT)......................................... $\square_{2}$
> MULTIPLE BIRTHS (SKIP TO QUESTION A1a) ............................. $\square_{3}$

REFUSED (SKIP TO QUESTION A3)............................................ $\square_{7}$
DON'T KNOW (SKIP TO QUESTION A3)....................................... 口 $_{8}$
MISSING (SKIP TO QUESTION A3).............................................. $\square_{9}$

## Condolence Script:

I'm so sorry for your loss.

## CATI NOTE:

SKIP TO NOTE BEFORE QUESTION A3 - OTHER CHILDREN) STATUS OF FC FLAG SHOULD BE SET TO DECEASED.
(A1=1 or 3)
A1a. Congratulations! How many babies were born?
$\qquad$
NOTE: LOOP THROUGH A2 THROUGH A2c FOR EACH BABY BORN
(A2_1_X) (A1a 2 1)
A2. What is the child's first name?
INTERVIEWER NOTES: FOR MULTIPLE BIRTHS, PLEASE COLLECT THE INFORMATION STARTING WITH THE OLDEST TO YOUNGEST.

First Name: $\qquad$
REFUSED
DON'T KNOW
... $\qquad$ (A2a_1_X) (A1a 2 1)
A2a. What is the child's last name?

Last Name: $\qquad$
REFUSED ..... $\square_{7}$DON'T KNOW$\square 8$
(A2B_1_X) $(A 1 a \geq 1)$
A2b. What is the child's date of birth?
$\frac{1}{M M} / \frac{1}{\mathrm{DD}}$ (SKIP TO QUESTION A2c)
REFUSED (SKIP TO QUESTION A2b_1) ..... $\square$
DON'T KNOW (SKIP TO QUESTION A2b_1) ..... - 8
(FOCALCHILDNODOB_QU) (FC_STATUSキ3)
A2b_1. Is the child between the ages of ..... ?
0 to 12 months ..... $\square_{1}$
13 to 24 Months ..... $\square \square_{2}$
25 to 36 Months ..... $\square{ }^{\square}$
37 to 48 Months ..... $\square_{4}$
4 to 4 years and 11 months ..... $\square_{5}$
5 to 7 years and 11 months ..... $\square 6$
8 to 8 years and 11 months ..... $\square_{7}$
9 to 9 years and 11 months ..... - 8
10 to 15 years and 11 months ..... $\square_{9}$
16 years or older ..... 10
REFUSED ..... $\square 97$
DON'T KNOW ..... 98
A2C_X (A1a $\mathbf{1}$ )
A2c. Is the child a...?
Male ..... $\square_{1}$
Female ..... $\square{ }_{2}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square 8$
$\qquad$

CATI NOTE: A2 THRU A2C WILL UPDATE FOCAL CHILD INFORMATION ON THE PROJECT DATABASE.

## A2d - A2f IS FOR THE FOCAL CHILD ONLY, IF A1=3 THEN SELECT OLDEST BORN CHILD AS THE FOCAL CHILD.

(A1=(1 or 3) and A1A>0 and (Pri_Focal_child unborn=1 OR Sec_Focal_child unborn=1))
A2d. How is the child related to [SPOUSE]?
BIOLOGICAL/ADOPTIVE CHILD ..... $\square_{1}$
STEP-CHILD ..... $\square{ }_{2}$
FOSTER CHILD ..... - $\square_{3}$
OTHER RELATIVE UNDER 18 ..... $\square_{4}$
OTHER DEPENDENT CHILD ..... $\square 5$
UNRELATED CHILD ..... $\square 6$
REFUSED ..... - 97
DON'T KNOW ..... - 98
MISSING ..... 99
(A1=(1 or 3) and A1A>0 and (Pri_Focal_child unborn=1 OR Sec_Focal_child unborn=1))
A2e. Is [CHILD] still living with you at least half the time?
Yes (SKIP TO QUESTION A3)

$\qquad$ ..... $\square 1$
No (ASK QUESTION A2f) ..... $\square{ }_{2}$
REFUSED (ASK QUESTION A2f) ..... $\square_{7}$
DON'T KNOW (ASK QUESTION A2f) ..... $\square_{8}$
MISSING ..... - 9
(A2e=2, 7 or 8)

A2f. And who does [CHILD] live with at least half the time? [INTERVIEWER: DO NOT READ CHOICES, HAVE RESPONDENT ANSWER AND CODE FOR RESPONSE. FOCAL CHILD ONLY]

Record Response:
SPOUSE .....  1
BIOLOGICAL FATHER ..... $\square_{2}$
BIOLOGICAL MOTHER ..... - ${ }^{3}$
MATERNAL GRANDPARENT(S) ..... $\square_{4}$
PATERNAL GRANDPARENT(S) ..... - ${ }_{5}$
OTHER RELATIVE(S) ..... - ${ }_{6}$
FRIEND ..... $\square_{7}$
FOSTER CARE ..... - 8
ADOPTIVE PARENT ..... - 9
OTHER (SPECIFY) ..... 95
REFUSED ..... 97
DON'T KNOW ..... 98

## CATI NOTES FOR REPLACEMENT OF FOCAL CHILD:

IF A2e=2, AND A2f IS NOT EQUAL TO 1, AND SITE IS EQUAL TO OKLAHOMA OR SEATTLE BPP, THEN DO NOT REPLACE FOCAL CHILD AND TREAT SURVEY SKIPS AS IF FOCAL CHILD IS DECEASED.

## IF A2e=2, AND A2f IS NOT EQUAL TO 1, AND SITE IS ANYTHING BUT OKLAHOMA OR SEATTLE BPP, THEN REPLACE FOCAL CHILD WITH REPLACEMENT FOCAL CHILD IN SAMPLE.

## IF REPLACEMENT CHILD DOES NOT LIVE WITH RESPONDENT OR WITH SPOUSE AT LEAST HALF THE TIME, THEN TREAT THE FOCAL CHILD AS DECEASED

During your initial interview with [PROGRAM NAME] you gave us some information about all the children living in your household. I'm going to ask you some questions about those children to make sure the information we have is correct.

## CATI NOTES:

ASK QUESTION A3-A6 FOR ALL CHILDREN LISTED AT BASELINE STARTING WITH FOCAL CHILD.

IF MORE THAN ONE CHILD IN THE SAMPLE, ASK FOR THE FOCAL CHILD FIRST
AND THEN ASK FROM OLDEST AND WORK DOWN TO THE YOUNGEST.

## IF DOB IS MISSING，ASK FIRST FOR THE FOCAL CHILD AND THEN IN ORDER AS IT APPEARS IN THE SAMPLE．

## SAMPLE FILE ALLOWS FOR UP TO 12 CHILDREN IN THE HOUSEHOLD． IF NO OTHER CHILDREN THEN SKIP TO QUESTION A7

（A3＿X）（C＿SMORIRGINID＝1 AND C＿FNAME＿1 1 Missing）
A3．Is［CHILD］still living with you at least half the time？


I＇m so sorry for your loss．
CATI NOTE：
SKIP TO NEXT CHILD IN HH．IF NO OTHER CHILD，SKIP TO A7．

## IF THE DECEASED CHILD IS THE FOCAL CHILD，THEN THE STATUS OF FC FLAG SHOULD BE SET TO DECEASED．

（A4＿X）（A3＿X＝2，7，8）
A4．And who does［CHILD］live with at least half the time？［INTERVIEWER：DO NOT READ CHOICES，HAVE RESPONDENT ANSWER AND CODE FOR RESPONSE．］

Record Response： $\qquad$

```
SPOUSE.................................................................................|
BIOLOGICAL FATHER............................................................ - 口 
BIOLOGICAL MOTHER.............................................................- - |
MATERNAL GRANDPARENT(S) ..............................................口}\mp@subsup{|}{4}{
PATERNAL GRANDPARENT(S)...............................................口 口5
OTHER RELATIVE(S) ............................................................. 口 }\mp@subsup{|}{}{\prime
FRIEND .................................................................................| (7
```

FOSTER CARE ..... 8
ADOPTIVE PARENT ..... $\square_{9}$
OTHER (SPECIFY) ..... 95
REFUSED ..... 97
DON'T KNOW ..... 98
MISSING ..... 99

## CATI NOTES FOR REPLACEMENT OF FOCAL CHILD:

## IF A3=2, AND A4 IS NOT EQUAL TO 1, AND SITE IS EQUAL TO OKLAHOMA OR SEATTLE BPP, THEN DO NOT REPLACE FOCAL CHILD AND TREAT SURVEY SKIPS AS IF FOCAL CHILD IS DECEASED.

## IF A3=2, AND A4 IS NOT EQUAL TO 1, AND SITE IS ANYTHING BUT OKLAHOMA OR SEATTLE BPP, THEN REPLACE FOCAL CHILD WITH REPLACEMENT FOCAL CHILD IN SAMPLE.

## IF REPLACEMENT CHILD DOES NOT LIVE WITH RESPONDENT OR WITH SPOUSE AT LEAST HALF THE TIME, THEN TREAT THE FOCAL CHILD AS DECEASED

(A5_X) (A3_X=1,2,7,8)
A5. Just to check, is his/her birthday [BIRTHDATE LISTED AT BASELINE]?
Yes (SKIP TO A3 LOOP) .............................................................. $\square$
$\square_{1}$
No ..................................................................................................... $\square_{2}$
REFUSED............................................................................................ $\square_{7}$
DON'T KNOW....................................................................................... $\square_{8}$
MISSING........................................................................................... $\square_{9}$
(A6_X) (A5_X=2,7,8)
A6. Can you please tell me his/her correct birthday? ENTER DATE.

Birthday: $\qquad$ / 1 / MM DD YYYY

REFUSED (SKIP TO QUESTION A6a)
DON'T KNOW (SKIP TO QUESTION A6a)

> MISSING

## (A6a_X) (FC_Status $\ddagger$ 3)

A6a. Is the child between the ages of .....?
0 to 12 months ..... $\square_{1}$
13 to 24 Months ..... $\square_{2}$
25 to 36 Months ..... - 3
37 to 48 Months

$\qquad$ ..... $\square_{4}$
4 to 4 years and 11 months.

$\qquad$ ..... $\square 5$
5 to 7 years and 11 months ..... - 6
8 to 8 years and 11 months ..... $\square_{7}$
9 to 9 years and 11 months ..... $\square_{8}$
10 to 15 years and 11 months ..... $\square_{9}$
16 years or older
REFUSED
DON'T KNOW ..... $\square 98$
CATI NOTE:UPDATE DOB IN THE PROJECT DATA BASE FOR FOCAL CHILD AND ANYOTHER CHILDREN THAT WERE PART OF THE BASELINE LIST OF CHILDREN.
ASK A7 AFTER ALL CHILDREN FROM BASELINE WERE CONFIRMED (A3-A6)
(If P_TOGETHER=1 and this is the first respondent, or P_TOGETHERキ1)
A7. Are there any other children under the age of 18, including biological, adoptive,foster, step, or other children or relatives currently living in your home at leasthalf the time who I did not mention?
Yes (SKIP TO A8) ..... $\square_{1}$
No (SKIP TO QUESTION A9) ..... $\square \square_{2}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... 8

(A7=1)

NOMORECHILD. Are there any other children under 18 living in your household besides the ones you just mentioned?
$1=$ Yes, there are other children
2=no, no others
7=REFUSED
8=DON'T KNOW
9=MISSING
(A7=1)
A8. How many children under the age of 18 are currently living in your home for at least half the time and who I did not mention before?

PROBE IF NEEDED: This will include biological, adoptive, foster, step, or other children or relatives currently living in your home at least half the time

Total number of children: $\qquad$
REFUSED
DON'T KNOW $\qquad$ $\square-2$

## CATI NOTE:

IF DON'T KNOW OR REFUSED, SKIP TO A9.
ALLOW UP TO 10 CHILDREN IN THE HOUSEHOLD.

\begin{tabular}{|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
<A8a_X> [X=1-10] What is the child's first name? \\
\(\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow\)
\end{tabular} \& <A8B_X> [X=1-10] What is child's last name? \& \begin{tabular}{l}
<A8C_X> [X=1- \\
10] \\
What is child's date of birth? \\
\(\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow\)
\end{tabular} \& \begin{tabular}{l}
<A8D_X>[X=1-10] Is the child \\
a...? \\
\(\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow\)
\end{tabular} \& \begin{tabular}{l}
<A8E_X> [X=1-10] \\
How is the child related to you? \\
\(\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow\)
\end{tabular} \& <A8F_X> [X=1-10] How is the child related to your spouse? \(\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow\) \\
\hline \[
\begin{aligned}
\& \text { <A8a_1_X> [X=1- } \\
\& \text { 10] } \\
\& \text { A: } \\
\& \text { First Name: } \\
\& \hline \\
\& \hline \\
\& \text { REFUSED ........] }_{7} \\
\& \text { DON'T KNOW . }_{8}
\end{aligned}
\] \& \begin{tabular}{l}
\[
\begin{aligned}
\& <A 8 B \_1 \_X>[X=1- \\
\& 10]
\end{aligned}
\] \\
Last Name:
\(\qquad\)
\end{tabular} \& \[
\begin{aligned}
\& \text { <A8C_1_X>[X=1-10] } \\
\& \frac{\mathrm{MM}}{\mathrm{MY}} \\
\& \begin{array}{l}
\text { REFUSED............. } \\
\text { DONTKNOW }
\end{array}
\end{aligned}
\] \& \begin{tabular}{l}
Male. \(\qquad\) \\
Female. 
\(\qquad\)
\(\qquad\)
\(\qquad\) \\
REFUSED \(\square\) \\
DON'T KNOW
\(\qquad\)

$\qquad$ <br>
MISSING
$\qquad$

 \& 

Biological/adoptive child $\square$ <br>
Step-child $\qquad$ <br>
Foster child $\qquad$
$\qquad$ . 3 <br>
Other relative under 18 $\qquad$
$\qquad$ <br>
Other dependent child $\square$
$\qquad$ .5 <br>
Unrelated child. $\qquad$ $\square$

 \& 

Biological/adoptive child $\square$ <br>
Step-child $\qquad$
$\qquad$ <br>
Foster child $\qquad$

$\qquad$ <br>
Other relative under 18. $\square$
\end{tabular} <br>

\hline \begin{tabular}{l}
B: \\
First Name: \\
REFUSED \(\qquad\)
7 \\
DON'T KNOW \(\square\) 8
\end{tabular} \& Last Name: \&  \& \begin{tabular}{l}
Male \(\qquad\)
\(\qquad\) \\
Female. \(\qquad\)

$\qquad$ <br>
REFUSED $\square$
$\qquad$ <br>
DON'T KNOW
$\qquad$

 \& 

Biological/adoptive child $\square$ <br>
Step-child. $\qquad$
$\qquad$ <br>
Foster child $\qquad$

$\qquad$ <br>
Other relative under 18. $\qquad$
$\qquad$

 \& 

Biological/adoptive child <br>
Step-child $\qquad$
<br>
....................................... 2 <br>
Foster child $\qquad$ . .2
$\square$
<br>
Other relative under 18. $\square$ <br>
...n.m.n..................................4 <br>
4
\end{tabular} <br>

\hline
\end{tabular}

|  |  | $\begin{aligned} & \text { REFUSED ..................... } 7 \\ & \text { DON'TKNOW........ } 8 \end{aligned}$ | MISSING $\square$ ..................... 9 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C: <br> First Name: $\qquad$ $\qquad$ <br> REFUSED $\qquad$ $\square$ 7 DON'T KNOW . $\square$ 8 | Last Name: | $\qquad$ | Male $\qquad$ Female $\qquad$ REFUSED . $\qquad$ DON'T KNOW $\qquad$ $\qquad$ <br> MISSING $\square$ $\qquad$ | Biological/adoptive child $\square$ $\qquad$ <br> ..................................... 2 <br> Foster child $\qquad$ $\qquad$ <br> Other relative under 18. $\qquad$ $\qquad$ <br> Other dependent child $\square$ | Biological/adoptive child <br> Step-child $\qquad$ <br> Foster child $\qquad$ $\qquad$ <br> Other relative under 18 . $\qquad$ $\qquad$ <br> Other dependent child $\square$ |

## (If $P_{-}$TOGETHER=1 and this is the first respondent, or $P_{-}$TOGETHER $=1$ )

A9. Including yourself, how many adults 18 years or older live in your home at least half the time?

WAIT FOR ANSWER. And that includes you, correct?
Enter Number of Adults: $\qquad$
$\qquad$

## CATI NOTE: IF 1, DON'T KNOW OR REFUSED, SKIP TO SECTION B.

## (A9 > 1 )

A10. Can you tell me the first and last name of each of the adults living in your home at least half the time, their gender and their relationship to you?
[ $\mathrm{X}=1-15$ ]
<A10A_1_X> FIRST NAME [ $X=1-15$ ]
$\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
<A10B_1_X> LAST NAME [X=1-15]
$\downarrow \downarrow \downarrow$

ADULT FIRST NAME
A10A_X

## ADULT LAST NAME

A10B_X $\qquad$
1 -Spouse
2 -New Husband
3 -New Wife
4 -Son
5 -Daughter
6 -Mother
7 -Mother-in-law
8 -Father
9 -Father-in-law
10-Brother
11-Sister
12- Unmarried Partner
<A10E_X> [X=1-15]
<A10D_X How is (PERSON'S NAME)
$>[\mathrm{X}=1-\quad$ related to you?
15] RELATIONSHIP TO RESPONDENT
Gender (ENTER THE NUMBER FROM THE
1-Male LIST BELOW THAT
CORRESPONDS TO THE
RESPONSE)
$\qquad$
$\qquad$
$\qquad$
$\qquad$

13-Boyfriend/Girlfriend
14-Son-in-law
15- Daughter-in-law
16-Niece
17- Nephew
18- Grandmother, Grandmother-in-law
19- Grandfather, Grandfather-in-law
20- Other non-related person
95- Other (specify)
97 - REFUSED
98 - DON'T KNOW
99 - MISSING

## NOTE: THE NUMBER OF RESPONSES IN A10 SHOULD BE EQUAL TO A9 minus

 1. CATI NOTE:ALLOW UP TO 15 ADULTS FOR THE HOUSEHOLD

## (A9 $\mathbf{\geq}$ )

NOMOREPERSON Are there any other adults over 18 in your household besides the ones you just mentioned?
$1=$ Yes, there are other adults
2=no, no others
7=REFUSED
8=DON'T KNOW

## COMPUTED VARIABLES:

FC STATUS
1=FOCAL CHILD AVAILABLE (A1=1, 3 OR A3 IN POSITION FOR FC OR REPLACEMENT FC=1)

2=NO FOCAL CHILD, BUT OTHER CHILDREN IN THE HOUSEHOLD (A1=2 OR A3 IN POSITION FOR FC OR REPLACEMENT FC=2) AND THERE ARE OTHER KIDS IN HH (SAMPLE VARIABLES FOR OTHER KIDS ARE NOT BLANK OR A7=1)

3=NO CHILDREN AT ALL IN THE HOUSEHOLD (A1=2 OR A3 IN POSITION FOR FC OR REPLACEMENT FC=2) AND THERE ARE NO OTHER KIDS IN HH (SAMPLE VARIABLES FOR OTHER KIDS ARE BLANK OR A7=2,7,8)

LIVESWITHFOCAL Does Person live with Focal Child more than half this time?
$1=$ Yes
$2=\mathrm{No}$
7=REFUSED
8=DON'T KNOW

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## Section B: Marital Status and Stability

CATI NOTE:
IF COUPLE IS LIVING TOGETHER <P_TOGETHER=1>, THEN ASK HUSBANDS ONLY B1, B2, B3 AND B4 AND THEN SKIP TO SECTION C. WIVES GET FULL SECTION B.

## IF <P_TOGETHER>=2,7,8 THEN ASK SECTION B TO HUSBANDS AND WIVES.

The next questions are about you and [SPOUSE].
(ALL)
B1. Are you and [SPOUSE] currently...
Married? ..... $\square$
[IF NOT MARRIED AT BASELINE] In a committed relationship or romantically involved ..... $\square_{6}$
Divorced? (SKIP TO QUESTION B3) ..... $\square 2$
[IF MARRIED AT BASELINE] Separated (SKIP TO QUESTION B3)[IF NOT MARRIED AT BASELINE] broken up? (SKIP TO QUESTION B3)HAD MARRIAGE ANNULLED? (SKIP TO QUESTION B3) ............. $\square_{4}$
WIDOWED (SKIP TO WIDOW SCRIPT) ........................................ $\square_{5}$
REFUSED ..... $\square 97$
DON'T KNOW. ..... $\square 98$

NOTE: ANSWER \#6 WILL ONLY BE DISPLAYED FOR PEOPLE WHO ANSWERED "NO" IN <NEW SCREENER 1>. ANSWERS 1,6, WILL BE ASKED B2. ANSWERS 2, 3, AND 4 WILL SKIP TO B3.

WIDOW SCRIPT: "I am so sorry to hear about your loss.
WAIT FOR RESPONSE. Do you think that it would be alright for me to ask you a few questions about you and your children? WAIT FOR RESPONSE, IF RESPONDENT ANSWERS "NO," SAY: "Would another time be better?" OTHERWISE SKIP TO SECTION F.)

CATI NOTE: BASE: BASE ALL (HUSBAND/WIFE) $\uparrow \uparrow$
(B1=1,6,97,98)
B2. Are you currently living with [SPOUSE] ...? [Only select one option.]

All of the time
Most of the time (OPTION 1 IN QUESTION B5a)

$\qquad$ ..... 2
Some of the time (OPTION 1 IN QUESTION B5a) ..... 3
None of the time (OPTION 2 IN QUESTION B5a) ..... a). ..... 4
REFUSED ..... 97
DON'T KNOW ..... 98
MISSING ..... 99
CATI NOTE: BASE: B1=1,6,97,98 ..... $\uparrow \uparrow$
MARRIAGE_FLAG (PERMANENT VARIABLE IN DATASET) TO BE CREATEDBASED ON:
1=MARRIED, LIVING TOGETHER: (B1=1 AND B2=1,2,3,7,8) OR (B1=6)2=MARRIED, LIVING APART:(B1=1 AND B2=4)
3=DIVORCED:
4=SEPARATED:(B1=2)
5=ANNULLED:(B1=3)
6=WIDOW: ..... (B1=5)99=MISSING
(Marriage_flagキ6)
B3. [IF B2=1,2,3: Many couples who live together may not always see each other allthe time due to work schedules and other conflicts. DTS displays the intro if
B2=1, 2, 3,] How often did you and [SPOUSE] see each other over the last threemonths? Was it...
Every day or almost every day ..... $\square_{1}$
A few times a week ..... $\square_{2}$
A few times a month ..... 3
1 or 2 times in the past 3 months ..... 4
Hardly ever or never ..... $\square$
REFUSED ..... - 97
DON'T KNOW ..... - 98
MISSING ..... 99
CATI NOTE: BASE B3: BASE ALL (HUSBAND AND WIFE) (Marriage_flagキ6)

B4. How often did you and [SPOUSE] talk to each other over the last three months? Was it...
Every day or almost every day

$\qquad$

$\square$
A few times a week........................................................................... $\square_{2}$
A few times a month ......................................................................... $\square_{3}$
1 or 2 times in the past 3 months..................................................... $\square_{4}$
Hardly ever or never ....................................................................... $\square_{5}$
REFUSED......................................................................................... $\square_{97}$
DON'T KNOW..................................................................................... 98
MISSING........................................................................................... $\square$ 99
CATI NOTE:
BASE B4: BASE ALL (HUSBAND AND WIFE)
BASE: B5: MARRIED AND LIVING TOGETHER (Marriage_Flag=1, 99)

For the Wife：（Marriage＿Flag＝1，98， 99 and B1キ5）
For the Husband：（Marriage＿Flag＝1，98， 99 and B1キ5 and P＿TOGETHER $=1$ ）
Where husband completed only：（Marriage＿Flag¥1，98，99）
B5．Since［RAD］，have you and［SPOUSE］lived apart for one or more nights？For example，this could include times when you and your spouse were not getting along or when you or your spouse traveled for work，were deployed for the military，or visited family or friends，and one or both of you did not spend the night at home as a result．

$$
\begin{aligned}
& \text { Yes (GO TO OPTION } 1 \text { IN QUESTION B5a) ................................... } \square_{1} \\
& \text { No (SKIP TO QUESTION SECTION C) ......................................... } \square_{2} \\
& \text { REFUSED (SKIP TO SECTION C) ................................................ } \square_{7} \\
& \text { DON'T KNOW (SKIP TO SECTION C)........................................... } \square_{8} \\
& \text { MISSING (SKIP TO SECTION C) .................................................. } \text { 口 }_{9}
\end{aligned}
$$

## CATI NOTE：BASE：B5a＝B5＝1 OR MARRIED LIVING APART， DIVORCED／SEPARATED／ANNULLED

（Marriage＿Flag＝1，98，99 and B5＝1 and B2\＃4）
B5a．OPTION 1：How many times have you and［SPOUSE］lived apart for one or more nights since［RAD］？

CATI NOTE：BASE：B5a OPTION 1：B5＝1
Number of times： $\qquad$ （IF ANSWER IS ZERO SKIP TO B8）
$\qquad$
$\qquad$
$\qquad$
［IF ANSWER IS NOT 0，ASK OPTION 1 IN QUESTIONS B6 AND B7］
（Marriage＿Flag＝（2，3，4，5）or B2＝4）
OPTION 2：Including this current time of living apart，how many times have you and［SPOUSE］lived apart since［RAD］？［ASK OPTION 2 IN QUESTIONS B6 AND B7］

CATI NOTE：BASE：B5a OPTION 2：MARRIED LIVING APART， DIVORCED／SEPARATED／ANNULLED

Number of times: $\qquad$ (NOTE: ANSWER MUST BE $\geq 1)$
$\qquad$

NOTE: IF ANSWER=0, THEN ASK B5 AGAIN
(B5A>0)
B6. OPTION 1: Thinking about all of the times that you and [SPOUSE] have lived apart since [RAD], what is the total amount of time (in days or months) that you and [SPOUSE] have lived apart?

## CATI NOTE : BASE : B6 OPTION 1 : B5=1

OPTION 2: Thinking about all of the times that you and [SPOUSE] lived apart since [RAD], including this most recent spell apart, what is the total amount of time (in days or months) that you and [SPOUSE] have lived apart?

## CATI NOTE: BASE: B6 OPTION 2: MARRIED LIVING APART, DIVORCED/SEPARATED/ANNULLED

PROBE: If you don't know the exact amount of time, you can just give me an estimate in days or months of how long you think you were living apart.
$\qquad$ Days and $\qquad$ Months

INTERVIEWER NOTE: If less than 1 month, enter number of days, and enter 0 for months. If more than 1 month, enter number of months rounded to the nearest month.

CATI NOTE: VALUES FOR DAYS: 0-31 / MONTHS: 0-12
REFUSED
DON'T KNOW ........................................................................................................
(B5A>0)
B7. OPTION 1: For the most recent spell that you and [SPOUSE] lived apart from one another, can you tell me what the main reason was for your separation?

CATI NOTE : BASE : B7 OPTION 1 : B5=1

OPTION 2: Can you tell me what the main reason is that you and [SPOUSE] do not currently live together?

## CATI NOTE: BASE: B7 OPTION 2: MARRIED LIVING APART, DIVORCED/SEPARATED/ANNULLED

## [INTERVIEWER: DO NOT READ CHOICES, CODE FOR THE RESPONSE THE RESPONDENT GIVES. IF RESPONDENT CANNOT COME UP WITH A REASON, THEN READ LIST.]

COMMUNICATION PROBLEMS/ARGUING TOO MUCH................. $\square_{1}$
FINANCIAL PROBLEMS/COULDN'T KEEP JOB.............................. $\square \square_{2}$
POOR PARENTING/BAD ROLE MODEL.......................................... $\square_{3}$
ALCOHOL OR DRUG PROBLEMS ................................................. $\square_{4}$
DOMESTIC VIOLENCE OR ABUSE ................................................ $\square_{5}$
INFIDELITY/UNFAITHFULNESS/CHEATING ................................... $\square_{6}$
WORKS FAR AWAY/BUSINESS TRAVEL......................................... $\square_{7}$
LACK OF SUPPORT FROM FAMILY MEMBERS............................. $\square_{8}$
INCARCERATED/IN JAIL.................................................................. $\square$ -
IN THE MILITARY ............................................................................ $\square_{10}$
OTHER SPECIFY__ ................................. $\square_{95}$
REFUSED.......................................................................................... $\square_{97}$
DON'T KNOW.................................................................................... 98
MISSING......................................................................................... $\square 99$

## (B7\# [97 or 98 or 99])

B7a Was the reason you and [SPOUSE] did not live together because of you, [SPOUSE], or both of you?
YOU ..... $\square 1$
[SPOUSE] ..... $\square \square_{2}$
BOTH
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square 8$

## CATI NOTE:

# SKIP TO B8 IF MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED OR IF MARRIED LIVING APART <br> OTHERWISE IF MARITAL FLAG=MARRIED LIVING TOGETHER, SKIP TO SECTION C. 

## HUSBAND: (MARRIAGE_FLAG=2,3,4,5 or P_TOGETHER $\boldsymbol{1} 1$ ) and PNUM=1 WIFE: (B1 $=5$ and MARRIAGE_FLAG=2,3,4,5)

B8. Are you currently involved in a romantic relationship with someone other than [SPOUSE]?
Yes. ..... - 1
No (SKIP TO SECTION C) ..... $\square_{2}$
REFUSED (SKIP TO SECTION C) ..... $\square_{7}$
DON'T KNOW (SKIP TO SECTION C) ..... $\square_{8}$
MISSING (SKIP TO SECTION C) ..... $\square_{9}$

## CATI NOTE:

BASE: B8: MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED or IF MARRIED LIVING APART

B8a. Do you currently live with him/her in the same household
All of the time,

$\qquad$ ..... $\square$Most of the time$\square \square_{2}$
Some of the time, ..... $\square_{3}$
None of the time, or ..... $\square_{4}$
REFUSED ..... $\square 7$
DON'T KNOW ..... 8

CATI NOTE: BASE: B8=1
(B8=1)
B8b. Are you currently married to him/her?
$\qquad$

CATI NOTE: BASE: B8=1

# Section C: Ideals, Expectations, and Standards about Marital Relationships 

Views of Marriage

CATI NOTE:
IF MARITAL FLAG=MARRIED, MARRIED LIVING APART, DIVORCED, ANNULLED OR SEPARATED OR 99 ASK SECTION C
IF MARITAL FLAG=WIDOW THEN SKIP TO SECTION F

## (Marriage_Flag¥=6)

People have different ideas about what marriage should be like, such as the ideal roles for husbands and wives. Now, I want to ask you a few questions about marriage in general. These questions are not asking about your marriage, but just what you think about marriage in general.

C1. For each statement, please indicate whether you strongly agree, agree, disagree, or strongly disagree with the statement. First... [READ STATEMENT].

| Strongly Agree | Agree | Disagree | Strongly Disagree | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square 4$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

C1a-C1f - MISSING=9

## Section D: Marital Relationship Outcomes

CATI NOTE:
IF MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED, THEN SKIP ITEMS WHERE INDICATED "SKIP IF DIVORCED OR SEPARATED." IFMARITAL FLAG=WIDOW THEN SKIP TO SECTION F

CATI NOTE: IF B3 OR B4 IS 5 "HARDLY EVER OR NEVER", 7 REFUSED, OR 8 DON'T KNOW, SKIP TO SECTION E

OTHERWISE, IF MARITAL FLAG=MARRIED, ASK ALL THE QUESTIONS IN SECTION D.

D1. The next questions are about your relationship with [SPOUSE]. IF B1=2,3,4, THEN ADD: We realize that you are currently not living with [SPOUSE] but we want to understand your current relationship with him/her. Please tell me if you strongly agree, agree, disagree, or strongly disagree with the following statements.
INTERVIEWER INSTRUCTION: IF RESPONDENT SEEMS CONFUSED BY THE USE OF THE WORD "MARRIAGE" OR IS HESITANT TO REPLY, INSTRUCT THE RESPONDENT TO ANSWER THE QUESTION BASED ON HIS/HER RELATIONSHIP WITH [BASE SPOUSE]

| Strongly <br> Agree | Agree | Disagree | Strongly <br> Disagree | REFUSED | DON'T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KNOW |  |  |  |  |  |

((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ )
D1a. [SPOUSE] understands that there are times when I do not feel like talking, and times when I do.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1b. SKIP IF DIVORCED OR SEPARATED: If I was unhappy, I $\square_{1}$ $\square_{2}$ $\square_{3}$ $\square_{4}$ $\square_{7}$ $\square_{8}$ would stay married to [SPOUSE] because my family expects it.
((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1c. SKIP IF DIVORCED OR
SEPARATED: I trust [SPOUSE] completely.

| Strongly <br> Agree | Agree | Disagree | Strongly <br> Disagree | REFUSED | DON'T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KNOW |  |  |  |  |  |

((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1d. SKIP IF DIVORCED OR SEPARATED: [SPOUSE] knows $\square 1$ $\square_{2}$ $\square_{3}$ $\square_{4}$ $\square_{7}$ $\square_{8}$ and understands me.
((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99 and FC Status $\ddagger=3$ )
D1e. SKIP IF DIVORCED OR SEPARATED: If I was unhappy, I would stay married to [SPOUSE] because of our children.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1f. SKIP IF DIVORCED OR SEPARATED: I am comfortable expressing how I feel about sex with [SPOUSE].
( $(B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1g. SKIP IF DIVORCED OR SEPARATED: I can count on [SPOUSE] to be there for me.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $=6$ )
D1h. It is hard for me to talk with [SPOUSE] about the important things in our lives.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1i. SKIP IF DIVORCED OR SEPARATED: I believe this relationship can be strong even through hard times.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1j. SKIP IF DIVORCED OR SEPARATED: I view our marriage as lifelong. INTERVIEWER NOTE: IF RESPONDENT SEEMS$\square_{2}$
$\square_{3}$
$\square_{4}$
$\square_{7}$
$\square_{8}$
CONFUSED BY THE USE OF THE WORD MARRIAGE OR RESP IS HESITANT TO REPLY, INSTRUCT THE RESP TO ANSWER THE QUESTION BASED ON HIS/HER RELATIONSHIP WITH <SPOUSE>
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ )
D1k. I feel appreciated by [SPOUSE].
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D1I. SKIP IF DIVORCED OR SEPARATED: [SPOUSE] expresses love and affection towards me.

D1a-D1I - MISSING=9

D2. The following questions are about how you and [SPOUSE] feel about your children. When answering these questions please include your biological, adoptive, and stepchildren. Please tell me if you strongly agree, agree, disagree, or strongly disagree with the following statements.

|  | Strongly Agree | Agree | Disagree | Strongly Disagree | REFUSED | $\begin{aligned} & \text { DON'T } \\ & \text { KNOW } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ and FC_Status=1,2) |  |  |  |  |  |  |
| D2a. SKIP IF NO FC, NO REPLACEMENT, NO CHILDREN IN HH [SPOUSE] takes his/her responsibilities for our children seriously. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6 and FC_Status=1,2) |  |  |  |  |  |  |
| D2b. SKIP IF NO FC, NO <br> REPLACEMENT, NO CHILDREN <br> IN HH I could/can raise our kids just as well without [SPOUSE]. | $\square$ | $\square \square_{2}$ | $\square \square_{3}$ | $\square 4$ | $\square \square_{7}$ | $\square_{8}$ |

D2a-D2b - MISSING=9

D3. These next questions are about extended family, such as grandparents, parents, sisters and brothers, aunts and uncles, and so on. Please tell me if you strongly agree, agree, disagree, or strongly disagree.

| Strongly <br> Agree | Agree | Disagree | Strongly <br> Disagree | REFUSED | DON'T |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KNOW |  |  |  |  |  |

((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D3a. SKIP IF DIVORCED OR SEPARATED I can count on [SPOUSE] to help with whatever problems my extended family faces.
((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D3b. SKIP IF DIVORCED OR SEPARATED [SPOUSE] respects and values my extended family.
$\square_{1}$
$\square_{2}$
$\square_{3}$
$\square_{4}$
$\square_{7}$
$\square_{8}$
$\square_{1}$
$\square_{2}$
$\square_{3}$ $\square_{4}$ $\square_{7}$ $\square_{8}$

## D3a-D3b - MISSING=9

In the last month...[READ ITEM]...Was it daily, 2-3 times a week, weekly, monthly or never?

Was it...

|  | 2-3 times <br> Daily <br> a week | Weekly | Monthly | Never | REFUSED | DON'T <br> KNOW |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
D4a_New. SKIP IF DIVORCED OR SEPARATED:...How often did you $\square_{1} \quad \square_{2}$ $\square_{2}$ $\square_{3}$ $\square_{4}$ $\square_{5}$ $\square_{7}$ $\square_{8}$ and [SPOUSE] spend time together as a couple alone?
( $(B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6 and FC_Status=1,2)
D4b_new. SKIP IF NO FC, NO REPLACEMENT, NO CHILDREN IN HH How often did you and [SPOUSE] spend time together with your children?

## D4a-D4b - MISSING=9

D5. In the last month, please indicate whether each of the following happened often, sometimes, hardly ever, or never.

|  | Often | Sometimes | Hardly ever | Never | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6) <br> D5a. [SPOUSE] listened to me when I need someone to talk to. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |


|  | Often | Sometimes | Hardly ever | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag¥6) <br> D5b. [SPOUSE] and I talked about things that happened during our day. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99) <br> D5c. SKIP IF DIVORCED OR SEPARATED: [SPOUSE] and I have similar views about what is important in life. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99) <br> D5d. SKIP IF DIVORCED OR SEPARATED: I did things to show [SPOUSE] I value him/her. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99) <br> D5e. SKIP IF DIVORCED OR SEPARATED: We enjoyed doing even ordinary, day-to-day things together. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag¥ $\ddagger$ ) <br> D5f. Small issues suddenly became big arguments. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6) <br> D5g. [SPOUSE] and I were good at working out our differences. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square 7$ | $\square_{8}$ |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98$ ) and marriage_flag $\ddagger$ 6) <br> D5h. When we argued, past hurts get brought up again. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square 7$ | $\square_{8}$ |
| ((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag¥6) <br> D5i. [SPOUSE] was rude and mean to me when we disagreed. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square 7$ | $\square_{8}$ |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98$ ) and marriage_flag $\ddagger 6$ ) <br> D5j. SPOUSE] seemed to view my words or actions more negatively than I mean them to be. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag¥6) <br> D5k. I feel respected even when we disagree. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |


|  | Often | Sometimes | Hardly ever | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98$ ) and marriage_flag $\ddagger$ 6) <br> D5I. During arguments [SPOUSE] and I were good at taking breaks when we need them. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square 8$ |
| ((B3 $=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6) <br> D5m. [SPOUSE] and I stayed mad at one another after an argument. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square 8$ |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\ddagger 6$ ) <br> D5n. Our arguments became very heated. | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square 8$ |

D6. In the last month, when you had a serious disagreement with [SPOUSE], how often did you...

|  | Often | Sometimes | Hardly ever | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ ) | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square 8$ |
| D6a. Just kept your thoughts to yourself? <br> ((B3 $1=5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flagキ6) <br> D6b. Discussed your disagreements respectfully? | $\square 1$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ and FC_Status=1,2) <br> D6c. SKIP IF NO FC, NO <br> REPLACEMENT, NO CHILDREN <br> IN HH Argued in front of the children? | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| ( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag $\neq 6$ ) <br> D6d. Worked together to find a resolution? | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

## D6a-D6d - MISSING=9

D7: How satisfied are you with [INSERT ITEM]? Are you very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied?

( $B 3 \neq 5,97,98$ and $B 4 \neq 5,97,98$ ) and marriage_flag $\neq 6$ )
D8: In the last month, how often did you and [SPOUSE] have a serious disagreement? Was it often, sometimes, hardly ever, or never?


## CATI NOTE:

## IF MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED, THEN SKIP TO SECTION E

((B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98)$ and marriage_flag=1,2,98,99)
The next question is about how happy or unhappy you are with your marriage.

> D9: All things considered, on a scale from 1 to 7 , where 1 is "completely unhappy" and 7 is "completely happy," how happy are you with your marriage to [SPOUSE]?

## INTERVIEWER INSTRUCTION: IF RESPONDENT SEEMS CONFUSED BY THE USE OF THE WORD "MARRIAGE" OR IS HESITANT TO REPLY, INSTRUCT THE RESPONDENT TO ANSWER THE QUESTION BASED ON HIS/HER RELATIONSHIP WITH [BASE SPOUSE]

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |

$\qquad$

## BASE D9: IF MARITAL FLAG=MARRIED

## Section E: Participation in Services

## Marriage Education Services

Now I will be asking about experiences you've had and services you may have received since [RAD].
(Marriage_flagキ6)
E1. Since [RAD], have you been enrolled in any program(s) where you received services or counseling to help you work on your marriage or your relationship? Please include any services you got from [PROGRAM NAME].
$\qquad$ (E1=2,7,8)

E1a. Since [RAD], have you received marriage education, marriage counseling or mentoring services? Please include any services you got from [PROGRAM NAME].


## (E1=1 or E1A=1)

E2. Now we are interested in hearing about the services you received that took place in a group setting. Since [RAD], how many different organizations did you go to for classes, workshops, group sessions, or retreats to improve your marriage or your relationship with your spouse?

INTERVIEWER: RECORD TOTAL NUMBER OF PROGRAMS. IF DON'T KNOW PROBE FOR BEST ESTIMATE

Total number of programs: $\qquad$
REFUSED
DON'T KNOW

CATI NOTE: IF DON'T KNOW OR REFUSED, LOOP BACK TO QUESTION E1a. RANGE FOR TOTAL NUMBER OF PROGRAMS IS FROM 1 TO 15.

IF E2 IS MORE THAN 2: We are only interested in the two programs you attended right after [RAD].

For the <first/second > program you attended right after [RAD],
(E3_X) (E2 $\geq 1$ )
E3. What is the name of the organization or program that provided this class or workshop?

PROBE: Where was this class, workshop or group held?
Name of organization: $\qquad$
REFUSED
DON'T KNOW $\qquad$

## CATI NOTE:

RANGE FOR TOTAL NUMBER OF PROGRAMS IS FROM 1 TO 15. QUESTIONS E4 - E5 SHOULD BE ASKED FOR EACH PROGRAM - UP TO 2 PROGRAMS.
IF RESPONDENTS ANSWER MORE THAN 2 DIFFERENT PROGRAMS, CATI WILL LOOP FOR 2 PROGRAMS ONLY.

## DISPLAY TEXT FOR FIRST, SECOND, BASED ON THE ANSWER TO QUESTION

 E2.(E4_X) (E2 21 )
E4. [IF FIRST PROGRAM ATTENDED/ONLY PROGRAM ATTENDED] How many times did you attend these classes or workshops since [RAD]? Was it...
[IF SECOND PROGRAM ATTENDED] For the second program that you participated in after [RAD], how many times did you attend the classes or workshops?

| Once | $\square_{1}$ |
| :---: | :---: |
| Two to five times | $\square_{2}$ |
| Six to 10 times | 3 |
| More than 10 times | ${ }_{4}$ |
| REFUSED | ${ }^{7}$ |
| DON'T KNOW. | $\square_{8}$ |

(E5_X) (E2 2 1)
E5. How often did you attend with your spouse? Was it...
Always

$\qquad$ ..... $\square$
Sometimes ..... $\square \square_{2}$
Seldom ..... $\square 3$
Never ..... $\square_{4}$
REFUSED ..... $\square_{7}$
DON'T KNOW. ..... $\square 8$
CATI NOTE: BASED ON \# OF PROGRAMS, LOOP BACK THRU E4-E5 TO COLLECT INFORMATION FOR SECOND PROGRAM IF APPLICABLE. QUESTION E6 SHOULD BE ASKED AFTER GOING THROUGH E4-E5 FOR FIRST TWO PROGRAMS ATTENDED.
(E1=1 OR E1A=1)E6. Other than the <DISPLAY ANSWER FROM QUESTION E2> programs youmentioned, did you go to any other organizations to receive classes, workshops,groups, or retreats to help you work on your marriage or relationship with yourspouse?
Yes (SKIP TO QUESTION E6a) ..... $\square 1$
No (SKIP TO BOX A) ..... $\square_{2}$
REFUSED (SKIP TO BOX A) ..... $\square_{7}$
DON'T KNOW (SKIP TO BOX A) ..... $\square 8$
(E6=1)
E6a. Since [RAD], and in addition to the <DISPLAY ANSWER FROMQUESTION E2> you mentioned before, how many of these differentorganizations did you receive services from?INTERVIEWER: RECORD TOTAL NUMBER OF PROGRAMS. IF DON'TKNOW PROBE FOR BEST ESTIMATE

Total number of programs: $\qquad$
REFUSED $\qquad$DON'T KNOW
$\qquad$

CATI NOTE: IF DON'T KNOW OR REFUSED, LOOP BACK TO QUESTION E6.

CATI NOTE: IF E6=YES, GO TO E6A AND RECORD NEW NUMBER OF PROGRAMS AND ASK THE E4-E6 SERIES AGAIN FOR THE NEW PROGRAM IF E2 + E6A $\leq$ 2. ONCE NEW INFO IS COLLECTED, SKIP TO BOX A.

IF WE HAVE ALREADY COLLECTED INFORMATION ON 2 PROGRAMS, SKIP TO LOGIC FOR BOX A.

(RA=2 AND (E1=1 OR E1A=1))
E7. About how many of the marriage education workshops at <PROGRAM NAME> that you were assigned to, did you actually attend? Was it...


## (E8_cX) (RA=2 AND (E1A=2 OR E7=[1 OR 2]))

E8. What are the reasons that you didn't attend? DO NOT READ LIST AND CHECK ALL THAT APPLY

| PROBE: Of the following, was it because ... |  |
| :--- | :--- |
| E8_C01 | OF THE HEALTH OF YOUR SPOUSE, CHILD, OR YOURSELF? |
| E8_C02 | YOU HAD TROUBLE FINDING CHILD CARE? |
| E8_C03 | YOU HAD TROUBLE FINDING TRANSPORTATION? |
| E8_C04 | OF A FAMILY ISSUE? |
| E8_C05 | OF A PROBLEM WITH YOUR HOUSING? |
| E8_C06 | OF A CONFLICT WITH YOUR JOB, SCHOOL, OR TRAINING |
| E8_C07 | OF A CONFLICT WITH YOUR SPOUSE'S JOB, SCHOOL OR |
| E8_C08 | OFAINING PROGRAM? |
| E8_C09 | YOU DIDN'T WANT TO PARTICIPATE? |
| E8_C10 | YOUR SPOUSE DIDN'T WANT TO PARTICIPATE? |
| E8_C11 | YOU DIDN'T LIKE THE PROGRAM? |
| E8_C12 | YOUR SPOUSE DIDN'T LIKE THE PROGRAM? |
| E8_C13 | YOU OR YOUR SPOUSE DIDN'T HAVE TIME? |
| E8_C14 | YOU AND YOUR SPOUSE SPLIT UP? |
| E8_C15 | A FEELING THAT ATTENDANCE AT GROUP MEETING WAS |
| E8_C16 | YOU WERE HAVING TOO MUCH TROUBLE WITH YOUR MARRIAGE? |
| E8_C95 | OTHER (SPECIFY) |
| E8_C97 | REFUSED |
| E8_C98 | DON'T KNOW |



E8_C01 - E8_C98 - MISSING=9

SKIP E9 IF E1a=NO $\downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow \downarrow$
BASE FOR E9: SKIP E9 IF MARITAL FLAG=DIVORCED OR ANNULLED. ASK E9 FOR SEPARATED. WE ASK THIS QUESTION TO TREATMENT AND CONTROL.

E9. Are you currently receiving any services, including classes, workshops, retreats, or other group activities with or without your spouse, to help with your marriage or relationship?
Yes................................................................................................ $\square_{1}$
No ....................................................................................................... $\square_{2}$
REFUSED........................................................................................... $\square_{7}$
DON'T KNOW..................................................................................... $\square_{8}$
MISSING/PILOT DATA

Now we would like you to think about programs or places where you received one-onone services to help with your marriage or your relationship. These are services that you or your spouse may have received from a counselor or clergy. Some people call these one-on-one services marital therapy, counseling, or couples' counseling. Please do not include meetings that you, or you and your spouse had with individual staff at [PROGRAM NAME], such as meetings with your [FAMILY SUPPORT STAFF MEMBER: USE STAFF TITLE BY SITE].

## (MARRIAGE_FLAGキ6)

E10. Since [RAD], did you receive one-on-one services with just you and a counselor that may have included your spouse?

PROBE IF NEEDED: Some people call these one-on-one services marital therapy, counseling, or couples' counseling.

(E10=1)
E11. Since [RAD] at how many places did you receive one-on-one services?
INTERVIEWER: RECORD TOTAL NUMBER OF PROGRAMS. IF DON'T KNOW PROBE FOR BEST ESTIMATE

Total number of places: $\qquad$ $-2$

CATI NOTE:
RANGE FOR TOTAL NUMBER OF PROGRAMS IS FROM 1 TO 15.
IF RESPONDENTS ANSWER MORE THAN 2 DIFFERENT PROGRAMS, CATI WILL LOOP FOR 2 PROGRAMS ONLY.

## ASK E12 ONLY ABOUT THE FIRST PROGRAM ATTENDED. QUESTIONS E13 E14 SHOULD BE ASKED FOR EACH PLACE/PROGRAM. DISPLAY TEXT FOR FIRST, SECOND, BASED ON THE ANSWER TO E11.

## CATI NOTE: IF DON'T KNOW OR REFUSED, LOOP BACK TO QUESTION E11.

Now I am going to ask you a series of questions for each of the <DISPLAY ANSWER FROM E11> programs or places where you received one-on one services or counseling to help you work on your marriage or your relationship.

IF QUESTION E11 IS MORE THAN 2: We are only interested in the two programs you attended right after [RAD].

For the <first> place you received services,
( $E 11 \geq$ 1)
E12. What is the name of the place or program that provided these one-on-one services?

Name of place or program:
$\qquad$
(E13_X) $[\mathrm{X}=1-3] \quad(\mathrm{E} 11 \geq 1)$
E13. [IF FIRST PROGRAM ATTENDED/ONLY PROGRAM EVER ATTENDED] About how many times since [RAD] did you receive these one-on-one services to help you work on your marriage or your relationship? Was it...
[IF SECOND PROGRAM ATTENDED] For the second program, how many times since [RAD] did you receive these one-on-one services?
Once ..... $\square 1$
Two to five times ..... $\square_{2}$
Six to 10 times ..... $\square_{3}$
More than 10 times ..... $\square_{4}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square_{8}$
E14. How often did you attend this one-on-one service with your spouse? Was it..
Always ..... $\square_{1}$
Sometimes ..... - 2
Seldom ..... 3
Never ..... $\square_{4}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... 8
(E14_X) $[\mathrm{X}=1-3](E 11 \geq 1)$
CATI NOTE: BASED ON \# OF PROGRAMS, LOOP BACK THRU E12 - 14 TO COLLECT INFORMATION FOR EACH PLACE/PROGRAM, ONLY ASKING E12 ABOUT FIRST PROGRAM ATTENDED. QUESTION E15 SHOULD BE ASKED AFTER GOING THRU ALL THE PROGRAMS.
IF E15=YES, SKIP TO 15a, RECORD NEW NUMBER OF PLACES/PROGRAMS ANDASK THE E12 - E14 SERIES AGAIN FOR THE NEW PLACE/PROGRAM IFE11+E15a $\leq 2$.
IF WE HAVE ALREADY COLLECTED INFORMATION ON 2 PROGRAMS, SKIP TO PERCEPTION OF PROGRAM LOGIC.
(MARRIAGE_FLAGキ6 AND E10=1)E15. Other than the <DISPLAY ANSWER FROM E11> programs or places youmentioned, did you attend any other program to receive one-on-one services thatmay have included your spouse to help you work on your marriage orrelationship?
Yes ..... $\square_{1}$
No (SKIP TO E16) ..... 2
REFUSED (SKIP TO E16) ..... $\square 7$
DON'T KNOW (SKIP TO E16) ..... $\square$8
(E15=1)
E15a. Since [RAD] and in addition to the <DISPLAY ANSWER FROM E11>, at how many places did you receive these services?

INTERVIEWER: RECORD TOTAL NUMBER OF PROGRAMS. IF DON'T KNOW PROBE FOR BEST ESTIMATE

Total number of places: $\qquad$
REFUSED $\qquad$
$\qquad$

BASE FOR E16: SKIP E16 IF MARITAL FLAG=DIVORCED OR ANNULLED. ASK E16 FOR SEPARATED.
((MARRIAGE_FLAG=1,2,4,98,99) AND E10=1)
E16. Are you currently receiving any one-on-one services to help with your marriage or relationship?


## PERCEPTION OF PROGRAM

NOTE: IF PROGRAM GROUP, ASK E17.
IF CONTROL GROUP, SKIP TO E20

## (RA=2 and Marriage_Flagキ6)

Now l'd like to ask you some questions about the [PROGRAM NAME] program.
E17. When you think back on [PROGRAM NAME], did you ever...
Yes No REFUSED KNOW

E17a. Get help from a staff person, outside the group sessions, in practicing the relationship skills you learned in the group? (Probe: remind respondent that we are interested in services received from only [PROGRAM NAME])

E17b. Talk with a staff person at [PROGRAM NAME], outside of the group sessions, about issues in your marriage?
E17c. Talk with a staff person at [PROGRAM NAME] about other challenges facing your children or family?

E17d. Get help from a staff person in arranging child care, transportation, or other issues to help you attend the groups?

E17e. Have a staff person give you information or advice about referrals to services in the community that you or your family needed?

| Yes | No | REFUSED | DON'T |
| :--- | :--- | :--- | :--- |
| KNOW |  |  |  |

$\square_{1}$
$\square_{2}$
$\square_{7}$
$\square_{8}$
$\square_{1} \quad \square_{2} \quad \square_{7} \quad \square_{8}$
$\begin{array}{llll}\square_{1} & \square_{2} & \square_{7} & \square_{8}\end{array}$
$\square_{1} \quad \square_{2} \quad \square_{7} \quad \square_{8}$
$\square 1$
$\square_{2}$
$\square_{7}$ $\square_{8}$

## (RA=2 and Marriage_Flagキ6)

E18. Overall, thinking back on the whole [PROGRAM NAME], including the groups and all the other activities, how helpful was the program to you? Using a scale from 1 to 10 where 1 is not very helpful and 10 is very helpful, how would you rate how helpful the program was to you?


## (RA=2 and Marriage_Flagキ6)

E19. If you had to pick one thing that you liked best about the program, what would that be? (DO NOT READ CHOICES ALOUD, CHECK ONE)
THE GROUPS ..... $\square$MY GROUP LEADER
$\qquad$MY FAMILY SUPPORT WORKER/FAMILY SUPPORT COORDINATOR /FAMILY ADVOCATE
$\qquad$$\square 3$
THE STAFF ..... $\square_{4}$THE WHOLE THING$\square 5$
SPENDING TIME WITH OTHER COUPLES ..... $\square_{6}$
SETTING ASIDE TIME WITH MY SPOUSE

$\qquad$ ..... $\square_{7}$
ACCESS TO OTHER SERVICES WE NEEDED

$\qquad$NOTHING, DIDN'T LIKE THE PROGRAM ....................................... $\square_{9}$
DIDN'T ATTEND ..... - 10
OTHER (SPECIFY ..... )............................... $\square 95$
REFUSED ..... 97
DON'T KNOW ..... 98

E20. Now we are asking about other types of services you might have received since [RAD].

There are many kinds of programs and organizations that help people find jobs, training, food, housing, childcare, health care, and help with other challenges they may face. For each of the following, please tell me whether you have spoken with anyone from an agency, program, or school, or with a social worker, case manager or counselor offering these kinds of help since [RAD]?

Since [RAD], did you did you speak to anyone about...

|  | Yes | No | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: |
| (Marriage_Flagキ6 and FC_Status=1 or 2) <br> E20a. Participating in any classes, groups, or workshops to help you improve your parenting skills? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| (Marriage_Flagキ6) <br> E20b. Participating in a job search or job training program? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| (Marriage_Flag¥6) <br> E20c. Participating in classes to finish high school, get a GED, or go to college? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| (Marriage_Flag¥6) <br> E20d. Taking classes to learn English? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| (Marriage_Flag¥6) <br> E20e. Getting services to help you with anger management or domestic violence issues? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |

Since [RAD], did you did you speak to anyone about...

|  | Yes | No | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: | :---: |
| (Marriage_Flag¥6) |  |  |  |  |
| E20f. Getting services to help you deal with a drug or alcohol problem? | $\square_{1}$ | $\square$ | $\square 7$ | $\square 8$ |
| (Marriage_Flag¥6 and FC_Status=1 or 2) |  |  |  |  |
| E20g. Getting help finding or paying for child care while you or your spouse worked? | $\square_{1}$ | $\square$ | $\square 7$ | $\square_{8}$ |
| (Marriage_Flagキ6) <br> E20h. Getting help finding a place to live? | $\square$ | $\square$ | $\square_{7}$ | $\square_{8}$ |
| (Marriage_Flag¥6) |  |  |  |  |
| E20i. Getting help in receiving Food Stamps, TANF, Medicaid, or medical care? | $\square_{1}$ | $\square$ | $\square 7$ | $\square 8$ |
| (Marriage_Flag¥6) |  |  |  |  |
| E20j. Getting help handling a financial emergency such as a possible eviction or if your car broke down, etc.? | $\square_{1}$ | $\square$ | $\square 7$ | $\square 8$ |
| (Marriage_Flag¥6) |  |  |  |  |
| E20k. Getting services to help you deal with mental health issues? | $\square_{1}$ | $\square \square_{2}$ | $\square_{7}$ | $\square_{8}$ |

```
E20a-E20k - Missing=9
```


## Section F: Co-Parenting and Parenting

CATI NOTE: BASE FOR F1: BASE ALL (HUSBAND AND WIFE)
IF FC STATUS=1, ASK ALL QUESTIONS
IF FC STATUS=2, ASK ALL QUESTIONS EXCEPT F5-F11 (WITH AGE LOGIC) IF FC STATUS=3, SKIP TO SECTION G

## Aggravation

```
(FC Status=1 or 2)
```

The next set of questions are about parenting.
F1. Please tell me if you strongly agree, agree, disagree, or strongly disagree with the following statements.


F1a-F1d - Missing=9

CATI NOTE:
IF MARITAL FLAG=6 WIDOW, SKIP TO F5
IF B3 OR B4 IS 5 "HARDLY EVER OR NEVER", 7 REFUSE OR 8 DK, SKIP TO F5

IF MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED, THEN SKIP ITEMS WHERE INDICATED "SKIP IF DIVORCED OR SEPARATED." OTHERWISE, IF MARITAL FLAG=MARRIED, ASK ALL THE QUESTIONS IN SECTION F.

## (FC_Status=1 or 2 and MARRIAGE_FLAGキ6 and (B3¥5,97,98 and B4¥5,97,98))

F2. The next set of questions are about how parents work together in raising their child(ren). Which of the following statements best describes your relationship with [SPOUSE] when it comes to parenting?
We get along very well

$\qquad$ ..... $\square$We get along okay
$\qquad$We do not get along well at all
$\qquad$REFUSED
$\qquad$
$\qquad$MISSING
$\qquad$
(FC_Status=1 or 2 and MARRIAGE_FLAG $\neq 6$ and ( $B 3 \neq 5,97,98$ and B4 $\neq 5,97,98$ ))
F3. For each of these items, do you strongly agree, agree, disagree, or strongly disagree with the statement?

F3a. When there is a problem with the child(ren), [SPOUSE] and I work out a good solution together.

F3b. [SPOUSE] acts like the kind of parent I want for my child(ren).

F3c. When I'm having a rough day with the child(ren), I can turn to [SPOUSE] for support and advice.

F3d. When I have to make rules for the child(ren), [SPOUSE] backs me up.

| STRONGLY <br> AGREE | AGREE | DISAGREE | STRONGLY <br> DISAGREE | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
|  |  |  |  |  |  |
| $\square$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
|  |  |  |  |  |  |

F3a-F3d - Missing=9

## (FC_Status=1 or 2 and MARRIAGE_FLAG $\neq 6$ and (B3 $\ddagger 5,97,98$ and B4 $\neq 5,97,98$ ))

F4. Now I would like to read you a list of issues that parents may have disagreements about. For each one, please tell me how often you and [SPOUSE] disagree.

Would you say you disagree about ...

|  | HARDLY <br> NEVER | EVER | SOMETIMES | OFTEN | REFUSED |
| :---: | :---: | :---: | :---: | :---: | :---: | | DON'T |
| :---: |
| KNOW |


| F4b.The activities that the child(ren) <br> participate in | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F4e.How money is spent on the <br> child(ren) | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F4f. Who does childcare tasks | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F4g.The amount of time each of you <br> spend with the child(ren) | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

F4a-F4g - Missing=9

Now, l'd like to ask you some questions about [FOCAL CHILD]...

## NOTE: IF FOCAL CHILD IS LESS THAN 2 YEARS OLD (24 months), THEN SKIP TO F6 <br> IF FC STATUS=1, ASK F5-F11 (WITH AGE SKIP LOGIC) IF FC STATUS=2, GO TO SECTION G <br> (FC STATUS=1 AND FOCALCHILD_NODOB_QU=3-10) <br> F5. During the past month, how often have you sent a card, letter, e-mail, text message, or phone call to [FOCAL CHILD]? Was it...

$$
\begin{aligned}
& \text { Everyday or nearly every day } \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ \\
& \square
\end{aligned}
$$

(FC STATUS=1)
F6. During the past month, about how often did you spend one or more hours a day with [FOCAL CHILD]? Was it...
Everyday or nearly every day ..... $\square_{1}$
A few times a week ..... $\square_{2}$
A few times in the last month ..... $\square_{3}$
Only once or twice, or

$\qquad$ ..... $\square_{4}$
Not at all. ..... $\square_{5}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square 8$
MISSING ..... 9
NOTE: IF F5 AND F6 BOTH=5 (PARENT DOES NOT HAVE CONTACT AND DOESN'T SEE FOCAL CHILD), SKIP TO G1.

IF FOCAL CHILD IS 5 YEARS TO 8 YEARS, 11 MONTHS, SKIP TO F8. IF FOCAL CHILD IS 9 YEARS TO 15 YEARS, SKIP TO F9.

Involvement/Engagement (4 years, 11 months or younger)
IF [FOCAL CHILD] IS 4 YEARS 11 MONTHS OLD OR YOUNGER ASK ITEMS F7a F7f.
(FC_STATUS=1 AND (F5キ5 OR F6¥5) AND FOCALCHILD_NODOB_QU=1-5)
F7. About how often in the past month have you...

|  | EVERY <br> DAY OR <br> ALMOST <br> EVERY <br> DAY | A FEW TIMES A WEEK | A FEW <br> TIMES <br> THIS <br> PAST <br> MONTH | NEVER | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F7a. Played inside with games or toys with [FOCAL CHILD]? | $\square_{1}$ | $\square \square_{2}$ | $\square 3$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F7b. Taken [FOCAL CHILD] for a walk or to play outside? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square 7$ | $\square_{8}$ |
| F7c. Sung songs or nursery rhymes with [FOCAL CHILD]? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F7d. Read books or told stories to [FOCAL CHILD]? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F7e. Dealt with [FOCAL CHILD] when he/she did something wrong? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

(F7e=4)
IF F7e is 'Never,' then ask: Was this because [FOCAL CHILD] did not do anything wrong in the past
month? $\qquad$
NOTE: SKIP TO NOTE BEFORE F10.

F7a-F7e - Missing=9

## Involvement/Engagement (5 years to 8 years, 11 months)

## IF [FOCAL CHILD] IS 5 YEARS - 8 YEARS 11 MONTHS OLD ASK ITEM F8a - F8e.

## (FC_STATUS=1 AND (F5\#5 or F6F5) AND FOCALCHILD_NODOB_QU=6 or 7)

F8. About how often in the past month have you... was it..?

|  |  | Every day or almost every day | A few times a week | A few times this past month | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F8a. | Talked with [FOCAL CHILD] about school, grades, and/or other things that (he/she) does at school? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F8b. | Spent time with [FOCAL CHILD] doing one of (his/her) favorite activities, like shopping, playing a sport, going to a movie, watching TV, or playing videogames? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square 8$ |
| F8c. | Talked with [FOCAL CHILD] about (his/her) friends? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square 7$ | $\square_{8}$ |
|  | Read a book with [FOCAL CHILD] or talked about a book he/she was reading? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F8e. | Dealt with [FOCAL CHILD] when he/she did something wrong? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

(F8e=4)
IF F8e is 'Never,' then ask: Was this because [FOCAL CHILD] did not do anything wrong in the past
month?
7 REFUSED
8 DON'T KNOW
NOTE: SKIP TO NOTE BEFORE F10.
INTERVIEWER NOTE: IF RESPONDENT OFFERS THAT THEIR CHILD HAS NOT BEEN IN SCHOOL IN THE LAST THREE MONTHS, THEN CODE AS NEVER, BUT COMPLETE A PROBLEM SHEET.
F8a-F8e - Missing=9

## Involvement/Engagement (9 years to 15 years)

IF [FOCAL CHILD] IS 9 YEARS - 15 YEARS OLD ASK ITEM F9a - F9e.
(FC_STATUS=1 and (F5 $\ddagger 5$ or $F 6 \neq 5$ ) AND FOCALCHILD_NODOB_QU=8 or 9)
F9. About how often in the past month have you:
Was it....


## (F9e=4)

IF F9e is 'Never,' then ask: Was this because [FOCAL CHILD] did not do anything wrong in the past
month? $\qquad$
7 REFUSED
8 DON'T KNOW
NOTE: SKIP TO NOTE BEFORE F10.
INTERVIEWER NOTE: IF RESPONDENT OFFERS THAT THEIR CHILD HAS NOT BEEN IN SCHOOL IN THE LAST THREE MONTHS, THEN CODE AS NEVER, BUT COMPLETE A PROBLEM SHEET.

## Monitoring/Supervision

NOTE: IF [FOCAL CHILD] IS 5 YEARS OR OLDER ASK ITEM F10a - F10d, OTHERWISE SKIP TO F11.
(FC_STATUS=1 and (F5 $\ddagger 5$ or $F 6 \neq 5$ ) AND FOCALCHILD_NODOB_QU=6-10)
F10. Over the past month, how often did you know...

Would you say it is...

|  | Always | Usually | Sometimes | Almost never | Never | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F10a. Where (FOCAL CHILD) spent his or her free time? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| F10b. How (FOCAL CHILD) spent his or her money or allowance? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| F10c. Whether (FOCAL CHILD) had finished his/her schoolwork or studying? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square 5$ | $\square_{7}$ | $\square_{8}$ |
| F10d. Which TV programs (FOCAL CHILD) watched? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square 4$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |

F10a-F10d - Missing=9

INTERVIEWER NOTE: IF RESPONDENT OFFERS THAT THEIR CHILD HAS NOT BEEN IN SCHOOL IN THE LAST THREE MONTHS, THEN CODE F10c AS NEVER, BUT COMPLETE A PROBLEM SHEET.

## Warmth and Harsh Discipline

F11. ((F5\#5 OR F6 $\ddagger 5$ ) AND FC STATUS=1)
Over the past month, how often have you... Was it...

|  | Every day or almost every day | A few times a week | A few times this past month | Never | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F11a. Told [FOCAL CHILD] that you love (him/her)? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F11b. Praised [FOCAL CHILD] or told (him/her) that you appreciated something that (he/she) did? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square 4$ | $\square \square_{7}$ | $\square_{8}$ |
| F11c. Laughed with (FOCAL CHILD)? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| F11d. Yelled, shouted, screamed at, or threatened [FOCAL CHILD] because you were mad at (him/her)? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square 4$ | $\square \square_{7}$ | $\square_{8}$ |


|  | Every day or almost every day | A few times a week | A few times this past month | Never | REFUSED | $\begin{aligned} & \text { DON’T } \\ & \text { KNOW } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F11e. Hit, spanked, grabbed or used physical punishment with [FOCAL CHILD]? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

F11a-F11e - Missing=9

## Section G: Non-Resident Involvement

IF MARITAL FLAG=MARRIED/LIVING TOGETHER and B2=1-3, SKIP TO SECTION H.

IF MARITAL FLAG=MARRIED/LIVING APART, DIVORCED, SEPARATED, ANNULLED, AND LIVESWITHFOCAL=1 AND FC AGE=>25 MONTHS THEN GO TO G1 AND G2.<br>IF MARITAL FLAG=MARRIED/LIVING APART, DIVORCED, SEPARATED, ANNULLED, AND LIVESWITHFOCAL=1 AND FC AGE<25 MONTHS, THEN SKIP G1 AND ASK G2.

IF MARITAL FLAG=MARRIED/LIVING APART, DIVORCED, SEPARATED, ANNULLED, AND LIVESWITHFOCAL=2 THEN SKIP TO G3.

IF MARITAL FLAG=WIDOW, SKIP TO SECTION I.
IF FC STATUS=1, ASK ALL QUESTIONS, BASED ON ABOVE LOGIC.
IF FC STATUS=2,3 SKIP TO SECTION H.
(LIVESWITHFOCAL=1 and FOCALCHILD_NODOB_QU=(3,4,5,6,7,8,9,10) and Marriage_Flag= 2,3,4,5,98,99)
G1. During the past month, how many times has [SPOUSE] sent a card, letter, email, text message, or phone call to [FOCAL CHILD]? Was it... [READ LIST]

| Everyday or nearly every day ............................................................. $\square_{1}$ |  |
| :---: | :---: |
| A few times a week | 2 |
| A few times in the last month. |  |
| Only once or twice, or ............................................................... $\square_{4}$ |  |
| Not at all................................................................................ $\square_{5}$ |  |
| REFUSED............................................................................. $\square_{7}$ |  |
| DON'T KN | $\square_{8}$ |

CATI NOTE: G1 LOGIC IS BOTH MARITAL STATUS (AS SPECIFIED ABOVE) AND FC AGE=>25 MONTHS

G2. During the past month, about how often did [SPOUSE] spend one or more hours with [FOCAL CHILD]? Was it...
Everyday or nearly every day ..... $\square_{1}$
A few times a week ..... $\square_{2}$
A few times in the last month ..... $\square{ }^{\square}$
Only once or twice, or ..... $\square_{4}$
Not at all. ..... $\square 5$
REFUSED ..... $\square_{7}$
DON'T KNOW. ..... $\square_{8}$
MISSING ..... $\square 9$
CATI NOTE: G2 LOGIC IS BOTH MARITAL STATUS (AS SPECIFIED ABOVE) ANDNO AGE SPECIFICATION FOR FC.
Child Support Payment (all ages)
CATI AND TESTING NOTES:
LOGIC FROM G1 AND G2 IS APPLICABLE TO SKIP OR GO TO G3.IF MARITAL FLAG=MARRIED/LIVING APART, DIVORCED, SEPARATED,ANNULLED, AND LIVESWITHFOCAL=2 THEN ASK G3.
(LIVESWITHFOCAL=2 and Marriage_Flag=2,3,4,5,98,99)
G3. Since you stopped living with [FOCAL CHILD], have you ever contributed moneyor child support for [FOCAL CHILD]'s upbringing?
Yes ..... $\square_{1}$
No (SKIP TO SECTION I) ..... $\square_{2}$
REFUSED (SKIP TO SECTION I) ..... $\square_{7}$
DON'T KNOW (SKIP TO SECTION I) ..... $\square 8$
(G3=1)

G4. Thinking about child support, do you have a legal agreement, an informal agreement, or no agreement at all for [FOCAL CHILD] with [SPOUSE]?
Legal agreement

$\qquad$

$\square$
Informal agreement ..... 2
No agreement ..... 3

REFUSED
DON'T KNOW
DONTKNOW............................................................................... $\square_{8}$

## (G3=1)

G5. Last month, how much money for child support did you give for [FOCAL CHILD]? Value range: 0-9999,-1, -2

Record Response: $\qquad$
$\qquad$ DON'T KNOW $\qquad$-2

CATI NOTE: RECORD AMOUNT WITHOUT CENTS. VALUES: 0-9999, -1, -2
(G3=1)
G6. In the last month, have you spent money on [FOCAL CHILD]'s?

## G6a. Clothes?

G6b. Medicine/health care?

| Yes | No | REFUSED | DON'T <br> KNOW |
| :---: | :---: | :---: | :---: |
| $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| $\square$ | $\square_{2}$ | $\square \square_{7}$ | $\square_{8}$ |
| $\square$ | $\square_{2}$ | $\square$ | $\square_{7}$ |
| $\square$ | $\square_{2}$ | $\square$ | $\square$ |

# Section H: Physical and Domestic Violence 

IF MARITAL FLAG=WIDOW, SKIP TO SECTION I

## IF MARITAL FLAG=DIVORCED, SEPARATED, ANNULLED, THEN SKIP ITEMS WHERE INDICATED "SKIP IF DIVORCED OR SEPARATED."

The next questions are about some difficult issues and decisions people sometimes have to deal with in their marriage. Please remember, if we come to any question you don't want to answer, just let me know and we'll skip it.

The next set of questions asks you about your marriage and your relationship with your spouse. Please remember that all the answers you give us will be kept secure and strictly confidential.

## (Marriage_Flag¥6)

H1. Would you like to answer these questions so that others cannot hear what you are saying?

| Yes [ASK H1a) |  |
| :---: | :---: |
| No... Okay. Let's continue with the survey - GO TO H2. |  |
| REFUSED [ASK H1a) | $\square_{7}$ |
| DON'T KNOW [ASK H1a) | - 8 | (H1=1, 7, 8)

H1a. To help you feel more comfortable, you can read the questions and enter the answers directly into the laptop. I will be here to assist you with the laptop. Would you like to do this?

Yes $\qquad$
No... Okay. Let's continue with the survey - GO TO H2............ $\square_{2}$
REFUSED... It's turned on. Tell me when you want to use it. Here's the first question (GO TO H2) ........................................... $\square_{7}$ DON'T KNOW.................................................................................. $\square_{8}$ MISSING.......................................................................................... ■ 9

NOTE TO INTERVIEWER: PLEASE POSITION THE LAPTOP SO THAT YOU AND RESPONDENT CAN SEE THE SCREEN.
(H1a=1)
H1b. Let's try a practice question first. Please read the question to yourself and press the number that goes with the answer you choose. If you want
to change your answer at any time, just let me know. How much do you agree with the following statement: Strawberry ice cream is better than chocolate ice cream? Press 1 if you strongly agree, press 2 if you somewhat agree, press 3 if you somewhat disagree, and press 4 if you strongly disagree.

|  | Strongly Agree. |
| :---: | :---: |
|  | Somewhat Agree |
|  | Somewhat Disagree ............................................................. $\square$ |
|  | Strongly Disagree |
|  | REFUSED.. |
|  | DON'T KNOW. |
|  | MISSING. |

H1c. According to my computer, you entered [FILL WITH ANSWER]. If you want to, you can change your answer to any of the questions; just let me know before you re-enter the number. Okay, now we'll go on with the survey.

CATI NOTE: IF RESPONDENT VOLUNTEERS THAT SHE/HE BEEN DIVORCED MORE THAN 3 MONTHS AGO, QUESTIONS H2, H3, H5, H6 SHOULD BE SKIPPED OUT. IF THIS CODE IS SELECTED IN ANY OF THESE QUESTIONS, THEN SKIP TO SECTION I.

## INTERVIEWER INSTRUCTION FOR H2 and H3: <br> IF RESPONDENT SEEMS CONFUSED BY THE USE OF THE WORD "MARRIAGE" OR IS HESITANT TO REPLY, INSTRUCT THE RESPONDENT TO ANSWER THE QUESTION BASED ON HIS/HER RELATIONSHIP WITH [BASE SPOUSE]

## (MARRIAGE_FLAG¥6)

H2. In the last three months, have you thought about getting services or counseling to help with your marriage? IF RESPONDENT SEEMS CONFUSED ABOUT THE USE OF THE WORD "MARRIAGE" OR IS HESITANT TO REPLY, INSTRUCT THE RESP TO ANSWER THE QUESTIONS BASED ON HIS/HER RELATIONSHIP WITH BASE SPOUSE.
Yes................................................................................................... $\square 1$
No ...................................................................................................... $\square_{2}$
DIVORCED MORE THAN 3 MONTHS AGO..................................... $\square_{3}$
REFUSED ..... $\square_{7}$
DON’T KNOW ..... 8
(H2 $=3$ and Marriage_Flagキ6)
H3. In the last three months, have you ever thought your marriage was in trouble?IF RESPONDENT SEEMS CONFUSED ABOUT THE USE OF THE WORD"MARRIAGE" OR IS HESITANT TO REPLY, INSTRUCT THE RESP TOANSWER THE QUESTIONS BASED ON HIS/HER RELATIONSHIP WITHBASE SPOUSE.
Yes ..... $\square 1$
No (SKIP TO QUESTION H5) ..... 2
DIVORCED MORE THAN 3 MONTHS AGO ..... 3
REFUSED (SKIP TO QUESTION H5) ..... 7
DON'T KNOW (SKIP TO QUESTION H5) ..... 8

## (H3=1 AND MARRIAGE_FLAG=(1,2,4,98,99))

H4. SKIP IF DIVORCED, WIDOWED OR ANNULLED: In the last three months, have you spoken to anyone about the possibility that you and [SPOUSE] might get a divorce?
Yes................................................................................................ $\square_{1}$
No ....................................................................................................... $\square_{2}$
REFUSED........................................................................................... $\square_{7}$
DON'T KNOW..................................................................................... $\square_{8}$
MISSING............................................................................................ $\square_{9}$

## (H2 $=3$ AND H3 $=3$ AND MARRIAGE_FLAG¥6)

H5. I'm going to read a statement to you and then l'd like you to tell me which of the following responses you would say is right. In the last three months, has [SPOUSE] cheated on you with someone else? Would you say.

INSTRUCTION: IF RESPONDENT ANSWERS ‘DON’T KNOW’ DO NOT
PROBE.
Definitely yes, ................................................................................. $\square$
$\square_{1}$
Probably yes, ...................................................................................... $\square_{2}$
Definitely no, or................................................................................. $\square_{3}$
Probably no?..................................................................................... $\square_{4}$
DIVORCED MORE THAN 3 MONTHS AGO..................................... $\square_{5}$
$\qquad$
REFUSED
DON'T KNOW 8
(H2 $\ddagger 3$ AND H3 $=3$ AND H5 $=5$ AND MARRIAGE_FLAG $\ddagger 6$ )
H6. In the last three months, have you cheated on [SPOUSE] with someone else?


BASE FOR H7 AND H8: IF MARITAL FLAG=SEPARATED, DIVORCED, WIDOW, ANNULLED, SKIP H7, H8 AND GO TO SECTION I.
(MARRIAGE_FLAG $\ddagger[3,4,5,6]$ AND H2 $=3$ AND H3 $=3$ AND H5 $=5$ AND H6 $=3$ )
Next l'm going to read a list of things that might have happened to you in the past three months.

H7. In the last three months how often..

Was it...

|  | Often | Sometimes | Hardly Ever | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H7a | $\square 1$ | $\square_{2}$ | $\square 3$ | $\square \square_{4}$ | $\square 7$ | $\square 8$ |
| H7b. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| H7c. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| H7d. | $\square 1$ | $\square_{2}$ | $\square \square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |
| H7e. | $\square \square_{1}$ | $\square \square_{2}$ | $\square \square^{\square}$ | $\square \square_{4}$ | $\square \square_{7}$ | $\square_{8}$ |
| H7f. | $\square \square_{1}$ | $\square \square_{2}$ | $\square \square^{\square}$ | $\square \square_{4}$ | $\square \square_{7}$ | $\square_{8}$ |
| H7g. | $\square \square_{1}$ | $\square \square_{2}$ | $\square \square^{\square}$ | $\square \square_{4}$ | $\square \square_{7}$ | $\square 8$ |
| H7h. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square \square_{4}$ | $\square_{7}$ | $\square_{8}$ |

[^27]Was it...

|  | Hardly |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Often | Sometimes | Ever | Never | REFUSED | KNOW |

(MARRIAGE_FLAG $\neq[3,4,5,6]$ AND H2 $\neq 3$ AND
H3 $\neq 3$ and $\mathrm{H} 5 \neq 5$ and $\mathrm{H} 6 \neq 3$ and
FC_STATUS $\ddagger 3$ )
H7i. Has [SPOUSE] threatened to hurt you or the children?
H7a-i - Missing=9
(MARRIAGE_FLAG $\ddagger[3,4,5,6]$ AND H2 $=3$ AND H3 $=3$ AND H5 $=5$ AND H6 $=3$ )
H8. In the past three months, how many times did [SPOUSE]...

|  | 0 | 1 | 2 | 3-5 | 6+ | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H8a. Throw something at you? | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square$ | $\square 7$ | $\square 8$ |
| H8b. Push, shove, hit, slap, or grab you? | $\square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square$ | $\square_{7}$ | $\square_{8}$ |
| H8c. Use a knife, gun, or weapon on you? | $\square_{1}$ | $\square \square_{2}$ | $\square 3$ | $\square_{4}$ | $\square$ | $\square \square_{7}$ | $\square 8$ |
| H8d. Choke, slam, kick, burn, or beat you? | $\square_{1}$ | $\square$ | $\square_{3}$ | $\square_{4}$ | $\square$ | $\square_{7}$ | $\square 8$ |
| H8e. Use threats or force (like hitting, holding down, or using a weapon) to make you have sex? | $\square_{1}$ | $\square_{2}$ | $\square 3$ | $\square 4$ | $\square \square_{6}$ | $\square_{7}$ | $\square_{8}$ |

H8a-e - Missing=9

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## Section I: Parental Well-Being

Financial Strain

CATI NOTE:

## BASE: ALL (HUSBAND AND WIFE)

(ALL)
11. The next set of items will ask you to think about your feelings toward you and your family's financial situation. Please tell us how true the following statements are to your life. Respond with not true at all, somewhat true, mostly true, or very true.

11a. I worry about paying my monthly bills.


11b. I worry that there won't be enough money to buy clothing, household items, food, and medical care.

I1c. We never seem to have enough money to buy something we'd like to have or go somewhere just for fun.
$\square_{1}$
$\mathrm{a}_{2}$
$\square_{3}$
$\square_{4}$
$\square_{7}$ $\square_{8}$

## Mental Health

(ALL)
12. These next questions are about feelings you may have experienced over the past 30 days. During the past 30 days, how often did you feel... [READ ITEM]? Often, sometimes, hardly ever, or never.

|  |  | Often | Sometimes | Hardly <br> Ever | Never | REFUSED |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | | DON'T |
| :---: |
| KNOW |

NOTE: QUESTION < 3 > WAS INTENTIONALLY REMOVED FROM SURVEY
I3: In the past year, did [SPOUSE] have problems keeping a job or getting alongwith family and friends because of alcohol or drugs? NOTE: Removed fromquestionnaire but remains in data.
Yes ..... $\square_{1}$
No ..... $\square \square_{2}$
DIVORCED MORE THAN 3 MONTHS AGO ..... $\square{ }^{\square}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square_{8}$
MISSING ..... $\square 9$
CATI NOTE:
BASE I4: MARITAL FLAG=WIDOW
(MARRIAGE_FLAGF6)
14: In the past year, did [SPOUSE] have problems keeping a job because of alcoholor drugs?
Yes. ..... $\square_{1}$
No ..... $\square{ }_{2}$
DIVORCED MORE THAN 3 MONTHS AGO ..... $\square{ }^{\square}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square_{8}$
MISSING/PILOT DATA ..... $\square 9$

## CATI NOTE:

## BASE I5: MARITAL FLAG=WIDOW

## (MARRIAGE_FLAGキ6)

15: In the past year, did [SPOUSE] have problems getting along with family and friends because of alcohol or drugs?
Yes. ..... $\square_{1}$
No ..... $\square \square_{2}$
DIVORCED MORE THAN 3 MONTHS AGO ..... $\square_{3}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square 8$
MISSING/PILOT DATA ..... $\square 9$

## Section J: Child Outcomes

CATI NOTE:
BASE ALL: HUSBAND AND WIFE WITH AGE SKIP LOGIC, ASK J1-J5.
IF FOCAL CHILD IS 0-2 YEARS, THEN ASK J1-J2 AND THEN SKIP TO J6a-e.
IF FOCAL CHILD IS 2-4 YEARS, ASK J1-J2 AND THEN SKIP TO J7a-i.
IF FOCAL CHILD IS 5-10 YEARS, ASK J1-J4 AND THEN GO TO J8a-i.

IF FOCAL CHILD IS 10+ YEARS, ASK J1-J5 AND THEN GO TO J8a-i.

IF FC STATUS=1, ASK ALL QUESTIONS (WITH AGE SKIP LOGIC).

IF FC STATUS=2, SKIP TO SECTION K.

IF FC STATUS=3, SKIP TO SECTION K.
IF F5 AND F6 BOTH=5, SKIP TO SECTION K.
(FC STATUS=1 AND (F5\#5 OR F6=5))
The next questions will be about [FOCAL CHILD].

J1. [ASK OF ALL AGES] In the last month, how often has [FOCAL CHILD] had sleep problems? Would you say often, sometimes, hardly ever, or never?

| Often | Sometimes | Hardly Ever | Never | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{7}$ | $\square_{8}$ |

J1- Missing=9

## (FC STATUS=1 AND (F5F5 OR F6キ5))

J2. Next, I am going to read a list of items that sometimes describe children. For each item, please tell me if this is never true, sometimes true, often true of [FOCAL CHILD]'s behavior.

Would you say this is...

|  | Sometimes |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Never True | True | Often True | REFUSED | DON'T <br> KNOW |

Would you say this is...

J2a. [FOCAL CHILD] is very timid, afraid of new things or new situations.
J2b. [FOCAL CHILD] is high-strung, tense, and nervous.

J2c. [FOCAL CHILD] hits, kicks, pushes, or hurts others.

J2d. [FOCAL CHILD] destroys things that belong to others on purpose.

J2e. [FOCAL CHILD] is unhappy, sad, or depressed.
J2f. [FOCAL CHILD] withdraws and wants to be alone a lot.

J2g. [FOCAL CHILD] has difficulties getting along with his/her sibling(s).
(FC STATUS=1 and (F5F5 OR F6 $=5$ ) and FOCALCHILD_NODOB_QU=6-10)
J2h. [ASK ONLY IF FOCAL CHILD IS 5 YEARS OLD OR OLDER AT FOLLOW-UP] [FOCAL CHILD] has difficulties getting along with his/her peers.


J2a-J2h - Missing=9
(FC STATUS=1 and (F5 $\ddagger 5$ or $F 6 \neq 5$ ) and FOCALCHILD_NODOB_QU=6-10)
J3. [ASK ONLY IF FOCAL CHILD IS 5 YEARS OLD OR OLDER AT FOLLOW-UP] Have you gotten a call or note home because [FOCAL CHILD] had a behavior or discipline problem at daycare/school in the last year?


## (FC STATUS=1 and (F5\#5 or $F 6 \neq 5$ ) and FOCALCHILD_NODOB_QU=6-10)

J4. [ASK ONLY IF FOCAL CHILD IS 5 YEARS OLD OR OLDER AT FOLLOW-UP] Did [FOCAL CHILD] get suspended and/or expelled from school in the last year?
$\qquad$1


## (FC STATUS=1 and (F5F5 or F6F5) and FOCALCHILD_NODOB_QU=9 or 10)

J5. [ASK ONLY IF FOCAL CHILD IS 10 YEARS OLD OR OLDER AT FOLLOW-UP] Did [FOCAL CHILD] smoke, drink, use drugs, or skip school in the last month?
Yes................................................................................................ $\square_{1}$
No ....................................................................................................... $\square_{2}$
REFUSED.......................................................................................... $\square_{7}$
DON'T KNOW..................................................................................... $\square_{8}$
MISSING......................................................................................... $\square_{9}$

BASE ALL: HUSBAND AND WIFE WITH AGE SKIP LOGIC, EXCEPT IF B3=5,97,98 AND B4=5,97,98 (Hardly ever or never, RF OR DK) ASK J6-J8 WITH AGE LOGIC. IF MARITAL FLAG=WIDOW SKIP OUT J6,J7,J8 AND GO TO SECTION K.
(B3 $=5,97,98$ and $B 4 \neq 5,97,98)$ and Marriage_Flag $\neq 6$ and FOCALCHILD_NODOB_QU=(1 or 2) and FC STATUS=1 and (F5キ5 or F675)) J6. [IF FOCAL CHILD IS $0-2$ YEARS OLD] I am going to ask you to describe [FOCAL CHILD]'s reactions to seeing arguments and disagreements between you and [SPOUSE] in the last month. Tell me if [FOCAL CHILD] reacts to seeing arguments and disagreements in this way.

|  |  | Would you say... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Often | Sometimes | Hardly Ever | Never | DO NOT ARGUE IN FRONT OF CHILDREN | REFUSED | DON'T KNOW |
| J6a. | [FOCAL CHILD] cries. | $\square \square_{1}$ | $\square \square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{5}$ | $\square 7$ | $\square_{8}$ |
| J6b. | [FOCAL CHILD] starts hitting or pushing one or both of you or other family members. | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| J6c. | [FOCAL CHILD] tries to hide (for example, by holding her/his head under a blanket). | $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{5}$ | $\square 7$ | $\square_{8}$ |

Would you say...

|  |  | Often | Sometimes | Hardly Ever | Never | DO NOT <br> ARGUE IN <br> FRONT OF <br> CHILDREN | REFUSED | $\begin{aligned} & \text { DON’T } \\ & \text { KNOW } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J6d. | [FOCAL CHILD] tries to get one or both of your attention, such as signaling to be picked up or bringing up other things. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{5}$ | $\square \square_{7}$ | $\square_{8}$ |
| J6e. | [FOCAL CHILD] tries to hug or kiss one or both of you. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square \square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |

J6a-J6e - Missing=9

## (B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98$ ) and Marriage_Flag $\neq 6$ and

## FOCALCHILD_NODOB_QU=(3,4,5) and FC STATUS=1 and (F5\#5 or F6F5))

J7. [IF FOCAL CHILD IS 2 YEARS OLD - 4 YEARS 11 MONTHS] I am going to ask you to describe [FOCAL CHILD]'s reactions to seeing arguments and disagreements between you and [SPOUSE] in the last month. Tell me if [FOCAL CHILD] reacts to seeing arguments and disagreements in this way.

Would you say...

| Often | Sometimes | Hardly Ever | Never | DO NOT <br> ARGUE IN <br> FRONT OF <br> CHILDREN | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| $\square 1$ | $\square \square_{2}$ | $\square_{3}$ | $\square 4$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| $\square 1$ | $\square_{2}$ | $\square_{3}$ | $\square 4$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| $\square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| $\square 1$ | $\square \square_{2}$ | $\square 3$ | $\square 4$ | $\square 5$ | $\square 7$ | $\square 8$ |
| $\square 1$ | $\square \square_{2}$ | $\square 3$ | $\square 4$ | $\square_{5}$ | $\square 7$ | $\square 8$ |
| $\square 1$ | $\square_{2}$ | $\square_{3}$ | $\square 4$ | $\square 5$ | $\square_{7}$ | $\square_{8}$ |
| $\square 1$ | $\square_{2}$ | $\square_{3}$ | $\square 4$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |

## (B3 $\ddagger 5,97,98$ and $B 4 \neq 5,97,98$ ) and Marriage_Flag $\neq 6$ and

 FOCALCHILD_NODOB_QU=(6,7,8,9,10) and FC STATUS=1 and (F5\#5 or F6F5))J8. [IF FOCAL CHILD IS 5 YEARS OLD OR OLDER] I am going to ask you to describe [FOCAL CHILD]'s reactions to seeing arguments and disagreements between you and [SPOUSE] in the last month. Tell me if [FOCAL CHILD] reacts to seeing arguments and disagreements in this way.

|  |  | Would you say... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Often | Sometimes | Hardly Ever | Never | DO NOT ARGUE IN FRONT OF CHILDREN | REFUSED | DON'T KNOW |
| J8a. | [FOCAL CHILD] appears upset. | $\square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square 8$ |
| J8b. | [FOCAL CHILD] appears anxious or worried. | $\square \square_{1}$ | $\square_{2}$ | $\square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square 8$ |
| J8c. | [FOCAL CHILD] is not able to calm down after you argued. | $\square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square 8$ |
| J8d. | [FOCAL CHILD] tries to stay out of your way (for example, by remaining in another room or leaving the room). | $\square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| J8e. | [FOCAL CHILD] causes trouble, acts out, or misbehaves. | $\square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square_{8}$ |
| J8f. | [FOCAL CHILD] starts hitting, pushing, or yelling at one or both of you or other family members. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square 8$ |
| J8g. | [FOCAL CHILD] yells at one or both of you or other family members. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square 8$ |
| J8h. | [FOCAL CHILD] tries to comfort one or both of you. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square \square_{8}$ |
| J8i. | [FOCAL CHILD] tries to distract one or both of you by bringing up other things. | $\square \square_{1}$ | $\square_{2}$ | $\square \square_{3}$ | $\square_{4}$ | $\square_{5}$ | $\square_{7}$ | $\square \square_{8}$ |

CATI NOTE:

## BASE ALL: HUSBAND AND WIFE EXCEPT IF F5 AND F6=5 (NOT AT ALL) SKIP TO SECTION K

## Section K: Social Support

Instrumental and Emotional Support

IF MARITAL FLAG=WIDOW, SKIP TO SECTION L OTHERWISE, ASK SECTION K TO ALL (HUSBAND AND WIFE)
(MARRIAGE_FLAGキ6)
K1. All people sometimes need help from others with different things in their lives.

|  | Yes | No | REFUSED | DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: |
| K1a. Do you have any close friends who are married couples? | $\square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |
| K1b. Other than (SPOUSE), is there someone you can turn to, if you want to talk about things that are very personal or private? | $\square \square_{1}$ | $\square_{2}$ | $\square_{7}$ | $\square_{8}$ |

## (MARRIAGE_FLAGキ6)

K2. Going back to you and [SPOUSE'S] relationship, how often do/did you have trouble getting along with [SPOUSE]'s family and relatives?

| Often | $\square_{1}$ |
| :---: | :---: |
| Sometimes | $\square_{2}$ |
| Hardly ever | $\square_{3}$ |
| Never | $\square_{4}$ |
| REFUSED | 7 |
| DON'T KNOW | $\square_{8}$ |

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## Section L: Economic Security

## Employment

The next questions are about your work.
(ALL)
L1. Have you worked for pay at any time during the past 12 months? Please include odd jobs and temporary jobs.

| Yes | $\square$ |
| :---: | :---: |
| No (SKIP TO QUESTION L7). |  |
| REFUSED (SKIP TO QUESTION L7) | 7 |
| DON'T KNOW (SKIP TO QUESTION L7) | - 8 |

(L1=1)
L2. How many months did you work for pay in the past 12 months?
Record Response: $\qquad$
$\qquad$
(L1=1)
L3. Did you work for pay in the past month?

$$
\begin{aligned}
& \text { Yes.................................................................................................. } \square_{1} \\
& \text { No (SKIP TO QUESTION L6)............................................................. } \square_{2} \\
& \text { REFUSED (SKIP TO QUESTION L6)................................................. } \square_{7} \\
& \text { DON'T KNOW (SKIP TO QUESTION L6) ............................................ } \square_{8}
\end{aligned}
$$

## (L3=1)

L4. What were your total earnings in the past month before taxes and other deductions? Please include tips, commissions, and overtime pay.

PLEASE ENTER IF RESPONDENT PROVIDED THE AMOUNT IN WHOLE DOLLARS..

Before taxes without probing: <L4_AMT>\$ $\qquad$
REFUSED ..... $-7$
DON'T KNOW ..... -8
MISSING ..... $\square-9$

## (L3=1)

L5. How many hours per week did you typically work last month?
Record Response: <L5HRS> $\qquad$
(SKIP TO QUESTION L7)
$\qquad$

## (L3 $2,2,7,8$ )

L6. Thinking about the last month that you did work, what were your total earnings during that month before taxes and other deductions? Please include tips, commissions, and overtime pay.

Record Response: <L6AMT> \$ $\qquad$
REFUSED $\qquad$
DON'T KNOW $\qquad$ $\square-8$

## Income

Now, please tell me whether you or other members of your household have received income from these sources in the past month. This includes anyone who you support and/or supports you and lives in your household.

## (ALL)

L7. Did you or other members of your household receive income from this source in the past month?

|  |  | $(L 7 x=1)(x=a-g)$ <br> IF YES, How much [INSERT INCOME SOURCE] did you receive in the past month? |
| :---: | :---: | :---: |
| L7a. Cash welfare which is also known as TANF, or [Local name of TANF]? |  | <L7A_AMT> $\qquad$ Record Response <br> -2 Don't Know -1 Refused 9999 Missing |
| L7b. Food stamp benefits? |  | $\$ \quad$<L7B_AMT> <br> Record Response <br> -2 Don't Know <br> -1 Refused <br> 9999 Missing |


|  |  | IF YES, How much [INSERT INCOME SOURCE] did you receive in the past month? |
| :---: | :---: | :---: |
| L7c. Disability insurance such as Supplemental Security Income (SSI) or Social Security Disability Insurance (SSDI)? |  | $\$ \quad$<L7C_AMT> <br> Record Response <br> -2 Don't Know <br> -1 Refused <br>  <br> 9999 Missing |
| L7d. Unemployment Insurance Benefits or UI? |  |  |
| (FC_Status $\ddagger 3$ ) <br> L7e. Child support? |  | <L7E_AMT> <br> \$ $\qquad$ Record Response <br> -2 Don't Know -1 Refused 9999 Missing |
| L7f. Money from friends or relatives outside of the household? |  | <L7F_AMT> $\qquad$ Record Response <br> -2 Don't Know <br> -1 Refused <br> 9999 Missing |
| L7g. Earnings from other family members including [Spouse]. Please report any earnings before taxes or other deductions, and include tips, commissions, and overtime pay. | Yes $\qquad$ $\square_{1}$ <br> No. $\qquad$ - <br> REFUSED $\qquad$ 2 7 <br> DON'T KNOW $\qquad$ 8 MISSING $\qquad$ - | <L7G_AMT> <br> \$ $\qquad$ Record Response <br> -2 Don't Know <br> -1 Refused 9999 Missing |

## (ALL)

L8. In the past month, did you or other members of your household receive money from any other source, such as rent from boarders, other government benefits, or any other income we have not already talked about?

```
Yes............................................................................................... 口 \(_{1}\)
No (SKIP TO QUESTION L9)........................................................ \(\square_{2}\)
REFUSED (SKIP TO QUESTION L9)............................................ \(\square_{7}\)
DON'T KNOW (SKIP TO QUESTION L9) ....................................... 口 \(_{8}\)
MISSING
```

$\qquad$
(L8=1)
L8a. How much money from these other sources did you or other members of your household receive in the past month?

Record Response:


DON'T KNOW
$\square_{-2}$
(ALL)
L9. Are you living in the same house or apartment as you were in [RAD]?


## (L9=2,7,8,9)

L10. How many times altogether have you moved since [RAD], including your most recent move? Base: <L9>=[2,7,8,9]

| Number of times: <br> REFUSED $\qquad$ <br> DON'T KNOW $\qquad$ <br> MISSING. $\qquad$ |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

The next sets of questions are about your financial circumstances and work status during the past 12 months.

## (ALL)

L11 ${ }^{2}$. During the past 12 months, has there been a time when you wished you were working, but could not find a job?


[^28]ASK TO ALL RESPONDENTS WHO ANSWERED YES TO L1 (HAVE YOU WORKEDFOR PAY IN THE LAST 12 MONTHS)

(L1=1)
L12. In the last 12 months, have you been fired or laid off from work? Base: L1=1
YES ..... $\square_{1}$
NO ..... $\square \square_{2}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square_{8}$
MISSING/PILOT DATA ..... $\square_{9}$
(L1=1)
L13. In the last 12 months, did you have an odd job or a temporary job that ended?Base: L1=1
YES ..... ${ }^{1}$
NO ..... $\square 2$
REFUSED ..... $\square 7$
DON'T KNOW ..... 8
MISSING/PILOT DATA ..... 9
(L1=1)L14. In the last 12 months, have you had your hours cut back by your employer?
$\qquad$
$\qquad$
REFUSED ..... $\square_{7}$
DON'T KNOW. ..... $\square 8$
MISSING/PILOT DATA ..... $\square 9$

## (L1=1)

L15. In the past 12 months, has there been a time when you were not able to pay your utility bills?
REFUSED ..... $\square 7$
DON'T KNOW ..... $\square_{8}$
MISSING/PILOT DATA ..... $\square 9$

## (L1=1)

L16. In the past 12 months, has there been a time when you did not pay the full amount for the rent or mortgage?
Yes (SKIP TO QUESTION L17) ..... $\square_{1}$
No (SKIP TO QUESTION L18) ..... $\square_{2}$
REFUSED(SKIP TO QUESTION L18) ..... $\square_{7}$
DON'T KNOW(SKIP TO QUESTION L18) ..... $\square_{8}$
MISSING/PILOT DATA ..... $\square_{9}$
ASK ONLY IF RESPONDENT ANSWERED YES TO PREVIOUS QUESTION(L16=1)L17. In the past 12 months, has there been a time when you and your familywere evicted from your home or apartment for not paying the rent or mortgage?
Yes ..... $\square 1$
No ..... $\square_{2}$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... $\square_{8}$
(L1=1)

L18. In the past 12 months, have you considered filing for bankruptcy?
Yes ................................................................................................ $\square$
$\square_{1}$
No ......................................................................................................... $\square_{2}$
REFUSED............................................................................................ $\square_{7}$
DON'T KNOW.................................................................................... $\square_{8}$
MISSING/PILOT DATA.................................................................... $\square_{9}$

## Section M: Locating and Demographic Information

CATI NOTE:
BASE ALL: HUSBAND AND WIFE

I would like to find out a little bit more information about where you're from.
(ALL)
M1. Were you born in one of the 50 U.S. states or Washington D.C.?
INTERVIEWER INSTRUCTION: PLEASE CODE "NO" IF RESPONDENT WAS BORN IN THE TERRITORIES OF PUERTO RICO, GUAM, THE U.S. VIRGIN ISLANDS, OR NORTHERN MARIANAS.


## (M1=2,7,8,9)

M2. Where were you born?

SPECIFY [IF RESPONDENT WAS RAed IN OK SITE, ASK M2a AND M2b; IF NOT, SKIP TO M3]

Country/US Territory: $\qquad$
REFUSED........................................................................................ $\square_{97}$
DON'T KNOW................................................................................... $\square 98$
MISSING............................................................................................ 99
(M2=packed and Site=4)
M2a. IF RESPONDENT IS FROM OKLAHOMA: What year did you come to live in one of 50 U.S. states or Washington D.C?

Year: $\qquad$
REFUSED
-1
DON'T KNOW.................................................................................... ■ -
(Site=4)
M2b. IF RESPONDENT IS FROM OKLAHOMA: Do you consider yourself Spanish, Hispanic or Latino?
Yes. ..... $\square_{1}$
No (SKIP TO M3) ..... $\square 2$
REFUSED (SKIP TO M3) ..... $\square 7$
DON'T KNOW (SKIP TO M3) ..... $\square_{8}$
MISSING ..... $\square 9$
(M2b=1)
M2c. Is that...(READ LIST)?
Mexican/Mexican-American/Chicano .....  1
Puerto Rican ..... $\square \square_{2}$
Cuban ..... $\square{ }^{\square}$
Other Spanish/Hispanic/Latino ..... $\square 4$
REFUSED ..... $\square 7$
DON'T KNOW ..... $\square_{8}$
(ALL)M3. How well do you speak English?
Very well ..... $\square 1$
Well ..... $\square 2$
Not well ..... $\square 3$
Not at all ..... $\square 4$
REFUSED ..... $\square_{7}$
DON'T KNOW ..... 8
MISSING ..... 9
(ALL)
M4. Do you speak or understand another language or languages other than English?
Yes. ..... $\square 1$
No [SKIP TO QUESTION M5] ..... $\square$
REFUSED [SKIP TO QUESTION M5] ..... $\square_{7}$ DON'T KNOW [SKIP TO QUESTION M5] ....................................... $\square_{8}$ MISSING............................................................................................ $\square_{9}$
(M4=1)
M4A_CX [X=01-06, 95-98]. And what would that (those) language(s) be?
Values are $0=$ language not selected; $1=$ language selected
<M4A_C01> SPANISH.......................................................................... $\square_{1}$
<M4A_C02> TAGALOG....................................................................... $\square_{2}$
<M4A_C03> NEPALESE .................................................................... $\square_{3}$
<M4A_C04> THAI ............................................................................... $\square_{4}$
<M4A_C05> CHINESE ....................................................................... $\square_{5}$
<M4A_C06> LUGANDA...................................................................... $\square_{6}$
<M4A_C95> OTHER SPECIFY: .......................................................... 】 95
<M4A_C97> REFUSED ....................................................................... 口 97
<M4A_C98> DON'T KNOW ................................................................. 1 98
(M4b_X) (M4A_CX=1)
M4b. Do you speak [INSERT LANGUAGE FROM M4a]....(READ LIST)?
NOTE: ASK M4b FOR EACH LANGUAGE MENTIONED IN M4a
Very well ............................................................................................. 口 $_{1}$
Somewhat well............................................................................. $\square_{2}$
Or not very well............................................................................. $\square_{3}$
REFUSED.................................................................................... $\square_{7}$
DON'T KNOW............................................................................... 口 $_{8}$
(M4A_CX=[1 OR 0] OR M4A_C97/C98\#1)
M4C_CX [X=01-06-95-99]. What languages do you usually speak at home?
RECORD RESPONSE:
MISSING
$\qquad$
(M4C_CX=1)
<M4D_X> .ASK: Is that...(READ LIST)?
X=Spanish, Tagalog, Nepalese, Thai, Chinese, Luganda, Other ]
Only [INSRT RESPONSE FROM ABOVE]...................................... $\square_{1}$
More [INSERT RESPONSE FROM ABOVE] than English ............... $\square_{2}$
Both English and [INSERT RESPONSE FROM ABOVE] equally...... $]_{3}$
More English than [INSERT RESPONSE FROM ABOVE] ............... $]_{4}$

```
Only English
```

```
MISSING \(\square 9\)
```


## (FC_STATUS $=3$ )

M5. Do(es) your child(ren) speak or understand a language other than English at home?


## (Site=4)

M6. [IF RESPONDENT IS FROM OKLAHOMA] When did you and (SPOUSE) get married?

PROBE: If you do not know the exact date, you can give me an estimate of the date that you started considering yourselves to be husband and wife.
$\qquad$
<M6_MTH> RECORD YEAR:
REFUSED......................................................................................... $\square_{7}$
DON'T KNOW...................................................................................... $\square_{8}$
MISSING............................................................................................ $\square_{9}$

## (Site=4)

m7. [IF RESPONDENT IS FROM OKLAHOMA] Did you live with (SPOUSE) before you were married?
Yes................................................................................................ $\square_{1}$
No ......................................................................................................... $\square_{2}$
REFUSED............................................................................................ $\square_{7}$
DON'T KNOW...................................................................................... $\square_{8}$
MISSING........................................................................................... $\square_{9}$
(Site=4)

M8. [IF RESPONDENT IS FROM OKLAHOMA] Prior to being married to (SPOUSE), were you married?
Yes............................................................................................... $\square$
$\square_{1}$
No ...................................................................................................... $\square_{2}$
REFUSED............................................................................................. $\square_{7}$
DON'T KNOW........................................................................................ $\square_{8}$
MISSING............................................................................................ $\square_{9}$

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## Section N: Contact Information

## CATI NOTE:

## BASE ALL: HUSBAND AND WIFE

Thank you very much for your time. We are almost done. We will be sending you a check for [ $\$ 30$ (if treatment)/ $\$ 50$ (if control)] within the next four weeks. To help us be able to get back in touch with you in the future, we would like to confirm your correct address and telephone number, as well as collect the names, telephone numbers and addresses of three people who will always know how to reach you. This information will be kept strictly confidential and will only be used if we are unable to contact you.

N1. IF HOME ADDRESS IN THE SAMPLE:
Is [HOME ADDRESS] still your home address?

| Yes (SKIP TO QUESTION N3)................................................. $\square_{1}$ |  |
| :---: | :---: |
| No | $\square_{2}$ |
| Don't have a home address (SKIP TO QUESTION N3) |  |
| REFUSED (SKIP TO QUESTION N3) |  |
| DON'T KNOW (SKIP TO QUESTION N3) | 8 |

## IF HOME ADDRESS BLANK IN THE SAMPLE:

N2. May I please have your home address?
Yes (SKIP TO RECORD ADDRESS) .............................................. $\square \square_{1}$
No ................................................................................................... $\square_{2}$
Don't have a home address (SKIP TO QUESTION N3) .................... $\square_{3}$
REFUSED (SKIP TO QUESTION N3)............................................. $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N3)....................................... $\square_{8}$

## RECORD HOME ADDRESS:

STREET:
CITY, STATE, ZIP:

INTERVIEWER NOTE: PROBE TO GET FULL ADDRESS AND READ IT BACK TO CONFIRM SPELLING.
N3. IF HOME PHONE NUMBER IN THE SAMPLE:Is [HOME PHONE NUMBER] still your home phone number?
Yes (SKIP TO QUESTION N5) ..... $\square$
No ..... $\square 2$
Don't have a home number (SKIP TO QUESTION N5) ..... $\square 3$
REFUSED (SKIP TO QUESTION N5) ..... $\square 7$
DON’T KNOW (SKIP TO QUESTION N5) ..... 8
IF HOME PHONE NUMBER BLANK IN THE SAMPLE:
N4. May I please have your home phone number, starting with the area code?
Yes (SKIP TO RECORD HOME NUMBER) ..... $\square_{1}$
No ..... $\square 2$
Don't have a home number (SKIP TO QUESTION N5) ..... $\square 3$
REFUSED (SKIP TO QUESTION N5) ..... $\square 7$
DON'T KNOW (SKIP TO QUESTION N5) ..... $\square 8$
RECORD HOME NUMBER:
HOME PHONE NUMBER: $\qquad$
INTERVIEWER NOTE: READ IT BACK TO CONFIRM CORRECT NUMBER WASRECORDED.
N5. IF WORK PHONE NUMBER IN THE SAMPLE:Is [WORK PHONE NUMBER] still your work phone number, starting with thearea code?
Yes (SKIP TO QUESTION N7)......................................................... $\square_{1}$
No ...................................................................................................... $\square_{2}$
Don't have a work number (SKIP TO QUESTION N7) ..... 3
REFUSED (SKIP TO QUESTION N7) ..... $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N7) ..... $\square 8$

## IF WORK PHONE NUMBER BLANK IN THE SAMPLE:

N6. May I please have your work phone number?
Yes (SKIP TO RECORD WORK NUMBER) .................................... $\square \square_{1}$
No ................................................................................................. $\square_{2}$
Don't have a work number (SKIP TO QUESTION N7) ..................... $\square_{3}$
REFUSED (SKIP TO QUESTION N7).............................................. $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N7)....................................... $\square_{8}$

## RECORD WORK NUMBER:

WORK PHONE NUMBER: $\qquad$

WORK EXTENSION:

## INTERVIEWER NOTE: READ IT BACK TO CONFIRM CORRECT NUMBER WAS RECORDED.

## N7. IF CELL PHONE NUMBER IN THE SAMPLE: <br> Is [CELL PHONE NUMBER] still your cell phone number?

Yes (SKIP TO QUESTION N9)......................................................... $\square_{1}$
No .................................................................................................... $\square_{2}$
Don't have a cell number (SKIP TO QUESTION N9) ..... $\square 3$
REFUSED (SKIP TO QUESTION N9) ..... $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N9) ..... 8

## IF CELL PHONE NUMBER BLANK IN THE SAMPLE:

N8. May I please have your cell phone number, starting with the area code?
Yes (SKIP TO RECORD CELL NUMBER) ..... $\square 1$
No ..... $\square{ }_{2}$
Don't have a cell number (SKIP TO QUESTION N9) ..... $\square$
REFUSED (SKIP TO QUESTION N9) ..... $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N9) ..... $\square 8$

## RECORD CELL NUMBER:

CELL PHONE NUMBER: $\qquad$

## INTERVIEWER NOTE: READ IT BACK TO CONFIRM CORRECT NUMBER WAS RECORDED.

N9. What is the best phone number to reach you?
Home phone (SKIP TO QUESTION N10) ..... - 1
Work phone (SKIP TO QUESTION N10) ..... $\square_{2}$
Cell phone (SKIP TO QUESTION N10) ..... - ${ }^{3}$
DA phone (SKIP TO QUESTION N10) ..... $\square_{4}$
REFUSED (SKIP TO QUESTION N5) ..... $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N5) ..... - 8
CATI NOTE: DISPLAY NUMBERS THAT WERE GIVEN IN THE HOME, WORK ORCELL SECTION. DO A CHECK WITH HOME NUMBER AND DA NUMBER BEFOREDISPLAYING IT. IF HOME AND DA THE SAME, ONLY DISPLAY HOME.
N10. IF EMAIL ADDRESS IN THE SAMPLE:
Is [EMAIL ADDRESS] still your email address?
Yes (SKIP TO QUESTION N12) ..... - 1
No ..... - ${ }_{2}$
Don't have email (SKIP TO QUESTION N12) ..... $]^{3}$
REFUSED (SKIP TO QUESTION N12) ..... $\square_{7}$
DON'T KNOW (SKIP TO QUESTION N12) ..... $\square 8$

## IF EMAIL ADDRESS BLANK IN THE SAMPLE:

N11. May I please have your email address?

| No $\qquad$ <br> Don't have email (SKIP TO QUESTION N12) REFUSED (SKIP TO QUESTION N12) |  |
| :---: | :---: |
|  |  |
|  |  |

$\qquad$ 8

## RECORD EMAIL ADDRESS:

EMAIL ADDRSSS: $\qquad$

INTERVIEWER: PLEASE RECORD EMAIL ADDRESS AND READ IT BACK TO CONFIRM SPELLING.

## CONTACT \#1:

## IF CONTACT 1 IN THE SAMPLE:

N12. Our records show that:
CATI: DISPLAY FULL INFO OF $1^{\text {st }}$ CONTACT
INTERVIEWER: VERIFY SPELLING OF NAMES AND FULL ADDRESS.
is a primary person who does not live with you and will always know how to contact you. Is this correct?

# Yes (SKIP TO SECOND CONTACT) .............................................. $\square_{1}$ <br> No (SKIP TO QUESTION N13) ..................................................... $\square_{2}$ <br> REFUSED (SKIP TO QUESTION N13).......................................... $\square_{7}$ <br> DON'T KNOW (SKIP TO QUESTION N13).................................... $\square_{8}$ 

## IF CONTACT 1 BLANK or IF C1a=2, 7, 8

N13. Could you tell us the name of a primary person who does not live with you and will always know how to contact you?
Yes.................................................................................................... $\square_{1}$
No (SKIP TO SECOND CONTACT)........................................ $\square_{2}$
REFUSED (SKIP TO SECOND CONTACT) ............................................. $\square_{7}$
DON'T KNOW (SKIP TO SECOND CONTACT) ..................... $\square_{8}$

N14. What is his/her first name? $\qquad$
N14a. What is his/her last name? $\qquad$
N15. What is (his/her) street address? $\qquad$
N15a. Is there a complex/building name? $\qquad$
N15b. Is there an apartment number? $\qquad$
N15c. In what city? $\qquad$
N15d. In what state? $\qquad$
N 15 e . What is the zip code? $\qquad$

N16. What's the best phone number to reach (him/her) at starting with the area code?

Telephone \# with area code: (___

N17. Is she/he a friend or a relative, or what is (his/her) relationship to you? ACCEPT ONE RESPONSE ONLY.
Friend............................................................................................ $\square$
Relative.............................................................................................. $\square_{2}$
Other (Specify__................... $\square_{3}$
REFUSED.................................................................................... $\square_{7}$
DON'T KNOW................................................................................ $\square_{8}$

## CONTACT \#2:

## IF CONTACT 2 IN THE SAMPLE:

N18. Our records show that:
CATI: DISPLAY FULL INFO OF $2^{N D}$ CONTACT

INTERVIEWER: VERIFY SPELLING OF NAMES AND FULL ADDRESS.
is the name of a second person who does not live with you and will always know how to contact you. Is this correct?
Yes (SKIP TO THIRD CONTACT) ..... - 1
No (SKIP TO QUESTION N19) ..... $\square_{2}$
REFUSED (SKIP TO QUESTION N19) ..... $\square_{7}$DON'T KNOW (SKIP TO QUESTION N19)....................................... $\square_{8}$
IF CONTACT 2 BLANK or IF C1a_2=2, 7, 8

N19. Could you tell us the name of a primary person who does not live with you and will always know how to contact you?


N20. What is his/her first name? $\qquad$

N20a. What is his/her last name?

N21. What is (his/her) street address? $\qquad$
N21a. Is there a complex/building name? $\qquad$
N21b. Is there an apartment number? $\qquad$
N21c. In what city? $\qquad$
N21d. In what state? $\qquad$
N21e. What is the zip code? $\qquad$

N22. What's the best phone number to reach (him/her) at starting with the area code?

Telephone \# with area code: $\qquad$ ) $\qquad$ - $\qquad$
N23. Is she/he a friend or a relative, or what is (his/her) relationship to you? ACCEPT ONE RESPONSE ONLY.
$\qquad$

## CONTACT \#3:

## IF CONTACT 3 IN THE SAMPLE:

## N24. Our records show that:

CATI: DISPLAY FULL INFO OF $3^{\text {rd }}$ CONTACT
INTERVIEWER: VERIFY SPELLING OF NAMES AND FULL ADDRESS.
is the name of a third person who does not live with you and will always know how to contact you. Is this correct?

```
Yes (SKIP TO SSN).................................................................\square\square
No (SKIP TO QUESTION N25) ..................................................\square\square \square
REFUSED (SKIP TO QUESTION N25).......................................\square\square }\mp@subsup{\square}{7}{
DON'T KNOW (SKIP TO QUESTION N25)...................................\square
```

IF CONTACT 3 BLANK or IF C1a_3=2,7,8

N25. Could you tell us the name of a primary person who does not live with you and will always know how to contact you?

```
Yes...........................................................................................|
No (SKIP TO SSN) .................................................................] 口
REFUSED (SKIP TO SSN)........................................................ [7
DON'T KNOW (SKIP TO SSN)................................................. - | 
```

N26. What is his/her first name? N26b. What is his/her last name? $\qquad$

N27. What is (his/her) street address? $\qquad$

N27a.
N27b.
N27c.
N27d.
N27e.

Is there a complex/building name? _Is there an apartment number? -

In what state? $\qquad$
What is the zip code? $\qquad$

N28 What's the best phone number to reach (him/her) at starting with the area code? Telephone \# with area code: $\qquad$ ) $\qquad$ - $\qquad$
N28. Is she/he a friend or a relative, or what is (his/her) relationship to you? ACCEPT ONE RESPONSE ONLY.

| Friend................................................................................. ロ $_{1}$ |  |
| :---: | :---: |
| Relative.............................................................................. $\square_{2}$ |  |
| Other (Specify | ).................... $\square_{3}$ |
| REFUSED.. | $\square_{7}$ |
| DON'T KNOW. | $\square$ |

## CATI NOTE:

IF SSN IS MISSING IN THE SAMPLE SKIP TO SCRIPT OF SSN OTHERWISE GO TO CLOSING

Our records show that we do not have your Social Security Number. To help us be able to get back in touch with you in the future, we would like to collect your SSN. This information will be kept strictly confidential and will only be used if we are unable to contact you and to verify that we are speaking with you.

What is your SSN?

```
RECORD NUMBER: DOES NOT HAVE A SSN............................................................. \(\square_{3}\) REFUSED
``` \(\qquad\)
``` [1 DON'T KNOW............................................................................... -
```


## GENERAL CLOSING

These are all the questions I have.
IF COUPLE IS INTACT AND/OR LIVING TOGETHER. Is [SPOUSE] available? I'd like to interview [him/her] too, if [he/she] are around.

If YES: Great, can you put him/her on the phone?
If NO: OK, when would be a good time to reach her/him.
INSTRUCTION: IF [SPOUSE] IS AVAILABLE, ASK TO SPEAK TO HIM/HER. CLOSE THE CURRENT CASE AFTER LEAVING A NOTE ABOUT THIS CASE AND OPEN [SPOUSE'S] CASE.

INSTRUCTION: IF [SPOUSE] ISN'T AVAILABLE, ASK FOR THE BEST TIME TO REACH HIM/HER AND ASK THE RESPONDENT TO TELL THEM WE WILL BE CALLING. RECORD ON [SPOUSE]'S CONTACT SHEET.

## CLOSING FOR SAMPLE MEMBERS SELECTED FOR OBSERVATION

IF RESPONDENT WAS SELECTED FOR OBS: Your family has been selected to participate in another component of this study. It involves coming to your home to talk to you, IF TOGETHER your spouse, and your child. We will be paying you $\$ 50$ for participating in this additional component of the study. Another interviewer will be
calling you in the next couple of weeks to make arrangements to come visit you and your family.

We will [now give you your money order for $\$ 30$ (if treatment)/\$50 (if control) /mail your $\$ 30$ (if treatment)/ $\$ 50$ (if control) check within the next four weeks] in appreciation for your time for completing this phone interview.

Thank you.

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NOTE: A complete publications list is available from MDRC and on its Web site (www.mdrc.org), from which copies of reports can also be downloaded.

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#### Abstract

About MDRC

MDRC is a nonprofit, nonpartisan social and education policy research organization dedicated to learning what works to improve the well-being of low-income people. Through its research and the active communication of its findings, MDRC seeks to enhance the effectiveness of social and education policies and programs.

Founded in 1974 and located in New York City and Oakland, California, MDRC is best known for mounting rigorous, large-scale, real-world tests of new and existing policies and programs. Its projects are a mix of demonstrations (field tests of promising new program approaches) and evaluations of ongoing government and community initiatives. MDRC's staff bring an unusual combination of research and organizational experience to their work, providing expertise on the latest in qualitative and quantitative methods and on program design, development, implementation, and management. MDRC seeks to learn not just whether a program is effective but also how and why the program's effects occur. In addition, it tries to place each project's findings in the broader context of related research - in order to build knowledge about what works across the social and education policy fields. MDRC's findings, lessons, and best practices are proactively shared with a broad audience in the policy and practitioner community as well as with the general public and the media.

Over the years, MDRC has brought its unique approach to an ever-growing range of policy areas and target populations. Once known primarily for evaluations of state welfare-to-work programs, today MDRC is also studying public school reforms, employment programs for exoffenders and people with disabilities, and programs to help low-income students succeed in college. MDRC's projects are organized into five areas:


- Promoting Family Well-Being and Children's Development
- Improving Public Education
- Raising Academic Achievement and Persistence in College
- Supporting Low-Wage Workers and Communities
- Overcoming Barriers to Employment

Working in almost every state, all of the nation's largest cities, and Canada and the United Kingdom, MDRC conducts its projects in partnership with national, state, and local governments, public school systems, community organizations, and numerous private philanthropies.

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[^0]:    ${ }^{1}$ JoAnn Hsueh, Desiree Principe Alderson, Erika Lundquist, Charles Michalopoulos, Daniel Gubits, David Fein, and Virginia Knox, The Supporting Healthy Marriage Evaluation: Early Impacts on Low-Income Families. OPRE Report 2012-11 (Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research and Evaluation, 2012).

[^1]:    ${ }^{1}$ The local program in Oklahoma City was involved in both the SHM evaluation and the Building Strong Families (BSF) evaluation. Because the baseline information form from the BSF evaluation contained much of the same information collected by SHM forms, the BSF version of the form was substituted for the SHM version in the Oklahoma City program.

[^2]:    ${ }^{2}$ Lindahl and Malik (1999).

[^3]:    ${ }^{3}$ For a detailed discussion of the conceptual model and theory of change underlying the SHM project, see Hsueh et al. (2012).

[^4]:    ${ }^{4}$ The initial plan for the 12-month impact analysis included consideration of observed coparenting behaviors as one of the key outcomes that would be used to assess the effectiveness of the SHM program. When the research team reviewed the data emerging from these interactions, however, it became clear that spouses showed limited interaction with each other; rather, most of their behaviors and emotions were directed at the child, in interactions that involved both spouses and the focal child. Therefore, the research team reassessed the plausibility of examining impacts on observed coparenting interactions because the data did not show sufficient variability to assess the constructs of interest, as initially hypothesized.

[^5]:    ${ }^{5}$ Conger et al. (1990); Conger et al. (1992); Lindahl and Malik (1999); Cutrona et al. (2003); Sullivan, Pasch, Eldridge, and Bradbury (1998).

[^6]:    ${ }^{6}$ NICHD Early Child Care Research Network (1994).
    ${ }^{7}$ Conger, Neppl, Kim, and Scaramella (2003).
    ${ }^{8}$ Melby et al. (1998).

[^7]:    ${ }^{1}$ Hsueh et al. (2012).
    ${ }^{2}$ Appendix I shows the estimated impacts on the primary survey and observational study outcomes when each local SHM program is weighted equally.
    ${ }^{3}$ As discussed in more detail in Appendix B and Appendix F, equal numbers of couples from each of the local SHM programs were asked to participate in the videotaped observations at the 12-month follow-up point. Furthermore, couples with infants or with preadolescent or adolescent focal children were oversampled in the sample that was flagged for the observational study. As a sensitivity check, the impact estimates were also calculated using a variety of weights to account for the sampling criteria used to select the observational study
    (continued)

[^8]:    sample, as well as nonresponse to the data collection component. (See Appendix F.) The results of these analyses suggest that the impact estimates on observed couple interaction outcomes are not highly sensitive to weighting.
    ${ }^{4}$ While the entire list of survey covariates could have been used in models estimating impacts for the full observational study sample, the covariate list for the observational sample was shortened to conserve degrees of freedom for subgroup analyses.

[^9]:    ${ }^{5}$ Hill, Bloom, Black, and Lipsey (2007).
    ${ }^{6}$ Cohen (1988).

[^10]:    ${ }^{7}$ Hsueh et al. (2012), Table 2.

[^11]:    ${ }^{8}$ Hsueh et al. (2012), Table 3.

[^12]:    ${ }^{1}$ Kessler et al. (2003).

[^13]:    ${ }^{2}$ This scale was created for individuals who were divorced or separated. Separate factor analyses for this group revealed few differences between the factor structures for this group and for individuals whose couple relationship was intact.
    ${ }^{3}$ This scale - with the exception of the items "spouse yelled or screamed at respondent" and "spouse blamed respondent for his/her problems" - was created for individuals who were divorced or separated. Separate factor analyses for this group revealed that the items hung together approximately as well as they did for individuals whose couple relationship was intact.

[^14]:    ${ }^{4}$ Straus, Hamby, Boney-McCoy, and Sugarman (1996).

[^15]:    ${ }^{5}$ This scale was created for individuals who were divorced or separated. Separate factor analyses for this group revealed that the items hung together approximately as well as they did for individuals whose couple relationship was intact.
    ${ }^{6}$ A slightly adapted version of the K6 Mental Health Screening Tool (Kessler et al., 2003) was administered to study participants, in which the response scale was modified from a 5-point scale to a 4-point scale, ranging from "often" to "never."

[^16]:    ${ }^{7}$ Melby et al. (1998).

[^17]:    ${ }^{1}$ Hsueh et al. (2012).

[^18]:    ${ }^{2}$ There are 30 individuals who participated in the observational study but did not complete a 12 -month survey. Although it was protocol to do the survey first, observational studies sometimes took place before the survey due to constraints in the availability of local interviewers. Some sample members did their observational studies first and later refused to participate in the survey.
    ${ }^{3}$ The observational study included couple interactions, coparenting interactions, and parent-child interactions. Some participants took part in only the parent-child interactions and not in the couple interactions. In the (continued)

[^19]:    ${ }^{4}$ The baseline characteristics that were used to develop the weights include the following: study participant's gender; local SHM program; month of random assignment; husband's and wife's earnings (ranging from $\$ 1$ to $\$ 14,999$ per year; $\$ 15,000$ to $\$ 24,999$ per year; and $\$ 25,000$ or more per year); whether both spouses are white, Hispanic, non-Hispanic African-American, or other/multiracial; number of years the couple was married; whether the couple had a child prenatal to age 1 , a child between ages 2 and 9 , or a child age 10 or older; whether both spouses had at least a high school diploma; whether a stepchild of either spouse is present in household; couples' average reported commitment to couple and family; couples' average reported hostile conflict resolution; whether either spouse was 23 years old or younger; whether either spouse experienced psychological distress; whether either spouse reported a substance abuse problem; couples' average reported positive interaction in marriage; whether either spouse reported concerns/arguments about infidelity; whether husbands or wives reported that their marriage was in trouble; and husband's and wife's reported marital happiness.
    ${ }^{5}$ For the couple-level outcomes, couples' responses, rather than individuals' responses, were weighted.

[^20]:    ${ }^{6}$ Though the observational study required both spouses to participate in the couple interactions, men and women responded to the 12 -month survey at differential rates. Accordingly, comparisons of observational study respondents and other sample members among the survey respondent sample were conducted separately for men and women.

[^21]:    ${ }^{7}$ There were 738 couples who did not respond to the observational study but who did have some level of response to the survey (either one or both spouses responded).

[^22]:    ${ }^{8}$ Gender was not used in this logistic regression to develop the weights because both spouses are members of the full SHM sample and participated together in the observational study's couple interactions.

[^23]:    ${ }^{1}$ For a detailed discussion of truncation bias in the evaluation of marriage education initiatives, see McConnell, Stuart, and Devaney (2008).

[^24]:    ${ }^{1}$ Hsueh et al. (2012).
    ${ }^{2}$ Fincham, Stanley, and Beach (2007).

[^25]:    ${ }^{3}$ For subgroups defined by levels of family income-to-poverty line, SHM's impacts significantly differed for one out of the 26 outcomes examined. A higher percentage of program group couples ( 90 percent) reported being married or in a committed relationship at follow-up than of control group couples ( 87 percent). Because this is the sole statistically significant impact identified for this subgroup and the impact does not appear to be part of a broader pattern of impacts in this study, it is likely that this finding is a statistical anomaly that occurred by chance.

[^26]:    ${ }^{4}$ For characteristics of couples in the SHM evaluation by local program, see Hsueh et al. (2012), Table 2.

[^27]:    ${ }^{1}$ Redacted items are from Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. Journal of Marriage and the Family, 41, 75-88.

[^28]:    ${ }^{2}$ New question L11 -L18 were added after pilot.

