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Parents and Children Together: Effects of Two Healthy Marriage Programs for Low-Income Couples

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OVERVIEW

Introduction

Growing up with two parents in a stable, low-conflict family can improve children's lives in a broad range of areas (Waldfogel et al. 2010; Kim 2011; Amato 2005; McLanahan and Sandefur 1994). However, the economic and other challenges faced by low-income families can make it hard for these families to achieve a stable, low-conflict family environment. Recognizing this challenge, as well as the potential benefits of healthy marriages and relationships for low-income families, the federal government has funded programming to encourage healthy marriage and relationships for many years. To expand our understanding of what works in healthy marriage and relationship education (HMRE) programming, the Office of Family Assistance (OFA) in the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services funded, and ACF's Office of Planning, Research and Evaluation oversaw, a contract with Mathematica Policy Research to conduct the Parents and Children Together (PACT) evaluation. The PACT Healthy Marriage (HM) impact study included a large-scale, random assignment examination of two HMRE programs funded and overseen by OFA. This report discusses the impacts of these programs about one year after study enrollment on (1) the status and quality of the couples' relationships, (2) the co-parenting relationships, and (3) job and career advancement.

From among all HMRE programs that received OFA funding through grants issued in 2011, the study team selected two for the PACT HM study: (1) Supporting Healthy Relationships, at University Behavioral Associates in the Bronx, New York; and (2) the Healthy Opportunities for Marriage Enrichment Program, at the El Paso Center for Children in El Paso, Texas. As a requirement of their grants, the two programs offered services to support and strengthen couples' relationships (Zaveri and Baumgartner 2016). The relationship skills workshops at both programs covered similar topics, such as understanding partner's perspectives, developing strategies to avoid fighting, and communicating effectively. In response to the funding announcement, the two programs integrated job and career advancement services into their programs. Both programs offered two-hour stand-alone job and career advancement workshops and one-on-one meetings with employment specialists. Supporting Healthy Relationships also integrated four hours of content related to economic and financial well-being into the relationship skills workshops. Participation rates were high for the HM programs in PACT, although attendance at the relationship skills workshops was much higher than for job and career advancement services.

Couples in the PACT HM study were in relatively stable and committed relationships when they enrolled in the study. Of the 1,595 study couples, 59 percent reported being married when they enrolled and about half of the study couples had been together for at least five years. About three-quarters of the couples were Hispanic. Most couples were in their 30s and had relatively low levels of education and earnings.

Primary research question

The PACT HM impact study addressed the primary research question: What is the effect of offering HMRE services to low-income couples on (1) the status and quality of the couple relationship, (2) co-parenting, and (3) economic stability?

Purpose

ACF conducted the PACT HM study to provide rigorous evidence on the effectiveness of HMRE services for low-income families. Recognizing that programs are always changing and developing, the study seeks to provide a building block in the evidence base to guide ongoing and future HMRE program design and evaluation. The PACT HM impact results are not intended to determine whether HMRE programs as a whole are effective, because the program's included in the study are not representative of all HMRE grantees or HMRE programs more broadly.

The PACT HM study adds to the prior research on the effectiveness of healthy relationship programming for low-income couples in two important ways. First, it examines programs that offer HMRE services in conjunction with low-intensity job and career advancement services. Prior research has not rigorously examined this approach. Second, the study examines the effectiveness of offering HMRE services to a mix of married and unmarried low-income couples raising children. Most prior studies have examined programs designed to serve either married couples or unmarried couples exclusively.

Key findings and highlights

Key impact findings of the project included:

- The HM programs in PACT improved multiple aspects of the couple relationship. They improved couples' relationship quality, including the level of commitment partners felt toward their relationship and the level of support and affection they felt toward each other. There is also some evidence that the programs helped couples avoid destructive conflict behaviors, although the programs did not improve use of constructive conflict behaviors or relationship happiness.
- The programs increased the likelihood that couples were married at the one-year follow-up by about 4 percentage points (63 percent for the program group versus 59 percent for the control group). Exploratory analysis indicates that this increase in marriage resulted from preventing couples who were married at baseline from breaking up, rather than encouraging marriage among those who were not initially married.
- The programs improved couples' co-parenting relationships. Couples in the program group reported higher values on a scale measuring the degree to which they felt they worked well together in raising their children.
- The programs had more limited success in improving the economic outcomes of participants. There is mixed evidence that the programs improved women's earnings during the follow-up period. The programs did not affect men's earnings or their perceptions of economic improvement.

Methods

From July 2013 to April 2015, the PACT HM study team randomly assigned 1,595 eligible couples, dividing them evenly between the program and control groups. To estimate the overall effect of the HM programs in PACT, we estimated the difference in average outcomes between program and control group couples. These estimated effects represent the difference, on average, between what actually happened to

couples who were offered HM program services and what would have happened to them if they had not been offered these services.

To estimate the effects of the programs, the team used data from three sources: (1) baseline surveys completed by both members of the couple when they applied to an HM program in PACT, (2) follow-up surveys conducted with both members of the couple about one year after they enrolled in the study, and (3) administrative employment records collected from the National Directory of New Hires (NDNH). The baseline and follow-up surveys included questions in many areas, including parenting, relationships, and economic stability. The NDNH is a national database of information about employment and earnings operated by the Office of Child Support Enforcement.

Recommendations

Findings from the study support further investment in HMRE programs as a means of promoting stability in the relationships of low-income families. The HM programs in PACT improved several aspects of relationship quality, co-parenting relationships, and the likelihood that couples would be married one year later. These findings indicate that HMRE programs can benefit low-income families in important ways.

Future HMRE programming and research should seek to improve HMRE approaches in ways that better meet the needs of unmarried low-income couples. Impacts of the programs were somewhat stronger for married couples than for unmarried ones. The study findings broadly align with other findings in the literature suggesting that HMRE programs are more effective for married couples than for unmarried couples (Hawkins and Erickson 2015). Taken together, results from the PACT HM study and previous studies suggest that although existing HMRE approaches can have encouraging results for low-income married couples, they are less successful for unmarried ones.

Developing more successful approaches to integrating job and career services into HMRE programs is another topic for future HMRE programming and research. The PACT HM study did not find a consistent pattern of positive impacts on earnings. Only half of couples received job and career advancement services, which might explain why the programs did not have a substantial effect in this area. Another possibility is that improving labor market success requires more intensive services than those offered as part of the HM programs in PACT. Combining job and career advancement services with HMRE services is still a relatively new idea. It might take time for programs to develop successful strategies that fully integrate these two program components and improve the job and career outcomes of participants.

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THE PARENTS AND CHILDREN TOGETHER HEALTHY MARRIAGE EVALUATION

If families are led by two adults in an unhealthy romantic relationship, creating a stable family environment that is conducive to positive child development can be challenging.

Introduction to the Parents and Children Together Evaluation

Growing up with two parents in a stable, low-conflict family environment can improve the lives of children in a broad range of areas, from education and employment to marriage and childbearing (Waldfogel et al. 2010; Kim 2011; Amato 2014; McLanahan and Sandefur 1994). If families are led by two adults in an unhealthy romantic relationship, creating a stable family environment that is conducive to positive child development can be challenging. Similarly, relationship instability can have negative effects on children. If the family faces substantial financial difficulties, that challenge can be compounded by the stresses economic hardship can place on the couple relationship (Bramlett and Mosher 2002; Conger et al. 2010).

Recognizing the potential benefits of healthy marriages and relationships for low-income families, Congress has funded three rounds of grants for healthy marriage programs since 2006. The Office of Family Assistance (OFA), which is in the Administration for Children and Families (ACF) at the U.S. Department of Health and Human Services, awards and oversees the grants. ACF designed the HM grants to foster economically secure households and communities for the well-being and long-term success of children and families.

The Parents and Children Together (PACT) Evaluation was initiated and designed to expand our understanding of what works in programming that promotes healthy relationships and marriage (Box 1). The OFA sponsored PACT, and ACF's Office of Planning, Research, and Evaluation oversaw it. One component of this multicomponent evaluation is a study of the impacts of two Healthy Marriage (HM) programs funded by ACF's OFA. Recognizing that programs are always changing and developing, the PACT HM study is intended to provide a building block in the evidence base to guide ongoing and future HM program design and evaluation. The impact results from PACT are not intended to determine whether HM programs as a whole are effective, because the PACT grantees are not representative of all HM grantees or HM programs more broadly. Even so, the results shed light on whether and how the HM programs in PACT affected couples' outcomes in several areas.

The PACT HM study adds to the prior research on the effectiveness of healthy relationship programming for low-income couples in two important ways. First, it examines programs that offer HM services in conjunction with low-intensity job and career advancement services. This approach has not been rigorously examined in prior research. Second, the PACT HM study examines the effectiveness of offering HM services to a mix of married and unmarried low income couples raising children. Most prior studies have examined programs designed to serve either married couples or unmarried couples exclusively.

Box 1. The PACT evaluation

The PACT evaluation is a large-scale multi-component research project intended to broaden understanding of several types of family strengthening grantees funded by ACF. Text marked with an asterisk (*) is the focus of this report.

MAIN EVALUATION COMPONENTS

- **Responsible Fatherhood programs**
  - —Qualitative study of fathers
  - —Implementation study of program operations
  - —Impact study of program effectiveness
- **Healthy Marriage programs**
  - —Implementation study of program operations
  - —Impact study of program effectiveness*

SPECIAL TOPIC STUDIES

- **Responsible Fatherhood programs serving Hispanic men**
  - —Study of the role of culture in program implementation
- **Programs for fathers re-entering society after incarceration**
  - —Descriptive study of trauma-informed approaches to serving fathers in re-entry
- **Pathways to outcomes study of responsible fatherhood and healthy marriage programs**
  - —Models hypothesizing how programs may effect change by describing and linking contextual influences and program activities to outcomes of interest

This study included two programs awarded HM grants by OFA in 2011 (See Box 2). Almost 1,600 couples voluntarily enrolled in the study and were randomly assigned to either a program group that could participate in the HM programs in PACT or a control group that could not. We surveyed these couples about one year after enrollment to ask how they were doing in multiple areas the programs aimed to affect. We also collected administrative records documenting the earnings of study participants. We estimated program effects by comparing the outcomes of the couples in the program group with the outcomes of those in the control group.

Box 2. HM programs in PACT

Supporting Healthy Relationships, at University Behavioral Associates (Bronx, New York)

Healthy Opportunities for Marriage Enrichment (HOME) Program, at El Paso Center for Children (El Paso, Texas)

This report focuses on the impacts of the HM programs in PACT on outcomes in three main areas: (1) the status and quality of the couples' relationships, (2) the co-parenting relationship, and (3) economic stability. A technical supplement to this report presents additional detail on how we conducted the analysis, as well as additional impact results (Covington et al. forthcoming). An earlier report documented the implementation of the two HM programs in PACT (Zaveri and Baumgartner 2016).

The programs improved several aspects of relationship quality, including the level of commitment and the level of support and affection the members of the couples felt toward each other. The impacts on couples' economic stability were more limited.

We found that the HM programs in PACT were successful in improving many of the outcomes their services targeted. The programs improved several aspects of relationship quality, including the level of commitment and the level of support and affection the members of the couples felt toward each other. We found some evidence that the programs improved couples' ability to avoid destructive conflict behaviors. Women in the HM programs in PACT were less likely than women in the control group to report that their partners had physically assaulted them in the year before the follow-up survey, although reducing intimate partner violence was not one of the PACT HM programs' central goals. In addition, the HM programs in PACT increased the likelihood that couples were married at the time of the one-year follow-up, because more couples who were married when they entered the program remained married. The HM programs in PACT also improved couples' co-parenting relationships at the one-year follow-up, on average, increasing the degree to which couples felt they worked well together in raising their children.

The impacts of the HM programs in PACT on couples' economic stability were more limited. The programs did not affect men's earnings over the one-year follow-up period of the study. We did find that women in the HM programs in PACT reported higher earnings on follow-up surveys than did women in the control group, a difference that was statistically significant at the .10 level. However, we did not find a similar impact on women's earnings when we examined administrative records data. Overall, these findings suggest that the HM programs in PACT had success in improving couples' relationships but more limited success in improving their economic outcomes.

Background and earlier research on healthy marriage and relationship programs

OFA has issued three rounds of HMRE grants, first in 2006, then in 2011, and most recently in 2015. The PACT HM study includes two programs selected from HMRE grants awarded in 2011.

The federal government has been funding programming to encourage healthy relationships and marriage for many years. Beginning in the mid-2000s, the federal government began providing additional funding specifically to support healthy marriage and relationship education (HMRE) services. OFA oversees these funds and distributes them through a set of competitive multiyear grants to organizations nationwide. OFA has issued three rounds of HMRE grants, first in 2006, then in 2011, and most recently in 2015. The PACT HM study includes two programs selected from HMRE grants awarded in 2011. In the 2011 grant cycle, ACF encouraged grantees to offer programs that supplemented marriage education services with services designed to address job and career success. The PACT HM study focused on programs that used such an approach, of core marriage education services complemented with job and career success services. The 2015 grant cycle maintained this emphasis on supplementing marriage and relationship education with economic stability services.

To build the evidence base and strengthen HMRE programming, ACF has sponsored several large studies of HMRE programs. Two evaluations, both of which used a rigorous random assignment research design, examined the effectiveness of HMRE programs for low-income couples: Building Strong Families (BSF) and Supporting Healthy Marriage (SHM).

BSF (2002–2013) examined the effectiveness of programs offering group-based relationship skills education to low-income, unmarried couples who were expecting or had just had a new baby. Couples also received individual support from a family coordinator and assessment and referral to support services. Relationship skills education was designed to be intensive, ranging from 30 to 42 hours of group sessions. Despite substantial efforts by the programs to promote regular program participation, maintaining attendance among participants proved challenging (Dion et al. 2010). Overall, across the eight programs in the evaluation, 55 percent of the couples offered services attended at least one group session. Including those who received no services, couples received an average of 12 hours of programming through these group sessions.

When data were combined across all eight programs, the BSF programs had no effect on couples' relationship quality and did not increase the likelihood that couples got married, at both 15 months and three years after couples applied to participate in the program (Wood et al. 2010; Wood et al. 2012). Couples in BSF also experienced some negative outcomes—couples were less likely to stay together, and fathers spent less time with their children—although parents also reported a positive outcome—children were less likely to exhibit behavior problems. When analyzed individually, one program showed a consistent pattern of positive impacts at 15 months, although those impacts generally faded by the three-year follow-up (Wood et al. 2012). Poor attendance at relationship skills sessions is a potential explanation for the absence of BSF effects on relationship quality. However, quasi-experimental analysis suggests that BSF had no effects on key outcomes for couples who attended BSF relationship skills sessions (Moore et al. 2013).

SHM (2003–2014) focused on HM programs providing services to lower-income married couples who were expecting a child or who had a child under the age of 18. It examined the impacts of a program model offering healthy marriage/relationship education in group-based workshops, case management and supplemental activities. Relationship skills education was designed to be intensive, ranging from 24 to 30 hours of group sessions provided over four to five months after couples enrolled in the programs. Overall, across eight programs in the evaluation, 83 percent of couples who were randomly assigned to be offered SHM services attended at least one group session (Gaubert et al. 2012). Couples who were randomly assigned to receive SHM services received an average of 27 hours of programming, of which 17 hours were group relationship skills education workshop sessions, and 10 hours were in-person family support meetings and supplemental activities (Gaubert et al. 2012).

Both one year and two-and-a-half years after couples enrolled in the program, SHM found small, positive impacts on couples' relationship quality. Also, after two-and-a-half years, SHM reduced psychological distress among women, but did not appear to affect the likelihood of couples staying together or the prevalence of physical assault in couple relationships as reported by both men and women. Further, after two-and-a-half years, SHM appeared to have few effects on co-parenting, parenting, or child well-being (Lundquist et al. 2014).

Overview of HM programs in PACT

The evaluation team selected two programs that received HMRE grants in 2011 for the PACT evaluation: (1) El Paso Center for Children's Healthy Opportunities for Marriage Enrichment (HOME) program in El Paso, Texas; and (2) University Behavioral Associates' Supporting Healthy Relationships program in the Bronx, New York. The team selected these grantees because they planned to offer services to parenting couples, deliver a relationship education workshop, and provide job and career

advancement services to a relatively large share of couples. Additionally, the selected programs appeared able to enroll a sufficient number of couples to meet sample size targets for the evaluation and were located in communities where a similar package of services was not available elsewhere, allowing for a strong contrast between program and control group couples. Although the grantees were not necessarily representative of all HM grantees in their cohort, because of their strengths, they were strong candidates for evaluation, providing good opportunities for detecting program impacts. These programs were also included in the SHM evaluation. The programs these organizations operated when they participated in the SHM evaluation differed from the HM programs in PACT in two key ways. First, unlike the HM programs in PACT, the SHM programs these grantees operated did not include economic stability services. Second, unlike the HM programs in PACT, the grantees designed the SHM programs to serve only married couples. The HM programs in PACT were explicitly designed to serve a mix of married and unmarried couples, and about two in five program couples were unmarried. Thus, the results from the PACT HM study will provide evidence on whether HMRE programs that incorporate economic stability services and serve a mix of married and unmarried couples can succeed in improving key outcomes.

As a requirement of their grants, the two programs offered services to support and strengthen couples' relationships (Table 1). The HOME program offered an 18-hour relationship skills education workshop using the *Within Our Reach* curriculum. Supporting Healthy Relationships offered a 24- to 27-hour relationship skills education workshop using the *Loving Couples, Loving Children* curriculum. The relationship skills workshops at both programs covered similar topics, such as

understanding partner's perspectives, developing strategies to avoid fighting, and communicating effectively (Zaveri and Baumgartner 2016). The programs offered the workshops in both English and Spanish. The relationship skills workshops were well attended. About 87 percent of couples attended at least one relationship skills workshop session and 68 percent attended about half of the sessions (Zaveri and Baumgartner 2016).

Table 1. Services offered by programs included in PACT

	Program name	
Services	**HOME**	**Supporting Healthy Relationships**
Relationship skills classes	*Within Our Reach* (18 hours)	*Loving Couples, Loving Children* (24–27 hours)[a]
Economic stability services	A two-hour job readiness workshop held approximately every other month on resume preparation, interview and communication skills, and appropriate work attire An occasional workshop on financial literacy called *Money Habitudes*	Economic stability topics included in its relationship skills workshop A twice-monthly two-hour stand-alone employment workshop on obtaining employment and developing soft skills
Case management	Yes	Yes
Other activities	Booster sessions (2–3 times per month)	Booster sessions (2–3 times per month) Services for "distressed couples," including one-on-one meetings with facilitators and workshops

[a] Supporting Healthy Relationships offered its workshop in a 27-hour weekday and 24-hour Saturday format.

In response to the funding announcement, the HOME program and Supporting Healthy Relationships integrated job and career advancement services into their programs. However, Supporting Healthy Relationships offered job and career advancement services that were more integrated and more regularly provided than the HOME program. As a result, couples at the Supporting Healthy Relationships program received more job and career advancement services than couples at the HOME program. Both grantees offered two-hour stand-alone job and career advancement workshops at regular intervals, although Supporting Healthy Relationships offered them more frequently (twice monthly for Supporting Healthy Relationships and every other month for the HOME program). The stand-alone workshops were not well attended; 13 percent of couples at the HOME program attended at least one workshop and about one-third of couples at Supporting Healthy Relationships did so (Zaveri and Baumgartner 2016). Supporting Healthy Relationships also integrated four hours of content related to economic and financial well-being into the relationship skills workshops; 55 percent of Supporting Healthy Relationship couples received job and career advancement services in this way. The HOME program did not integrate economic and financial well-being content into

More than 90 percent of couples in the program group received some PACT HM program services. Couples at both programs received just over 18 hours of service, on average.

the relationship skills workshops. Participants could also receive job and career advancement services through one-on-one contact from an employment specialist. A larger proportion of couples in Supporting Healthy Relationships participated in an employment-focused individual contact than did couples at the HOME program (63 percent versus 11 percent).

Overall participation rates were high for the HM programs in PACT. More than 90 percent of couples in the program group received some PACT HM program services. Couples at both programs received just over 18 hours of service, on average, although they were offered a longer relationship skills curriculum at Supporting Healthy Relationships (Table 2). For both programs, a large majority of this time came in relationship skills workshops (Table 2).

Table 2. Average hours of participation in the HM programs in PACT

Content	HOME	Supporting Healthy Relationships
Relationship skills workshop[a]	15.1	13.6
Job and career advancement workshop	0.5	0.9
Individual contacts	1.6	3.4
Supplemental activities	1.2	0.5
Total hours	**18.4**	**18.4**

Source: PACT information system.

Note: Values include all program group couples, including those who did not participate in any services.

[a] Value includes time in make-up sessions of relationship skills workshops. For Supporting Healthy Relationships, these workshops included job and career advancement content, but for the HOME program they did not.

A rigorous evaluation

Couples who applied for one of the two HM programs in PACT were randomly assigned to either a program group that was offered the HM program services or a control group that was not. The control group received information about other services in the community and could choose to participate in those. As a result, the control group represented business as usual—that is, what would have happened had the HM programs not been available.

From July 2013 to April 2015, the PACT evaluation team randomly assigned a total of 1,595 eligible couples, dividing them evenly between the program and control groups. The strength of random assignment is that couples in both research groups are likely to have very similar characteristics and circumstances before they apply for the program, on average. For that reason, a statistically significant difference between outcomes of the couples in the program and control groups after random assignment can be

attributed to the HM programs in PACT rather than to any differences in the pre-existing characteristics or circumstances in the two groups.

The evaluation team estimated effects of the HM programs in PACT by comparing the outcomes of the program group to those of the control group. These estimated effects represent the difference, on average, between what actually happened to fathers who were offered PACT HM program services versus what would have happened to them if they had not been offered these services. In generating the impact estimates, we used statistical models that adjusted for small differences in the initial characteristics of the research groups that may have arisen by chance or because of survey nonresponse. The technical supplement to this report provides more information on our statistical methods (Covington et al. forthcoming).

The study team pooled the data from the two HM programs to evaluate the overall effect of the HM programs in PACT. Each site was weighted equally. This approach evaluates the average effect of the programs instead of the individual effect of each site. A key reason for pooling the results was to gain statistical power to detect program effects. All else being equal, the smaller the effects that researchers are trying to detect, the larger the sample size should be. Pooling the data more accurately reflects the diversity of the HM programs as a whole. Although the grantees were not selected to be representative, they chose different approaches for implementing the required program elements. The pooled results show the average across these grantees and their different implementation approaches.

Data sources

This report is based on data collected from three sources: (1) baseline surveys completed by all couples when they applied to a PACT HM program, (2) follow-up surveys conducted with couples in the study about one year after study enrollment, and (3) administrative employment records collected from the National Directory of New Hires (NDNH). The baseline and follow-up surveys included questions in many areas, including parenting, relationships, and economic stability. The NDNH is a national database of information about employment and earnings operated by the Office of Child Support Enforcement.

We used data from two data sources for the analysis of employment outcomes: (1) sample members' self-reports from the surveys, and (2) administrative data from NDNH on employment covered by unemployment insurance (UI). The two data sources were complementary. The survey data included couples' reports of all earnings from all types of work, but are subject to recall error or miscalculations. Data from NDNH are not affected by recall error or miscalculations, but do not include earnings from work that is not covered by UI, such as self-employment, part-time employment, temporary or seasonal employment, employment in certain sectors, and informal or under-the-table employment.[1]

Outcomes

The HM programs had the potential to affect numerous areas of the lives of participating couples. We assessed a broad range of couples' outcomes that aligned with the key goals and services of the programs. We refer to analysis of the primary outcomes used to assess program effectiveness as the evaluation's confirmatory analysis. We refer to analysis of outcomes less central to the goals of the HM programs in PACT as the evaluation's additional analysis.

The evaluation team selected confirmatory outcomes that aligned closely with the grant goals and were most likely to be affected by the program.

Before conducting the analysis, the evaluation team selected 12 outcomes to include in the confirmatory analysis and 8 outcomes to include in the additional analysis (Table 3). We selected confirmatory outcomes that aligned closely with the grant goals and were most likely to be affected by the program. We estimated impacts on a larger set of exploratory outcomes as part of the additional analysis and presented them in the technical appendix (Covington et al. forthcoming).

Outcomes examined in the confirmatory analysis fall within the three broad topic areas: (1) couple relationships, (2) parenting, and (3) economic stability. Within these topic areas, outcomes in the confirmatory impact analysis can be grouped within four domains, as shown in Table 3. Two outcome domains measure the couple relationship: (1) relationship quality and (2) relationship status. One domain is associated with parenting: the quality of the co-parenting relationship. One domain is associated with economic stability: labor market success. We also analyze outcomes in additional domains, including intimate partner violence, father involvement, perceived economic improvement, depressive symptoms, and emotional well-being.

Table 3. Evalution outcomes

Domain	Outcome	Brief description
Couple relationship		
Relationship quality (confirmatory)	Support and affection (couples in an intact relationship)	Scale for relationship support and affection, composed of both partners' responses averaged across 13 survey items measuring positive relationship traits such as support, intimacy, friendship, commitment, and trust.
	Avoidance of destructive conflict behaviors (couples in contact with each other)	Scale for avoiding hostile conflict behaviors, composed of both partners' responses averaged across 10 survey items measuring behaviors such as criticism, contempt, and defensiveness.
	Constructive conflict behaviors (couples in contact with each other)	Scale for constructive conflict management, composed of both partners' responses averaged across seven survey items measuring behaviors such as being respectful and listening.
	Relationship commitment (couples in an intact relationship)	Measured from 1 to 10, where 1 is not at all committed and 10 is completely committed to his/her marriage/relationship, by averaging both partners' responses.
	Relationship happiness	Measured from 1 to 10, where 1 is not at all happy and 10 is completely happy, averaging both partners' responses.
Relationship status (confirmatory)	Couple married to each other	Binary variable indicating both partners report that they are married to each other.
	Couple married or romantically involved	Binary variable indicating both members of the couple characterized their relationship as either being "married," "romantically involved on a steady basis," or being "involved in an on-again and off-again relationship."
Intimate partner violence (additional)	Any severe physical assault	Binary variable indicating whether the woman experienced any severe physical assault by the partner in the past year based on the seven items from the CTS2 subscale categorized by the CTS2 developers as severe.
Parenting		
Co-parenting (confirmatory)	Quality of co-parenting relationship	Scale of 10 items drawn from Parenting Alliance Inventory (Abidin and Brunner 1995). Created by averaging mothers' and fathers' responses to all 10 items.
Father involvement (additional)	Fathers' engagement in parenting activities	Scale of nine items related to parenting activities with the focal child such as reading books or telling stories and playing during the past month.
	Fathers' nurturing behavior	Scale of four items related to father's nurturing behaviors.

(continued on next page)

Table 3. Evalution outcomes *(continued from previous page)*

Domain	Outcome	Brief description
Economic stability		
Labor market success (confirmatory)	Women's earnings, survey	Average monthly earnings during the three months prior to the follow-up survey, based on survey data.
	Women's earnings, administrative	Average monthly earnings created by summing quarterly earnings data across the year and then dividing by 12 during the year after random assignment.
	Men's earnings, survey	Average monthly earnings during the three months prior to the follow-up survey, based on survey data.
	Men's earnings, administrative	Average monthly earnings created by summing quarterly earnings data across the year and then dividing by 12 during the year after random assignment.
Perceived economic improvement (additional)	Better off financially now (women) Better off financially now (men)	Sample member reported on the follow-up survey that he/she feels better off financially now than a year ago.
	Handle bills better now (women) Handle bills better now (men)	Sample member reported on the follow-up survey that he/she knows how to handle money and bills better now than he/she did a year ago.
Emotional well-being		
Social-emotional and mental well-being (additional)	Depressive symptoms (scale)	Sum of how frequently a sample member experienced depressive symptoms measured by eight questions from the Patient Health Questionnaire (PHQ-8) depression scale.

Note: The technical supplement to this report provides more details on how we created each outcome (Covington et al. forthcoming). All couple-level outcomes incorporate information from both women's and men's responses. In cases in which only one member of the couple responded to the survey, the values for the nonresponding partner were imputed using a multiple imputation technique. This method is described in the technical supplement.

Characteristics of couples in the study

Couples in the PACT HM study were in relatively stable and committed relationships when they enrolled in the study. Of the 1,595 study couples, 59 percent reported being married at baseline (Table 4). About half of the study couples had been together for at least five years. The average value on a scale of relationship commitment was 9.0 on a 1 to 10 scale. The average score indicates that couples in both research groups, on average, were very committed to their relationships. Couples had about two children, on average (Table 4).

Table 4. Baseline characteristics of couples in the PACT HM study

Baseline characteristic	Mean value
Relationships quality	
Relationship commitment (scale 1–10)	9.06
Support and affection (scale 1–4)	3.07
Avoidance of negative conflict management (scale 1–4)	2.45
Positive conflict management (scale 1–4)	3.01
Relationship happiness (scale 1–10)	7.45
Quality of co-parenting relationship (scale 1–10)	3.42
Family characteristics	
Married	59
Length of relationship	
Less than one year	17
At least one year, less than five years	27
At least five years	56
Number of resident biological and adopted children	2.2
Average age of biological and adopted children (years)	7.2
Demographics	
Average age (years)	
Women	33.5
Men	36.1
Race and ethnicity	
Both partners Hispanic	78
Both partners Black, non-Hispanic	10
Other	12
Both partners' primary language is English	37
Socioeconomic status	
Both partners have high school diploma or GED	55
Worked for pay in past 30 days ($)	
Women	46
Men	81
Earnings in past 30 days ($)	
Women	614
Men	1,515
Well-being	
At least one partner had symptoms of moderate or severe depression	36
Sample size	**1,595**

Source: PACT baseline survey.

Note: Numbers are percentages unless otherwise noted. The PACT HM programs are weighted equally for these calculations.

Most PACT HM couples were Hispanic (78 percent), in their 30s, and had relatively low levels of education and earnings (Table 4). On average, PACT HM women were about 34 years old when they enrolled in the study and PACT HM men were about 36. Only about 55 percent of couples included two members with a high school diploma or GED. About four in five of the men worked in the month before study enrollment and slightly less than half of the women did so. Couples' earnings were generally low, with average earnings in the 30 days before study enrollment of $614 for women and $1,515 for men.

Effects of the HM programs in PACT on the couple relationship

Strengthening the couple relationship is at the center of the HM programs in PACT. The core service of both programs was the marriage and relationship skills workshop, during which a male-female facilitator pair provided relationship skills education on topics such as communication skills, compromise, and problem solving (Zaveri and Baumgartner 2016). This section examines effects of the HM programs in PACT on the couple relationship about one year after couples enrolled in the study. It focuses on two key aspects of the couple relationship that the program aimed most directly to affect: (1) relationship quality and (2) relationship status (including romantic involvement and marriage). It also examines impacts on the prevalence of intimate partner violence.

The HM programs in PACT improved couples' commitment to their relationships and their supportiveness and affection.

The HM programs in PACT increased couples' commitment to their relationships. Among the 88 percent of couples who were married or romantically involved at follow-up, average relationship commitment scale values for the program group were 9.4 compared to 9.2 for the control group, a difference that is statistically significant (Table 5). This impact is equivalent to the HM programs in PACT causing about 1 in 7 program group couples to move up one value on the ten-point scale.

The HM programs in PACT significantly improved couples' reported levels of supportiveness and affection in their relationships. Among the couples who were still together at the time of the follow-up survey, average support and affection scale values for the program group were 3.4 compared to 3.3 for the control group, a difference that is statistically significant (Table 5). The magnitude of the impact is equivalent to the HM programs in PACT causing 1 in 20 program group couples to move up one value on the four-point scale.

Table 5. Impacts of HM programs in PACT on the couple relationship

	Range	PACT group	Control group	Estimated impact	*p*-value	Effect size
Relationship quality (confirmatory)						
Relationship commitment[a]	1–10	9.39	9.24	0.15**	0.02	0.12
Support and affection[a]	1–4	3.38	3.33	0.05**	0.03	0.10
Avoidance of destructive conflict behaviors[b]	1–4	2.75	2.70	0.05*	0.09	0.07
Constructive conflict behaviors[b]	1–4	3.16	3.13	0.03	0.32	0.05
Relationship happiness	1–10	7.91	7.77	0.15	0.12	0.07
Relationship status (confirmatory)						
Married (%)	0–100	63	59	4**	0.01	0.11
Married or romantically involved (%)	0–100	90	87	2	0.18	0.15
Intimate partner violence (additional)						
Any severe physical assault (%)	0–100	5	8	-3**	0.03	-0.30
Sample size (couples)[c]		**755**	**745**			

Source: PACT follow-up surveys, conducted by Mathematica Policy Research.

Note: Pooled overall impact estimates are calculated based on a weighted average of site-level impacts in which all sites are weighted equally. Outcomes include all couples unless otherwise noted. Sites began PACT intake in July 2013 and ended in April 2015. Impact analyses were weighted for individual nonresponse and multiple imputation was used.

[a] Outcome defined only for the 88 percent of couples who were in intact relationships with each other at the time of follow-up. The risk of attrition bias for this sample is low (Covington et al. forthcoming).

[b] Outcome defined only for the 97 percent of couples who were in contact with each other at the time of follow-up. The risk of attrition bias for this sample is low (Covington et al. forthcoming).

[c] The sample size varied by outcome.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

There is some evidence that the HM programs in PACT improved couples' ability to manage their conflicts by avoiding destructive conflict behaviors. Among the 97 percent of couples who were still in contact with each other at follow-up, there was a statistically significant difference between the research groups in the avoidance of destructive conflict behaviors, such as withdrawing when there is a disagreement or allowing small disagreements to escalate. The average scores for this 1 to 4 scale were 2.75 for program group couples and 2.70 for control group couples, a difference that is statistically significant at the .10 level (Table 5). These average values suggest that couples in both the program and control groups typically reported that they almost never engage in these destructive conflict behaviors. The difference between the research groups on the scale measuring the use of constructive conflict behaviors (such as keeping a sense of humor and listening to the other partner's perspective during disagreements) was small and not statistically significant.

Program and control group members reported being equally happy in their relationships, with average ratings of 7.9 and 7.8, respectively, on a 0 to 10 relationship happiness scale (Table 5). The maximum score on this scale (10) indicates that both members of the couple reported that they were completely happy with their relationship.

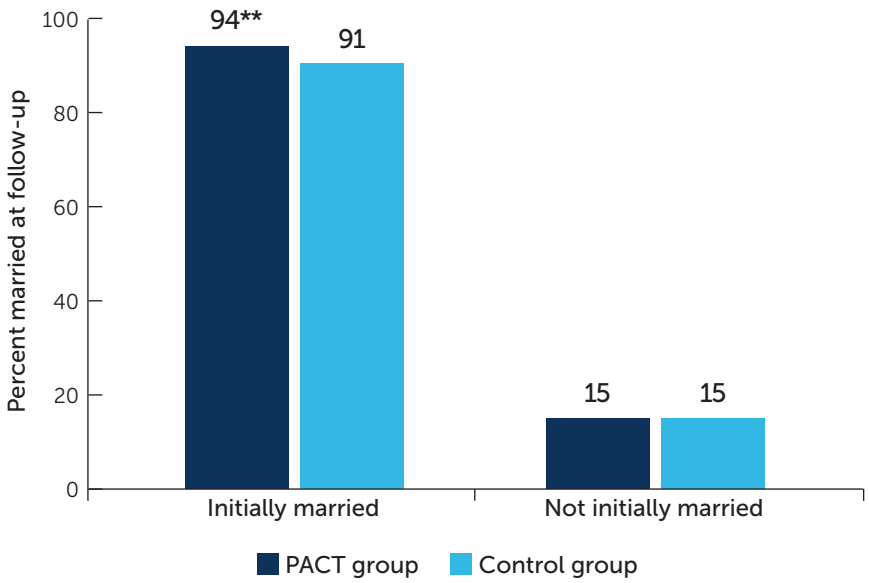
HM programs in PACT reduced the likelihood that women experienced a severe physical assault. At the one-year follow-up, 5 percent of women in program group couples reported a severe physical assault by a romantic partner in the past year, compared with 8 percent of women in control group couples, a difference that is statistically significant (Table 5). Severe physical assaults included punching, choking, or kicking (Strauss et al. 1996). Although reducing intimate partner violence was not one of the HM programs' central goals, this finding is consistent with favorable impacts on relationship quality in the confirmatory analysis.

The HM programs in PACT increased the likelihood that couples were married at the one-year follow-up.

One year after study enrollment, about 63 percent of program group couples reported being married to each other, compared to 59 percent of control group couples, a difference that is statistically significant (Table 5). Looking at relationship status defined more broadly, about 90 percent of the program group reported being either married or romantically involved at the one-year follow-up, compared to about 87 percent of the control group, a difference that is not statistically significant (Table 5).

To better understand the positive impact on marriage, we conducted exploratory analysis to examine whether this impact is the result of the HM programs in PACT keeping married couples together or encouraging marriage among those who were not married. Among the 59 percent of couples who were married at the time of study enrollment, 94 percent of program group couples reported being married at follow-up, compared to 90 percent of control group couples, a statistically significant difference (Figure 1). However, there was no difference in marriage rates at follow-up among the 41 percent of couples who were not married at the time of study enrollment; among those couples, about 15 percent of both research groups reported that they were married at follow-up. This evidence suggests that the HM programs in PACT were successful in preventing married couples from breaking up; they did not increase marriage rates among those who were not initially married.

Figure 1. Impact of HM programs in PACT on marriage at one-year follow-up, by initial marital status



Source: PACT follow-up surveys, conducted by Mathematica Policy Research.

Note: Pooled overall impact estimates are calculated based on a weighted average of site-level impacts in which all sites are weighted equally. Sites began PACT intake in July 2013 and ended in April 2015. Impact analyses were weighted for individual nonresponse and multiple imputation was used.

**Significantly different from zero at the .05 level, two-tailed test.

Effects of the HM programs in PACT on parenting

As a requirement of their HM grants, grantees offered services to support and strengthen couples' relationships. The HM programs in PACT offered couples tools intended to foster healthy relationships, including communication skills, conflict management, and co-parenting strategies (Zaveri and Baumgartner 2016). This content could improve not only the couples' romantic relationship but also their co-parenting skills—that is, how couples coordinate on parenting a child, support each other, and manage conflict regarding childrearing. For this reason, we examine program impacts on the co-parenting relationship as part of the confirmatory analysis.

Research has shown that a father's relationship quality with his partner is positively associated with the quality of his relationships with the children, a pattern that is generally not observed for mothers (Almeida et al. 1999; Kouros et al. 2014). Therefore, improvements in couples' relationship quality might have beneficial spillover effects on father's parenting. For this reason, we examined impacts on father involvement as part of the additional analysis.

The HM programs in PACT improved couples' co-parenting relationships.

The average co-parenting scale score at follow-up was 3.43 for program group couples and 3.38 for control group couples, a difference that is statistically significant (Table 6). The maximum value for this scale (5) indicates that both partners strongly agreed with the 10 positive statements about the co-parenting relationship used to create the scale. The magnitude of the impact on co-parenting is equivalent to the HM programs in PACT causing 1 in 20 program group couples to move up one value on the four-point

scale. This result suggests that the programs increased, on average, the degree to which couples felt they worked well together in raising their children.

Table 6. Impacts of HM programs in PACT on parenting

	Range	PACT group	Control group	Estimated impact	*p*-value	Effect size
Co-parenting skills (confirmatory)						
Quality of co-parenting relationship	1–4	3.43	3.38	0.05**	0.03	0.10
Father involvement (additional)						
Fathers' engagement in parenting activities	1–4	2.31	2.25	0.06	0.11	0.09
Fathers' nurturing behavior	1–4	2.50	2.45	0.06	0.12	0.09
Sample size (couples)		**755**	**745**			

Source: PACT follow-up survey, conducted by Mathematica Policy Research

Note: Pooled overall impact estimates are calculated based on a weighted average of site-level impacts in which all sites are weighted equally. Outcomes include all couples unless otherwise noted. Sites began PACT intake in July 2013 and ended in April 2015. Impact analyses were weighted for individual nonresponse and multiple imputation was used.

**Significantly different from zero at the .05 level, two-tailed test.

Fathers in the program and control groups had similar self-reported parenting behavior at follow-up.

Additional analysis did not find effects of PACT HM programs on fathers' engagement in parenting activities or nurturing behaviors. The average scores on the father engagement scale indicate that, in both research groups, fathers reported engaging in activities such as having a meal together, somewhat often (Table 6). The average scores for the nurturing behavior scale indicate that, in both research groups, fathers reported engaging in activities related to nurturing behavior, such as showing patience when the child is upset, between somewhat often and very often.

Effects of the HM programs in PACT on job and career advancement

OFA encouraged grantees in the 2011 round of HMRE grants to offer programs that include job and career advancement services in addition to marriage and relationship education services. The HMRE grantees selected for PACT augmented their healthy marriage programming by offering services related to job and career advancement and financial management. The low-intensity economic stability services included a brief stand-alone job and career advancement workshop in both sites, as well as supplemental economic stability material integrated into core relationship skills workshops in one site (Zaveri and Baumgartner 2016). We assessed whether these job and career advancement services translated into improved labor market outcomes. As part of our additional analysis, we also examined program impacts on perceptions of economic improvement and ability to handle financial issues.

There is some evidence that the HM programs in PACT improved women's earnings during the follow-up period.

For women in the program group, the survey-reported average monthly earnings for the three months before the one-year follow-up survey were $934; the figure for women in the control group was $835, a difference that was statistically significant at the .10 level (Table 7). However, program and control group women had similar average monthly earnings for the one-year follow-up period based on administrative records. Women in both groups earned somewhat less than $800 per month on average in jobs covered by administrative records.

There are several potential reasons why the estimated impact on earnings is statistically significant at the .10 level when examining survey reports and but is not statistically significant when examining administrative records. One reason for this difference could be that the reference period for these measures differs. Survey reports refer to the three months before the date of the survey, whereas the main earnings measure based on administrative records refers to the first year after study enrollment. However, when we focus on the quarter in the administrative earnings records that most closely aligns with the survey data (the fourth quarter after study enrollment), we find the same pattern in the administrative records data as we do when examining the full year. Another potential explanation for differences in impact patterns by earnings data source is that the two types of sources cover different types of employment. Impacts on earnings based on survey reports could emerge if the programs affect the extent to which program group members work in jobs that are not covered by UI—such as temporary, part-time, or informal jobs. These types of jobs are not included in administrative records data (Moore et al. 2018).

In the additional analysis, we found that 88 percent of women in the program group reported on follow-up surveys that they were better able to handle bills than they had been a year earlier. The percentage for control group women was 84 percent, a difference that is statistically significant at the .10 level (Table 7). However, there was no impact on women's reports of whether they are better off financially compared to one year before the survey.

The HM programs in PACT did not affect men's earnings or their perceptions of economic improvement.

There was no difference across research groups in men's average earnings based on either survey reports or administrative records. On the one-year follow-up survey, men in both groups reported average monthly earnings of about $2,000 (Table 7). Men in both groups earned somewhat more than $1,700 per month, on average, in jobs covered by UI administrative records. Consistent with this finding, the additional analysis indicated that there was also no difference across research groups in men's perceptions of economic improvement (Table 7).

Table 7. Impacts of HM programs in PACT on economic stability

	Range	PACT group	Control group	Estimated impact	*p*-value	Effect size
Labor market success (confirmatory)						
Women's average monthly earnings, survey report ($)	0–11,000	934	835	99*	0.08	0.08
Women's average monthly earnings, administrative records ($)	0–8,333	778	762	15	0.83	0.01
Men's average monthly earnings, survey report ($)	0–11,000	2,057	1,984	73	0.39	0.04
Men's average monthly earnings, administrative records ($)	0–8,333	1,786	1,726	60	0.58	0.03
Perceived economic improvement (additional)						
Better off financially now, women (%)	0–100	68	64	3	0.19	0.09
Handle bills better now, women (%)	0–100	88	84	4*	0.07	0.18
Better off financially now, men (%)	0–100	71	71	0	0.89	-0.01
Handle bills better now, men (%)	0–100	88	89	-1	0.76	-0.03
Sample size (couples)		**755**	**745**			

Source: PACT follow-up survey, conducted by Mathematica Policy Research

Note: Pooled overall impact estimates are calculated based on a weighted average of site-level impacts in which all sites are weighted equally. Outcomes include all couples unless otherwise noted. Sites began PACT intake in July 2013 and ended in April 2015. Impact analyses were weighted for individual nonresponse and multiple imputation was used.

*Significantly different from zero at the .10 level, two-tailed test.

Effects of the HM programs in PACT on emotional well-being

Although not required by the OFA HM grant, both HM programs in PACT covered a group of topics related to emotional well-being, such as stress and coping, problem solving, and goal planning (Zaveri and Baumgartner 2016). Relationship skills, such as being supportive of one another, communicating, and anger management, may also benefit individuals' emotional health. Further, support from staff and peers during individual and group sessions may improve depressive symptoms. For these reasons, we examined effects on depressive symptoms as part of our additional analysis of the effects of HM programs in PACT.

The HM programs in PACT reduced women's depressive symptoms relative to what they would have been without the program; they did not affect men's depressive symptoms.

We measured depressive symptoms on follow-up surveys using the eight-item Patient Health Questionnaire (PHQ-8). The PHQ-8 score represents the frequency with which sample members experienced a set of eight depressive symptoms, such as having a poor appetite; feeling down, depressed, or hopeless; and having little interest or pleasure in doing things. Values of the summary scale range from 0, indicating that the respondent did not experience the symptoms at all, to 24, indicating that the respondent experienced all eight symptoms nearly every day.

Program group women had an average PHQ-8 scale score of 3.9, compared to an average of 4.7 for control group women (Table 8). This difference is statistically significant. For context, a PHQ-8 scale score between 5 and 9 represents mild depressive symptoms (Kroenke et al. 2008). Thus, on average, the HM programs in PACT moved women further from this diagnostic threshold than they would have been without the program. Men in the program and control groups had similar PHQ-8 scale scores. The average scale score for program group men was 3.2 compared to 3.9 for control group men.

Table 8. Impacts of HM programs in PACT on emotional well-being

	Range	PACT group	Control group	Estimated impact	*p*-value	Effect size
Depressive symptoms						
Men's depressive symptoms	0–24	3.42	3.85	-0.43	0.11	-0.08
Women's depressive symptoms	0–24	3.91	4.72	-0.81***	< 0.01	-0.14
Sample size (couples)		**755**	**745**			

Source: PACT follow-up survey, conducted by Mathematica Policy Research.

Note: Pooled overall impact estimates are calculated based on a weighted average of site-level impacts in which all sites are weighted equally. Outcomes include all couples unless otherwise noted. Sites began PACT intake in July 2013 and ended in April 2015. Impact analyses were weighted for individual nonresponse and multiple imputation was used.

***Significantly different from zero at the .01 level, two-tailed test.

Effects of the HM programs in PACT for subgroups

Program effects may not be uniform across all participants or sites. Effectiveness may depend on who was served, where, and how. Subgroup analyses can identify variations, for example, stronger or weaker program impacts for groups with select characteristics. But by increasing the number of comparisons, subgroup analysis also increases the risk of finding statistically significant impacts by chance.

The evaluation team examined impacts on the primary measures of program effectiveness separately for the two HM programs in PACT. Before beginning the analysis, the evaluation team also identified set of subgroups that past research has suggested might be differently affected by the program or might have implications for future program operations and development (Table 9). For most of these subgroups, the team determined that a subgroup must show impacts on primary measures of program effectiveness in multiple domains to demonstrate a noteworthy pattern of findings.[2] However, the team designated initial marital status as a priority subgroup that should be discussed in this report regardless of the pattern of findings. An important contribution of the PACT HM evaluation is that it examines the effectiveness of offering HM services to a mix of married and unmarried low-income couples raising children. Prior research suggests that that HMRE programs might be more effective for married couples than for unmarried couples (Hawkins and Erickson 2015). Therefore, it is important to examine whether differences in the impacts the HM programs in PACT based on whether the couples were married at baseline.

Table 9. Subgroups for PACT analysis of HM programs

Topic	Subgroup	Definition of subgroup categories and proportion of sample
Couple relationship	Marital status (priority subgroup)	• Married. Both partners report that they are married (56 percent). • Unmarried. At least one partner reports that he or she is not married (44 percent).
	Relationship quality among married couples	• Poor relationship quality among married couples (below the median of quality for married couples) (46 percent of married couples). • Good relationship quality among married couples (at or above the median for married couples) (54 percent of married couples).
	Relationship quality among unmarried couples	• Poor relationship quality among unmarried couples (below the median of quality for unmarried couples) (49 percent of unmarried couples). • Good relationship quality among unmarried couples (at or above the median for unmarried couples) (51 percent of unmarried couples).
Demographic and socioeco-nomic	Primary language	• English. Both partners speak English as their primary language (41 percent). • Spanish. At least one partner speaks Spanish as his or her primary language (59 percent).
	Education	• Both partners have a high school diploma (45 percent). • At least one partner does not have a high school diploma (55 percent).
Parenting	Multipartner fertility	• At least one partner has a child from a previous relationship (58 percent). • Neither partner has a child from a previous relationship (42 percent).

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Table 9. Subgroups for PACT analysis of HM programs
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Topic	Subgroup	Definition of subgroup categories and proportion of sample
Well-being	Depression risk	• At least one partner is at risk for moderate or severe depression. Based on the Patient Health Questionnaire; each response coded (not at all = 0; several days = 1; more than half the days = 2; nearly every day = 3) and summed. Scores of 10 or higher indicate moderate to severe depression (37 percent). • Neither partner is at risk for moderate or severe depression. Score on Patient Health Questionnaire was less than 9 for both partners (63 percent).

Note: Initial marital status is a priority subgroup to be discussed regardless of the pattern of findings. Other subgroups must demonstrate a noteworthy pattern of findings, defined having statistically significant differences between the subgroup impacts in at least two domains after adjusting for the number of outcomes examined in each domain.

Impacts were similar for the two HM programs in PACT.

We found no statistically significant differences between impacts for the HOME program and impacts for Supporting Healthy Relationships for any confirmatory outcomes (Table 10). Moreover, the magnitude of impacts was similar between the two HM programs in PACT for most outcomes (Table 10). We measured the magnitude of impacts in terms of effect size, which is a value that converts estimated impacts into standardized units that we can compare across different outcomes, even if the outcomes are measured in different units.

The largest differences between program impacts were those related to men's earnings. For the HOME program, we found small, negative impacts on men's earnings in survey reports and administrative records (Table 10); neither of these impacts are statistically significant. For Supporting Healthy Relationships, we found moderately sized positive impacts on men's earnings in survey reports and administrative records (Table 10); the impact on survey-reported earnings is statistically significant and the impact on earnings in administrative records is statistically significant at the .10 level. The positive impacts on men's earnings for Supporting Healthy Relationships are consistent with Supporting Healthy Relationships offering a more robust set of employment services than the HOME program. However, as noted, the difference in the impacts between programs is not statistically significant for any outcome, meaning the differences in impacts between programs are consistent with what one might find due to chance.

Table 10. Effect sizes for site-level impacts of HM programs in PACT

	Effect size on impacts for:		
	HOME	Supporting Healthy Relationships	Statistically significant difference between program impacts?
Relationship quality			
Support and affection	0.12	0.09	No
Constructive conflict behaviors	0.02	0.07	No
Avoidance of destructive conflict behaviors	0.08	0.06	No
Relationship commitment	0.11*	0.13*	No
Relationship happiness	0.05	0.09*	No
Relationship status			
Married	0.15*	0.09*	No
Married or romantically involved	0.24	0.09	No
Co-parenting skills			
Quality of co-parenting	0.05	0.16***	No
Labor market success			
Men's average monthly earnings, survey	-0.04	0.13**	No
Women's average monthly earnings, survey	0.06	0.09*	No
Men's average monthly earnings, administrative	-0.07	0.14*	No
Women's average monthly earnings, administrative	-0.06	0.08	No
Sample size	**535**	**965**	

Note: Effect sizes convert estimated impacts into standardized units that reflect the proportion of one standard deviation of the relevant outcomes. Because the values are standardized, the effect sizes of different outcomes can be compared, even if the outcomes are measured in different units.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

Impacts were not statistically different based on whether couples were married at baseline, but married couples had a stronger pattern of statistically significant effects when examined separately.

We found no statistically significant differences in impacts on confirmatory outcomes between couples who married at the time of study enrollment and those who were not (Table 11). However, the pattern of statistically significant effects is stronger for couples who were initially married. For initially married couples, we found

statistically significant impacts on support and affection, marital status at follow-up, and co-parenting relationship; the impacts on use of constructive conflict behaviors and avoidance of destructive conflict behaviors were statistically significant at the .10 level. For couples who were not initially married, only the impact on relationship commitment was statistically significant at the .10 level and no impacts were statistically significant at levels lower than .10.

Table 11. Effect sizes for impacts of HM programs in PACT by initial marital status

	Effect size on impacts for:		
	Initially married	Not initially married	Statistically significant difference between program impacts?
Relationship quality			
Support and affection	0.15***	0.01	No
Constructive conflict behaviors	0.11*	0.00	No
Avoidance of destructive conflict behaviors	0.10*	-0.01	No
Relationship commitment	0.08	0.17*	No
Relationship happiness	0.08	0.02	No
Relationship status			
Married	0.34**	0.00	No
Married or romantically involved	0.17	0.11	No
Co-parenting skills			
Quality of co-parenting	0.13**	0.11	No
Labor market success			
Men's average monthly earnings, survey	0.00	0.08	No
Women's average monthly earnings, survey	0.03	0.12	No
Men's average monthly earnings, administrative	0.00	0.04	No
Women's average monthly earnings, administrative	0.02	-0.01	No
Sample size	**843**	**657**	

Note: Effect sizes convert estimated impacts into standardized units that reflect the proportion of one standard deviation of the relevant outcomes. Because the values are standardized, the effect sizes of different outcomes can be compared, even if the outcomes are measured in different units.

*Significantly different from zero at the .10 level, two-tailed test.

**Significantly different from zero at the .05 level, two-tailed test.

***Significantly different from zero at the .01 level, two-tailed test.

The HM programs in PACT do not appear to be more or less effective for any other subgroups.

No findings for other subgroups listed in Table 9 met our standard for demonstrating a strong pattern of statistically significant findings. The technical supplement provides more details on the subgroup analysis (Covington et al. forthcoming).

Summary and discussion

The PACT HM study is the first rigorous test of the effectiveness of offering marriage education services to low-income couples raising children, complemented with low-intensity job and career advancement services. Another important contribution of this study is the examination of the effects of programs designed to serve both married and unmarried couples together in the same program. Thus, results from the evaluation make important contributions to our understanding of how these programs can improve the human condition of low-income couples.

The HM programs in PACT improved multiple aspects of the couple relationship.

The HM programs in PACT improved couples' relationship quality, including the level of commitment they felt toward their relationship and the level of support and affection they felt toward each other. There is also some evidence that the programs helped couples avoid destructive conflict behaviors and reduce rates of intimate partner violence. In addition, PACT HM couples reported working better together as parents than control couples did. Consistent with the improvements in relationship quality, the HM programs in PACT had positive impacts on marriage rates. At the one-year follow-up, 63 percent of PACT HM couples were married, compared with 59 percent of control group couples, a difference that is statistically significant. This increase in marriage resulted from preventing the breakup of couples who were married at baseline, rather than encouraging marriage among those who were not initially married.

The impacts of the HM programs in PACT compare favorably to other rigorously evaluated HMRE programs for low-income couples. The effects of the HM programs in PACT on relationship quality were larger than the average effects on relationship quality found in previous studies of couple and relationship education for lower-income families. An examination of other rigorous studies of HMRE programs for low-income couples showed an average effect size of 0.06 on self-report of relationship quality, communication, and aggression (Hawkins and Erickson 2015). In the PACT HM evaluation, the average effect size for the five relationship quality outcomes was somewhat larger than this average at 0.08. For two outcomes—relationship commitment and support and affection—the effect size was at least 0.10; although these impacts are statistically significant, their magnitude is still relatively modest.

The positive impact of HM programs in PACT on marriage is notable. Most other rigorously evaluated HM programs have not affected the marriage rate. One exception is a study of married couples in which at least one spouse was on active duty in the U.S. Army, which showed the PREP for Strong Bonds program reduced divorce rates (Allen et al. 2015). The impact of the HM programs in PACT—a difference of about 4 percentage points—was similar to PREP for Strong Bonds at one-year follow-up.

Some findings in the PACT HM evaluation are consistent with earlier work that has found HMRE programs to be more effective for married couples than for unmarried couples. Two large ACF-funded evaluations of HMRE programs targeting low-income couples found different patterns of program impacts. BSF, an evaluation of services for low-income unmarried couples, largely showed no effects on relationship status or quality. SHM, an evaluation of services for married couples, showed favorable effects on relationship quality but no effects on relationship status. Similarly, a recent review of rigorous studies of HMRE programs targeting low-income couples found larger effects on relationship quality for studies that included more married couples (Hawkins and Erickson 2015).

The HM programs in PACT included a mix of married and unmarried couples. Some evidence from the subgroup analysis suggests that impacts were somewhat stronger for married couples than for unmarried ones. Although PACT subgroup impacts were not statistically different for married and unmarried couples, the pattern of impacts by initial marital status provides some additional support for the findings from earlier research suggesting HMRE programs may be more effective at improving the outcomes of married couples. We found significant impacts for couples who were married at baseline on several outcomes: support and affection, whether the couple was married to each other at follow-up, and the quality of the co-parenting relationship.[3] We found statistically significant impacts on none of these outcomes for couples who were not married at baseline, although we did find an effect on relationship

commitment that is statistically significant at the .10 level. Although we did not find that the impacts of couples who were married at baseline are statistically different from the impacts of those who were not, these results offer a suggestion that the programs better meet the needs of married couples than those of unmarried couples.

The PACT HM findings broadly align with other findings in the literature suggesting that HMRE programs might be more effective for married couples than for unmarried couples.

The PACT HM findings broadly align with other findings in the literature suggesting that HMRE programs might be more effective for married couples than for unmarried couples. However, we do not know if the impacts we found for the HM programs in PACT would have been the same if the program were offered only to married couples. We know only that the program was effective for married couples as implemented to a mix of married and unmarried couples. It is possible that married couples benefit from interacting with unmarried couples during relationship skills sessions and that the HM programs in PACT would not have been as effective if they had been offered only to married couples. Future HMRE programming and research should seek to improve HMRE approaches in ways that better meet the needs of unmarried low-income couples.

HM programs in PACT had more limited success in improving the economic outcomes of participants.

We found some evidence that the low-intensity job and career advancement services offered by the HM programs in PACT improved women's labor market success. Women in the program group reported higher earnings for the three months before the follow-up survey than did women in the control group, a difference that is statistically significant at the .10 level. However, we did not find a statistically significant impact on women's earnings based on administrative records. In addition, we found no evidence of effects on men's earnings in either the survey or administrative data.

The fact that we did not find a stronger, more consistent pattern of positive impacts on earnings could be because take-up rates for the job and career advancement services were relatively low: only half of couples received job and career advancement services.[4] This finding might also be related to the motivation of PACT HM couples; at the time of study enrollment, 80 percent of PACT HM couples reported that their motivation to participate in the program was to improve the relationship with their partner, and only 9 percent reported that their motivation was to improve their job situation (Zaveri and Baumgartner 2016).

Some of the site-level impact findings suggest that providing more intensive career and job advancement services along with HMRE services might be more successful in improving couples' labor market success.

Another possibility is that improving labor market success requires more intensive services than those offered as part of the HM programs in PACT. Some of the site-level impact findings suggest that providing more intensive career and job advancement services along with HMRE services might be more successful in improving couples' labor market success. Supporting Healthy Relationships offered a more robust set of employment services than the HOME program. We observed positive impacts on

men's earnings for Supporting Healthy Relationships but not for the HOME program, although the difference in the impacts between programs is not statistically significant.

Programs funded through the most recent round of HMRE grants in 2015 are being studied in the ACF-sponsored Strengthening Relationship Education and Marriage Services (STREAMS) evaluation: STREAMS will provide more information on the effectiveness of programs that complement marriage and relationship education with job and career advancement services. STREAMS is examining the effects of two programs using this approach, both of which aim to offer more intensive employment services than the HM programs in PACT did. Thus, findings from that study will provide evidence on whether more intensive employment services than those offered by the HM programs in PACT lead to greater success in improving labor market outcomes. More generally, adding job and career advancement services to marriage education services is a relatively new idea. It may take time for programs to develop successful strategies that fully integrate these two program components and improve the economic outcomes of participants.

The HM programs in PACT are an example of HMRE programs that benefit low-income families.

The positive findings from the PACT HM study indicate that HMRE programs can be an effective strategy for improving the human condition for low-income couples. The HM programs in PACT had success in improving couples' relationships but more limited success in improving their economic outcomes. The success of the HM programs in PACT in improving relationship quality and increasing marriage rates likely came from the strengths of the two programs. The two HM programs in PACT were very mature and experienced, having operated since 2006. Thus the programs have had the opportunity to refine their service content and delivery over time. The programs had strong attendance: nearly 90 percent of couples who were randomly assigned to the program attended at least one workshop. Even with a strong set of services, programs can only benefit their target population if people actually receive the services. The quality of the PACT HM program services likely encouraged high participation rates. The programs also took active steps to encourage participation. The HOME program and Supporting Healthy Relationships both provided financial incentives and supports to encourage and reward participation, as well as assistance with child care, transportation, and meals.

Closing thoughts

The PACT HM study is a building block in the evidence base on HMRE programming, intended to guide ongoing and future HMRE program design and evaluation. These results can inform practitioners, policymakers, and researchers about successful strategies, as well as areas for potential improvement to consider as they continue the work of strengthening the effectiveness of HMRE programming.

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ENDNOTES

[1] There is also evidence that employers have incentive to underreport earnings for UI purposes. See Moore et al. (2018) for more information about comparing impacts measured based on survey reports and administrative records.

[2] This standard required statistically significant differences between the subgroup impacts in at least two domains after adjusting for the number of outcomes examined in each domain.

[3] Please see technical appendix for detailed findings (Covington et al. forthcoming).

[4] Men and women received similar amounts of job and career advancement services.

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