Participation Patterns in Three Healthy Marriage and Relationship Education Programs for Adults with Low Incomes: Lessons for the Field

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Overview

Introduction

Healthy marriage and relationship education (HMRE) programs aim to support the well-being of families by teaching them skills to improve communication and conflict management, how to recognize the characteristics of healthy romantic relationships, and how to strengthen existing relationships. HMRE programs may pair a relationship skills curriculum with other services, such as individualized job development or instruction on financial planning, that aim to promote economic stability or content on parenting skills. For such programs to be effective, it is critical that clients attend regularly, yet studies have found that HMRE program providers sometimes struggle to maintain high rates of participation (Dion et al. 2010; Miller et al. 2012; Zaveri and Baumgartner 2016). Identifying and exploring typical participation patterns in HMRE programming can help us better understand this challenge and point to ways in which programs can promote and support regular participation.

This study investigates participation patterns in three HMRE programs that were included in the Strengthening Relationships and Marriage Services (STREAMS) evaluation. The Office of Planning, Research, and Evaluation within the Administration for Children and Families at the U.S. Department of Health and Human Services, with funding from the Office of Family Assistance (OFA), engaged Mathematica and its partner Public Strategies to develop the evaluation. The evaluation examines the implementation and impacts of a set of HMRE programs delivered by grantee organizations that received funding in the 2015 cohort of HMRE grants from OFA. This study focuses on three of these programs: (1) MotherWise, which served pregnant and new mothers in Denver, Colorado; (2) Career STREAMS, which served young adults seeking job training and employment services in St. Louis, Missouri; and (3) Empowering Families, which served couples with low incomes raising children together in Fort Worth, Texas. These three programs represent a range of HMRE program services and populations and, because of the rich data available on both participation and client characteristics, offer opportunities to develop deeper insights into participation patterns in HMRE programs

Primary research questions

This report addresses the following primary research questions:

1. What are typical patterns of participation across all program components?
2. Which clients participate in these distinct ways?

Purpose

This report describes typical patterns of participation in three programs that were part of the STREAMS evaluation. It identifies distinct patterns of participation in each of these programs and provides profiles of the clients who participate in these distinct ways. Earlier evaluation reports provided detailed information on the programs' design and implementation during the first year of the impact study and described the programs' impacts after one year.

What we learned

- For each program, cluster analysis identified three groups of clients defined by the extent of their participation in the program. We labeled these groups full engagers, moderate engagers, and low engagers.

- We examined clients' extent of participation in MotherWise's three key program elements: (1) the core workshop, (2) case management, and (3) the optional couples' workshop. We found clients who were older and those in steady romantic relationships with their baby's father were more engaged in the program than others. Clients who participated more fully tended to have enrolled postpartum, whereas those with low participation were more likely to have enrolled during pregnancy.
- We examined clients' extent of participation in Career STREAMS's three key program elements: (1) the two-week workshop, (2) one-on-one case management and job development, and (3) weekly one-hour booster sessions offered after the two-week workshop. We found full engagers were more likely than other clients to have worked recently, and they had fewer barriers to employment. Low engagers received the fewest program services and also tended to be clients who were most in need of employment support.
- For Empowering Families clients, we examined their extent of participation in four program components that partners could engage in together or separately: (1) the core workshop, (2) case management, (3) employment coaching, and (4) financial counseling. Spanish-speaking couples were more likely to fully engage with program services than were English speakers. Couples with more stable relationship and economic circumstances were also more likely to participate fully in Empowering Families services. Couples who were married, had children with no other partners, and had higher earnings had higher participation rates.

Methods

To understand typical patterns of participation and who participates in these ways, we used a statistical method called cluster analysis to identify groups of people with similar patterns of participation across each program's key components. We defined multiple measures of participation for each program component to capture different dimensions of engagement. For each program, the cluster analysis algorithm then identified sets of common patterns across all the participation measures. We selected the set of patterns where we found the most meaningful differences in background characteristics across the client groups. We examined these participation patterns and the characteristics of the clients in each group to better understand their backgrounds and how they made use of program services. Data on measures of participation and client characteristics came from the Information, Family Outcomes, Reporting, and Management (nFORM) information system used by federal HMRE grantees and a baseline survey collected before program participation as part of the STREAMS impact evaluation.

Considerations for HMRE programs and research

Participation in HMRE programs can vary substantially, with some clients fully engaging in all the services offered and others participating in these services little or not at all. This report used data analytic methods to analyze patterns of participation in three HMRE programs—MotherWise, Career STREAMS, and Empowering Families—that were part of the STREAMS evaluation. Patterns and profiles varied across programs, but two cross-cutting findings emerged.

- **Clients with the most stable relationship and employment histories engaged most fully with HMRE program services.** A consistent pattern across the three programs is that clients in more stable circumstances were more likely to engage fully with program services. For example, women who engaged most fully with MotherWise services were more likely than other clients to be in a stable relationship with their baby's father when they enrolled in the program. Similarly, couples who fully engaged with Empowering Families services were more likely than other couples in the program

to be married to each other and to have no children with other partners. Those with more stable employment also received more services from the programs. Full engagers in Career STREAMS and Empowering Families reported fewer barriers to employment than other clients in those programs. Conversely, those potentially most in need of the supports the programs offered were least likely to fully engage in program services. For instance, Career STREAMS and Empowering Families clients who received few services were generally more likely to be actively looking for work and more likely to report barriers to employment. Similarly, those who were not in steady romantic relationships were generally less likely to participate fully in program services. Programs may need to make special efforts to keep these clients in less stable circumstances engaged.

- **Spanish-speaking clients may be particularly receptive to HMRE services.** In the two programs we examined that served both English- and Spanish-speaking clients—MotherWise and Empowering Families—Spanish-speaking clients had higher rates of participation in all program components. These programs had bilingual staff members and offered all services in English and Spanish. Their intensive efforts to offer a full set of program services in Spanish likely contributed to their success in engaging Spanish speakers. Moreover, many Spanish-speaking clients in these programs were born outside the United States and may have especially valued the sense of community the workshops provided, as well as the programs' assistance in accessing resources such as English classes, GED programs, and financial services. These findings suggest that, with appropriate investments, programs can successfully engage Spanish speakers in HMRE services.

Careful examination of program participation patterns using data analytic methods can provide insights for HMRE program providers as they consider ways to adapt recruitment strategies, programming, and service delivery to promote clients' attendance and completion. Providers can use this information on how clients engage in program services in different ways and how this varies by their characteristics to inform their work with current and future clients—helping them identify which clients may need extra attention and support to fully engage in program services. These insights can help programs strengthen program implementation and improve their ability to meet performance standards. Future work should examine data from a larger set of HMRE programs to determine whether these patterns apply more broadly.

Introduction

Healthy marriage and relationship education (HMRE) programs aim to support the well-being of families by teaching them skills to improve communication and conflict management, recognize the characteristics of healthy romantic relationships, and strengthen existing relationships. HMRE programs may pair a relationship skills curriculum with other services, such as individualized job development or instruction on financial planning, that aim to promote economic stability or content on parenting skills. For such programs to be effective, it is critical that clients attend regularly, yet studies have found that HMRE program providers sometimes struggle to maintain high rates of participation (Dion et al. 2010; Miller et al. 2012; Zaveri and Baumgartner 2016). Identifying and exploring typical participation patterns in HMRE programming can help us better understand this challenge and point to ways in which programs can promote and support regular participation.

This study investigates participation patterns in three HMRE programs that were included in the Strengthening Relationships and Marriage Services (STREAMS) evaluation. The Office of Planning, Research, and Evaluation within the Administration for Children and Families at the U.S. Department of Health and Human Services, with funding from the Office of Family Assistance (OFA), engaged Mathematica and its partner Public Strategies to develop the evaluation. The evaluation examines the implementation and impacts of a set of HMRE programs that received funding in the 2015 cohort of HMRE grants from OFA. This study focuses on three of these programs: (1) MotherWise, which served pregnant and new mothers in Denver, Colorado; (2) Career STREAMS, which served young adults seeking job training and employment services in St. Louis, Missouri; and (3) Empowering Families, which served couples raising children together in Fort Worth, Texas. See Table 1 for summaries of these three programs; for a full description of each program and its implementation, see Baumgartner and Paulsell (2019); Friend et al. (2020); and D'Angelo and Bodenlos (2020), respectively. These three programs represent a range of HMRE programs and, because of the rich data available on both participation and client characteristics, are opportunities to develop deeper insights into participation patterns in HMRE programs.

Table 1. Intended populations and key components of three HMRE programs

Program	Primary provider	Intended population	Key components
MotherWise	University of Denver	Pregnant women and new mothers with low incomes in Denver, Colorado	• *Within My Reach* HMRE curriculum supplemented with content on parenting and infant care (weekly 4-hour workshop for 6 weeks) • Case management • Couples' workshop
Career STREAMS	Family and Workforce Centers of America	Young adult job seekers in St. Louis, Missouri	• *Within My Reach* HMRE curriculum and Money Habitudes financial planning activity integrated into a pre-employment training program (daily 7-hour workshop for 2 weeks) • Booster sessions delivering *Within My Reach* and *Winning the Workplace Challenge* curricula (weekly 1-hour workshop for 5 weeks) • One-on-one case management and job development services

Program	Primary provider	Intended population	Key components
Empowering Families	The Parenting Center	Couples with low incomes in the Fort Worth, Texas, area, who are raising children together	• *Family Wellness* HMRE curriculum supplemented with employment and financial literacy content (weekly 2.5-hour workshop for 8 weeks, or workshop on 4 consecutive Saturdays) • One-on-one employment counseling • Individual financial coaching

HMRE = healthy marriage and relationship education.

The study can help program providers and other audiences in a number of ways. The information presented here highlights how not all clients participate in HMRE programs in the same way. Understanding typical patterns of participation in these programs, and the profiles of the clients who participate in these distinct ways, may help program providers focus their recruitment. It can also help them identify clients who may be less likely to participate regularly and who may need additional support to fully engage with program services. In addition, providers could use information on patterns of participation to guide clients to services they are likely to find useful and enhance services to promote regular participation.

Research questions

Most HMRE programs offer a range of components, such as workshops focused on teaching relationship skills, case management, and other services. Clients can participate fully in each program component; they may participate in some more than others; or they may participate little in any of them. Their participation in a component depends on factors such as whether they think the services will benefit them and how difficult it is for them to attend. Each client faces a unique set of benefits and challenges based on the client's own background, living situation, goals, and needs.

To help programs support client participation, we address the following research questions for each of the three HMRE programs in our study:

1. What are typical patterns of participation across all program components?
2. Which clients participate in these distinct ways?

We first examine the overall participation patterns in these three programs. We then identify groups of clients within each of these programs who participate in distinct ways and examine their characteristics. We use this analysis to develop potential lessons for the HMRE field on strategies for promoting program participation.

Methods

To understand typical patterns of participation and who participates in these ways, we used a statistical method called cluster analysis. Cluster analysis identifies groups of people with similar patterns of participation across a program's components. It is part of a larger class of data analytic methods that use statistical algorithms to uncover patterns in data sets, such as client usage of program services in a variety of settings (Vaithianathan et al. 2019; Weigensberg et al. 2018). To use cluster analysis, we first needed to identify key program components and how to measure them. The programs in this study all included (1) a workshop delivering the core curriculum, (2) case management or other one-on-one support, and (3) additional services.

We defined multiple measures of participation for each program component to capture different dimensions of engagement. For example, we examined three types of workshop participation measures: whether clients attended any workshop sessions, what percentage of the curriculum clients completed, and number of sessions the clients completed. Measures of participation in case management and other services varied by program according to what those components were and how they were delivered.

For each program, the cluster analysis algorithm then identified sets of common patterns across all the participation measures. We restricted our focus to sets of two, three, four, and five patterns identified by the algorithm and selected the set of patterns where we found the most meaningful differences in background characteristics across the client groups. We examined these participation patterns and the characteristics of the clients in each group to better understand their backgrounds and how they made use of program services. Details about the analysis and participation measured examined for each program are in the appendix.

Data

We used two data sources for measures of participation and client characteristics. The first source was participation data from the Information, Family Outcomes, Reporting, and Management (nFORM) information system that all federal HMRE grantees use. The second source was baseline survey data collected before program participation as part of the STREAMS impact evaluation. These baseline surveys covered a broad range of client characteristics: demographics, relationships, parenting, employment, public assistance and barriers to employment, justice system involvement, well-being, and reasons for enrolling in the program.

What is nFORM?

nFORM—which stands for Information, Family Outcomes, Reporting, and Management—is a web-based system that all Healthy Marriage and Responsible Fatherhood (HMRF) grantees, funded by the Administration for Children and Families, use to collect, store, and analyze performance measures about their programs.

For example, grantees use nFORM to document services, report on program operations (such as outreach, recruitment, and implementation challenges), track client participation in services, and administer surveys to clients about their characteristics and outcomes.

Road map to report

The rest of the report describes our analyses and findings for each of the three HMRE programs we examine. In each section that follows, we describe the program, the sample of clients, specific information about the analytic methods described above, and findings. We then offer concluding remarks about the methods used here and potential next steps for future research. The appendix provides technical details about the analyses and supplemental findings.

MotherWise in Denver, Colorado

MotherWise served pregnant women and new mothers with low incomes in the Denver, Colorado, area. Denver has a substantial population of residents who speak Spanish at home (18 percent in 2019, compared to 14 percent nationally, based on data from the American Community Survey). For this reason, the program offered all services in both English and Spanish and had bilingual staff, including recruiters, intake staff, case managers, and workshop facilitators (Baumgartner and Paulsell 2019).

MotherWise had three key components. The main component was a six-session relationship skills workshop using the *Within My Reach* curriculum supplemented with program-developed information on infant care and parenting. Second, the program offered individual case management, with the first meetings happening before the first workshop session. Third, women who finished at least three workshop sessions could attend an optional couples' workshop with their partner. To support regular attendance, the program offered makeup sessions, as well as onsite child care, a meal as part of each session, transportation assistance, and financial incentives.

Key components of MotherWise

Core workshop (3 hours per week for 6 weeks). This workshop focused on building clients' relationship skills using *Within My Reach*, a curriculum for individual adults who may or may not be in romantic relationships. It consisted of 15 one-hour lessons, delivered through 6 workshop sessions, designed to help adults make informed and healthy decisions about their personal and romantic relationships. The program supplemented this material with 3 hours of parenting and infant care content, for a total of 18 hours of content. The program defined completion of the workshop as attending at least five of the six sessions.

Case management. The program designed case management to help women apply concepts from *Within My Reach*, for instance, by discussing concrete examples or developing personal goals with individual clients. Each woman was expected to attend four case management meetings before the end of the six-week workshop.

Couples' workshop (either 7 or 4 hours delivered on one day). This was an optional, one-day session intended for women in committed relationships and their partners, and it was restricted to women who completed the first three sessions of *Within My Reach*. The program offered the workshop each quarter, originally as 7 hours on a weekend and then later as 4 hours on a weekday evening. Each couples' workshop was designed to stand alone, but couples could attend more than one to practice their communication skills.

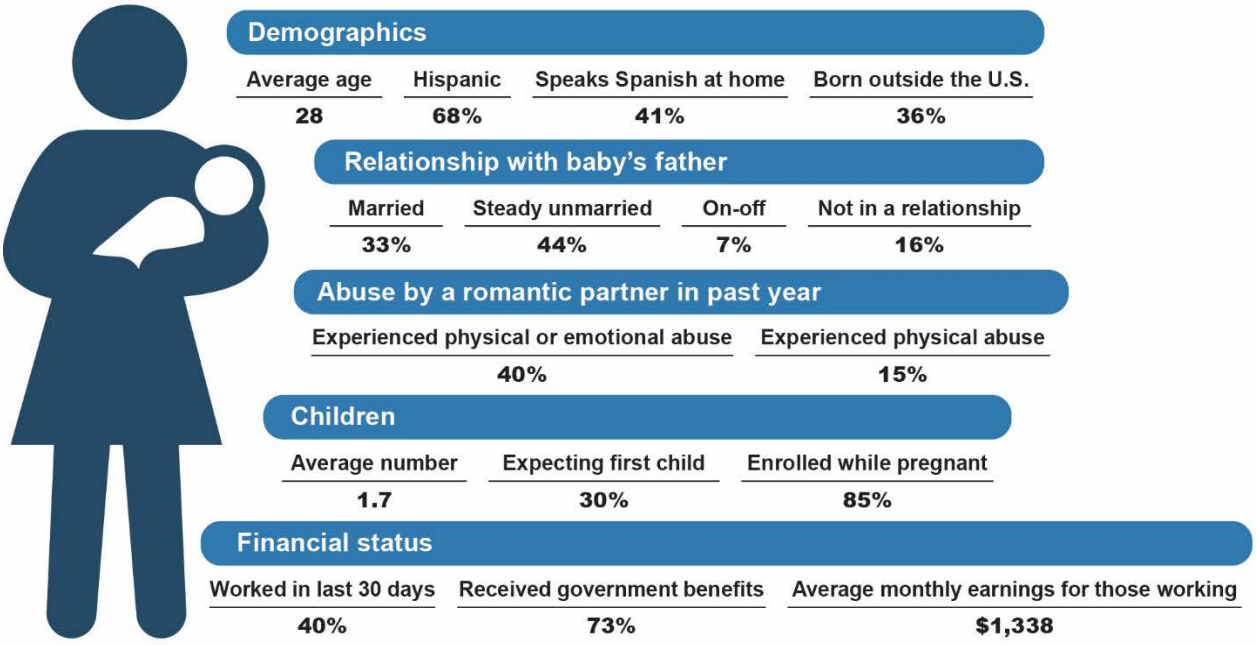
Description of clients

Our analysis includes 505 women who enrolled in MotherWise from September 2016 to December 2018. More than two-thirds of these women were Hispanic and about 40 percent spoke Spanish in the home; 36 percent were born outside of the United States. Their average age was 28 (Figure 1). To be eligible for MotherWise, women had to be pregnant or have had a baby in the past three months. Eighty-five percent were pregnant at enrollment, and about 30 percent of women in the program had just had or were expecting their first child. The average number of children among women at the time they enrolled was 1.7.

Although MotherWise served women regardless of their relationship status, most were in a romantic relationship with their baby's father when they entered the study. Thirty-three percent were married to their baby's father, and 44 percent were in a steady romantic relationship with their baby's father. Another 7 percent were in an on-again, off-again relationship with the baby's father. Eleven percent of women were not in a romantic relationship with the baby's father when they entered the study. Some women reported experiencing violence in their recent romantic relationships. In the past year, nearly 40 percent of the women had experienced psychological abuse by a romantic partner (either the baby's father or a different romantic partner) and 15 percent had experienced physical abuse.

As anticipated, most clients had relatively low income. Sixty percent had not worked during the past month. The most common employment barriers reported were related to child care (33 percent), transportation (25 percent), and documentation (15 percent). Those who worked had low earnings, averaging $1,338 in the past month. Almost three-quarters received some government benefits including Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Only 8 percent reported owning their home or having a mortgage, and 4 percent reported being homeless, living in a shelter, or living in other unstable housing. Additional details on client characteristics are in Appendix Table A.7.

Figure 1. Characteristics of mothers enrolled in MotherWise

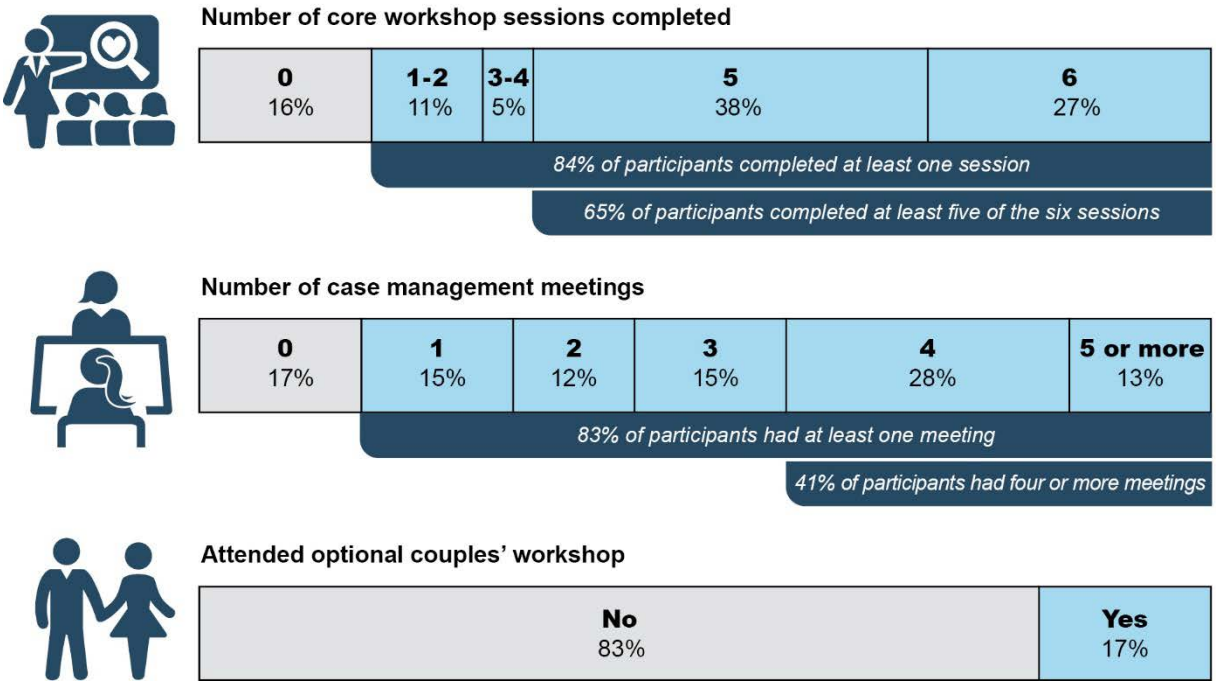


Description of participation

Most women (83 percent) participating in MotherWise attended at least one core workshop session (Figure 2). Two-thirds attended at least five of the six core sessions, meeting the program's definition of program completion. The six sessions included 15 one-hour lessons about relationship skills and 3 hours of parenting and infant care content. Participation in case management was also high, with 84 percent participating in at least one meeting with their case manager. About 40 percent of clients met the benchmark the program set for completing at least four meetings with their case manager (see Figure 2).

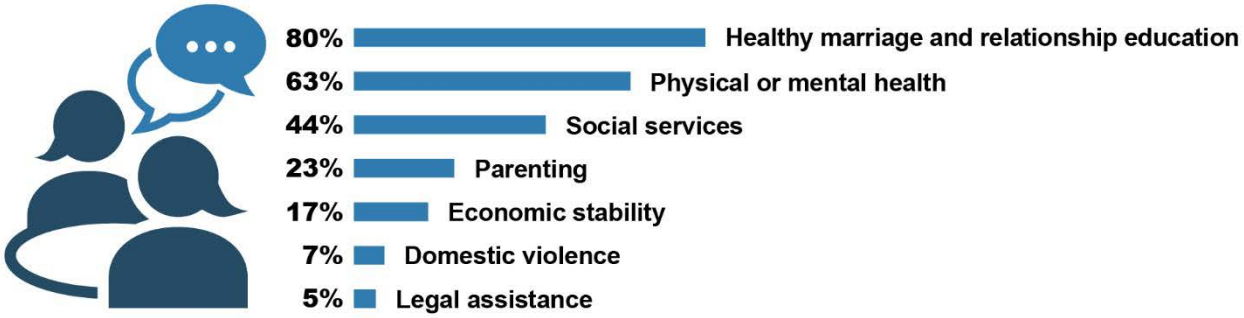
Only 17 percent of MotherWise clients attended a couples' workshop, reflecting both that this component was considered optional and the challenge of getting both members of a couple to attend workshop sessions. Additional details on client participation are in Appendix Table A.8.

Figure 2. Participation in MotherWise core workshop sessions, case management, and couples' workshop



Topics discussed in case management offer insight into clients' most pressing concerns. Most clients discussed HMRE (80 percent) with their case manager (Figure 3), reflecting the case manager's function to reinforce content taught in the core workshops. Physical or mental health was the next most discussed topic (63 percent), followed by social services (44 percent) and parenting (23 percent). Economic stability, which we defined to include job placement and financial counseling, was a topic discussed by 17 percent of clients.

Figure 3. Proportion of MotherWise clients who discussed topics with a case manager



Exploring patterns of participation across program components

Although the average rates of participation in the MotherWise program components were high, not all women participated in MotherWise in the same way. Some participated in almost all services offered, while others participated little or not at all. To better understand these different participation patterns and which clients followed them, we used cluster analysis to identify specific patterns of participation (see details in the appendix). To group clients based on their participation patterns, we examined their extent of participation in MotherWise's three key program elements: (1) the core workshop, (2) case management, and (3) the optional couples' workshop.

This analysis identified three groups of clients defined by their extent of participation in the program: (1) full engagers, (2) moderate engagers, and (3) low engagers. On the next page, we describe the participation patterns in each group and highlight the ways the clients in each group differed from the rest of the clients pooled together. We highlight only the differences across these groups that are statistically significant. Figure 4 summarizes these findings. We include in the appendix details on the participation measures and characteristics we examined; detailed tables of findings are in Appendix Tables A.9 and A.10.

Figure 4. Differences in participation patterns and characteristics for full, moderate, and low engagers in MotherWise

Participation	100% All	27% Full engagers	44% Moderate engagers	29% Low engagers
Proportion of workshop sessions attended (%)	66 (4 of 6 sessions)	100** (6 sessions)	81** (4.8 of 6 sessions)	9** (0.5 of 6 sessions)
Number of case management meetings attended (average)	2.7	3.9**	3.3**	<1**
Number of topics discussed in case management meetings (average)	3.6	4.4**	4.2**	1.7**
Received a referral (%)	49	60**	59**	22**
Attended any optional couples' workshop (%)	17	24**	22**	1**
How is each group different from the others?	**All**	**Full engagers**	**Moderate engagers**	**Low engagers**
Age (average years)	28	30**	28	27*
Hispanic ethnicity (%)	68	66	73**	61**
Born outside the U.S. (%)	36	44**	36	26**
Enrolled postpartum (%)	15	20*	16	9**
In a steady romantic relationship with baby's father (%)	44	51*	40	44
In an on-again, off-again relationship with baby's father (%)	7	2**	9	10

Note: Only characteristics with statistically significant differences across groups are included in the bottom panel.

** $p < 0.05$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

* $p < 0.10$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

Full engagers. Just over a quarter of MotherWise clients (28 percent) were full engagers. Clients in this group attended all six of the core workshop sessions offered. On average, they attended three to four case management meetings and discussed more than four topics with their case manager. Sixty percent of the group received a referral to a community service. Almost one-quarter attended a couples' workshop.

Clients who were older and those in steady romantic relationships with their baby's father were more engaged in the program than others. These clients may have faced fewer barriers to participation or may have found the curriculum more relevant because they were already in a relationship. Other HMRE programs serving new mothers may find these types of clients more receptive to participation. These programs may want to take additional steps to make services more enticing and accessible to younger mothers and mothers who are not in steady relationships.

On average, clients in this group were older than the rest of the clients (nearly 30 years old, compared to an average age of 28 among clients not in this group) and tended to have more steady relationships. Just over half of clients were in a steady romantic relationship with their baby's father, compared to 42 percent among clients not in this group, and were less likely to be in an on-off relationship (2 percent, compared to 9 percent among clients not in this group). Clients in this group were somewhat more likely to have enrolled postpartum (20 percent, compared to 13 percent among clients not in this group). They were also more likely to be born outside the United States than other client groups (44 percent, compared to 32 percent among clients not in this group).

Moderate engagers. Forty-five percent of the clients were moderate engagers. This group participated in program services at a relatively high level, although not as intensively as full engagers. On average, they attended 81 percent of the core workshop sessions offered. All attended at least one core workshop session. They attended more than three case management meetings on average and discussed about four topics with their case manager on average. Fifty-nine percent received a referral to a community service, and 22 percent attended a couples' workshop.

Moderate engagers were similar to the rest of the clients, with a few exceptions. They were more likely to be Hispanic (73 percent, compared to 64 percent among clients not in this group), and they were somewhat less likely to be in a steady romantic relationship with the baby's father (40 percent, compared to 48 percent among clients not in this group).

Low engagers. Twenty-eight percent of MotherWise clients were low engagers, with little to no participation in the program. Sixty percent of the women in this group did not attend any workshop sessions. On average, they attended fewer than one case management meeting and discussed fewer than two topics with their case manager. They were much less likely to receive a referral to a community service (22 percent compared to 59 percent among clients not in this group). Almost none attended the optional couples' workshop.

Compared to the rest of the clients, this group was less likely to be Hispanic, less likely to be born outside the United States, and more likely to have enrolled postpartum (9 percent compared to 15 percent among clients not in this group) rather than enrolling in the program after their baby was born.

Clients who participated more fully in MotherWise tended to have enrolled postpartum, whereas those with low participation were more likely to have enrolled during pregnancy. New mothers feeling lonely or anxious caring for an infant may have especially welcomed the program's opportunities to socialize. Additionally, those experiencing changes in their romantic relationships brought about by their child's birth may have found the healthy relationship curriculum especially relevant. These findings suggest that HMRE programs can achieve high rates of participation among new mothers shortly after their babies are born.

Career STREAMS in St. Louis, Missouri

Career STREAMS, based in St. Louis, Missouri, served young adult job seekers with low incomes who were interested in employment services and education and training opportunities. St. Louis has a diverse population, with roughly equal proportions of White and Black residents (46 and 48 percent, respectively, in 2019 based on data from the American Community Survey). The period of Career STREAMS program operations examined in this report (2016 through 2019) represents a period of strong economic conditions before the COVID-19 pandemic. The unemployment rate fell in St. Louis during the 2010s as the local economy strengthened and job market conditions improved.

Family and Workforce Centers of America (FWCA), a community-based social services provider, operated the Career STREAMS program. FWCA offers a broad range of family support and workforce services to adults, adolescents, and families in the greater St. Louis area. The organization's programming has included an early childhood development academy, a summer youth employment program, relationship education for high school students, and several education and employment training programs. FWCA developed Career STREAMS by integrating HMRE content into one of its existing employment training programs.

Career STREAMS had three key components: (1) a two-week job readiness workshop that incorporated both the *Within My Reach* HMRE curriculum and employment-related topics, (2) one-on-one case management and job development services, and (3) five one-hour booster sessions offered weekly following the two-week workshop. Booster sessions were offered at various times of day and were about one hour long; clients could attend these sessions on a drop-in basis. To promote program completion, clients also received participation supports including child care, meals, transportation, and financial incentives (Friend et al. 2020).

Key components of Career STREAMS

Two-week workshop (7 hours per weekday for two weeks). The workshop included daily meetings with 6 hours of content and 1 hour of breaks per day, for a total of 60 hours of content. About a quarter of the workshop content was from the *Within My Reach (WMR)* HMRE curriculum (15 hours), including instruction designed to help adults make informed and healthy decisions about their relationships. The workshop's other content focused on financial skills (3 hours) and employment-related topics such as resume writing, job search strategies, and interviewing skills (42 hours).

One-on-one case management and job development. An employment case manager worked with clients to develop an individualized employment plan, while a separate job developer provided soft skills training, resume assistance, and job placement and retention services. Most clients initially met with their employment case manager and job developer during the first few days of the two-week workshop.

Booster sessions (1 hour per week for five weeks). The program offered booster sessions weekly following the two-week workshop. Sessions were held at various times of day throughout the workweek and clients could drop in to any session during the week. The booster sessions introduced additional healthy relationship content from *WMR.* Sessions also covered communication and conflict management skills in an employment context, as well as reinforcing *WMR* lessons learned in the core workshop.

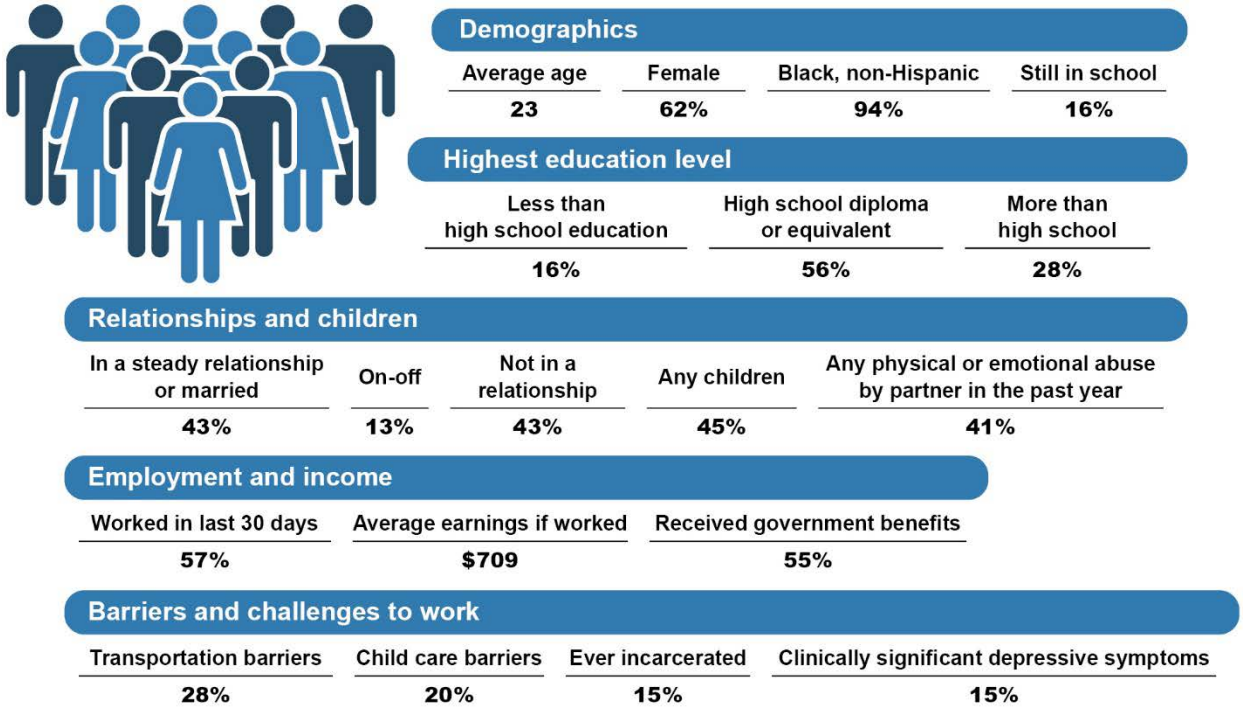
Description of clients

Our analysis includes 455 clients who enrolled in Career STREAMS from August 2016 to December 2018. Clients tended to be young (age 23, on average) and identify as Black, non-Hispanic adults (Figure 5). About 6 in 10 were women. Slightly less than half (45 percent) were parents. At the time they entered the program, 43 percent reported being in a steady romantic relationship or marriage; 13 percent reported being in an on-again, off-again romantic relationship. More than 40 percent of clients reported that they experienced physical or emotional abuse by a romantic partner in the past year.

Most Career STREAMS clients (84 percent) had at least a high school diploma, and more than a quarter had attained a higher level of education. Specifically, 3 percent had earned a vocational or technical certification and a quarter had attended at least some college. Sixteen percent were still attending school when they enrolled in the program. More than half had worked in the past month, and those who worked reported monthly earnings of $709, on average. More than half of the clients received some government benefits in the past month.

Clients reported some barriers to employment over the past year, most commonly a lack of transportation (28 percent) or quality child care (20 percent). Fifteen percent of clients experienced clinically significant symptoms of depression. About 15 percent of clients had ever been incarcerated. Additional details on client characteristics are in Appendix Table A.11.

Figure 5. Characteristics of clients enrolled in Career STREAMS

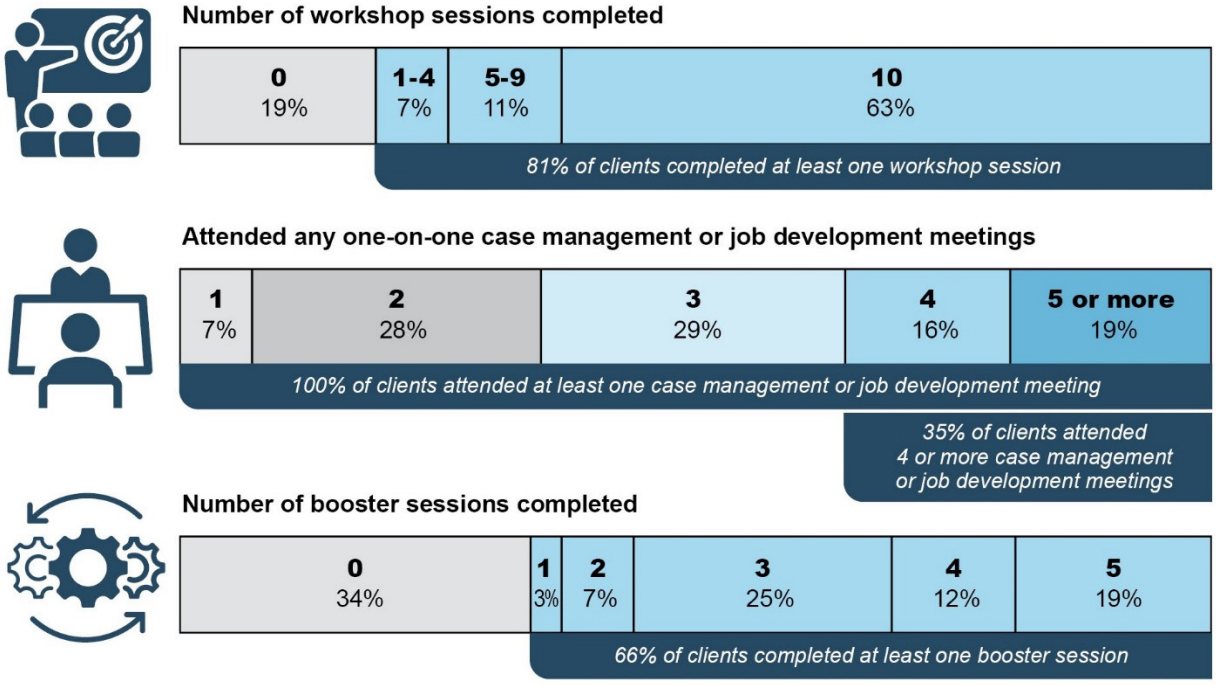


Description of participation

Findings from an earlier process study of Career STREAMS concluded that young adult clients needed substantial support to complete the two-week workshop (Friend et al. 2020). Many needed the transportation and child care support the program offered. FWCA also made frequent use of makeup

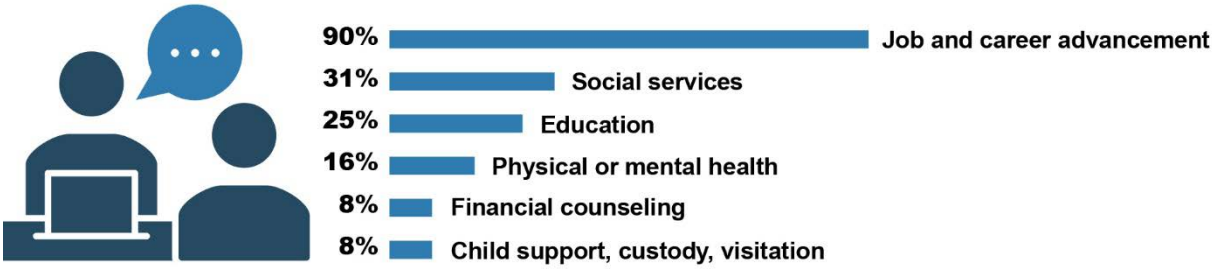
sessions for clients who missed a regularly scheduled session. The makeup sessions were typically 30 to 90 minutes long and took place as one-on-one or group formats before or after a regularly scheduled workshop session. In total, more than one-quarter of clients used the makeup sessions. Including makeup sessions, 81 percent of clients attended at least one of the workshop sessions, and 63 percent attended all 10 sessions (Figure 6). In comparison to the two-week workshop, attendance at the booster sessions was relatively low. About one-third of clients did not attend any booster sessions; about one in five clients attended all the booster sessions offered. Additional details on client participation are in Appendix Table A.12.

Figure 6. Participation in Career STREAMS workshop sessions, one-on-one case management and job development, and booster sessions



All clients had at least one case management or job development meeting, as the program intended, and more than one-third had four or more meetings. Topics discussed in one-on-one meetings reflect program priorities and highlight clients' potential concerns. Nearly all meetings included discussion of job and career advancement (90 percent; Figure 7). Other commonly discussed topics included social services (31 percent), education (25 percent), and physical or mental health support (16 percent).

Figure 7. Proportion of Career STREAMS clients who discussed topics with a case manager or job developer



Exploring patterns of participation across program components

As expected, when looking beyond the average rates of participation, we see that clients participated in different components of Career STREAMS to different extents. To better understand the mix of program services that clients tended to engage in, we used cluster analysis to identify specific patterns of participation (see details in the appendix). To group clients based on their participation patterns, we examined their extent of participation in Career STREAMS's three key program elements: (1) the two-week workshop, (2) case management and job development, and (3) booster sessions covering healthy relationships, communication skills, and conflict management.

This analysis identified three groups of clients defined by their extent of participation in the program: (1) full engagers, (2) moderate engagers, and (2) low engagers. Below we describe the participation patterns in each group and highlight the ways that clients in each group differed from the rest of the clients pooled together. We highlight only the differences across these groups that are statistically significant. Figure 8 summarizes these findings, and detailed tables of findings are in Appendix Tables A.13 and A.14.

Figure 8. Differences in participation patterns and characteristics for full, moderate, and low engagers in Career STREAMS

Participation	100% All	32% Full engagers	42% Moderate engagers	27% Low engagers
Proportion of workshop sessions attended (%)	74 (7.4 of 10 sessions)	99** (9.9 of 10 sessions)	97** (9.7 of 10 sessions)	7** (0.7 of 10 sessions)
Number of case management and job development meetings attended (average)	3.3	4.3**	3.3	2.2**
Number of topics discussed in case management and job development meetings (average)	3.2	3.7**	3.5	2**
Received job and career advancement services (%)	90	98**	93	77**
Number of job and career advancement services received (average)	1.9	2.7**	2	1.1**
Proportion of booster sessions attended (%)	48	92**	44*	0**
How is each group different from the others?	**All**	**Full engagers**	**Moderate engagers**	**Low engagers**
Female (%)	62	58	68**	56
Number of children	1.0	0.8**	1.1*	1.0
Not in a romantic relationship (%)	43	42	40	50*
Actively looking for work (%)	80	76	78	88**
In school (%)	16	11**	15	22**
Highest education level				
Less than high school (%)	16	12*	16	23**
High school diploma or equivalent (%)	56	63**	56	47**
Employment and earnings in the past month				
Worked for pay (%)	57	64*	57	50**
Average earnings ($)	404	416	445	325*
Barriers to finding or keeping a good job in the past year				
Transportation (%)	28	21**	24*	45**
Childcare (%)	20	15*	19	27**
Clothes (%)	9	7	7	16**
Mental health (%)	8	5*	7	13**
Documentation (%)	8	4**	8	12
Crime				
Ever convicted of a crime (%)	16	17	11**	21*
Depression				
Clinically significant depressive symptoms (%)	15	10**	14	23**

Note: Only characteristics with statistically significant differences across groups are included in the bottom panel.

** $p < 0.05$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

* $p < 0.10$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

Full engagers. Nearly a third of the Career STREAMS clients were full engagers. They were likely to complete nearly all the two-week workshop sessions (including makeups) and booster sessions. They met with an employment case manager or job developer more than four times on average and discussed nearly four topics. Almost all (98 percent) received a job and career advancement service—such as coaching on soft skills, job search assistance, job retention services, and referrals—during a one-on-one meeting with the employment case manager or job developer. Clients in this group received more than two such services on average.

Full engagers were more likely than other Career STREAMS clients to have worked recently, and they had fewer barriers to employment. They may have had fewer barriers to program participation as well. Programs may find that clients like these need little to no additional support to participate regularly.

Compared to the rest of the clients, this group faced fewer employment barriers. They had fewer children on average, were least likely to have transportation barriers to work, and were least likely to have symptoms of depression. Moreover, they were more attached to the labor force: they were more likely to have worked in the past month (64 percent, compared to 54 percent among clients not in this group) and least likely to be in school at the time they enrolled in the program. They were more likely to have a high school diploma (63 percent, compared to 56 percent among clients not in this group), though not more likely to complete higher levels of education beyond high school. They were somewhat less likely to have less than a high school diploma (12 percent, compared to 16 percent among clients not in this group).

Moderate engagers. Forty-two percent of Career STREAMS clients were moderate engagers. Including makeup sessions, clients in this group completed nearly all of the workshop sessions (97 percent of sessions). They received two job and career advancement services and met with an employment case manager or job developer more than three times—about one time fewer than the full engagers. The most substantial way in which their participation differed from that of full engagers was that they attended fewer booster sessions: clients attended 44 percent of booster sessions on average (or 2.2 sessions), and none completed all five sessions.

Like full engagers, moderate engagers attended almost all the Career STREAMS job readiness workshop sessions. However, moderate engagers had lower attendance at the booster sessions. Information from participant focus groups documented in the Career STREAMS implementation report offers some insights into why some participants were not able to attend booster sessions regularly. Focus group participants reported that the booster session content was valuable, but that the one-hour, once-a-week format conflicted with work and child care schedules and made attendance challenging (Friend et al. 2020).

This group was similar to the rest of the clients in terms of background and employment, with three key exceptions. A greater percentage of moderate engagers were women (68 percent, compared to 57 percent among clients not in this group). They were also more likely to have a vocational or technical certification (5 percent, compared to 1 percent among clients not in this group) and less likely to have ever been convicted of a crime (11 percent, compared to 17 percent among clients not in this group).

Low engagers. About one in four clients was a low engager. Among this group, just over one-quarter attended any workshop sessions; the average client in this group attended only 1 or 2 of the 10 sessions. None attended any booster sessions. They met with employment case managers and job developers and received one-on-one job development services, but did so less frequently than the rest of the clients. Despite this limited attendance at booster and workshop sessions, nearly all received an assessment in a case management meeting. About 80 percent received one-on-one job and career advancement services—a large proportion, but not as large as among the other clients. On average, these clients met with case managers more than two times and discussed two topics.

Low engagers received the fewest program services and also tended to be clients who were most in need of employment support. These clients faced barriers to work that may also have made it difficult for them to attend program meetings. Programs may need to provide more intensive or flexible supports to encourage regular participation for clients like these. For example, they may need more case management to identify referrals to outside resources, more transportation and child care assistance, and more options for program participation (such as added flexibility in workshop schedules or makeup sessions).

Compared to the rest of the clients, low engagers were most in need of employment. Specifically, they were least likely to have worked in the past month (50 percent, compared to 60 percent among clients not in this group) and most likely to be actively looking for work (88 percent, compared to 78 percent among clients not in this group). Clients in this group also faced more employment challenges. They were more likely than those other groups to have less than a high school education (23 percent, compared to 14 percent among clients not in this group). They were more likely to have clinically significant depressive symptoms (23 percent, compared to 12 percent among clients not in this group) and more likely to report barriers to work related to transportation (45 percent, compared to 22 percent among clients not in this group), child care (27 percent compared to 17 percent), and mental health (13 percent compared to 6 percent). In addition, clients in this group were more likely not to be in a romantic relationship (50 percent, compared to 43 percent among clients not in this group).

Empowering Families in Fort Worth, Texas

Empowering Families served economically disadvantaged couples who were raising children together. The program was developed and delivered by The Parenting Center in Fort Worth, Texas, a large, diverse city. In 2019, the estimated population was about 910,000 people, of whom about 4 in 10 were Hispanic and about 1 in 5 were non-Hispanic Black. Roughly 40 percent of households had income under $50,000 per year. More than a quarter of people age 5 and older spoke Spanish at home (based on data covering 2015 through 2019 from the American Community Survey).

Empowering Families featured four components. First, the program offered a group workshop integrating the *Family Wellness* HMRE curriculum with information about employment and financial literacy. This workshop had eight sessions, with each session lasting about 2.5 hours. Second, the program offered case management to couples monthly for six months. Case managers provided referrals to supportive services and reinforced concepts from the curriculum. Third, clients had the option to meet individually with employment counselors to be connected to education and training opportunities. Fourth, couples had the option to meet with financial coaches to help them identify financial goals and plans. To support participation, The Parenting Center provided clients with child care, transportation, and financial incentives. They also provided dinner to clients and their children before evening workshop sessions.

Key components of Empowering Families

Group workshop on relationship skills, employment, and financial literacy (20 hours offered in two alternate schedules). The Parenting Center integrated the *Family Wellness* curriculum with information about employment and financial literacy. The group workshop was designed to strengthen couples' relationships and address employment or financial difficulties that could affect them. The workshop covered 20 hours of material and was available on two schedules: eight 2.5-hour sessions on weekday evenings, or four 5-hour Saturday sessions. More than 90 percent of couples enrolled in the weekday sessions.

Case management. The program designed case management to connect couples to Empowering Families' employment services and financial counseling and help them apply concepts from *Family Wellness.* Case managers aimed to meet one on one with each couple monthly for six months, either in person or by phone. Typically, case managers met with both members of the couple, but would meet with only one member if the other member was not able to attend.

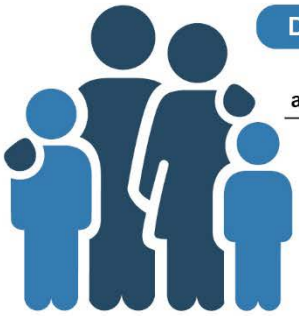
Employment services. Employment counselors helped clients set employment goals and connected them to job services, including work readiness services, resume preparation, interview skills training, soft skills training, job skills training, and job placement. The program encouraged clients to meet with an employment counselor while they were still active in the workshop session. During the first meeting with a client, employment counselors reviewed the client's education and employment history and administered the Test for Adult Basic Education to assess eligibility for training programs and job placement.

Financial counseling. Financial coaches taught couples skills about the basics of budgeting, saving, and credit. The program's goal was for couples to attend four sessions with their financial coach. Typically, in the first meeting, financial coaches worked with couples to identify their financial goals and develop a customized plan. Couples who participated in four coaching sessions within 18 months could receive a savings match of up to $100.

Description of clients

Our analysis includes 475 couples who enrolled in Empowering Families from September 2016 to December 2018. Most clients were Hispanic or Black, non-Hispanic couples in their thirties (Figure 9). For just over half the couples, both partners identified as Hispanic; for just over a quarter, both partners identified as Black, non-Hispanic. The average age of mothers was 33 and the average age of fathers was 35. Just over half (56 percent) of the couples were married. More than 80 percent had at least one child together; 57 percent had at least one child from other relationships. Additional details on client characteristics are in Appendix Table A.15.

Figure 9. Characteristics of couples enrolled in Empowering Families



Demographics

Mothers' average age	Fathers' average age	Both partners Hispanic	Both partners Black, non-Hispanic	Both partners have a high school diploma
33	35	53%	28%	52%

Relationships and children

Married	Steady unmarried	On-off	Couple has children together	Couple has children from other relationships
56%	39%	6%	82%	57%

Employment and income

Mother worked in past 30 days	Father worked in past 30 days	Average earnings for working mothers	Average earnings for working fathers	Mother actively looking for work	Father actively looking for work	Couple received government benefits
48%	86%	$1,263	$2,081	34%	40%	66%

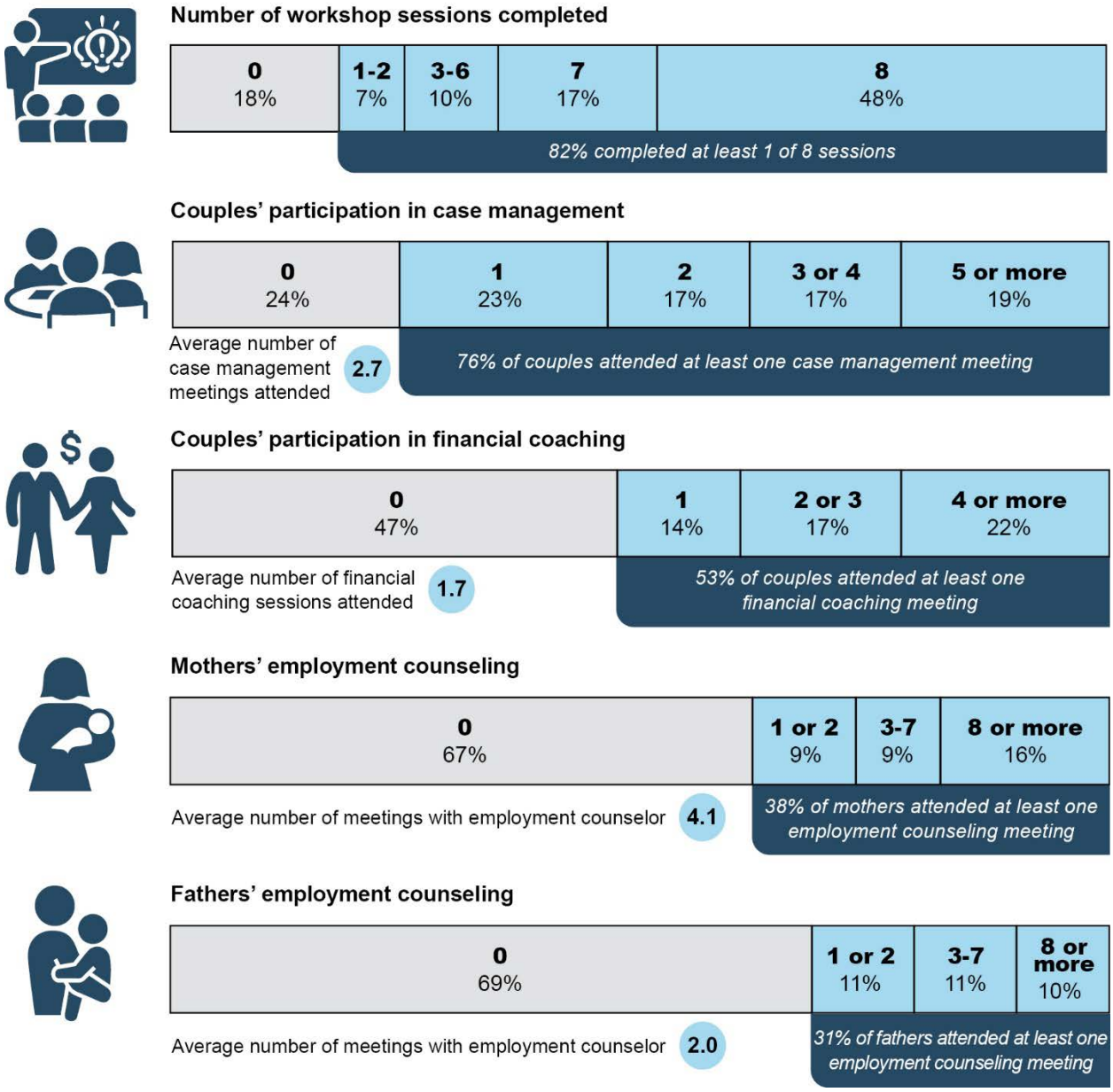
Note: "Couple received government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance.

As expected for the program, most clients had low incomes. Nearly half of mothers had worked in the past 30 days, and the average earnings among those who worked during that period were $1,263. Fathers were more likely to have worked in the past 30 days (86 percent) and those who worked had higher average earnings ($2,081). Thirty-four percent of mothers and 40 percent of fathers were actively looking for work at the time of the survey. Two-thirds of couples received government benefits including SNAP or WIC.

Description of participation

More than 8 in 10 couples attended at least one workshop session, while almost half attended all of them (Figure 10). Couples participated at a lower rate in the one-on-one services offered outside of the core workshop. At least one partner from 76 percent of couples had met with a case manager. On average, couples met with their case manager about three times. Thirty-three percent of mothers and 28 percent of fathers met with an employment counselor. On average across all clients, including those who did not meet with an employment counselor, mothers attended 3.4 meetings and fathers attended 1.5 meetings. Just over half (53 percent) of couples met with a financial coach. Additional details on client participation are in Appendix Table A.16.

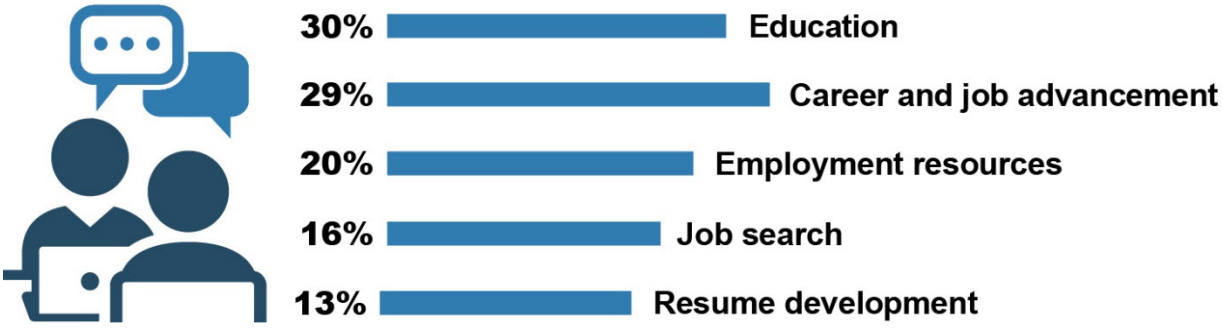
Figure 10. Participation in Empowering Families workshop sessions, case management, employment counseling, and financial coaching



Note: This figure includes 5 percent of clients who completed all four sessions on a Saturday schedule and 1 percent of clients who partially completed the Saturday workshop sessions. We assigned these clients to attendance categories in this figure by doubling their number of sessions attended.

The range of topics discussed with employment counselors offers some insights into clients' potential employment concerns. Figure 11 shows that the most common topics discussed were education (30 percent), career and job advancement (29 percent), employment resources (20 percent), job search (16 percent), and resume development (13 percent). Case managers primarily connected clients to other resources and did not provide direct services, and financial coaches only discussed financial counseling.

Figure 11. Proportion of Empowering Families clients who discussed topics with an employment coach



Exploring patterns of participation across program components

Empowering Families had four components that partners could engage in together or separately: (1) the core workshop, (2) case management, (3) employment coaching, and (4) financial counseling. Most couples attended at least some workshop sessions and met with their case manager. Fewer participated in individual employment coaching and financial counseling. However, not all couples and partners engaged in the same way. Some participated in every component, and others participated partially in some services or not at all. To group clients based on their participation patterns, we examined their extent of participation in the four program components and used cluster analysis to identify specific patterns of participation (see details in the appendix).

This analysis identified three groups of clients defined by their extent of participation in the program: full engagers, moderate engagers, and low engagers. Below we describe the participation patterns in each group and highlight the ways clients in each group differed from the rest of the clients pooled together. Figure 12 summarizes these findings for characteristics that differed the most across groups.[1] We include in the appendix details on the participation measures and characteristics we examined; detailed tables of findings are in Appendix Tables A.17 and A.18.

[1] Specifically, these are the characteristics for which differences between one group and the rest of the sample were statistically significant at the 5 percent level, for two of the three groups.

Figure 12. Differences in participation patterns and characteristics for full, moderate, and low engagers in Empowering Families

Participation	100% All	70% Full engagers	12% Moderate engagers	18% Low engagers
Proportion of workshop sessions attended[a] (%)	70 (5.4 sessions of 8)	95** (7.4 sessions of 8)	29** (2.3 sessions of 8)	0** (0 sessions of 8)
Number of case management meetings attended by couple (average)	2.7	3.3**	1.6**	0.9**
Number of employment coaching meetings attended by mother (average)	3.4	4.8**	0.3**	0.3**
Number of employment coaching meetings attended by father (average)	1.5	2.0**	0.4**	0.2**
Number of financial counseling meetings attended by couple (average)	1.7	2.5**	0.1**	0.1**
How is each group different from the others?	**All**	**Full engagers**	**Moderate engagers**	**Low engagers**
Couple is Hispanic (%)	53	62**	32**	34**
Couple is Black, non-Hispanic (%)	28	20**	46**	48**
Mother speaks Spanish at home[b] (%)	42	51**	18**	23**
Mother was born outside the U.S.[b] (%)	44	53**	18**	24**
Couple is married (%)	55	63**	34**	42**
Couple only has children together (%)	43	50**	27**	28**
Mother is actively looking for work (%)	34	27**	57**	49**
Mother's criminal record is an employment barrier (%)	11	9**	14	19**
Mother's lack of transportation is an employment barrier (%)	28	24**	39*	38**
Father is actively looking for work (%)	40	34**	57**	55**
Father's criminal record is an employment barrier (%)	21	18**	27	31**
Father's lack of transportation is an employment barrier (%)	20	16**	29	33**
Father has education beyond a high school diploma or GED (%)	25	29**	14**	20
Father's average monthly earnings, including fathers with no earnings[c] ($)	1,795	1,961**	1,250**	1,499*
Couple receives government benefits (%)	66	62**	73	80**
Couple receives income from SNAP (%)	50	43**	63**	67**

Note: Only characteristics with statistically significant differences across groups are included in the bottom panel.

** $p < 0.05$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

* $p < 0.10$ for a two-tailed t-test comparing the subgroup to the rest of the sample.

[a] The percentage of workshop sessions is calculated as the number of sessions attended divided by 4 sessions if the client enrolled in a weekend workshop or 8 sessions if the client enrolled in a weekday workshop.

[b] Results for fathers were similar and showed that each group was significantly different from the rest of the sample.

[c] Fathers' earnings were top-coded at 3 standard deviations above the mean amount.

Full engagers. Seventy percent of Empowering Families clients were full engagers. Clients in this group attended an average of 95 percent of their workshop sessions. On average, couples in this group participated in three case management meetings and two to three financial counseling meetings. Mothers attended an average of nearly five meetings with an employment coach, and fathers attended two meetings with an employment coach.

The majority of clients in this group were Hispanic. For 62 percent of couples in this group, both members were Hispanic, compared to only 33 percent among couples not in this group. They were also more likely to speak Spanish at home and to have been born outside the United States.

Empowering Families served both English- and Spanish-speaking couples. Spanish-speaking couples were more likely to fully engage with program services than English speakers were. Spanish-speaking couples may have particularly valued the Spanish-language services available through Empowering Families, as there may be fewer services in the broader community available in Spanish. Program staff said Spanish speakers were particularly interested in referrals to English classes and GED programs. One financial coach thought Spanish speakers may have been more interested in financial services because they had less experience with the U.S. financial system (D'Angelo and Bodenlos 2020).

This group tended to be less disadvantaged than the rest of the clients. They had more stable relationships and employment, higher income, and fewer barriers to employment. Couples were more likely to be married (63 percent, compared to 39 percent among couples not in this group) and to have no children with other partners (50 percent, compared to 27 percent among couples not in this group). Clients in this group were less likely than those in other groups to be actively looking for work (27 percent for mothers and 34 percent for fathers, compared to 52 percent for mothers and 56 percent for fathers among couples not in this group). Fathers in this group had higher average earnings ($1,961 in the past 30 days compared to $1,399 for fathers among couples not in this group), and these couples were least likely to receive government benefits (62 percent, compared to 77 percent among couples not in this group). Clients in this group were least likely to say that a criminal record or a lack of transportation were employment barriers for them. Nine percent of mothers and 18 percent of fathers said a criminal record was a barrier, compared to 17 and 30 percent for mothers and fathers among couples not in this group, respectively. Similarly, 24 percent of mothers and 16 percent of fathers said transportation was a barrier, compared to 39 and 31 percent for mothers and fathers among couples not in this group, respectively. Fathers in the full engagers group were more likely than those among couples not in this group to have completed education beyond a high school diploma or GED (29 percent compared to 18 percent for other fathers).

Moderate engagers. Twelve percent of couples were moderate engagers, constituting the smallest group. On average, they attended 29 percent of their workshop sessions; met between one and two times, on average, with their case managers; and met less than once, on average, with a financial counselor. Mothers and fathers each met less than once on average with employment coaches.

Couples with more stable relationship and economic circumstances were more likely to participate fully in Empowering Families services. Couples who were married, had children with no other partners, and had higher earnings had higher participation rates. These couples may have faced fewer barriers to participation or may have viewed the services as more beneficial to them. Other HMRE programs for couples with low incomes may find these types of clients more receptive to participation. Programs may need to make additional efforts to engage couples with less stable relationships and economic situations in program services.

These couples were less likely than other groups to be Hispanic (32 percent, compared to 56 percent among couples not in this group). They were also least likely to speak Spanish at home and be born outside the United States (18 to 22 percent for mothers and fathers in this group, compared to 45 to 47 percent for mothers and fathers among couples not in this group). Couples in this group tended to be disadvantaged in terms of education and earnings, and many were in need of employment, in contrast to couples in the full engagers group. Specifically, fathers in this group were least likely to have education beyond a high school diploma or GED (14 percent, compared to 27 percent of fathers among couples not in this group) and had the lowest average monthly earnings ($1,250, compared to $1,868 for fathers among couples not in this group). Mothers and fathers in this group were most likely to be looking for work (57 percent for both, compared to 31 percent for mothers and 38 percent for fathers among couples not in this group).

Low engagers. Eighteen percent of couples were low engagers. This group did not participate in any workshop sessions, attended one case management meeting on average, and attended almost no employment coaching or financial counseling meetings.

Couples in this group were similar to moderate engagers in terms of their ethnicity and rates of speaking Spanish at home and being born outside the United States. They were also similar to moderate engagers in terms of disadvantage and job search. Fathers in this group were most likely to report a lack of transportation as an employment barrier (33 percent, compared to 18 percent of fathers among couples not in this group). Couples in this group were the most likely to receive government benefits (80 percent, compared to 63 percent among couples not in this group), including SNAP (67 percent, compared to 46 percent among couples not in this group).

Conclusions

Participation in HMRE programs can vary substantially, with some clients fully engaging in all the services offered and others participating in these services little or not at all. This report used data analytic methods to analyze patterns of participation in three HMRE programs—MotherWise, Career STREAMS, and Empowering Families—that were part of the STREAMS evaluation. Because of their participation in STREAMS, these programs had detailed data on client characteristics, making them particularly well suited for this analysis. For each program, our analysis led us to group clients into three categories—full, moderate, and low engagers—and we examined their participation patterns and their individual characteristics to better understand how HMRE clients engage in program services. Patterns and profiles varied across programs, but two cross-cutting findings emerged.

- **Clients with the most stable relationship and employment histories engaged most fully with HMRE program services.** A consistent pattern across the three programs is that clients in more stable circumstances were more likely to engage fully with program services. Those with more stable relationships received more services from the programs. For example, women who engaged most

fully with MotherWise services were more likely than other clients to be in a stable relationship with their baby's father when they enrolled in the program. Similarly, couples who fully engaged with Empowering Families services were more likely than other couples in the program to be married to each other and to have no children with other partners. Those with more stable employment also received more services from the programs. Full engagers in Career STREAMS and Empowering Families reported fewer barriers to employment than other clients in those programs. Moreover, full engagers in Career STREAMS were more likely than other clients to have worked recently. Similarly, full engagers in Empowering Families had higher earnings and were less likely than other clients to be actively looking for work.

Conversely, those potentially most in need of the supports the programs offered were least likely to fully engage in program services. For instance, Career STREAMS and Empowering Families clients who received few services were generally more likely to be actively looking for work and more likely to report barriers to employment. Similarly, those who were not in steady romantic relationships were generally less likely to participate fully in program services. Programs may need to make special efforts to keep these clients in less stable circumstances engaged.

- **Spanish-speaking clients may be particularly receptive to HMRE services.** In the two programs we examined that served both English- and Spanish-speaking clients—MotherWise and Empowering Families—Spanish-speaking clients had higher rates of participation in all program components. These programs had bilingual staff members and offered all services in English and Spanish. Their intensive efforts to offer a full set of program services in Spanish likely contributed to their success in engaging Spanish speakers. Moreover, many Spanish-speaking clients in these programs were born outside the United States and may have especially valued the sense of community the workshops provided, as well as the programs' assistance in accessing resources such as English classes, GED programs, and financial services. These findings suggest that, with appropriate investments, programs can successfully engage Spanish speakers in HMRE services.

Careful examination of program participation patterns using data analytic methods can provide insights for HMRE program providers as they consider ways to adapt recruitment strategies, programming, and service delivery to promote clients' attendance and completion. Providers can use this information on how clients engage in program services in different ways and how this varies by their characteristics to inform their work with current and future clients—helping them identify which clients may need extra attention and support to fully engage in program services. These insights can help programs strengthen program implementation and improve their ability to meet performance standards.

These results are based on participation patterns in only three HMRE programs. Future work should examine data from a larger set of HMRE programs to determine whether these patterns apply more broadly.

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Technical Appendix

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Mathematica used a hierarchical clustering technique to describe participation in the main report. This technique involves applying an algorithm to look for relationships among researcher-selected variables. This appendix describes the technique we used and provides the tables underlying graphics included in the report.

Cluster analysis

Cluster analysis is a statistical method we used to identify and describe typical patterns of participation across all the program's key components. This method enables the data to determine the most common and distinctive patterns of participation. We used the same general steps to conduct the clustering analysis separately for each program.

1. We defined variables to cluster on based on the program's structure and components. We selected key components of programs based on their implementation reports and discussions with the study authors. For participation in each program's curriculum, we examined three types of measures, capturing whether clients began the curriculum, what percentage of the curriculum they completed, and how many daily sessions the clients completed. This latter measure could proxy for barriers the participants faced each time they had to attend a session (for instance, child care or transportation). For participation in case management and other services, we looked for one to three measures that could capture whether clients received the service and at what intensity, such as the number of services received and/or the number of topics discussed. Using different variables in the clustering analysis would result in different clusters.
2. We applied hierarchical clustering with the selected clustering measures. Hierarchical clustering methods create a map for how to place observations into alternative groupings. For a sample with *N* observations, the map describes groupings for all potential numbers of groups (1 to *N* groups). Specifically, for each number of groupings, the algorithm places clients into the specified number of groups to maximize the similarity of individuals within groups on the clustering measures, as well as the differences between individuals across groups on the same clustering measures. The map starts by considering each observation as a separate group (*N* groups with 1 observation each). The algorithm then applies a specified criterion (linkage rule) to join two of the observations into one group, resulting in *N*-1 total groups. The process is repeated, now applying the linkage rule to *N*-1 groups and resulting in *N*-2 groups. This continues until all clusters have been combined.

   To select a set of clusters to describe in the report, we chose two linkage rules to apply with the clustering measures and prespecified that we would examine the clusters they produced when separating clients into two, three, four, and five groups. We chose multiple linkage rules and sets of groupings because there are no universally applicable criteria for selecting an optimal set of clusters. We decided to focus on characteristics of groups when there were two to five groups, so the report could focus on a small number of key patterns that are most likely to rely on sufficient sample sizes and be relevant to other programs.

   We applied the following linkage rules using Stata®, version 16.1:

   - **Average linkage rule.** This rule measures the average distance between all data points for each pair of groups that could be combined. The pair of groups with the smallest average distance are combined. This linkage rule puts relatively more emphasis on creating clusters with distinct differences, on average.
   - **Ward's linkage rule.** This rule estimates the error sum of squares between all data points for each pair of groups that could be combined. The pair of groups with the smallest error sum of

squares is combined: that is, the total within-cluster variance is minimized. This linkage rule puts relatively more emphasis on avoiding outliers when creating clusters.

3. For each program, we reviewed group differences in the participation clustering variables and other characteristics, for the eight sets of groups defined by the two linkage rules and four sets of clusters (two to five). We then selected a preferred grouping to describe in the report by identifying a grouping with more statistically significant differences across meaningful characteristics that might be of interest to other programs.

The remainder of this section focuses on the three programs (MotherWise, Career Strengthening Relationships and Marriage Services [STREAMS], and Empowering Families) separately. For each program, we define the participation variables used for the clustering analysis and discuss alternative diagnostics we could have used to select the number of clusters. Comparisons of clusters on additional characteristics for MotherWise appear in Appendix Tables A.9 and A.10, Tables A.13 and A.14 for Career STREAMS, and Tables A.17 and A.18 for Empowering Families.

MotherWise

We specified the variables in Appendix Table A.1 as the basis for the clustering approach. These variables describe participation in each component of the MotherWise program—individual and couple workshops, case management meetings, and referrals. We captured participation by whether and how many workshop sessions the participants attended, and the number and breadth of topics discussed with the case manager.

Table A.1. Definitions of participation variables used in the clustering analysis for MotherWise

Participation measure	Definition
Workshop attendance	
Attended any session	Binary variable equal to 1 if the participant engaged in at least one workshop session, 0 otherwise
Percentage of sessions attended	Percentage of workshop sessions attended (0 to 100), excluding makeup sessions
Number of sessions attended, with and without makeup sessions	Total number of workshop sessions attended (0 to 6), with and without makeup sessions
Case management	
Number of case management meetings attended	Total number of case management meetings attended (0 to 10)
Number of topics discussed with case managers	Number of topics covered at case management meetings (0 to 18)
Received any referrals	Binary variable equal to 1 if the participant received at least one referral to another community organization, 0 otherwise. Referrals were provided for assessments, child service custodian visits, child welfare, domestic violence, financial counseling, education, family therapy, job advancement, legal assistance, mental health services, parenting, housing, child care, clothing, public assistance, food assistance, identification cards, health insurance, healthy marriage and relationship education, youth services, baby items, or other social services.

Couples' workshop	
Attended the couples' workshop	Binary variable equal to 1 if the couple attended at least one workshop session, 0 otherwise

As described, we focused our selection of the linkage method and number of clusters on whether there were statistically significant differences in meaningful characteristics between the groups. The linkage method directly influenced the magnitudes of differences and cluster sizes, both of which factor into statistical tests of differences. As an example of how linkage rules created clusters of different sizes, in the MotherWise sample, the Ward linkage rule generally created clusters that were more evenly sized than the average linkage rule. The average linkage rule identified three clusters as containing 355, 118, and 32 clients, respectively, whereas the Ward linkage rule identified three clusters containing 226, 140, and 139 clients. Based on comparing means for the participation variables in Table A.1 and additional characteristics not used to create the clusters, we reported findings from the Ward linkage approach for three clusters.

Although not accounted for in our analysis, we also calculated quantitative measures of distinct clustering (cluster stopping rules) as an alternative to selecting an optimal number of clusters based on reviewing cluster means (Table A.2). Two common measures are the Duda-Hart Je(2)/Je(1) index and the Caliński-Harabasz index. Higher values of the Duda-Hart Je(2)/Je(1) index with larger decreases in the associated pseudo T-squared value indicate more distinct clustering on the participation measures that we used to define the clusters. Higher values of the Caliński-Harabasz index indicate more distinct clustering on these participation measures. Relative to our preferred approach of interpreting statistically significant differences, using these cluster stopping rules would focus exclusively on the participation measures and not consider whether other characteristics differed. Even though we did not use them to select our final number of clusters, we include them here as useful diagnostics to understand how distinct the participation patterns are. Under both the Ward's and average linkage rules, the Duda-Hart index suggests examining two clusters compared to five for the Caliński-Harabasz index.

Table A.2. Measures of distinct clusters, by number of clusters and linkage rule

Number of clusters	Ward's linkage rule			Average linkage rule		
	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index
2	.34	706	4,407	.24	469	4,364
3	.19	590	4,269	.74	121	3,867
4	.18	995	5,382	.07	4,290	3,255
5	.07	757	10,930	.06	1,961	7,626

Note: Higher values of the Duda-Hart Je(2)/Je(1) index with larger decreases in the associated pseudo T-squared value indicate more distinct clustering. Higher values of the Caliński-Harabasz index indicate more distinct clustering.

Career STREAMS

For the Career STREAMS program, we specified the variables in Table A.3 as the basis for the clustering approach. These variables describe participation in each component of the program—individual

workshops and case management meetings. We captured participation by whether and how many workshop sessions participants attended, the number and breadth of topics discussed with the case manager, and whether and how many assessment and job advancement services participants received. Our measures of participation included makeup sessions.

Table A.3. Definitions of participation variables used in the clustering analysis for Career STREAMS

Participation measure	Definition
Workshop attendance	
Attended any session	Binary variable equal to 1 if the participant engaged in at least one workshop session, 0 otherwise
Percentage of two-week and booster workshop sessions attended, scaled	Percentage of two-week and booster workshop sessions attended (0 to 100)
Percentage of two-week sessions attended	Percentage of two-week workshop sessions attended (0 to 100)
Percentage of booster session sessions attended	Percentage of booster workshop sessions attended (0 to 100)
Case management	
Number of case management meetings attended	Total number of case management meetings attended (0 to 15)
Number of topics discussed with case managers	Number of topics covered at case management meetings (0 to 18)
Received an assessment	Binary variable equal to 1 if the participant engaged in at least one case management meeting that provided an assessment, 0 otherwise
Number of assessments received	Number of assessments received at case management meetings (0 to 15)
Received job advancement services	Binary variable equal to 1 if the participant engaged in at least one case management meeting that provided job advancement services, 0 otherwise
Number of job advancement services received	Number of job advancement services received at case management meetings (0 to 15)

STREAMS = Strengthening Relationships and Marriage Services.

Based on comparing means for these variables and additional characteristics not used to create the clusters, we reported findings from the Ward linkage approach for three clusters. As with MotherWise, the Ward linkage rule produced three clusters that were of more even size than the average linkage rule. At three clusters, for example, the average linkage rule produced clusters with sample sizes of 290, 118, and 47 clients. The Ward linkage rule produced cluster sample sizes of 190, 144, and 121 clients.

Cluster stopping rules are an alternative to selecting an optimal number of clusters based on reviewing cluster means. For this program, cluster stopping rules suggested multiple sets of clusters. For Ward's linkage rule, the Duda-Hart statistics did not clearly imply an optimal number of clusters, and the Caliński-Harabasz statistic suggested five clusters. For the average linkage rule, the Duda-Hart statistic suggested two or three clusters, compared to five based on the Caliński-Harabasz index. This does not mean the clusters are all similar, however, because these statistics do not consider differences on other measures besides those in Table A.3.

Table A.4. Measures of distinct clusters, by number of clusters and linkage rule

Number of clusters	Ward's linkage rule			Average linkage rule		
	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index
2	.40	494	1,495	.41	476	1,419
3	.19	777	1,984	.37	78	1,902
4	.15	675	3,527	.22	995	1,358
5	.17	693	3,841	.14	723	3,237

Note: Higher values of the Duda-Hart Je(2)/Je(1) index with larger decreases in the associated pseudo T-squared value indicate more distinct clustering. Higher values of the Caliński-Harabasz index indicate more distinct clustering.

Empowering Families

For The Parenting Center's Empowering Families program, we specified the variables in Appendix Exhibit A.5 as the basis for the clustering approach. These variables describe participation in each component of the program—individual workshops and meetings led by a case manager, an employment services provider, or a financial counselor. We captured participation by whether and how many workshop sessions participants attended, and whether and how many meetings were held with the case manager, employment services provider, and financial counselor. Our measures of participation excluded makeup sessions.

Table A.5. Definitions of participation variables used in the clustering analysis for The Parenting Center's Empowering Families program

Participation measure	Definition
Workshop attendance	
Attended any session	Binary variable equal to 1 if the participant engaged in at least one workshop session, 0 otherwise
Percentage of sessions attended	Percentage of workshop sessions attended (0 to 100)
Number of sessions attended	Total number of workshop sessions attended (0 to 6)
Selected an 8-week, weekly workshop schedule	Binary variable equal to 1 if the participant selected the weekly 8-week workshop schedule, 0 if the participant selected the 4 Saturdays schedule
Case management	
Couple attended any case management meetings	Binary variable equal to 1 if the couple engaged in at least one case management meeting, 0 otherwise
Number of case management meetings attended by the couple	Total number of case management meetings attended by the couple (0 to 9)
Employment services	
Mother attended any employment services meetings	Binary variable equal to 1 if the female partner engaged in at least one employment services meeting, 0 otherwise
Number of employment services meetings attended by the mother	Total number of employment services meetings attended by the female partner (0 to 48)

Participation measure	Definition
Father attended any employment services meetings	Binary variable equal to 1 if the male partner engaged in at least one employment services meeting, 0 otherwise
Number of employment services meetings attended by the father	Total number of employment services meetings attended by the male partner (0 to 27)
Financial counseling	
Number of financial counseling meetings attended	Total number of financial counseling meetings attended (0 to 8)
Attended any financial counseling meetings	Binary variable equal to 1 if the participant engaged in at least one financial counseling meeting, 0 otherwise

Based on comparing means for these variables and additional characteristics not used to create the clusters, we reported findings from the Ward linkage rule for three clusters. In the main text, we only discussed comparisons that were statistically significant. As in MotherWise, we found the average linkage rule led to some clusters that were substantially smaller than others. At three clusters, the average linkage rule grouped clients into clusters of 320, 142, and 14, compared to the Ward linkage rule's clusters of 334, 86, and 56.

Examining cluster stopping rules as an alternative to our approach of reviewing cluster means, we found the Duda-Hart index indicated the most distinct clustering at three clusters, and the Caliński-Harabasz index suggested two clusters. This held for both Ward's linkage rule and the average linkage rule.

Table A.6. Measures of distinct clusters, by number of clusters and linkage rule

Number of clusters	Ward's linkage rule			Average linkage rule		
	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index	Duda-Hart Je(2)/Je(1) index	Duda-Hart pseudo T-squared value	Caliński-Harabasz pseudo-F index
2	0.28	351	3,102	0.81	78	3,102
3	0.68	154	2,195	0.19	607	1,790
4	0.55	190	2,062	0.64	176	1,896
5	0.24	170	2,106	0.64	7	2,081

Note: Higher values of the Duda-Hart Je(2)/Je(1) index with larger decreases in the associated pseudo T-squared value indicate more distinct clustering. Higher values of the Caliński-Harabasz index indicate more distinct clustering.

Supporting tables

This section contains tables with the estimates underlying the graphics included in the report, as well as supplemental information. Following the structure of the report, we provide tables for MotherWise (Tables A.7 through A.14), then Career STREAMS (Tables A.15 through A.19), followed by Empowering Families (Tables A.20 through A.24). The tables appear in the following sequence for each program:

1. Characteristics of the sample
2. Detailed measures of participation

3. Cluster averages of the participation measures used to generate clusters
4. Cluster averages of other characteristics not used to generate clusters

MotherWise

Table A.7. Average characteristics of women enrolled in the MotherWise program

Characteristic	Percentage (except where noted)
Age (years)	28
Race and ethnicity	
Hispanic	68
Black, non-Hispanic	11
White, non-Hispanic	16
Other	6
Speaks Spanish in the home	40
Born outside the United States	36
Highest education level	
Less than high school	23
High school diploma or equivalent	40
Vocational or technical certification	4
Some college, no degree	23
College degree (two-year, four-year, or greater)	10
Pregnant at study enrollment	85
Number of children	
None (first-time mother-to-be)	29
One	28
Two or three	32
Four or more	12
Relationship status	
Married	35
In a steady romantic relationship	46
In an on-again, off-again relationship	8
Not in a romantic relationship	11
Relationship status with the baby's father	
Married	33
In a steady romantic relationship	44
In an on-again, off-again relationship	7
Physical and emotional abuse	
Any physical or emotional abuse by a romantic partner in the past year	39
Physical violence by a romantic partner in the past year	15

Characteristic	Percentage (except where noted)
Employment and earnings in the past month	
Worked for pay	40
Average earnings ($)	541
Average earnings for those who worked ($)	1,338
Barriers to finding or keeping a good job in the past year	
Child care	33
Transportation	25
Documentation	15
Criminal record	11
Skills or education	11
Receipt of government benefits	
Receipt of any government benefits	73
SNAP	46
TANF	17
WIC	55
Housing	
Own or have mortgage	8
Rent	58
Pay some of the rent, low-income housing, or other stable housing	14
Other (live rent-free, in shelter, homeless, other unstable housing)[a]	19
Reason for applying	
Improving parenting skills was very or extremely important	88
Improving personal relationships was very or extremely important	87
Improving job situation was very or extremely important	53
Convicted of a crime	27
Longest period of incarceration	
Never incarcerated	76
One week	9
Two to six weeks	4
More than six weeks	11
Depression	
Clinically significant depressive symptoms	25
N	505

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes women who enrolled in MotherWise between September 2016 and December 2018. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Earnings have been top-coded. Fewer than 10 percent of respondents reported that a lack of clothes or their mental health was a barrier to employment in the past year. Figures may sum to more than 100 due to rounding.

[a] Living rent-free was the most common type of housing in this category. Fifteen percent of the sample reported living rent-free.

nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table A.8. Participation in the MotherWise program

Participation measure	Percentage
Engagement in (%)	
At least one program component	88
At least one workshop session	83
At least one case management meeting	84
Couples' workshop	17
Number of workshop sessions completed (%)	
None	17
1 or 2	11
3 or 4	5
5	39
6	27
Number of case management meetings attended (%)	
0	16
1	15
2	12
3	15
4	28
5+	13
Topics in case management (% who discuss with case manager)	
Healthy marriage and relationship education	80
Assessment	75
Physical or mental health	63
Social services	44
Parenting	23
Economic stability (job placement, financial counseling)	17
Education	12
Family therapy and counseling	7
Domestic violence	7
Legal assistance	5
N	505

Source: nFORM data as of March 2021.

Note: The sample includes women who enrolled in MotherWise from September 2016 to December 2018. Measures are based on participation within 12 months of enrollment. Only 1 percent of women attended more than six sessions. Fewer than 5 percent of women discussed child support, custody, visitation, youth services, and child welfare services with their case manager. Figures might sum to more than 100 due to rounding.

nFORM = Information, Family Outcomes, Reporting, and Management.

Table A.9. Key participation measures for the MotherWise program, by participation pattern

Participation	Low engagers	Moderate engagers	Full engagers	Total
Workshop attendance				
Percentage attending any session	40*	100*	100*	83
Average percentage of sessions attended	9*	81*	100*	66
Average number of sessions attended	0.5*	4.9*	6.1*	4.0
Case management				
Average number of case management meetings attended	0.7*	3.3*	3.9*	2.7
Average number of topics discussed with case managers	1.7*	4.2*	4.4*	3.6
Percentage receiving any referrals	22*	59*	60*	49
Couples' workshop				
Percentage attending the workshop	1*	22*	24*	17
Percentage of sample	28	45	28	100
N	139	226	140	505

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes women who enrolled in MotherWise from September 2016 to December 2018. We used hierarchical cluster analysis to classify individuals' participation into three patterns. This table reports patterns identified using Ward's linkage clustering method.

* $p < 0.05$ for a two-tailed *t*-test comparing the subgroup to the rest of the sample.

+ $p < 0.10$ for a two-tailed *t*-test comparing the subgroup to the rest of the sample.

nFORM = Information, Family Outcomes, Reporting, and Management; STREAMS = Strengthening Relationships and Marriage Services.

Table A.10. Average characteristics of clients in the MotherWise program, by participation pattern

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Age (years)	27+	28	30*	28
Race and ethnicity				
Hispanic	61*	73*	66	68
Black, non-Hispanic	12	9	13	11
White, non-Hispanic	21+	15	12	16
Other	7	3*	9	6
Speaks Spanish in the home	35+	42	44	40
Born outside the United States	26*	36	44*	36
Highest education level				
Less than high school	22	26	19	23
High school diploma or equivalent	46	39	36	40
Vocational or technical certification	4	4	6	4
Some college, no degree	20	22	27	23
College degree (two-year, four-year, or greater)	9	9	12	10
Reason for applying				
Improving personal relationships was very or extremely important	86	87	89	87
Improving parenting skills was very or extremely important	88	88	89	88
Pregnant at study enrollment	91*	84	81	85
In first trimester of pregnancy at study enrollment	12	11	7	10
In second trimester of pregnancy at study enrollment	46	43	51	46
In third trimester of pregnancy at study enrollment	28	28	21	26
Enrolled postpartum	9*	16	20+	15
Number of children	1.6	1.5	1.7	1.6
First-time mother	30	28	28	29
Relationship status				
Married	31	36	37	35
In a steady romantic relationship	49	41*	50	46
In an on-again, off-again relationship	10	9	4*	8
Not in a romantic relationship	10	14	9	11
Relationship status with the baby's father				
Married	30	33	35	33
In a steady romantic relationship	44	40	51+	44
In an on-again, off-again relationship	10	9	2*	7
Physical and emotional abuse				
Any physical or emotional abuse by a romantic partner in the past year	41	40	38	39
Physical violence by a romantic partner in the past year	18	15	14	15

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Employment and earnings in the past month				
Worked for pay	41	41	39	40
Average earnings in the past 30 days	548	458+	667	541
Barriers to finding or keeping a good job in the past year				
Child care	29	31	39+	33
Transportation	24	25	25	25
Documentation	13	18	13	15
Criminal record	12	10	12	11
Skills or education	9	10	14	11
Receipt of government benefits				
Receipt of any government benefits	69	75	73	73
SNAP	51	48	39*	46
TANF	18	19	15	17
WIC	45*	57	62+	55
Convicted of a crime	31	28	21+	27
Housing				
Own or have mortgage	9	8	7	8
Rent	54	56	66*	58
Pay some of the rent. low-income housing, or other stable housing	15	15	12	14
Other (live rent-free[a], in shelter, homeless, other unstable housing)	21	21	14+	19
Percentage of sample	28	45	28	100
N	139	226	140	505

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes women who enrolled in MotherWise from September 2016 to December 2018. We used hierarchical was used to classify individuals' participation into three patterns. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Figures might sum to more than 100 due to rounding.

*/+ Significantly different from mean for the rest of the sample at the .05/0.10 level, two-tailed *t*-test.

[a] Living rent-free was the most common type of housing in this category. Seventeen percent of the sample reported living rent-free.

nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Career STREAMS

Table A.11. Average characteristics of participants enrolled in FWCA's Career STREAMS program

Characteristic	Percentage (except when noted)
Female	62
Age (years)	23
Race and ethnicity	
Black, non-Hispanic	94
White, non-Hispanic	1
Hispanic	1
Other	4
Highest education level	
Less than high school	16
High school diploma or equivalent	56
More than high school (vocational or technical certification, some college, college degree, or greater)	28
Pregnant at study enrollment	6
Number of children	
None	55
One	20
Two or three	19
Four or more	6
Relationship status	
Married	2
In a steady romantic relationship	41
In an on-again, off-again relationship	13
Not in a romantic relationship	43
Physical and emotional abuse	
Any physical or emotional abuse by a romantic partner in the past year	41
Physical violence by a romantic partner in the past year	18
Employment and earnings in the past month	
Worked for pay	57
Average earnings ($)	404
Average earnings for those who worked ($)	709
Barriers to finding or keeping a good job in the past year	
Transportation	28
Child care	20
Skills or education	14
Criminal record	12
Clothes	9
Physical or mental health	8

Characteristic	Percentage (except when noted)
Documentation	8
Receipt of government benefits	
Receipt of any government benefits	55
SNAP	48
TANF	11
WIC	19
Housing	
Own or have mortgage	2
Rent	35
Pay some of the rent, low-income housing, or other stable housing	17
Other (live rent-free[a], in shelter, homeless, other unstable housing)	46
Reason for applying	
Improving job situation was very or extremely important	86
Improving personal relationships was very or extremely important	55
Improving parenting skills was very or extremely important	44
Convicted of a crime	16
Longest period of incarceration	
Never incarcerated	85
One to six weeks	6
More than six weeks	8
Depression	
Clinically significant depressive symptoms	15
N	455

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes people who enrolled in Career STREAMS from August 2016 to December 2018. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Figures might sum to more than 100 due to rounding.

[a] Living rent-free was the most common type of housing that we categorized as unstable. Forty-three percent of the sample reported living rent-free.

nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table A.12. Participation in FWCA's Career STREAMS program

Participation measure	Percentage
Engagement in:	
Any program component	100
Any two-week workshop session	81
Any one-on-one contact	100
Any booster sessions	66
Sessions of the two-week workshop completed	
None	19
1 to 4	7
5 to 7	2
8 or 9	9
10	63
Booster sessions completed by the full sample	
0	34
1	3
2	7
3	25
4	12
5	19
Average number of case management meetings attended	3.3
Percentage who discussed topics with intake staff and case managers at least once	
Assessment	99
Job and career advancement	90
Social services	31
Education	25
Physical or mental health	16
Financial counseling	8
Child support, custody, or visitation	8
Family therapy or counseling	6
HMRE services	6
Percentage who received referrals to other community organizations at least once	69
N	455

Source: nFORM data as of March 2021.

Note: The sample includes people who enrolled in Career STREAMS from August 2016 to December 2018. Measures are based on participation within 12 months of enrollment. Figures might sum to more than 100 due to rounding. Fewer than 5 percent of participants discussed legal assistance, parenting, youth services, domestic violence, and child welfare with intake staff and case managers.

FWCA = Family and Workforce Centers of America; HMRE = Healthy marriage and relationship education; nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services.

Table A.13. Key participation measures for the Career STREAMS program, by participation pattern

Participation	Low engagers	Moderate engagers	Full engagers	Total
Workshop attendance				
Percentage attending any session	27*	100*	100*	81
Average percentage of two-week workshop sessions attended (of 10)	7*	97*	99*	74
Average percentage of booster sessions attended	0*	44+	92*	48
Average percentage of two-week workshop and booster curriculum units attended	6*	93*	98*	72
Case management				
Average number of case management meetings attended	2.2*	3.3	4.3*	3.3
Average number of topics discussed with case managers	2.0*	3.5*	3.7*	3.2
One-on-one employment services				
Percentage receiving assessment services	98	100+	99	99
Average number of assessment services received	1.0*	1.1+	1.4*	1.2
Percentage receiving job and career advancement services	77*	93	98*	90
Average number of job and career advancement services received	1.1*	2.0	2.7*	1.9
Percentage of sample	27	42	32	100
N	121	190	144	455

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes participants who enrolled in the study from August 2016 to December 2018. Hierarchical cluster analysis was used to classify individuals' participation into three patterns. Figures might sum to more than 100 due to rounding. This table reports patterns identified using Ward's linkage clustering method.

*/+ Significantly different from mean for the rest of the sample at the .05/0.10 levels, two-tailed *t*-test.

nFORM = Information, Family Outcomes, Reporting, and Management; STREAMS = Strengthening Relationships and Marriage Services

Table A.14. Average characteristics of participants enrolled in the Career STREAMS program, by participation pattern

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Age	24	24	23	23
Female	56	68*	58	62
Race and ethnicity				
Black, non-Hispanic	93	94	95	94
White, non-Hispanic	1	2	1	1
Hispanic	1	1	1	1
Other	5	4	3	4
Highest education level				
Less than high school	23*	16	12+	16
High school diploma or equivalent	47*	56	63*	56
More than high school (vocational or technical certification, some college, college degree, or greater)	30	28	26	28
In school	22*	15	11*	16
Reason for applying				
Improving job situation was very or extremely important	86	83	90+	86
Improving personal relationships was very or extremely important	55	55	56	55
Pregnant at study enrollment	6	5	8	6
Number of children	1.0	1.1+	0.8*	1.0
Relationship status				
Married	1+	4+	1	2
In a steady romantic relationship	37	43	43	41
In an on-again, off-again relationship	12	13	14	13
Not in a romantic relationship	50+	40	42	43
Actively looking for work	88*	78	76	80
Employment and earnings in the past month				
Worked for pay	50*	57	64+	57
Average earnings ($)	325+	445	416	404
Barriers to finding or keeping a good job in the past year				
Transportation	45*	24+	21*	28
Child care	27*	19	15+	20
Skills or education	16	14	13	14
Criminal record	16	9+	13	12
Clothes	16*	7	7	9
Mental health	13*	7	5+	8

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Documentation	12	8	4*	8
Crime				
Ever convicted of a crime	21+	11*	17	16
Depression				
Clinically significant depressive symptoms	23*	14	10*	15
Percentage of sample	27	42	32	100
N	121	190	144	455

Note: The sample includes people who enrolled in Career STREAMS from August 2016 to December 2018. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Figures might sum to more than 100 due to rounding.

*/+ Significantly different from mean for the rest of the sample at the .05/0.10 levels, two-tailed *t*-test.

SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Empowering Families

Table A.15. Average characteristics of couples enrolled in The Parenting Center's Empowering Families program

Characteristic	Percentage (except when noted)
Average age at enrollment (years)	
Mothers	33
Fathers	35
Race and ethnicity	
Both partners Hispanic or Latino	53
Both partners Black, non-Hispanic	28
Both partners white, non-Hispanic	6
Both partners other[a] or each partner is a different race	12
Born outside United States	
Mothers	44
Fathers	43
Primarily Spanish speaker	
Mothers	42
Fathers	42
Have at least a high school diploma or GED	
Neither partner	14
Only mother	18
Only father	16
Both partners	52
Couples' earnings in the past month	
No earnings	8
$1 to $1,000	18
$1,001 to $2,000	24
$2,001 to $3,000	21
More than $3,000	29
Employment	
Employed in past month	
Mothers	48
Fathers	86
Actively looking for work	
Mothers	34
Fathers	40
Couples' receipt of government benefits	
Any government benefits	66

Characteristic	Percentage (except when noted)
SNAP	50
TANF	8
WIC	31
Ever convicted of a crime	
Mothers	16
Fathers	34
Couple only has children together	43
Relationship status[b]	
Married	55
In a steady romantic relationship	39
In an on-again, off-again relationship	6
Reason for applying	
Improving personal relationships was very or extremely important	
Mother	92
Father	85
Improving parenting skills was very or extremely important	
Mother	89
Father	84
Improving job situation was very or extremely important	
Mother	68
Father	70
N	476

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes couples who enrolled in Empowering Families from August 2016 to December 2018. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Figures might sum to more than 100 due to rounding.

[a] "Both partners other" indicates neither partner was Hispanic, non-Hispanic Black, or non-Hispanic white.

[b] Relationship status was defined based on the mother's survey responses.

GED = General Education Development; nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Table A.16. Participation in The Parenting Center's Empowering Families program

Participation measure	Percentage (except when noted)
Any engagement in (%)	
At least one program activity	88
Workshop session	82
Case management	76
Mothers' employment counseling	33
Fathers' employment counseling	28
Financial coaching	53
Workshop schedule selected and number of sessions attended	
Did not select a schedule	4
Meeting once a week for eight weeks	
None	14
1 or 2	7
3 or 4	5
5 or 6	5
7	17
8	43
Meeting for four Saturdays[a]	
None	0
1 to 3	1
4	5
Meetings with a case manager	
Average number of meetings attended by mother, father, or couple	2.7
Percentage who discussed topics with case managers at least once	
Healthy marriage and relationship education	12
Social services	5
Family therapy and counseling	4
Health or mental health	2
Domestic violence	1
Meetings with an employment counselor	
Average number of meetings attended by mother	3.4
Average number of meetings attended by father	1.5
Percentage of couples in which partners discussed topics with employment counselors at least once	
Education	30
Career planning or job advancement	29
Assessment	23
Employment resources	20
Job search	16

Participation measure	Percentage (except when noted)
Resumé development	13
Percentage of couples who received referrals to other community organizations at least once	6
N	476

Source: nFORM data as of March 2021.

Note: The sample includes couples who enrolled in Empowering Families from September 2016 to December 2018. Figures might sum to more than 100 due to rounding.

[a] This includes 4 percent of couples who signed up for a condensed weekly schedule due to a holiday.

nFORM = Information, Family Outcomes, Reporting, and Management.

Table A.17. Key participation measures for TPC's Empowering Families program, by participation pattern

Participation	Low engagers	Moderate engagers	Full engagers	Total
Workshop attendance				
Percentage attending any session	0	100**	100**	82
Percentage of sessions attended	0**	29**	95**	70
Number of workshop sessions attended	0.0**	2.3**	7.4**	5.4
Percentage with a workshop schedule over eight weeks, versus four Saturdays	78**	96**	93**	91
Meetings with a case manager				
Percentage attending any meetings	47**	66*	85**	76
Average number of meetings attended	0.9**	1.6**	3.3**	2.7
Meetings with an employment coach				
Percentage of mothers attending any meetings	9**	14**	43**	33
Average number of meetings attended by mother	0.3**	0.3**	4.8**	3.4
Percentage of fathers attending any meetings	8**	16**	36**	28
Average number of meetings attended by father	0.2**	0.4**	2.0**	1.5
Meetings with a financial counselor				
Percentage attending any meetings	3**	5**	73**	53
Average number of meetings attended	0.1**	0.1**	2.5**	1.7
Percentage of sample	18	12	70	100
N	86	56	334	476

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes couples who enrolled in Empowering Families from September 2016 to December 2018.

**/* Significantly different from mean for the rest of the sample at the .05/0.10 levels, two-tailed *t*-test.

nFORM = Information, Family Outcomes, Reporting, and Management; STREAMS = Strengthening Relationships and Marriage Services; TPC = The Parenting Center.

Table A.18. Average characteristics of participants enrolled in TPC's Empowering Families program, by participation pattern

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Average age at enrollment (years)				
Mothers	32	32	34*	33
Fathers	34	33**	36**	35
Race and ethnicity				
Both partners Hispanic or Latino	34**	32**	62**	53
Both partners black, non-Hispanic	48**	46**	20**	28
Both partners white, non-Hispanic	6	11	5	6
Both partners other, or each partner in couple is a different race	13	11	13	12
Born outside United States				
Mothers	24**	18**	53**	44
Fathers	24**	22**	51**	43
Speaks Spanish at home				
Mothers	23**	18**	52**	43
Fathers	23**	21**	51**	43
Reason for applying				
Improving personal relationships was very or extremely important				
Mothers	87	86	94**	92
Fathers	91*	73**	85	85
Improving parenting skills was very or extremely important				
Mothers	80**	91	91*	89
Fathers	85	80	85	84
Improving job situation was very or extremely important				
Mothers	69	70	68	68
Fathers	77**	61	70	70
Couple has children with other partners	72**	73**	50**	57
Relationship status				
Married	42**	34**	63**	5
In a steady romantic relationship	45**	46*	31**	35
In an on-again, off-again relationship	3	4	1*	1
Employment and earnings in the past month				
Mother worked for pay	88	88	95**	93
Mothers' earnings	432**	560	646*	598
Father worked for pay	83	79	89*	86
Fathers' earnings	$1,499*	$1,250**	$1,961**	$1,795
Actively looking for work				
Mothers	49**	57**	27**	34

Characteristic	Low engagers	Moderate engagers	Full engagers	Total
Fathers	55**	57**	33**	40
Receipt of any government benefits				
Mothers	76**	71	58**	63
Fathers	63**	59	47**	51
Convicted of a crime				
Mothers	26**	21	13**	16
Fathers	53**	54**	26**	34
Has education beyond a high school diploma or GED				
Mothers	29*	29	40**	37
Fathers	20	14**	29**	25
Percentage of sample	18	12	70	100
N	86	56	333	475

Sources: nFORM data as of March 2021 and STREAMS baseline survey.

Note: The sample includes couples who enrolled in Empowering Families from August 2016 to December 2018. "Receipt of any government benefits" refers to income support from TANF, WIC, SNAP, Social Security Disability Insurance, Supplemental Security Insurance, unemployment insurance, Section 8 public housing assistance, and any cash assistance. Figures might sum to more than 100 due to rounding.

**/* Significantly different from mean for the rest of the sample at the .05/0.10 levels, two-tailed *t*-test.

[a] "Both partners other" indicates neither partner was Hispanic or non-Hispanic Black or non-Hispanic white.

[b] Relationship status was defined based on the mother's survey responses.

GED = General Education Development; nFORM = Information, Family Outcomes, Reporting, and Management; SNAP = Supplemental Nutrition Assistance Program; STREAMS = Strengthening Relationships and Marriage Services; TANF = Temporary Assistance for Needy Families; TPC = The Parenting Center; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

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