

Work, Engagement, and Well-Being at the Midpoint:

Findings From the Family Self-Sufficiency Evaluation



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Work, Engagement, and Well-Being at the Midpoint:

Findings From the Family Self-Sufficiency Evaluation

Prepared for
U.S. Department of Housing
and Urban Development
Office of Policy Development
and Research

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July 2021

Acknowledgments

This report reflects contributions from many people. We are especially grateful to all the individuals who volunteered to participate in the evaluation—both those who enrolled in the programs to receive Family Self-Sufficiency (FSS) services and the members of the control group, who have allowed us to learn from their experiences. We also appreciate the dedication of the many staff members, past and present, at the 18 public housing agencies (PHAs) participating in the evaluation who gave generously of their time, provided us with valuable insights and explanations or prepared necessary data files. Space does not permit us to list everyone who was involved, but we are grateful to PHA administrators, FSS supervisors, case managers, and data managers and programmers at Akron Metropolitan Housing Authority, Baltimore County Housing Office, Columbus Metropolitan Housing Authority, Housing Authority of the City of Dallas, Housing Authority of the City of Deerfield Beach, Housing Authority of the City of Fort Lauderdale, Housing Authority of the City of Los Angeles, Housing Authority of the County of Alameda, Housing Authority of the County of Riverside, Housing Authority of Fort Worth, Housing Authority of Kansas City (Missouri), Housing Opportunities Commission of Montgomery, Houston Housing Authority, Jersey City Housing Authority, Lucas Metropolitan Housing Authority, Orange County Housing Authority, Tarrant County Housing Assistance Office, and the Youngstown Metropolitan Housing Authority.

We appreciate the support of many staff at the U.S. Department of Housing and Urban Development (HUD). Our HUD government technical representatives, Regina Gray, has been a source of steady guidance on all phases of this work. We also thank HUD Office of Public and Indian Housing (PIH) and the Office of Policy Development & Research (PD&R) staff for their helpful review and feedback on report drafts. Robert Mulderig, Anice Chenault, Amaris Rodriguez, Jogchum Poodt, Jayme Brown, and Tremayne Youmans offered valuable feedback on this report. We are appreciative of Lynn Rodgers, who prepared many administrative data files from the HUD Inventory Management System (IMS)/PIH Information Center (PIC) system and managed MDRC's requests for data from the National Directory of New Hires Data maintained by the U.S. Department of Health and Human Services (HHS)-Office of Child Support Enforcement (OCSE). With HHS, we are grateful for support on the HHS-OCSE contracts from Cheri Davidson, Wendi Trant, and Jean Shaw. We are also grateful for the contributions of M. Davis and Company, our survey partner.

At MDRC, we thank many staff members for their important contributions. James Riccio, Richard Hendra, Cynthia Miller, and Gayle Hamilton offered immense insights in their review of report drafts. We are grateful for the dedicated work contributed by data team members Joshua Vermette, Natasha Piatnitskaia, and Brandon Hawkins who reliably provided high-quality analysis. We are appreciative of MDRC's Survey Unit oversight on the 36-Month Survey. We thank Galina Farberova and Alla Chaplygina who designed and maintained the FSS service-use and contacts database. Annie Utterback was a steady source of support and managed report coordination and fact-checking processes with assistance from Brandon Hawkins, Katerina Galkin, Affiong Ibok, Gloriela Iguina-Colón, Rachael Metz, Andrew Rock, and Diane Singer. In addition, we are grateful for the efforts that Stephanie Rubino and Simran Vazirani contributed as resource managers. Finally, Ali Tufel and Rebecca Bender offered meticulous feedback and editing across stages of the writing process.

DISCLAIMER

The contents of this report are the views of the contractor and do not necessarily reflect the views or policies of the U.S. Department of Housing and Urban Development or the U.S. Government.

Foreword

The Family Self-Sufficiency (FSS) program is administered by over 700 housing authorities across the country, who employ case managers/coaches to work with participant households to develop individualized self-sufficiency plans and access education, training, employment opportunities and wrap-around supportive services. The program promotes savings and asset development through an interest-bearing escrow account. As families' rent contribution increases due to earnings increases, housing agencies deposit this increased amount into a savings account which is redeemable upon graduation from the program, or in some instances, can be accessed sooner, if needed. The vast majority of families participating in FSS are Black or Hispanic, potentially positioning FSS as a key program to help these families accrue savings. In 2012, HUD's Office of Policy Development and Research (PD&R) commissioned the first nationwide study of the Family Self-Sufficiency program that incorporates a randomized controlled trial to assess the effectiveness of the program for increasing earnings, sustaining long-term employment, and reducing families need for public assistance because they've grown income and savings.

This interim assessment of the Family Self-Sufficiency program, 3 years after the random assignment of participants, continues to build evidence about the program's effectiveness in helping participants access education, training, and services that may improve their economic well-being. The final report, covering the full 5-year standard program and up to 6 to 7 years of follow-up, is expected in 2022. The 2019 publication entitled *Promoting Work and Self-Sufficiency for Housing Voucher Recipients: Early Findings from the Family Self-Sufficiency Program Evaluation* was a precursor to this second interim report. The researchers find as of Year Two, that while FSS increased participation in a range of employment-related and support services by a statistically significant 13 percentage points relative to the control group, participants in the FSS program have not yet increased employment rates or average earnings in a statistically significant way over the control group. They did, however, experience small shifts from part-time to full-time employment. Given that FSS is typically a 5-year program and that participants can be focused on a range of self-sufficiency activities during that timeframe, it is too early to definitively conclude whether the program is effective at shifting employment and income-oriented outcomes. But this study shows that over half of those enrolled in FSS accrued some escrow over the 3 years of followup and those with a positive escrow balances as of the end of Year 3 had accrued an average of nearly \$3,700 (\$1,450 among all FSS group members).

In considering the lack of a difference in earnings data between FSS and non-FSS participants highlighted in this report, it may be useful to consider the economics of employment and wages at relatively the same time as the 3-year study, namely, the historically low unemployment nationwide that occurred before the COVID-19 pandemic.

Some of the indicators in the study show longer-term investment on the part of FSS participants in their movement toward economic independence, including the focus on financial literacy, establishing bank accounts, educational and skill attainment, working toward increasing the FSS escrow, and the achievement of other goals. We look to the longer-term analyses to see if this foreshadows greater sustained economic resiliency and self-sufficiency. This might be an important factor to the extent that data representing those FSS participants in the final years of their FSS contract are impacted by the severe economic downturn wrought by the coronavirus pandemic—which may significantly impact the final results.

Another factor that may affect future outcomes has been HUD's efforts over the past 3 years to implement a Performance Measurement Methodology for the FSS program. The Performance Measurement

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Methodology, when fully implemented, will allow the Department to assess the effectiveness of the FSS programs around the nation based on program participation rates, graduation rates, and earnings and income growth for participants. The goal for this new system is to incentivize housing authorities to focus on the most fundamental objectives of the FSS program long after the 5-year study is completed. Future reports will incorporate additional findings on service delivery, FSS graduation rates, and disbursement of escrow dollars. Included in the long-term assessment is a survey administered to a sample of study participants and an in-depth analysis of Experian credit data to study asset creation and debt reduction. This credit analysis strikes us as very important because of FSS participants' desire for financial counseling and their relatively high take-up rate of that financial education relative to the control group.

Beyond the national evaluation, we plan to continue tracking income data for all Family Self-Sufficiency program participants and monitor program metrics established by the program office. FSS represents a significant investment in family well-being that may take years to have impact; our research plan has the necessary patience to measure those possible long-term impacts. As more data from subsequent years of the program become available, it will be important to assess the extent to which programs like FSS complement to rental assistance. That is, does it enable enrolled households to generate wealth and accrue savings and thus promote economic opportunity?



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Executive Summary

The U.S. Department of Housing and Urban Development (HUD) Family Self-Sufficiency (FSS) program blends housing assistance with employment-focused supports and services to help improve the economic well-being of households receiving housing subsidies. A voluntary program, FSS is the main strategy through which HUD helps households receiving federal housing vouchers to increase their earnings and make progress toward economic self-sufficiency. Until recently, little evidence was available about the FSS program's effectiveness in achieving those goals. To fill that gap, HUD commissioned a national evaluation in 2012 and selected MDRC to lead it. This report presents interim findings from the ongoing evaluation.

HUD provides about 700 public housing agencies (PHAs) with annual grants to hire service coordinators to work with FSS participants to set self-sufficiency goals and to refer them to services in their communities.¹ Participants are eligible to receive a lump sum payment when they successfully graduate from the program. HUD requires FSS participants to meet two goals to graduate: (1) they must be employed, and (2) all household members must not have received cash welfare assistance for the 12 consecutive months leading up to graduation. At enrollment, participants—typically heads of households—sign a Contract of Participation and develop an Individual Training and Services Plan (ITSP). FSS contracts usually last for 5 years (with 2-year extensions possible). Program staff members work with participants to set and achieve additional goals, such as acquiring an educational or occupational credential or improving credit scores—goals that may be important to the participant and foster employment and higher earnings. A core feature of the program is its escrow account, which is offered to program participants to encourage them to go to work and build long-term savings. Like others receiving housing subsidies, FSS participants pay additional rent when their earnings increase (typically 30 percent of additional earnings), but in the FSS program, the housing agency credits the family's escrow account with an amount based on their rent increase. Typically, escrow accruals are disbursed to participants when they graduate from the program, and graduates can use their escrow how they please. If the PHA permits, participants may receive a portion of their escrow accruals earlier, in the form of interim disbursements, to help them achieve their FSS goals.

Using a randomized controlled trial, the national FSS evaluation examines the effects of the program on a range of economic mobility outcomes, including participants' engagement in and completion of education or training activities, employment, earnings, receipt of housing subsidies and other government assistance, and financial and material well-being. It compares the outcomes of individuals who were randomly assigned to two groups: an FSS group, whose members were eligible to participate in the FSS program, and a control group, whose members were not eligible to participate in the program for 3 years after study enrollment. Differences between the two groups' outcomes represent the program's impacts. Statistically significant differences between groups indicate with a strong degree of confidence that the impacts can be attributed to FSS rather than to chance.

The national evaluation focuses on housing agencies operating FSS for housing choice voucher (HCV) holders. Eighteen housing agencies in seven states, operating both small and large FSS programs for HCV recipients, agreed to participate in this evaluation and together enrolled 2,656 study participants. This report summarizes the findings for the 2,556 study participants (the "impact sample") who were 18 to 61 years of age at study enrollment. The second in a series, the report describes longer term (3-year) patterns of program participation and program impacts on employment and housing subsidies. It features findings from a comprehensive survey, conducted roughly 36 months after participants had enrolled in the study. At this stage in the evaluation, the

¹ HUD and program operators refer to this staff position as FSS program coordinator, FSS case manager, or FSS coach.

interim results point to largely comparable outcomes for the FSS and control groups. Future reports, which will cover 6 to 7 years of followup (the full FSS engagement period for those receiving extensions), will speak more conclusively to the program effects.

The Family Self-Sufficiency Program

The FSS program was established in 1990 by Section 554 of the Cranston-Gonzalez National Affordable Housing Act against a backdrop of policy discussions about persistent poverty among participants in government benefits programs. Housing agencies that administer public housing or housing voucher programs operate most FSS programs. In fiscal year 2018, HUD made about \$75 million in FSS annual grants available for program coordinator positions (HUD, 2018a). Funding for program management, services, and other related administrative costs is not covered by these grants; these costs are typically absorbed by the housing agency operating the program. Fiscal year 2017 grants show that the size of the programs funded can range from as few as 15 participants in the smallest program to more than 1,000 in the largest (HUD, 2017b). Overall, FSS enrolls a small fraction of families receiving HCVs, a reflection of the limited congressionally appropriated funding to operate it.

HUD regulations set the basic framework for the FSS program around two central components: (1) case management or case coordination and referrals to employment-related, education and training, and financial management and counseling services, and (2) an escrow savings account (a longer-term financial incentive for households to increase their work and earnings). These program components are expected to help and encourage participants to go to work, increase their earnings from work, reduce their reliance on cash welfare assistance programs, build assets, and set a pathway toward economic self-sufficiency. Although all adults in FSS households are encouraged to seek employment, only the household head—the voucher holder—is required to meet the employment goals of the FSS contract. Housing agencies can design their own case management approaches, an element of flexibility offered by the federal framework. In contrast, the escrow component strictly follows HUD specifications, and the rules for escrow calculations are largely uniform across all PHAs.

FSS operators are also required to organize a Program Coordinating Committee (PCC), consisting of service providers in the community. The PCC, which operates more like an informal collaborative group, serves as a mechanism by which FSS operators are made aware of services and resources in the community and service providers can become invested in the success of the FSS program by providing services to FSS participants.

In recent years, HUD has produced a comprehensive resource guide on the program, offering housing agencies practical, hands-on tips for its operation. In 2018, HUD also rolled out a performance measurement system for assessing programs that receive HUD-FSS funding. Both developments reflect HUD efforts to strengthen program performance.

Mechanisms for Positive Effects

This evaluation posits that the program's short- and long-term effects are expected to operate via two mechanisms: (1) increase participants' access to ongoing case management and coordination services that enhance their employability or improve their financial security, and (2) offer a long-term escrow savings account—a potentially generous financial incentive—for participants to start or maintain employment and increase their earnings over time. Through these mechanisms, it is hoped that participants will eventually earn enough to pay for housing without a subsidy and thereby free up PHA resources to serve other households.

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Positive effects may not be realized for a variety of reasons, however. For example, escrow represents a distant and uncertain reward that may not motivate participants to increase their earnings and, per HCV rules, pay higher rent. Also, FSS participants face a variety of barriers that may limit their chances of finding new employment or increasing their earnings, especially if the nature or quality of services delivered do not help address those barriers. In addition, members of the control group may be able to access similar employment-promoting services in their communities, which would suggest that FSS is not adding value over and above what can already be obtained with existing community services. Finally, given the long-term nature of the FSS program, it is also possible that positive impacts may not be realized in the shorter-term but may be realized later in the followup period (closer to the graduation milestone, for example) if more FSS group members take longer to attain education or training credentials, find employment, receive a raise or promotion at their job, or move to a better job.

Evaluation and Sample Characteristics

The HUD-funded FSS evaluation is designed to build rigorous evidence about the effectiveness of the program, examining the types of questions that to date have limited evidence. For instance:

- Does the FSS program help improve the employment, earnings, income, and financial well-being of program participants compared with what would have occurred in the absence of FSS services and financial incentives?
- How do different groups of FSS participants respond to the program?
- Are some program implementation features more effective at helping participants achieve or make progress toward their self-sufficiency goals?
- Are some types of FSS programs more effective than others?

To address these types of questions, the evaluation includes a comprehensive study of program implementation practices, program impacts, and program benefits and costs. It uses a combination of qualitative and quantitative data to assess the ways in which the FSS program affects the well-being of program participants. The evaluation examines the effects for the study sample overall and for certain subgroups—such as those who are not working or those with low levels of educational attainment at study enrollment. The evaluation also explores whether some FSS programs are more effective than others, whether program features or implementation approaches, such as having small or large caseloads or maintaining more or less frequent contact with participants, appear to be more effective in boosting program participation or improving outcomes.

To select study sites, MDRC examined HUD data, identified candidate PHAs, conducted phone reconnaissance with approximately 60 administrators, visited 27 sites, and developed study agreements with 18 sites in seven states: California, Florida, Maryland, Missouri, New Jersey, Ohio, and Texas. The 18 sites in the evaluation represent a wide range of contexts within which FSS programs operate, such as large and small housing agencies and FSS programs, in large and small cities and suburban settings.²

In keeping with HUD regulations, the heads of households enrolling in FSS had to be 18 years of age or older, be in good standing with the housing agency, and have completed a recertification of HCV eligibility within the past 120 days (or be willing to complete one at enrollment, to provide the housing agency with a baseline income for use in determining future escrow credits). Working with each housing agency, MDRC

² Rural FSS programs, which serve extremely small numbers of participants, are not represented in the study.

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developed study recruitment and enrollment processes. The study agencies did not have to increase or decrease the size of their FSS programs for the purposes of the evaluation, but they did need to double the number of households that signed up for a chance to participate in the FSS program, because one-half were assigned to the control group.

The study sample was enrolled between October 2013 and December 2014. The study households' demographic characteristics are broadly similar to those in the national FSS population. The study participants are predominantly (91 percent) female, with an average age of 39 years at random assignment. At enrollment, more than 76 percent of participants had a minor child present at home, typically age 12 or younger. About 14 percent did not have a high school diploma or equivalency certificate, suggesting that lack of education may represent a barrier to work for this subset of the population. More than one-half (56 percent) of the sample was working at study enrollment. Receipt of Supplemental Nutrition Assistance Program (SNAP) benefits, or food stamps, was high (about 70 percent), implying that a large proportion of households had earnings equal to 130 percent of the federal poverty level or less, which is the SNAP benefit eligibility cutoff. Among the study sample, and similar to national patterns, cash assistance receipt was low (less than one-sixth received cash assistance), and about one-third of the sample reported receiving housing vouchers for 10 years or more. Participants reported that the opportunity to receive financial counseling and management services was a big draw to the program; job-related services were also described as a draw, but to a lesser extent.

Findings on Program Contact and Service Use

Throughout individuals' enrollment in the FSS program, FSS coordinators or case managers remain their main point of contact. Through these contacts with program staff, FSS offers participants information about a multitude of services for enhancing their self-sufficiency; case managers and coordinators largely rely on referrals to schools, colleges, and community organizations to provide these services. This report examines participants' engagement patterns with FSS program staff and use of services over the first 3 years of their 5-year contract period. Do participants stay formally enrolled in FSS? Do they maintain some type of contact with program staff? What types of services do they use to help them make progress toward attaining their FSS goals? FSS program tenure is likely to affect these patterns, so the summary below starts with a discussion of the extent to which participants are still formally enrolled in the FSS program at the end of the 3-year followup period. A variety of data sources, including program data maintained by the housing agencies, HUD administrative data, and responses to the FSS 36-month survey, are used to examine participation and engagement patterns.

- **By the end of Year 3, about 60 percent of FSS group members were still enrolled in the program.**

As with any other employment-focused self-sufficiency program, the FSS program in the evaluation witnessed some loss of program participants over the first 3 years of followup. While 60 percent of the FSS group remained formally enrolled in the program, a relatively large proportion (40 percent) had formally exited the FSS program by the end of Year 3. HUD and housing agency administrative data include limited information about exit reasons but show that only about 4 percent of the FSS program exits were related to participants graduating from the program (see exhibit ES.1). A larger proportion of exits involve participants leaving the voucher program or moving to another PHA, being terminated from FSS, or leaving the program voluntarily. Most sites (all but three) report having policies that allow them to terminate FSS participants who do not show up for appointments and are not responsive to case managers' repeated attempts to reach them. Staff members

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at some sites reported feeling strongly that inactive participants *should* be terminated from the program, while staff members at other sites reported using letters of termination to try to re-engage families.

Exhibit ES.1. Selected Participation and Escrow Outcomes, Years 1 to 3

Outcome	FSS Group
Program Status	
Still enrolled in FSS, Month 36 (%)	61.3
Graduated from FSS (%)	4.2
Sample size	1,285
Program Participation	
Used FSS services, Years 1 to 3 (%)	80.4
One or more contact with FSS case manager, Year 3 (%)	50.3
Used FSS services, Year 3 (%)	36.3
Had program-recorded employment, Year 3 (%)	54.8
Service-use and program-recorded employment, Year 3 (%)	28.3
Service-use only, Year 3 (%)	8.0
Program-recorded employment only, Year 3 (%)	26.5
Neither service use nor program-recorded employment, Year 3 (%)	37.3
Sample size	714
Escrow	
At least one month of credit accrual, months 1–36 (%)	51.7
Had any escrow balance in Month 36 (%)	40.0
Average escrow balance in Month 36 (\$)	1,462
Received escrow disbursement, Months 1–36 (%)	3.5
Received interim disbursement	0.8
Sample size	1,285

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher (HCV) heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 public housing agencies, and were age 18 to 61 at the time of random assignment. The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums.

SOURCES: MDRC calculations using housing authority administrative data and HUD Inventory Management System/Office of Public and Indian Housing Information Center data.

- On average, in Year 3, roughly halfway through the program, FSS group members who were still enrolled in the program interacted with an FSS case manager about once every 6 months, a decrease in frequency compared with Year 1.**

Contact with program staff members declined over 3 years. A “contact” assumes an exchange between the FSS participant and the FSS case manager, either simultaneously, as in a face-to-face meeting or phone call, or

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sequentially, as during a documented exchange of electronic communications or when the FSS group member mailed or dropped off at the housing agency office a letter or a completed progress report. During the first year of the program, FSS group members communicated with their case manager every 4 or 5 months. Across all housing agencies, FSS group members and FSS case managers averaged less than two exchanges, equivalent to communications occurring every 8 or 9 months—or once every 6 months among FSS group members who were still enrolled in the program. The average for Year 3 also falls below the established standard requirement of quarterly or monthly communications that was set by many housing agencies at the start of the evaluation.

- **The majority of the FSS group engaged in some type of FSS goal-related activity during the first 3 years of followup. The incidence of participation in FSS-related services decreased over time, however, in part because more FSS group members appear to be were working for pay.**

Close to 60 percent of the FSS group members began to participate in FSS-related services within 6 months of random assignment, often by attending short-term workshops on job search skills, financial security, homeownership preparation, or life skills training or conducting a job search or education and training-related activity. Over the 3-year followup period, though, relatively few FSS group members who had not begun participating in FSS-related services and activities by the end of Month 6 began participation during the remaining 2.5 years of followup. According to program records, a little over one-third of FSS group members participated in at least one FSS-related service during Year 3.

The high rate of employment among FSS group members could help explain why they participated in services and activities intermittently or stopped after completing one or two short-term activities. In any month of followup, more than twice as many FSS group members were employed as were participating in FSS activities, and in Year 3, a similar proportion of FSS group members worked for pay but did not use FSS-related services, compared with those who combined service use and employment. The high incidence of employment among the FSS group is a positive outcome both in general and because employment is a required graduation goal. Nonetheless, combining work and service is often difficult for low-income heads of households, particularly those with young children or other caregiving responsibilities. As the months of followup proceed, FSS group members who maintain employment but have ceased participating in FSS activities or, as occurred for 12 percent of FSS group members, had not yet participated in FSS activities by the end of Year 3, may find it increasingly difficult to connect with the program and complete all goals listed in their ITSP.

- **The FSS program led to increases of 10 to 23 percentage points above the control group levels in participation in employment- or self-sufficiency-related activities.**

The 36-month survey respondents in both research groups were asked whether they had received a broad range of services and financial supports in the 12 months prior to their survey interview. Responses to these questions provide important information about the control group's engagement in similar services and for interpreting the estimates of the FSS program's effects on employment, earnings, and other self-sufficiency outcomes. As shown in exhibit ES.2, nearly 70 percent of the control group members reported using at least one service in the 12 months preceding the interview. Control group respondents most often sought out assistance for enrolling in or paying for healthcare coverage, attended education or training programs, or participated in job search activities. Relatively few control group members reported receiving assistance to help manage their family finances or for homeownership preparation. The FSS program realized moderate-level increases (between 6 and 14 percentage points) above control group levels in the domains of job search, homeownership preparation, post-employment services, and education and training but had a much larger effect (greater than 20 percentage points) on the use of financial counseling services. FSS group respondents

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were also more likely than their control group counterparts to participate in multiple activities or combine employment and services. Higher levels of participation in education and training activities were accompanied by a small increase above the control group level in earning an occupational credential or license within the 36-month followup period, but do not appear to have increased attainment of academic credentials (such as conferral of a degree or a diploma, not shown).

Exhibit ES.2. Impacts on Use of Services, Year 3

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
In the Past 12 Months				
Used any services (%)	79.5	69.0	10.5***	0.000
Job search	38.8	24.4	14.4***	0.000
Post-employment services	22.4	15.7	6.6***	0.000
Financial counseling	40.6	17.9	22.8***	0.000
Education or training	30.6	24.9	5.7***	0.005
Homeownership preparation	17.5	6.2	11.3***	0.000
Health coverage or health assistance	25.9	27.7	-1.8	0.383
Social services	19.3	19.1	0.3	0.892
Supportive services	20.2	17.1	3.1*	0.077
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Findings on Escrow Accrual and Balances

The FSS program's escrow incentive is intended to motivate participants to increase their earnings, reduce their reliance on cash welfare assistance, and build long-term savings. The likelihood of accruing escrow, however, can be influenced by several factors. One is FSS participants' employment status at program enrollment. FSS participants who are not working at program entry could potentially benefit the most from the FSS escrow because all their future earnings would be included in the calculation of escrow credits. Unemployed participants may also face the most severe barriers to finding and maintaining employment, however, which is required for graduation and earning the escrow. In contrast, FSS participants who enter the program working full time or with relatively high earnings may still have the best prospects of increasing their earnings by finding a better job or advancing with their current employer. They may also be the most likely to maintain their employment after they start accruing escrow credits. They may experience smaller increases in their earnings, however, and accrue only a small amount of escrow.

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- **Nearly 52 percent of the FSS group accrued some escrow over 3 years of followup. Those with positive escrow balances as of the end of Year 3 had accrued an average of nearly \$3,700 (\$1,450 among all FSS group members).**

FSS group members began accruing escrow credits at a fairly rapid pace following their enrollment in the program. At the end of Year 1, nearly one-fourth of FSS group members had a positive escrow balance. A year later, that proportion had increased to 39 percent. Few additional FSS group members began accruing escrow during Year 3, however, as this proportion stood at 40 percent at the end of the 3-year followup period. FSS group members who were underemployed at random assignment—that is, who were working part-time hours or receiving relatively low annual earnings—were more likely to accrue escrow credits compared with those who were working full-time or receiving relatively high earnings.

During the 3 years of followup covered in this report, only about 4 percent of FSS group members had graduated or received an interim escrow disbursement. Further, exits from the FSS program accounted for a fairly large drop-off in escrow accrual, as about one in five FSS group members who had accrued escrow no longer maintained a balance in Month 36.

A larger proportion of FSS group members with a positive escrow balance at the end of Year 3 maintained contact with their FSS case manager and participated in an FSS-related service during Year 3, compared with FSS group members with no balance. Nonetheless, as mentioned above, a relatively large proportion of FSS group members with some escrow were working during Year 3 but did not participate in FSS services, per program records.

Impacts on Employment and Earnings

This evaluation draws on the National Directory of New Hires (NDNH) quarterly wage records and survey responses to examine the program's early effects on work outcomes—that is, whether the FSS group experienced a greater incidence of employment or earned more on average than members of the control group in the first 3 years following program enrollment. FSS participants can take up to 5 years to achieve their program goals, and given their highly individualized goals and pathways to attain them, positive effects on work outcomes may occur after the first 3 years of program enrollment tracked in this report.

- **Over the first 3 years of followup, based on NDNH wage data, the FSS and control groups experienced comparable quarterly employment levels and average earnings.**

Quarterly wage data show high levels of employment for FSS and control group members. More than 80 percent of both groups worked for pay at some point during the 3 years of followup; on average, about 63 percent were employed in any given quarter. Members of both groups averaged a bit more than \$41,000 in total earnings during the followup period (nearly \$14,000 per year). As shown in exhibit ES.3, there are only small and (with one exception) not statistically significant differences in employment or earnings outcomes between the two study groups. These outcomes were also examined for subgroups of participants based on their work, education, and disability statuses at enrollment. Exhibit ES.3 presents the results for subgroups defined by baseline employment status and shows that no statistically significant differences exist in impacts by employment status at random assignment. For that matter, for the range of subgroups examined so far, the FSS program led to only small and not statistically significant differences (or impacts) on these measures when average values for each research group are compared.

Exhibit ES.3. Impacts on Employment and Earnings, Years 1 to 3

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Impact Sample				
Ever employed (%)	83.4	81.7	1.7	0.170
Average quarterly employment rate (%)	63.5	63.0	0.5	0.679
Employed in all quarters (%)	32.7	35.5	-2.8*	0.081
Total earnings (\$)	41,650	41,487	163	0.884
Sample size (total = 2,548)	1,282	1,266		
Not Employed at Random Assignment				
Ever employed (%)	68.6	66.5	2.1	0.378
Average quarterly employment rate (%)	42.0	41.2	0.8	0.667
Employed in all quarters (%)	8.9	11.2	-2.3	0.178
Total earnings (\$)	20,923	20,109	814	0.572
Sample size (total = 1,126)	575	551		
Employed at Random Assignment				
Ever employed (%)	95.2	93.7	1.5	0.164
Average quarterly employment rate (%)	80.5	80.3	0.2	0.898
Employed in all quarters (%)	51.6	54.7	-3.1	0.209
Total earnings (\$)	58,060	58,403	-343	0.835
Sample size (total = 1,422)	707	715		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as total quarters employed divided by total quarters of followup, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random-assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent. No statistically significant differences in impact estimates were found across subgroups.

SOURCES: MDRC calculations using baseline data and quarterly wage data from the National Directory of New Hires.

The 36-month survey was used to examine program impacts on job characteristics (for example, hourly wages and hours worked), data that are not captured in NDNH wage records. Most respondents in each research group who were working at the time of their interview reported working in a regular job (self-employment or temporary or seasonal jobs was rare). The largest proportion of respondents worked full-time and worked regular daytime shifts. Respondents tended to work in relatively low-paying jobs with few or no benefits. FSS group members reported working full time for close to 6 months during the 12 months before interview, compared with 5 months for the control group, a difference that is statistically significant. FSS group members were more likely to report they were looking for full-time work, compared with their control group

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counterparts (31 percent versus 27 percent). FSS group respondents also reported working slightly more hours per week, an increase of about 1 hour (a statistically significant difference).

- **The FSS program appears to have positive effects on self-reported measures of employment and financial well-being among more disadvantaged subgroups—a pattern is not supported by NDNH quarterly wage data.**

For most subgroups, the survey data show that the FSS group reported a higher incidence of working full-time hours at the interview compared with control group members. Statistically significant increases above the control group ranged from 4 to 12 percentage points. Impacts were recorded for four subgroups with greater disadvantages and for three additional subgroups.³ These findings suggest that the FSS program may have facilitated more disadvantaged study participants to realize slightly better employment outcomes (more hours of work but not higher earnings) compared with the control group.

Given that FSS is a 5-year program and that participants can focus on a range of self-sufficiency goals during this timeframe, it is important to continue monitoring their employment behaviors over the full 5-year term of the FSS program to assess whether it is effective at shifting work outcomes. The longer-term evaluation will continue to track the employment and earnings trajectories for both study groups and assess whether bigger differences begin to emerge as FSS participants approach the end of their FSS contracts and possibly access their escrow balances.

Impacts on Income, Benefit Receipt, and Material Well-Being

- **In the short term, the FSS program had few, and mostly inconsistent, effects on indicators of self-reported income and financial well-being.**

As shown in exhibit ES.4, the FSS program increased participants' access to mainstream banking, but FSS group members, on average, incurred greater amounts of debt. Consistent with programs that emphasize the use of financial security and homeownership preparation counseling and workshops, FSS led to positive effects on attitudinal outcomes. FSS group members, when surveyed, were more likely than control group respondents to indicate that they had improved their financial situation in the past year and were better able to plan for the future.

Survey responses also suggest that FSS led to a small, statistically significant decrease (of 2 percentage points) in the receipt of Temporary Assistance for Needy Families (TANF) cash welfare benefits. FSS households need to remain off TANF for at least 12 months to graduate from the program. Reductions in the receipt of TANF benefits will possibly continue or become larger in later years, as FSS group members approach the end of their FSS contract. No differences in the receipt of SNAP benefits were observed between groups.

The FSS program does not require families to give up their housing assistance once they graduate. They may be required by the voucher program to exit if their income exceeds the maximum allowed for eligibility for a housing subsidy. Based on HUD administrative data, 81 percent of the FSS group and 79 percent of the control group continued to receive a housing subsidy at the end of the 3-year followup period, a 2 percentage-point difference that is not statistically significant. Both groups averaged receiving roughly similar levels of housing subsidies. In the absence of employment and earnings effects in the first 3 years, these results are not surprising. Future analysis will examine whether effects on housing outcomes emerge during the longer term.

³ The more disadvantaged subgroups are those who are not employed at random assignment, have no educational degree or credential, have an annual household income of up to \$10,000, and are paying up to 25 percent of their housing expenses out of pocket.

Exhibit ES.4. Impacts on Household Income, Benefit Receipt, Housing Assistance, and Financial Well-Being, Year 3

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Survey responses				
Income and financial well-being				
Average total household income (\$)	1,686	1,633	53	0.281
Hardship paying regular monthly bills (%)	50.7	47.0	3.7*	0.089
Currently has bank account (%)	67.5	61.3	6.2***	0.001
Average savings (\$)	145	170	-26	0.344
Average debt (\$)	15,403	13,778	1,625**	0.045
Financial situation is better than last year (%)	54.3	47.4	6.9***	0.003
Benefit receipt in month before interview (%)				
Received SNAP/food stamps	57.3	58.3	-1.0	0.622
Received TANF	9.6	11.9	-2.3*	0.081
Sample size (total = 1,936)	988	948		
Administrative Data				
Housing assistance				
Enrolled in HCV program in Month 36 (%)	80.9	78.6	2.3	0.136
Total housing subsidy in year 3 (\$)	8,313	8,511	-198	0.309
Sample size (total = 2,548)	1,281	1,267		

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher. SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families.

NOTES: The FSS 36-Month Survey respondent sample includes HCV heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey and HUD Inventory Management System/Office of Public and Indian Housing Information Center data.

Variation Across Sites in Program Impacts

An important element of this evaluation is to examine how program effects vary across the types of FSS programs. These effects could vary across PHAs because of differences in how FSS administrators design program policies and set expectations for program participants. Most PHAs operate relatively small FSS programs, making it difficult, however, to conduct an independent assessment of the effects of any single FSS program.⁴ This report, as with the last one, continues to explore patterns of variation for *clusters* of programs, a topic for continued exploration through the end of the evaluation.

To examine PHA-level variation in participation and impacts, PHAs with similar implementation features were grouped into a series of “site clusters,” and the magnitude of employment and earnings impacts estimated for each cluster. For instance, the data used to group PHAs into low, medium, and high monitoring and engagement emphasis clusters are based on three program implementation features and practices at study launch: caseload sizes, expectations about program contact, and the program’s focus on short-term goals. Sites classified as high monitoring and engagement sites have smaller caseloads, expect participants to maintain more frequent contact with FSS coordinators and focus on having participants establish short-term goals.⁵

The percentage of FSS group members who ever participated in one or more FSS-related service in Years 1 to 3 was highest in housing agencies that most strongly emphasize monitoring and engagement. Similarly, FSS group members in these housing agencies were more likely to have a record of service use and employment during Year 3. These PHAs also record the highest rate of having three contacts or more during Year 3.

So far, only one test shows statistically significant variation in impacts among site clusters. Participants affiliated with PHAs with a strong emphasis on monitoring and engagement averaged \$8,000 less in total earnings over 3 years compared with the control group. In contrast, the FSS program led to slightly positive but not statistically significant effects on earnings in PHAs with a low and medium emphasis on monitoring and engagement. The negative impact for PHAs with a high emphasis on monitoring and engagement possibly reflects the tendency of these programs to encourage FSS group members to participate in FSS activities, which may decrease their hours or weeks of employment. If so, this negative impact could diminish or turn positive after FSS group members complete their participation. The longer-term data will be important to more fully analyze and interpret this pattern.

Additional findings based on survey data show that FSS programs with a strong emphasis on monitoring and engagement did not lead to better outcomes in other measures of financial or personal well-being compared with other types of programs. FSS programs with a high emphasis on monitoring and engagement led to relatively large and positive impacts on having a savings or checking account, but other types of FSS programs also led to increases in this outcome that were nearly as large. Likewise, all three types of programs increased the proportion of study participants who assessed their financial situation as better than the previous year, but only the largest increase, recorded for programs with a low emphasis on monitoring and engagement, is statistically significant.

At present, the researchers can only conjecture as to what implementation features are associated with the patterns of impacts on employment and earnings. Additional tests of variation in impacts by PHAs will be examined in future years as FSS group members reach the end of their FSS contract.

⁴ The national evaluation includes 18 PHAs and clusters them on various dimensions of program practice to assess variation in outcomes and impacts.

⁵ Similar tests were run for PHAs that varied in the types of services that they emphasized during the goal-setting stage (job search and post-employment support, education and training, or financial counseling and workshops) and also for PHAs with similar performance levels as measured by HUD for an earlier (pre-evaluation) cohort of FSS participants.

Looking Forward

This report presents extensive information on program participation patterns and outcomes of study participants roughly halfway through the FSS program. The remainder of the evaluation, slated to end in 2022 and covering 6 to 7 years of followup for the study sample, will allow the evaluation to track participant outcomes through the end of their FSS contracts and will also examine post-FSS circumstances for former participants. Two additional reports will be published during this timeframe, relying largely on PHA, HUD, and NDNH data. The long-term housing and employment and earnings analyses will also be supplemented with a final round of interviews with program staff members to understand how they work with families to help them prepare for graduation and their exit from FSS. In addition, these reports will incorporate findings from two new study components that will extend the scope of the current evaluation and inform our understanding of the FSS program and its effects: (1) a longer-term followup survey of study participants, including FSS participants who graduated from the program (the successful exits) as well as those who were terminated from FSS, voluntarily exited the FSS program, or are no longer receiving HCVs, and (2) an analysis of a range of financial security and well-being outcomes, based on credit data acquired from Experian. The FSS program's emphasis on financial literacy and homeownership preparation may lead to improved credit scores, lower levels of accumulated debt, and better management of household finances, compared with the control group. The longer timeframe and more comprehensive data will support a more complete assessment of FSS and the difference it makes in helping families make progress toward self-sufficiency.

Chapter 1. Introduction

Since the mid-1980s, the U.S. Department of Housing and Urban Development (HUD) has supported efforts to improve the economic well-being of public housing residents or households receiving rental assistance under the federal Housing Choice Voucher (HCV) program (also known as “Section 8,” after Section 8 of the Housing Act of 1937).⁶ The Family Self-Sufficiency (FSS) program, a voluntary program, is one such effort. In this approach, the provision of the rental subsidy is augmented by services and a long-term escrow account to support participants’ economic mobility. Evidence on the ways in which the FSS program affects the economic mobility of program participants is generally limited, and until recently, little of that evidence was based on random assignment experiments or strong quasi-experimental research. To build rigorous evidence about the effectiveness of the FSS program, HUD commissioned the first national random assignment evaluation of this program in 2012. This report, the second in a series, documents interim results on program participation and effects around Year 3 of followup, roughly halfway through the 5-year program.

Annually, about 700 public housing agencies (PHAs) are awarded grants to implement FSS in public housing and HCV rental assistance programs.⁷ The funding provides PHAs modest resources to hire coordinators (or case managers or coaches) to work with participants to set self-sufficiency goals and to refer them to services in their communities. At program enrollment, participants sign a Contract of Participation (COP) and complete an Individual Training and Services Plan (ITSP). The typical FSS contract can last for up to 5 years, during which participants are expected to achieve all agreed-upon goals. FSS also includes an escrow account, or an asset-building feature, that is designed to encourage participants to go to work, increase their earnings, and build savings in an interest-bearing account, which the housing agency maintains. Like others receiving housing assistance, FSS participants see their rents increase when their earnings increase, but in the FSS program, the housing agencies credit the family’s escrow account with an amount based on their rent increase. These escrow accruals are paid to participants once they graduate from the program—that is, when they are employed and have met all goals outlined in their COP and ITSP. Nongraduates forfeit their escrow accruals.⁸ PHAs may allow participants to withdraw accrued escrow funds while they are in the program in order to pursue their goals.

The national evaluation uses a randomized controlled trial to test whether FSS produces its intended effects of increasing employment and earnings and improving a broad range of quality-of-life outcomes for HCV households. Randomized controlled trials employ an experimental design that compares the outcomes of a program group whose members are eligible to participate in the intervention with those of a control group whose members are not eligible to participate in the intervention. Random assignment of study participants to either a program group or a control group is designed to ensure that the individuals in the program and control groups are similar at the start of the study.⁹ Differences between the program and control groups’ outcomes reflect the program’s impacts. Statistically significant differences indicate that the impacts can be attributed with a high degree of confidence to the intervention rather than to chance.

The evaluation focuses on non-Moving to Work (MTW) housing agencies that are operating FSS for HCV holders. At the time of study design, MDRC and HUD agreed to exclude MTW PHAs, which

⁶ Project Self-Sufficiency, Operation Bootstrap, and the Jobs Plus demonstration are some examples of the efforts to use housing assistance as a platform to support the work outcomes of housing-assisted households.
⁷ This report uses the terms *public housing agencies* and *public housing authorities*, both PHAs, interchangeably.
⁸ For FSS participants in the HCV program, any escrow forfeiture becomes part of housing assistance payment (HAP) equity and is restricted to HAP activities. See HUD (2015).
⁹ Randomization does not affect—or limit—study participants’ use of resources that are available in the general community.

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have congressionally authorized administrative flexibility to modify their FSS programs without legislative or regulatory change, and FSS programs for public housing residents, which serve considerably fewer participants. Eighteen non-MTWH housing agencies operating FSS for tenant-based housing voucher recipients agreed to participate in this evaluation and together enrolled 2,656 voucher holders in the study.¹⁰

The first report from this evaluation introduced the study design and detailed the findings on the first 18 to 24 months of followup (Verma et al., 2019). It documented FSS implementation strategies across the 18 sites, participants' engagement, and program impacts on labor force outcomes and receipt of government benefits. That report showed that PHAs have substantial discretion over FSS program implementation, leading to broad variation in how case management services are delivered. The early data also showed that the program increased participants' engagement in a range of employment-related services, relative to the control group. The earlier report documented that FSS had produced small shifts from part-time to full-time employment among FSS participants, relative to the control group, but there was no evidence that the program increased employment or average earnings over the first 24 months of followup. This report, the second in a series of reports on the ongoing evaluation, extends the above analysis through the end of Year 3. Since FSS is a 5-year program, this report examines whether bigger differences between the program and control groups begin to emerge over a longer-term followup period. The report draws on a new data source, the 36-month survey, to look at the program's effects on a broader range of outcomes, including household material, financial, and economic well-being. Additional reports slated as part of this evaluation will look at outcomes in Years 6 and 7, well after the end of the program for most participants.¹¹

The Housing Assistance and Employment Context

Low-income renters receive federal housing assistance by three primary means: HCV, project-based rental assistance, and public housing assistance. The HCV program is the nation's largest rental assistance program, providing subsidies to slightly more than 2 million low-income households. Administered by 2,150 local housing agencies, the HCV program allows families to rent a unit in a neighborhood of their choice, if the housing meets HUD inspection standards and the landlord is willing to accept housing vouchers. Households contribute 30 percent of their monthly income to their rent (minus certain adjustments to defray childcare expenses or for other reasons), and the HCV program covers the rest of the rent and utilities expenses, up to a locally determined maximum (also referred to as the payment standard).

Housing vouchers became part of U.S. housing policy in the 1970s.¹² Eligibility for housing vouchers is limited to households with income under 80 percent of the median income for the metropolitan area or county in which they choose to live. However, the program gives priority to extremely low-income households by reserving at least 75 percent of available vouchers each year for households with income at or below 30 percent of the area median income. No time limits are imposed on the duration of subsidy receipt, but the program does restrict the amount of income a household may receive and remain eligible for this benefit. If a housing voucher holder's household income exceeds the limit of 80 percent of the area median income for 6 consecutive months, the household eligibility for the subsidy ends. Congress provides funding annually for all current voucher holders, although no statutory guarantee of permanent renewals exists.

¹⁰ In fiscal year 2014, funding streams for HCV and public housing FSS programs were merged, and housing authorities could submit one application for their annual grants. This consolidation of funding streams also meant that PHAs could use the funding to serve both public housing and HCV FSS programs if applicable.

¹¹ In 2018, HUD extended the national FSS evaluation through 2021, allowing 6 to 7 years of followup for the study sample. With the exceptions of participants who receive an extension, most FSS participants will reach the 5-year term of the program by 2020. This longer-term study will also include a special analysis of credit data and related financial well-being outcomes.

¹² See Schwartz (2006) for additional background information on the HCV program.

The HCV program serves large numbers of households with elderly members and members with disabilities, and nonelderly and nondisabled households account for only about 49 percent of all voucher-assisted households (CBPP, 2017).¹³ A 2016 analysis of HUD administrative data shows that a large majority of the voucher population works: roughly 69 percent of nonelderly, nondisabled households using vouchers were working or had worked recently. The employment and earnings trajectories of nonelderly, nondisabled housing voucher holders, however, have been a long-standing policy concern. Given both the potential employment advantage that voucher receipt may offer and the potential work disincentives inherent in various government assistance programs (because higher earnings generate higher rent or reduced benefits), researchers and policymakers have raised questions about the expected effects of employment-focused programs like FSS.

As with any means-tested program, the provision of a government benefit has the potential to affect the recipients' work effort. Some analysts have argued that the provision of housing subsidies not only improve access to decent housing but may also—in and of itself—promote work.¹⁴ This view holds that the housing stability that comes from rent subsidies may enable recipients to focus on employment or build human capital, and that when housing assistance takes the form of vouchers, households are able to move to better quality neighborhoods that offer more or better employment opportunities.¹⁵ This view, however, is challenged by evidence that seems to suggest that although many households undoubtedly do benefit in selected ways, housing assistance alone may not, on average, improve employment outcomes (Jacob and Ludwig, 2008; Mills et al., 2006; Shroder, 2010).¹⁶ In this case, voucher holders may feel less pressure to work when their housing expenses are subsidized and their remaining income is adequate to sustain the family without the cost of seeking work (because of transportation expenses, for example) or finding adequate childcare while working. Similarly, the HCV program's rent rules could also discourage work. Voucher holders must pay 30 percent of any earnings for rent, up to the point that they are no longer eligible for this subsidy. Thus, their participation in the HCV program subjects them to an implicit "tax" on additional earnings that could negatively affect their inclination to work (Popkin et al., 2000, 2010; Popkin, Cunningham, and Burt, 2005). The FSS program's interest-bearing escrow account is intended to address this issue: Program participants may be permitted to receive interim disbursements or access their full escrow savings on graduation from the program.

The Family Self-Sufficiency Program

Established in 1990 by Section 554 of the Cranston-Gonzalez National Affordable Housing Act, the FSS program emerged against a backdrop of policy discussions about persistent poverty among participants of government benefit programs. Mostly operated by housing agencies administering public housing or HCV programs, FSS programs reach a small fraction of all voucher families—a reflection of the funding appropriated to operate this program.¹⁷ Beyond the program size constraints imposed by funding, there is generally limited information about the reasons why many voucher households do not enroll in FSS. Early research on this topic has shown that, at least from the program operators' perspectives, the potential fear on the part of voucher recipients that they may lose their housing assistance and other public assistance benefits

¹³ Households that have elderly members or members with disabilities make up the remaining 51 percent.

¹⁴ See Sard and Waller (2002) for one discussion on this perspective.

¹⁵ Recent research has also shown positive long-term effects for young children of the original Moving to Opportunity demonstration and, in a separate nationwide study, the benefits that low-income children experience in adulthood when they move to high-opportunity neighborhoods as children (Chetty and Hendren, 2017a, 2017b).

¹⁶ For example, the findings from the Welfare-to-Work program conducted in the early 2000s found that having and using a voucher *reduced* employment rates and earnings amounts in the first year or two after random assignment, but the small negative effect of vouchers disappeared over time, and vouchers had no significant effect overall on employment and earnings during 3.5 years of followup. The most rigorous evidence from the United States suggests a loss of 10 to 20 cents in earnings per dollar of assistance (see Shroder, 2010).

¹⁷ HUD makes funding available for FSS programs through the annual grants, but the funding is limited to the amount that Congress appropriates.

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for not fulfilling the FSS contract is a crucial factor that might keep participants from enrolling in the program (Rohe and Kleit, 1999). These program operators also saw issues like family responsibilities, potential lack of motivation, childcare or transportation problems, and distrust of social programs as possible barriers (Rohe, 1995; Rohe and Kleit, 1999). MDRC’s own interviews with program staff members during the site recruitment process for the national evaluation evoked similar responses.

In the most recent round of annual grants, HUD made available about \$75 million in funding for the FSS program (HUD, 2018a).¹⁸ The FSS grants offer support for coordinator positions, with no provisions for program management or other related administrative costs.¹⁹ Fiscal year 2017 grants show that the size of the programs funded can range from as few as 15 participants in the smallest program (funded for only a part-time coordinator position) to more than 1,000 in the largest.²⁰ Thus, although FSS is the only HUD program aimed at helping voucher holders improve their work outcomes and reduce their need for housing subsidies and other government benefits, it remains a small program at the federal and local levels.²¹

In 2017, HUD published its first comprehensive resource guide for program operators. Without enforcing a particular service delivery framework, the guide provides practical, hands-on tips for operating the FSS program (HUD, 2017b). Housing agencies operating the FSS program are required to prepare an FSS Action Plan and have it approved by HUD. This document is expected to detail program parameters—for instance, size and population served, types of services that will be offered, and program rules and policies. Once HUD approves an action plan, the PHA does not need to resubmit it to HUD for approval unless the PHA makes policy or other changes to the program.

Starting in 2018, HUD also rolled out a performance measurement system for assessing programs that receive HUD FSS funding.²² The performance score, a composite, is based on three measures: the extent to which the earnings of FSS participants increase over time after joining the FSS program, the FSS graduation rate, and the portion of expected participants served.²³ A 2018 announcement in the Federal Register informed housing agencies of the criteria for evaluating FSS programs. HUD plans to use the performance measures to identify high-performing and low-performing FSS programs, which could inform its understanding of best practices and its delivery of technical assistance.²⁴ The introduction of the FSS performance measurement system establishes a new monitoring context for FSS programs nationwide.

Core Features

Guided by statutory requirements and HUD regulations, the FSS program is structured around two basic components: an escrow savings account with a behavioral condition for its release (a longer term financial incentive for households to increase work and earnings, described in more detail in the following sections) and coordination of supportive services (exhibit 1.1). Except for the escrow account, local housing agencies can decide how to structure their case management and case coordination services—an element of flexibility captured in this evaluation.

¹⁸ A small fraction of HUD’s budget is reserved for self-sufficiency efforts.

¹⁹ HUD funds the FSS programs through the FSS Notice of Funding Availability (NOFA). Housing authorities apply for this funding on an annual basis.

²⁰ These findings are from an MDRC analysis of HUD FSS grant awards.

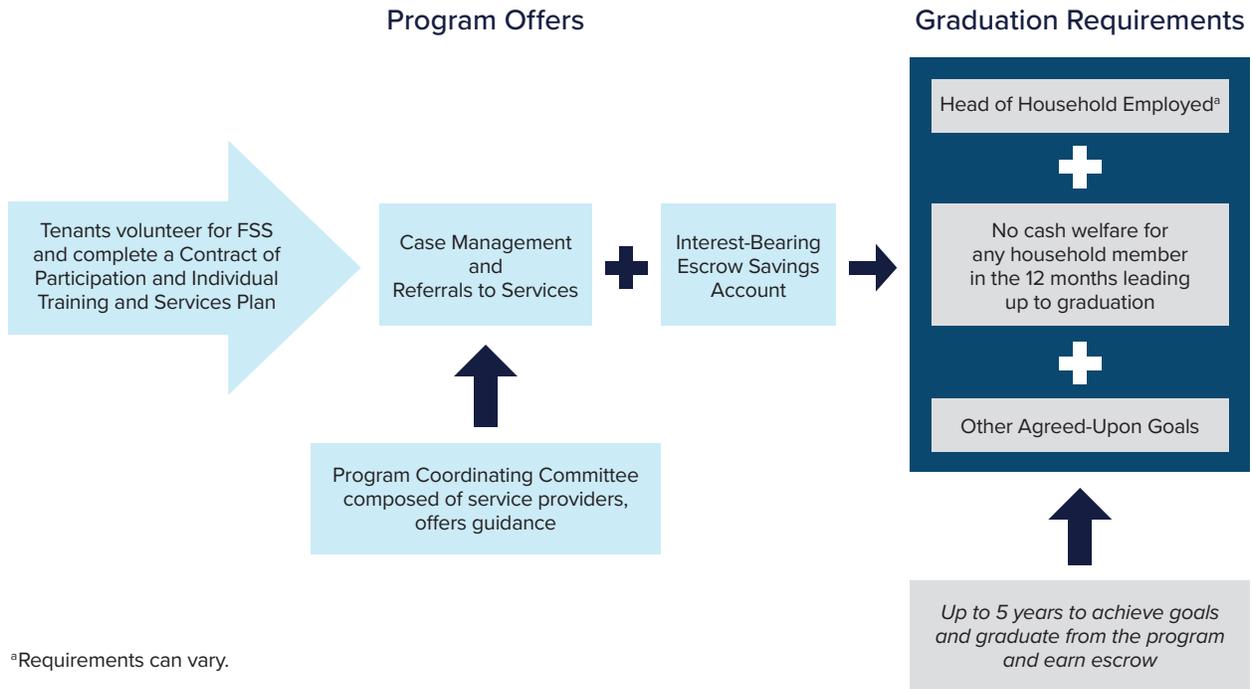
²¹ Changes to rent policies could also be used to encourage work among HCV participants, as is being tested as part of HUD’s Rent Reform Demonstration (see Riccio, Deitch, and Verma, 2017).

²² See HUD (2018b).

²³ The three measures are weighted as follows: earnings (50 percent), graduation rate (30 percent), and participation rate (20 percent).

²⁴ Toward these goals, at least once per year, HUD will analyze data collected through the Public Housing Information Center to calculate FSS performance scores for each FSS program that received an FSS coordinator grant in one or more of the past three fiscal year NOFA competitions.

Exhibit 1.1. Core Components of the HUD Family Self-Sufficiency Framework



^aRequirements can vary.

FSS = Family Self-Sufficiency.

Participation in the FSS program is voluntary. Housing agencies promote the program through various means, including flyers and program brochures in housing application packets; notifications by way of community partners, PHA newsletters, and websites; and group-orientation sessions at the housing agency. Informal channels, such as referrals from friends and relatives, also help spread the word about the program. Once participants enroll, the case coordination services offered by the program are designed to help participants access services that will help them achieve their goals. Although all adults in FSS households are encouraged to seek employment, only the household head—the voucher holder—is required to meet the employment goals of the FSS contract in order to graduate and collect escrow. On meeting these goals (usually within 5 years), household heads graduate from the FSS program and can access the escrow savings their household accrued (unless participants qualify for an interim withdrawal (see below), they can only access their escrow once they graduate from FSS).

The FSS program’s escrow account is intended to serve both as an incentive for households to go to work and to increase their earnings and as a long-term savings vehicle to help them build financial assets. Housing agencies place no restrictions on participants’ use of escrow funds (unusual for asset-building programs), but they report that households most commonly use their resources to start a new business, repair credit, buy a home, or pay for education.²⁵ Some programs also consider interim disbursements, as long as participants use the funds to meet approved expenses related to their self-sufficiency goals. Partial payments of the escrow

²⁵ The 42-month survey conducted as part of the Work Rewards demonstration sheds some light on the *desired* uses of the escrow. Administered before the escrow funds had been disbursed to graduates, the Work Rewards survey showed that about one-third of the respondents indicated that they would save their escrow money for an emergency. Other uses included saving for children’s future educational expenses, paying for basic necessities, and buying a house. See Verma et al., 2017.

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before program graduation can be approved for expenditures such as tuition, car purchase, credit repair, uniforms, tools, homeownership, or business startup.

Little published data is available on the extent to which participants accrue escrow and, among program graduates, how much escrow they have at graduation. A recent HUD report to Congress, focusing on the July 2017 to June 2018 period, shows that 47 percent of graduates during this period had escrow savings averaging approximately \$7,700.²⁶ The Opportunity NYC–Work Rewards (hereafter, Work Rewards) demonstration tested the effects of regular FSS (FSS-only) and an enhanced version of the FSS program that offered special cash incentives to encourage work (FSS-plus-incentives) against a control group. This demonstration provides the first complete evidence about the extent to which cohorts of participants graduate from the program and earn an escrow disbursement. Following the FSS participants over 6 years, the study showed that about 45 of the FSS participants graduated and received escrow disbursements. Households in the FSS-only group received an average of about \$3,800 (the FSS-plus-incentives group, which received FSS and two additional special workforce incentives, received nearly \$700 more in escrow disbursements on average than the FSS-only group). Escrow disbursements covered a wide range of amounts, with the bottom quartile of payments averaging less than \$1,000, and the top quartile averaging more than \$15,000 (Verma et al., 2017).

To graduate from FSS, a HUD measure of program success, the head of household must complete all the goals and activities listed in the ITSP, be employed, and become independent of public cash assistance. The welfare receipt requirement applies to all members of the households, and no member of the household should receive Temporary Assistance for Needy Families (TANF) cash assistance for at least 12 months before graduation.²⁷ Some FSS programs also require participants to work toward additional goals (related to financial security, for example) to graduate.²⁸ The welfare requirement, in contrast, is implemented uniformly across all sites. If the head of household is not employed and someone other than the head of household achieves increases in earned income, the family is not eligible to receive escrow at the time of graduation, a potentially problematic aspect of the escrow component for households with multiple adults. In addition, it is also possible for participants to graduate from the program and not receive any escrow funds; this could happen for various reasons, including not having had the earned income increases that are necessary to trigger escrow accumulation. Thus, it cannot be assumed that all FSS participants who graduate from the program do so with some amount of escrow.²⁹

One other HUD requirement that applies to all FSS programs relates to the Program Coordinating Committee (PCC). With referrals being central to the FSS service delivery model, the intent of the PCC is to create a mechanism by which the service providers in the community can become invested in the success of the FSS program. The PCC, which operates as a collaborative group, is intended to provide both guidance to the housing agency administering the FSS program and direct services to clients; it usually comprises some or all of the service providers that accept FSS referrals.

²⁶ See HUD, n.d.a. “Family Self-Sufficiency 2020 Summary of Resources.”

²⁷ According to HUD rules, receipt of the following is not considered welfare assistance: food stamps through the Supplemental Nutrition Assistance Program (SNAP), medical assistance, childcare assistance, work supports such as transportation assistance or short-term benefits under TANF, or disability benefits for the Head of Household or another family member.

²⁸ Setting additional graduation requirements is not consistent with HUD regulations or guidance on the program. As discussed in chapter 2, it is unclear whether FSS staff members set these additional benchmarks and actually terminate participants if they do not achieve them or whether these are used as ways to motivate participants to achieve what the staff members see as necessary goals for participants to truly become self-sufficient. This topic will be examined as part of the ongoing evaluation.

²⁹ In Work Rewards, which followed a cohort of participants for 6 years after they enrolled in FSS, 30 percent of FSS participants who graduated did not receive an escrow disbursement. According to a recent HUD analysis, 63 percent of participants earn some escrow while in the program; 47 percent of graduates earn some amount of escrow. See HUD, n.d.a., “Family Self-Sufficiency 2020 Summary of Resources.”

How Family Self-Sufficiency Might Help Participants Advance

Exhibit 1.2 offers a simplified schematic to identify the main pathways by which the FSS program might increase participants' work and earnings and improve their financial well-being. At the most basic level, the program's hypothesized short- and long-term effects might operate via two mechanisms.

Mechanism 1: Increase the Payoff Through Case Management

Although FSS programs may vary in their service delivery approaches, they all have some dimension of goal setting and case management (or coordination) that includes needs assessments and referrals to services that may help participants address some of the challenges that might come in the way of work. Typically, case managers work with each participant (and sometimes other members of the household) to identify goals the participant will aim to achieve during the 5 years of program participation. During this process, case managers and participants discuss the types of supports participants might need to advance toward their goals. The supports might include, for example—

- Securing quality, low-cost childcare to make balancing work and home life commitments more feasible.
- Engaging in and completing education and training to improve employment prospects and create pathways for advancement.
- Finding and maintaining stable employment.
- Establishing, repairing, or improving the participant's credit score to increase employment prospects and decrease reliance on high-cost alternative credit sources like pawn, automobile-title, and payday loans.

Progress along each of these pathways would make it easier and more remunerative to work. Furthermore, some of these pathways, such as credit score improvement, may also help participants manage their financial resources and thus improve material hardship irrespective of the program's impact on employment and earnings.

Improving outcomes, such as education or credit, for example, may be difficult with a program that offers less intense case management or coordination services (as in a “light-touch” services approach, which may be less structured, require infrequent contact with staff, and lack a strong monitoring and engagement focus). In general, outcomes will depend on several factors, including the strength of the service providers (and the service providers' models) in the local community, the case management model (including the type and frequency of followup), and the capacity and willingness of the participant to follow through on a course of action—something that is directly targeted in other interventions that apply a more behavioral science–informed coaching approach (Guare and Dawson, 2016) but is somewhat weakly targeted in FSS given the fairly far-off possible reward of the escrow disbursement.³⁰ Because some of these factors vary among the housing agencies in this study, the evaluation will explore the ways in which different program practices affect participant outcomes, if at all.

³⁰ These efforts, which focus on “executive skills”—or roughly, the capacity to plan, manage, and cope—attempt to achieve larger impacts than are typically achieved with conventional case management. MDRC's MyGoals Demonstration is testing the effects of a structured, executive skills–informed coaching and incentives program on work outcomes.

Mechanism 2: Provide an Incentive to Work Through Escrow

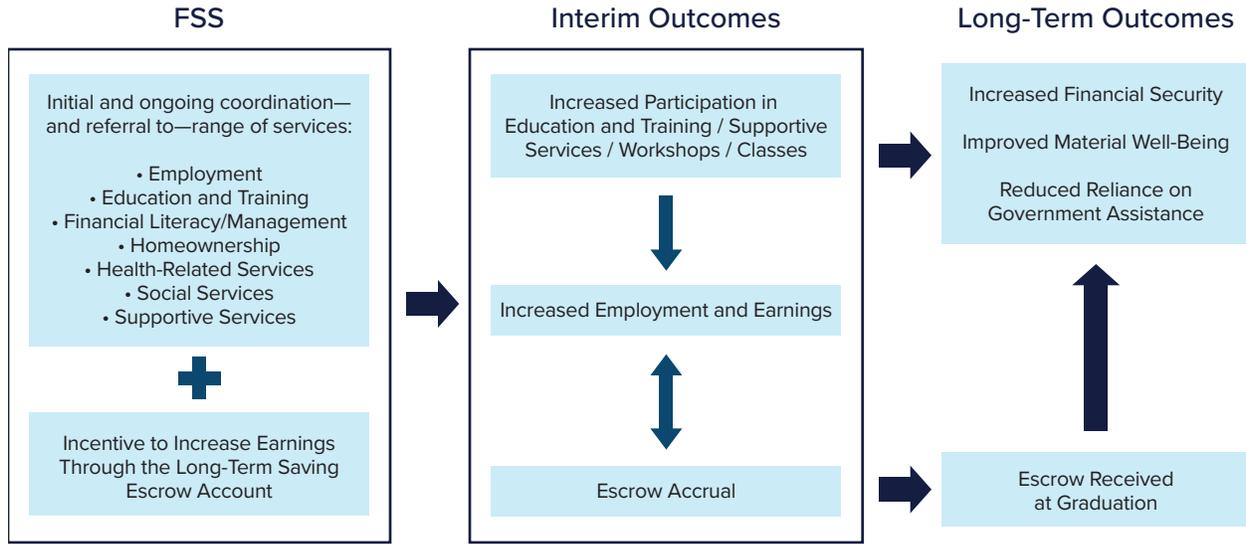
As described, the escrow account is designed, in part, to counteract the disincentive effect of the implicit “tax” built into HCV rent rules; specifically, 30 percent of a recipient’s earnings must be contributed to rent, so 30 percent of any earnings gains are diverted to increased rent payment. This rent policy could discourage additional work by decreasing the marginal gain for any added hour of work done. It may also discourage any work effort among those not working by reducing the effective wage rate below the “reservation wage,” the wage rate necessary to induce potential workers to enter or reenter the labor market.

The degree to which this implicit tax on wages acts as a disincentive to work, or to work harder or find a better paying job, is not well established. Consequently, it is difficult to estimate the potential impact of a program like FSS—and specifically its escrow component that is intended to cancel out that disincentive.

Two additional aspects are to be considered: the effectiveness of escrow as an incentive and the factors that may constrain participants’ response. First, escrow represents an incentive to work, but the incentive cannot be earned until graduation requirements are fulfilled, so it is a distant and uncertain reward. It may not, therefore, effectively (or completely) counteract any disincentive effect of the HCV rent rules because those costs are immediate and certain. The current structure of the escrow account was the impetus for testing an offer of more immediate, work-related cash incentives alongside the normal FSS program escrow incentive as part of the Work Rewards demonstration.

Second, FSS participants face a variety of barriers that may limit their employment prospects and increase the costs of work (beyond the contours of the local job market and transportation-spatial infrastructure). Like most low-income households in the country, participants may receive multiple means-tested benefits, including Supplemental Nutrition Assistance Program, or SNAP, and TANF benefits. Aspects of these benefits work in ways similar to the HCV rent rules, and uncertainty or fear about decreases in or loss of these benefits could discourage work effort. Poor educational attainment, criminal history, and poor or no credit history may limit the types of jobs participants can qualify for and obtain, thus reducing the payoff from work or increased hours. Likewise, family obligations and responsibilities (such as taking care of children or loved ones with disabilities or who are sick), being sick or having disabilities, and the need to secure employment-related transportation may further discourage work or additional hours by increasing the costs associated with employment (by reducing the effective wage, potentially below zero). For some, a cost-benefit calculation of minimum wage with uncertain hours may conclude that, at least in the short run, *not* working is a better choice for the family. Thus, in isolation, the HCV rules may constitute only a small part of the decision not to work or not to work more. For this reason, case management and case coordination services, described previously, may be important components.

Exhibit 1.2. Simplified Schematic of the Family Self-Sufficiency Program Theory of Change



FSS = Family Self-Sufficiency.

Drawing on this conceptual framework, this ongoing evaluation assesses how a self-sufficiency program like FSS affects a range of economic mobility outcomes for program participants. It also examines the effects for certain subgroups to better understand what works best for whom. For example, it is possible that the program may have larger effects for participants who are not employed at study enrollment, because it is often easier for individuals to advance to higher wage jobs once they are already employed than to get a job in the first place. Given the case management supports, the FSS program may also have different effects depending on a participant’s barriers to work or preparation for work. Based on program theory, prior evidence, or policy interest in a given subgroup, the evaluation focuses on subgroups defined by participant characteristics at enrollment: work status and educational attainment.³¹ In addition, given the variation in FSS implementation practices across sites, the subgroup analysis also considers program impacts for participants who are exposed to different program engagement and implementation strategies or program “types.”

³¹ These subgroups were identified during the design stage. Additional subgroups examined are mainly considered exploratory analyses.

The National Family Self-Sufficiency Impact Evaluation

Until recently, questions about the FSS program’s effectiveness had not been investigated using methods that would support unambiguous causal inferences.³² Thus, an overarching goal of the national evaluation is to build conclusive and comprehensive evidence about the program’s effects. In other words, does FSS improve the employment, earnings, income, and financial well-being of participants, over and above the levels for a control group with similar characteristics and work histories and similar interest in receiving employment-related or financial security-related services but who are not allowed to enroll in FSS? How do different groups of participants respond to FSS? Do the effects vary across types of people participating in the program or in response to different types of implementation practices? Does the intervention produce positive benefit-cost results from the perspective of study participants or HUD and participating housing authorities? To address this broad range of questions, the evaluation includes a comprehensive, multisite study of FSS programs, consisting of three core study components: implementation research, impact analysis, and benefit-cost analysis.³³ Exhibit 1.3 lists the data sources and the followup included in this report.³⁴

Exhibit 1.3. Data Sources for the Family Self-Sufficiency Study

Data	Data Period	Length of Followup
Baseline characteristics	October 2013–December 2014	At random assignment
Wage records	April 2013–December 2017	36 months (12 quarters)
Program participation and escrow data	October 2013–December 2017	36 months
Housing subsidy data	October 2013–December 2017	36 months
36-month survey	February 2017–August 2017	29–46 months

Eighteen housing authorities in seven states—California, Florida, Maryland, Missouri, New Jersey, Ohio, and Texas—were selected to participate in the FSS study (see exhibit 1.4). These sites are broadly representative of the contexts within which FSS programs operate.³⁵ The sites participating include those running small, mid-sized, and large FSS programs and small, mid-sized, and large voucher programs. Although no data were available to distinguish typical or higher quality FSS programs during site recruitment, MDRC and HUD sought to include a broad range of sites, including ones with different program sizes, staff caseloads, and case management or coordination practices and unique program-implementation features.³⁶ The site-specific enrollments, including program and control group members, ranged from 50 to 350, reflecting varying enrollment targets based on the sizes of the programs.³⁷

³² Nationally, the Work Rewards demonstration was the first to use a random assignment design to test the effects of an FSS program (Nuñez, Verma, and Yang, 2015; Verma et al., 2012, 2017). Results from that study, which focused on a single site, showed that the program was effective in enrolling participants in education and training activities or linking them to financial literacy programs, but there were few gains in the range of economic and material outcomes tracked for the sample. A small quasi-experimental analysis of the Compass Working Capital FSS programs in Lynn and Cambridge, Massachusetts, showed that the Compass FSS programs were associated with an average gain in annual household earnings of \$6,305 between the fourth quarter of 2010 and the first quarter of 2016 (Geyer et al., 2017).

³³ Verma et al. (2019) includes additional information about the study components.

³⁴ The 36-month survey achieved a 77 percent response rate, and there is little evidence of bias or potential problems in generalizing the results to the larger impact sample (see appendix F). Additional details on the study data sources are provided in the following chapters.

³⁵ See Verma et al. (2019) for site recruitment details. The site selection approach considered various factors, such as program size, the possibility of building clusters of sites within states, regional and local diversity, and varying program approaches. The research team examined HUD data from 2010 to 2012, creating a list of potential sites; conducted phone reconnaissance with about 60 program administrators; visited 27 sites; and ultimately negotiated agreements with 18 sites.

³⁶ HUD’s performance management system ranking for FSS programs was not available until 2018. The ranking system classifies 20 percent of FSS programs as high performing, 60 percent as standard, 10 percent as low, and 10 percent as troubled.

³⁷ Seven PHAs agreed to enroll under 100 study participants, five agreed to enroll between 100 and 200, and another six agreed to enroll between 200 and 350. PHAs operating larger FSS and HCV programs were more likely to agree to larger enrollment targets.

The Study Sample

From October 2013 to December 2014, the 18 public housing agencies enrolled and randomly assigned 2,656 households. This figure includes a small number of households that later withdrew voluntarily from the study or that program staff members determined to have been ineligible for FSS at their time of random assignment and removed from the study, as well as households headed by elderly individuals (62 years or older), who are not the focus of the main impact analysis—excluding these individuals reduced the sample to 2,556. These 2,556 study participants compose the sample for the entire impact analyses in this report (also referred to as the “impact sample” in relevant exhibits).

Exhibits 1.5 and 1.6 present sample characteristics from a survey (also referred to as the Baseline Information Form, or BIF) that participants completed at the time of study enrollment.³⁸ As shown, the sample is largely composed of households with children, and 76 percent of households included a minor child. Nearly 34 percent of participant households included another adult. Although labor market outcomes for other adult household members are not analyzed here, their earnings do contribute to household escrow accumulation, affect the household’s subsidy, and may benefit directly or indirectly from FSS case management. Approximately 70 percent of study households reported receiving SNAP benefits. The TANF benefit receipt rate was around 16 percent. The FSS program is designed to help participants move off cash assistance, such as TANF, and reduce reliance on public assistance in general.³⁹ Slightly more than one-half of the sample (54.2 percent) reported having received Section 8 housing assistance for 6 years or less. About 31 percent reported having received Section 8 housing assistance for 10 years or more.

³⁸ See appendix exhibits A.1 and A.2 for additional baseline characteristics on the program and control groups.

³⁹ The Work Rewards data suggest more families may enter and exit the TANF system over the followup period.

Exhibit 1.4. Public Housing Agencies Participating in the National Family Self-Sufficiency Evaluation

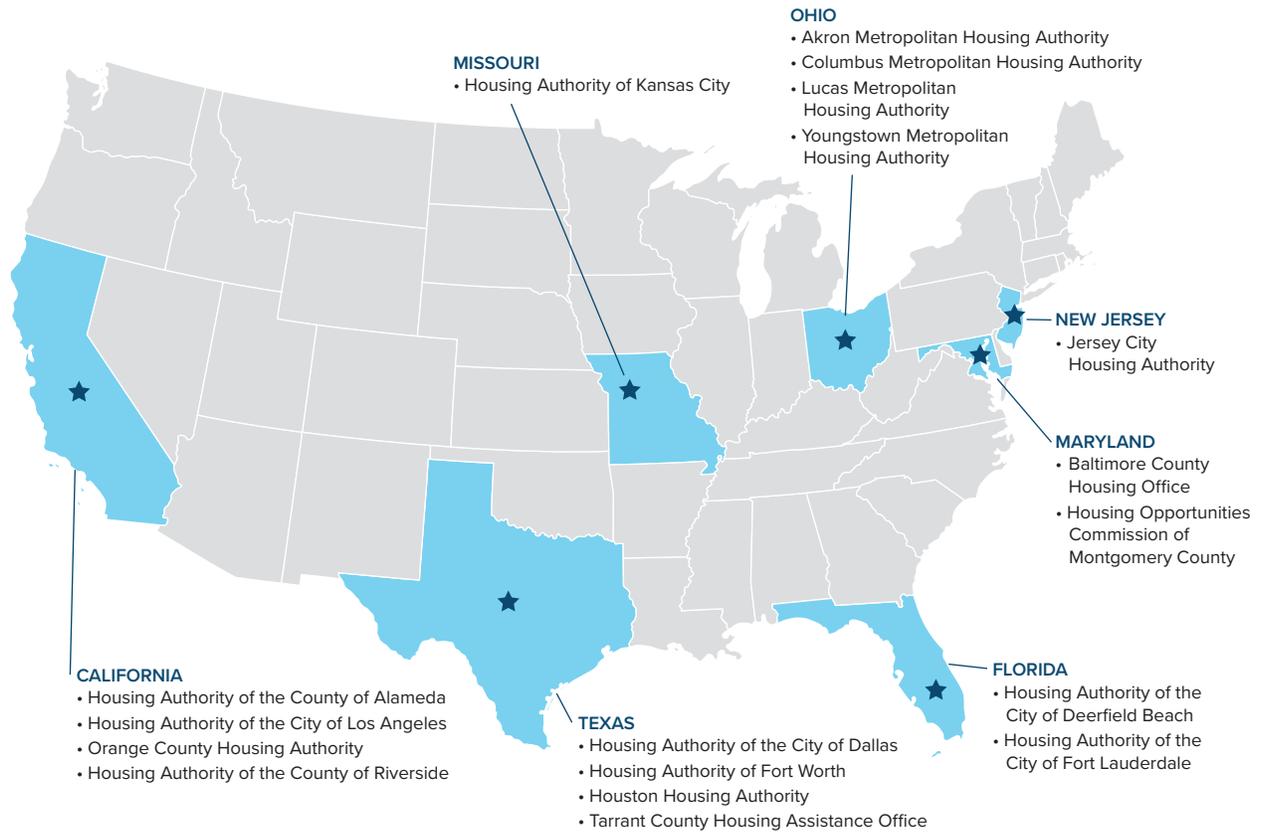


Exhibit 1.5. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample

Characteristic	Impact Sample
Average number of household members ^a	3.2
Average number of adults in household ^a	1.5
Households with more than 1 adult (%)	33.7
Average number of children in household	1.8
Number of children in household (%)	
0	23.8
1	22.7
2	24.7
3 or more	28.8
For households with children, age of youngest child (%)	
0–2 years	20.8
3–5 years	20.4
6–12 years	41.3
13–17 years	17.5
Primary language spoken at home is English (%)	92.2
Receives TANF (%)	15.8
Receives food stamps/SNAP (%)	69.6
Length of time receiving Section 8 Housing Choice Voucher (%)	
Less than 1 year	5.0
1–3 years	27.6
4–6 years	21.6
7–9 years	15.2
10 years or more	30.6
Total annual household income (%)	
\$0	4.5
\$1–\$4,999	17.0
\$5,000–\$9,999	18.7
\$10,000–\$19,999	31.9
\$20,000–\$29,999	19.3
\$30,000 or more	8.5

(continued)

Exhibit 1.5. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample continued

Characteristic	Impact Sample
Payment for rent and utilities (%)	
\$0	1.9
\$1–\$199	15.0
\$200–\$399	24.3
\$400–\$599	21.3
\$600–\$799	15.1
\$800 or more	22.4
During the past 12 months, household experienced at least one financial hardship (%)	59.0
Not able to buy prescription drug	13.3
Not able to buy food	28.9
Not able to pay telephone bill	28.2
Not able to pay rent	18.5
Not able to pay utility bill	43.4
Sample size	2,556

SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families.

*Maximum response option for number of adults in a household is four.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than total for questions that allow more than one response.

SOURCE: MDRC calculations from Baseline Information Form data.

In terms of their individual characteristics (see exhibit 1.6), the sample is predominantly female (90.6 percent), with an average age of 39 years at study enrollment. About 14 percent of the sample did not have a General Educational Development (GED) certificate or high school diploma, suggesting that lack of education may represent an important barrier to address for this subset of the population. To explore the effect of baseline education, the evaluation examines how starting educational status affects program participation, employment, and other outcomes. Around 41 percent of the sample reported some other barriers to employment. Among these study participants, physical health (18.8 percent) and access to affordable childcare (17.8 percent) represent the most common difficulties. Approximately 56 percent of study participants were working at study enrollment (with around 30.5 percent working full time). Work status and earnings are primary outcomes of interest for this study because FSS is designed to enable and encourage (more remunerative) work and because employment is one of the requirements for program graduation and access to accumulated escrow.

Exhibit 1.6. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample

Characteristic	Impact Sample
Sample Member Characteristics	
Female (%)	90.6
Age (%)	
19–24 years	2.2
25–34 years	33.9
35–44 years	35.6
45–59 years	27.3
60–61 years	1.1
Average age (years)	39
Marital status (%)	
Married, living with spouse	7.7
Married, not living with spouse	6.8
Cohabiting	1.4
Single, widowed, or divorced	84.0
Citizenship status (%)	
U.S.-born	87.7
Naturalized	8.1
Noncitizen	4.2
Race/ethnicity (%)	
Black, non-Hispanic/Latino	73.3
Hispanic/Latino	15.8
White, non-Hispanic/Latino	6.7
Other	4.2
Education	
Highest degree or diploma earned (%)	
GED certificate	3.0
High school diploma	10.6
Some college or received technical/trade license	55.0
Associate's or 2-year college degree	10.8
4-year college or graduate degree	6.5
None of the above	14.0

(continued)

Exhibit 1.6. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample continued

Characteristic	Impact Sample
Has trade license or training certificate (%)	47.0
Employment status	
Currently employed (%)	56.2
Regular job	48.4
Self-employed	4.2
Temporary or seasonal job	3.5
Currently working 35 hours or more per week (%)	30.5
Average hours worked per week	18.3
Average weekly earnings (\$)	213
Barriers to Employment	
Has any problem that limits work (%)	41.2
Physical health	18.8
Emotional or mental health	7.6
Childcare access or cost	17.8
Need to care for disabled household member	7.3
Previously convicted of a felony	6.3
Limited English-speaking ability (%)	3.8
Does not have access to transportation for employment (%)	
No access to public transportation	17.8
No access to an automobile	18.2
FSS Program	
Heard of escrow before random assignment (%)	44.0
Interest in FSS services related to (%)	
Job-related services	70.5
Social services	32.4
Financial services	95.5
Sample size	2,556

FSS = Family Self-Sufficiency; GED = General Educational Development.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than total for questions that allow more than one response.

SOURCE: MDRC calculations from Baseline Information Form data.

Chapter 1. Introduction

Overall, study households and heads of households are broadly similar to those in the FSS national population, with some notable differences.⁴⁰ Sample members are somewhat more likely to have no children present (23.8 percent in the study sample have no children versus 17.6 percent in the national FSS population).⁴¹ Study households are less likely to report no income (4.5 percent versus the national FSS figure of 6.5 percent) but are also less likely to report income of \$30,000 or more (8.5 versus 13.9 percent). Sample members also report higher levels of TANF and SNAP benefit receipt than the averages for the national FSS population (15.8 versus 10.0 percent for TANF; 69.6 versus 37.5 percent for SNAP). Study sites tend to run larger HCV and FSS programs and spend more on rent and utilities per participant than the national population of PHAs running FSS programs, a consequence of the need to select sites that would allow for sample recruitment within the required 1-year window.

Structure of This Report

The report is structured in eight chapters, each examining results over the 3-year post-random assignment followup period. Chapter 2 provides a brief program implementation update and sets the context for understanding longer term participant engagement patterns with case managers, service referrals, and use of services (chapter 3). Chapter 4 updates the analysis related to FSS group members' accumulation of escrow credits and average account balances over the followup period. Chapter 5 turns to the program's 3-year impacts on employment and earnings—assessments based on comparing average outcomes for FSS and control group members. Using the same approach, chapter 6 examines whether the FSS program led to positive effects on household income and on a series of self-sufficiency and financial security outcomes. Next, chapter 7 investigates variation in impacts and outcomes for subgroups defined by baseline individual characteristics and program features. The final chapter summarizes the essential takeaways from the interim findings and describes the future work on this evaluation.

⁴⁰ See Verma et al. (2019). To assess whether individuals and households in the study were broadly similar to their site- and national-level counterparts, MDRC compared sample members with the broader FSS population in the study sites and with the national population of FSS participants and housing voucher holders. The team also compared the study's participating PHAs with all PHAs operating FSS programs.

⁴¹ Children are defined here as individuals under the age of 18.

Chapter 2. Program Delivery and Implementation Update

By design, Family Self-Sufficiency programs provide local public housing agencies with a broad framework within which to design and implement an FSS program tailored to their local population and service environment. As a result, and not surprisingly, local FSS policies, approaches, priorities, and staffing arrangements vary across housing authorities. A previous report, which focused on early case management practices, provided an overview of how the PHAs structured their FSS programs to help families make progress toward self-sufficiency. It described how participants in the 18 FSS study sites generally interacted with the program, how the programs were staffed, how the programs typically worked with different population groups such as employed and unemployed clients, and the various policies and approaches to implementing FSS that the 18 study sites adopted.⁴² Chapter 2 provides an update on ongoing program implementation practices since the previous report.

Between May and July 2018, the evaluation team conducted another round of interviews with program staff members at the FSS study sites.⁴³ These interviews were conducted roughly 3.5 years after study enrollment ended, built on previous rounds of interviews, and were structured to gather information about the PHAs' current FSS policies and approaches.⁴⁴ The goal of this round of interviews was to understand changes over time, how programs were working with participants who were more than midway through the 5-year program, and programs' strategies for keeping participants engaged.⁴⁵

As described in chapter 1, in recent years, HUD has funded close to 700 PHAs each year to implement the FSS program. The 18 FSS study sites represented a broad range of programs that vary by size, staffing configuration, program practices, community resources, and other factors and reflect the variation that exists in the types of programs funded by HUD. This report documents their operational practices that were in place across the FSS study sites and how program operators and staff members describe their implementation practices.

Staffing and Caseloads

HUD funds the FSS programs each year through the annual FSS Notice of Funding Availability (NOFA), and the funding is limited to the amount appropriated by Congress. Housing authorities have to apply for this funding on an annual basis. Staff positions are funded according to program size but are also limited to the number of coordinators for which they had been funded in recent years. Most programs have not had an increase in the number of FSS coordinators for which they were funded (regardless of increase in program size) since before 2012. The 2016 NOFA stated, "Eligibility for funding will be based on the number of FSS program participants in your entire FSS program during the target period, according to a formula that requires 15 families to support one part-time position, 25 families to support one full-time position, and an additional 50 families to support each additional position beyond the first full-time position."⁴⁶ The

⁴² Data for the previous report on program implementation came from interviews with FSS supervisors and case managers and observations at all 18 FSS study sites between November 2015 and January 2016, roughly a year after sample enrollment ended (Verma et al., 2019).

⁴³ This round included in-person interviews with FSS supervisors and case managers at 7 sites and phone interviews with FSS supervisors at 10 sites. One site was unavailable for either in-person or phone interviews at the time the data collection was under way.

⁴⁴ The study sample was enrolled between October 2013 and December 2014.

⁴⁵ Appendix exhibit A.3 presents additional information on FSS program features and policies of the sites in the study.

⁴⁶ Per communication with HUD Office of Public and Indian Housing (PIH) staff, this funding formula has now been written into the FSS statute (HUD, 2016c).

FSS study sites varied in the amount of funding they received: Four sites received less than \$50,000, six sites received between \$50,000 and \$99,999, five sites received between \$100,000 and \$299,999, and three sites received \$300,000 or more.⁴⁷ FSS study sites also varied in how many FSS staff members they had and how they deployed them: Some solely had FSS-related functions, while others played multiple roles, including conducting HCV recertifications.⁴⁸

For most sites in the evaluation, the FSS program team included one or two supervisors and from one to eight case managers, depending on the size of the program.⁴⁹ In the period since the first round of interviews, several sites expanded their staff by hiring additional case managers.⁵⁰ In contrast, a handful of sites reduced the number of case managers, consequently increasing caseload sizes. At the time of the 2018 staff interviews, staff members at two sites reported working with an average of 50 or fewer cases, eight sites had averages of 51 to 99, four had between 100 and 149, and three had more than 150, with two of those three having more than 200. Some sites saw their caseload sizes shift drastically, while others managed modest changes.⁵¹

Contact Expectations

The study sites set expectations about the frequency with which case managers contact clients beyond the mandated annual notification of clients' escrow account balances, either at in-person meetings or by phone, e-mail, or asking participants to return a completed written progress report form. Staff members at many of the study sites reported that they maintained their original contact expectations, as documented in an earlier report. Most sites still mandated a minimum of quarterly contact, and all sites encouraged clients to get in touch with a case manager if they experienced difficulties, had questions, or wanted further assistance. Chapter 3 explores the actual contact that occurred, which differed in some cases from the expectations about the frequency of contact.

Staff members at a small number of sites stated that case managers were required to contact their participants on a monthly basis. Some were reportedly taking a more targeted approach and requiring monthly contacts with specific subgroups of participants (for instance, nonworking and nondisabled participants, so that case managers could better connect them to job-search services). One site restructured the frequency of contact to strongly encourage its staff to communicate with their participants every month. This change was not a strict requirement, as the PHA-mandated frequency was still quarterly. Case managers at this site stayed in touch with most of their clients each month, however, which enabled them to more quickly learn of and address any issues that may have adversely affected participants' program participation or continued employment. See exhibit 2.1 for examples of site engagement practices.

In addition to the quarterly (or monthly) contact mandate, all sites required at least one annual in-person meeting with each participant. These in-person meetings were part of either the annual HCV rent recertification meetings (especially in those sites that had combined HCV/FSS staff) or the annual FSS program review meeting. Sites continued to be flexible and creative about the ways in which they permitted

⁴⁷ The funding can be used only for coordinators' salary and fringe benefits. The amount each site receives per coordinator is based on local comparable salaries.

⁴⁸ HUD intentionally leaves this decision to local discretion.

⁴⁹ According to communication with PIH program staff members, nationally, most FSS programs have one coordinator, and that individual may be the only resident services staff member at the PHA. In programs with two supervisors, one is usually a mid-level case manager who manages the day-to-day operations, and the other is a more senior manager or supervisor. PHAs with a resident services department may be better positioned to be more supportive of programs like FSS, and the PHA senior staff can support the relationships needed to secure service commitments.

⁵⁰ These sites, however, did not report lower caseload sizes.

⁵¹ Average caseload sizes were calculated by dividing the total number of FSS participants by the number of staff members with an FSS caseload, regardless of whether those staff members were full time or part time or had other roles, such as HCV or homeownership program responsibilities. Averages do not include supervisors, who sometimes carry a small caseload.

Chapter 2. Program Delivery and Implementation Update

clients to maintain contact with the program: Participants could communicate in person during scheduled appointments at the office or the individual's home or during onsite events or workshops, by submitting a completed progress report, by phone, or by e-mail. The overarching principle was for participants to stay in touch using the method that was easiest for them. Using FaceTime as a mode of contact was reported by one site. Meeting clients outside of the PHA (for example, visiting them at home, meeting them at their place of work, or meeting them at a local coffee shop) was also an option at two programs. In 2017, one site decided to use one-way texting to stay in touch with program participants. Typical messages sent via text included alerts of upcoming events, workshops, and other activities.⁵²

⁵² The texts go out only to those participants who agreed to sign up for these messages.

Exhibit 2.1. Site Engagement Practices

“The more connected people are to the program the better overall they do.”

One site with high expectation for engagement emphasizes the importance of a successful start to participation and of building a relationship with the participant. Coordinators work especially closely with participants immediately after they join the program. To establish rapport and the routine of being in touch, monthly contact is expected for the first 3 months. Goals are written using the “SMART” goal format meaning that they are achievable and measurable. For instance, when a participant wants to buy a home, the goal on the ITSP says “home ownership readiness” rather than “home ownership,” since the former may be more achievable within the FSS program’s five-year timeframe than the latter.

After the 3 months, coordinators check in quarterly—usually by phone or email. In addition, coordinators plan and hold a variety of workshops throughout the year. These workshops engage participants with relevant content and information and provide additional opportunities for participants and coordinators to connect in person.

“As we’re checking in, we’re going over their progress, based on what’s in their ITSP... Then, a year prior to graduation, we’re definitely doing a check-off to make sure they’re on their way to graduation.”

At another site that aims for monthly contact throughout the duration of FSS, goals on the ITSP are intentionally short-term (that is, they can be achieved in less than one year) to keep people motivated and feeling like they’re accomplishing something. Goals are broken down into incremental steps, and each step is articulated on the ITSP. Frequent contact allows coordinators to change goals as they are achieved.

In another site, cases are prioritized so that more help and support is purposefully given to those who need it. There is an explicit expectation that coordinators will spend more time and focus on unemployed participants, who receive monthly contact, compared with quarterly contact for employed participants. Other groups needing more support include those who are on probation (such as at risk of being terminated) and those who are nearing graduation. A report that is prepared monthly and shared with the supervisor categorizes all participants and lets coordinators know which clients need more frequent contact.

The extra effort made by coordinators at this site to reach participants is manifested not just in the frequency of the contact but also the type of contact. Coordinators are required to make field visits where they meet participants in person somewhere other than the housing authority office. Program staff believe field visits are better than “typical” communication in identifying underlying issues and barriers and providing an “extra push” for those needing additional support, such as the unemployed and those cycling through different jobs. Coordinators at this site have HCV responsibilities as well as the FSS coordinator duties. Building rapport and frequent contact remain central despite having these dual roles.

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher. ITSP = Individual Training and Services Plan. SMART = Specific, Measurable, Achievable, Realistic, and Timely.

SOURCES: 2018 field research interviews with program staff in study sites.

Working with Unemployed or Underemployed Participants

Supervisors and case managers in nearly all sites emphasized that line staff spent more of their time working with unemployed participants than with employed participants. This is not surprising, given that clients without jobs usually had a number of barriers and issues that needed to be addressed, such as low educational levels, spotty employment histories, support service needs (such as childcare and transportation), and family and landlord issues. Chapter 5 (see exhibit 5.4) provides more details about some of the strategies staff members used to work with unemployed or underemployed participants.

Re-Engaging Participants Who Are Not Making Progress

FSS case managers described using a variety of approaches to identify and reengage participants who were no longer making progress toward their program goals. They used client-submitted progress reports, agency-level and personal-level tracking systems (including spreadsheets and case notes), face-to-face meetings, phone calls, and e-mails for this purpose. For those participants whom staff members identified as not making progress, case managers generally intensified case management outreach, including multiple face-to-face meetings to rebuild camaraderie, trust, and confidence. Part of this approach involved reminding clients of their original program goals, stressing that participants wanted to better their and their children's lives, and identifying and resolving barriers to participation as much as the program could. Some programs terminated participants if they did not stay engaged; chapter 3 describes the efforts they made before taking that action.

Modifying Goals and Facilitating Graduation

Goal setting is central to the FSS program. At enrollment, participants work with FSS case managers to set goals for the duration of their FSS contract and must achieve all goals that are included on ITSP to graduate from the program. HUD requires that the ITSP include two mandatory goals: to be employed and for all household members to be free from cash assistance for 12 consecutive months. Participants usually agree to pursue additional goals that are added to the ITSP that reflect their ambitions and hopes. These initial goals can be updated, provide a starting point for mapping various pathways toward self-sufficiency such as finding and securing a job or a promotion that pays a living wage, gaining education or occupational credentials that will lead to a better job, improving credit scores, saving money, or acquiring other financial literacy skills that make homeownership possible. Participants' goals also influence the types of services case managers offer. HUD provides housing authorities with considerable leeway in terms of how they approach goal setting with their clients, including in the number, types, and timeframes of goals and whether and how often goals are updated.

Preparing for graduation was equated with reviewing clients' goals and making sure participants were progressing and "on track" in achieving their goals. Case managers said that they reviewed the ITSP and clients' goals at least annually and in many cases more often. For instance, in a site with quarterly check-ins, the case manager said she will have a copy of the ITSP in front of her "so that we're going over that to see how their progress is." Because making sure clients achieve their goals is so central to case managers' work with clients throughout the 5 years, when asked when preparation for graduation begins, more than one case manager said, "The day that they enroll. Really, the day that they enroll."

Goals that are included on the ITSP are additional requirements to graduate. However, programs helped participants meet the graduation requirements by allowing participants to update their goals on the ITSP, including changing details of their employment goals, usually up until 6 to 12 months before their expected FSS program graduation date; the decision about how close to graduation a participant can change goals

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was left to the discretion of each PHA (for example, four sites allowed the ITSPs to be updated right up to a participant's graduation date). Changing goals was a common occurrence, but as clients got closer to the FSS contract end date, case managers were often even more diligent in discussions with clients to make sure the goals on the ITSP were ones that the participants were still interested in and that they were realistic within the time remaining. While these types of discussions happened throughout the duration of the FSS program, it happened toward the end "even more." Case managers described having conversations about "lingering" goals—that is, goals that participants said they were interested in but had not made progress toward achieving. These types of discussions sometimes took place even earlier in the sites where goals could not be changed for a year (or more) before the contract end date.

Long-term goals such as buying a home or completing a college degree were ones that often were not likely to be completed within the program's 5 years, though participants could make progress toward those goals during that time. Case managers usually told clients they could keep working on those goals even if they took them off the ITSP. For instance, one case manager explained:

"I will say to them, you know, look, we either rewrite this goal so that I can graduate you, or drop the goal. Just focus on being employed. But that doesn't mean you can't still be working on this."

Some sites did not just eliminate goals, but rather required participants to replace or modify a particular goal with a new, more realistic goal. One case manager stated:

"I don't change goals in the middle like that. Now, if it's...feasible to revise a goal, I'll do that, but changing it just because they can't do it just so they can graduate? I don't do that."

In the final year or two before the end of the contract, case managers described an added scrutiny about the goals as part of the annual review. As one staff member put it:

"I'd say to you that if they have about 2 years left, because per our action plan [the ITSPs] are fluid up until the last 6 months. So, if we've got 2 years we need to...refocus everything... But it is something that if I know they're relatively new it's not as imperative to know [about the participants' goals], but if it's third year, fourth year, then yeah it's important."

Programs that imposed other participation requirements, such as attendance at workshops, tried to be flexible in how participants could meet those requirements.

At a minimum, staff members said they let clients know at the annual meeting what they needed to do to graduate. About 1 year from the contract end date, some sites sent out a letter or series of letters reminding participants about their goals and the timing or date when goals were final and could not be changed. In one site, case managers did not send a letter until 60 days before the contract end date, which was after the date that clients could change goals but gave them time to provide the documentation necessary to graduate. One site sent a form for participants to complete at the fourth year—putting the onus on participants to let the staff members know whether they had met the goals and were ready to graduate.

Both case managers and clients initiated discussions about graduation. Typically, case managers made sure the file was complete, which meant the goals and their completion were documented, and then supervisors signed off and approved the graduation. One site reported that staff members voted on whether the client was ready to graduate.

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In explaining the graduation requirements, staff members said they included information about escrow and what clients needed to do to get that money. Sites also put this information in writing. One case manager noted:

“And I do make it a point of saying to them, look, you got another year and a half left in the program. You know, you’ve got escrow money sitting here. Remember, this is what needs to happen if you want to graduate [with] this money.”

Some case managers also reported that they put in extra effort to keep someone with escrow on track to graduate. One case manager observed:

“I will say that [if] people that have escrow, I’m bound and determined that you weren’t gonna do something stupid to lose one quarter of this money because this money is more money than you had in the past, you know, so I’m not gonna let you...miss an appointment from me and not call. I’m gonna harass you to the end of the earth in order to make sure that doesn’t happen.”

Employment Requirements for Graduation

Although HUD requires FSS clients to be employed in order to graduate, some program staff members reported that additional criteria not required by HUD—such as earning either “enough to support themselves” or a pay rate “deemed reasonable” by the PHA, working a certain number of hours per week, or being employed a certain number of months before graduation—were sometimes added at the discretion of the PHAs. These additional criteria varied quite a bit across the 18 FSS study sites (HUD, 2017c: 26).⁵³ The majority of sites reported that they required participants to meet several of these more specified benchmarks to graduate. It is unclear whether FSS staff members held participants to meeting these higher benchmarks, however, or whether they used these additional criteria simply as ways to motivate participants to achieve what the staff members thought was necessary for participants to truly become self-sufficient. While staff members reported that these criteria were “requirements” for graduation, it is possible that staff members used these additional criteria primarily as motivators and never planned to enforce achievement of these higher benchmarks. Future rounds of research will explore this further.

Two sites reported that they accept any employment to satisfy graduation requirements. The rest, according to program staff members, set the bar higher.⁵⁴ Some sites reported that they specified the number of weekly hours of employment required to graduate (such as 30 or 32 hours per week), and some required 6 or 12 months of continuous employment to graduate. Sites also offered extensions on a case-by-case basis, so clients could reach the required number of months. Likewise, sites that said they required employment at more than minimum wage tended to be in regions with higher living expenses. In those sites, many staff members held the view that clients needed to earn enough to sustain themselves in order to be self-sufficient. Ten sites specified a rate of pay (for example, wages that are “sustainable”—that is, wages that are high enough to maintain a reasonable standard of living without assistance), and two required people who came into the program employed to increase their income. Rather than set a minimum number of hours or wage rate, two sites reported trying to accommodate different employment situations by multiplying the minimum wage by

⁵³ According to HUD staff members, these additional criteria are not permitted, and HUD clarified its policy and reminded sites of this in the 2017 NOEA by stating, “PHAs shall not require or define a certain number of hours or rate of pay as ‘suitable’ for all FSS participants” (HUD, 2017b).

⁵⁴ At the time of the prior research visits to the FSS study sites, four sites had reported that they accepted any employment to satisfy graduation requirements. Since then, two more sites added requirements by adding a specified number of hours of employment and by being more specific about earnings requirements (one of which reported that it would determine if wages were appropriate on a case by case basis, and the other of which required that the wage “improve” over the initial wage if someone came into the program employed) (Verma et al., 2019).

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a certain number of hours (30 in one site, 40 in the other) and used that as the minimum required earnings amount. A majority of the study sites reported making changes to the employment requirements for graduation between January 2016 and July 2018. Many of these changes increased the requirement (that is, raised the bar even higher). In a few cases, the change was small (for example, a change from simply requiring full-time employment to noting that full-time employment is defined as at least 30 hours per week). Most of the changes were related to hours and earnings requirements; most sites did not change requirements for how many months a participant had to be continuously working in order to graduate. One site removed the requirement that specified the number of hours a participant must be working. The staff members realized they were making it more difficult for clients to graduate. As one staff member put it:

“And we made that to where it’s not as hard. It’s like, why (are) we making this harder than we have to? For instance, a lot of it came from having a certain amount of hours that people needed to work and stuff like that... It’s like, why are we requiring them to work 32 hours, HUD doesn’t require that. You know what I mean?”

Some policy changes also added some leeway for program staff members so that they could use their own judgment in determining “reasonable” wages.

Reaching Goals Before the End of the 5-Year Contract Period

Most of the FSS study sites describe their approach to working with clients as being “client-driven”—that is, they take the clients’ lead when working with them to identify goals and to create a plan that will help them meet those goals, rather than suggesting goals or services to the clients. One of the aspects of being client-driven is that programs allow clients to proceed at their own pace. Some participants complete all their goals and graduate early, and others take the full 5 years or even need to get an extension. When asked if they encouraged participants to use the full 5 years, some staff members reported that they encouraged clients to do that so that they could use the program’s resources for as long as possible. Others said they did not necessarily encourage participants to stay but let them know the program allowed them to stay for 5 years if they needed that support.

Clients who moved out of housing because they earned too much to qualify for the subsidy were automatically graduated from FSS when they were no longer eligible for the subsidy, even if they did not complete all their goals.⁵⁵

Sites had different practices when participants completed all goals on their ITSP before the end of the contract. Some programs automatically graduated clients at that time. In other programs, clients were encouraged to set new goals and continue in the program and keep earning escrow until they achieve their new goals and reached the contract end date. In still others, staff members said that staying in the program to build their escrow account and work toward homeownership was a satisfactory reason for some to stay in the program.

⁵⁵ HUD regulations state that FSS participants are eligible to graduate from the program and receive the full amount that has accrued in the escrow account when household earnings have increased to the point where 30 percent of the monthly adjusted income equals or exceeds the published fair market rent for the size of the unit for which the FSS family qualifies based on the PHA’s occupancy standards. This rule does not apply to FSS participants in public housing, who are not the subject of this study (HUD, n.d.b.; “Outreach and Goal Setting—Module 2.3: Contract of Participation and Individual Training and Services Plan”).

Conclusions

Overall, FSS program delivery did not change much between the first year and the midpoint of the program. Contact expectations remained the same, for the most part. While most programs reported adding criteria to the employment requirements for graduation, it is unclear whether this was done primarily to motivate participants or whether there were actual consequences for not meeting those extra requirements. Meanwhile, case managers also reported paying special attention to participants' progress toward their goals as they approached the final years of their FSS contracts and allowing participants to update their goals so that they were more likely to achieve them in time to graduate.

Chapter 3 explores the FSS programs' practices related to terminating participants, particularly as those practices pertain to FSS enrollment status midway through the 5-year program. It also examines longer-term participant engagement patterns with case managers, service referrals, and use of services. Additional field research in late 2019 and early 2020 will explore FSS program practices in the final year of FSS for many study participants.

Chapter 3. Participant Engagement

The Family Self-Sufficiency (FSS) programs offer participants information about a multitude of services for enhancing self-sufficiency and largely rely on referrals to schools, colleges, and community organizations to provide these services. Nonetheless, throughout participants' enrollment in the program, FSS case managers remain their main point of contact.⁵⁶ Chapter 3 examines participant engagement patterns with case managers, service referrals, and use of services during the first 3 years of followup. Analyses of FSS group members' engagement and program participation are based on quantitative data from housing agencies' electronic and paper notes and records, FSS and Housing Choice Voucher (HCV) program reporting forms, program management information records and tracking spreadsheets, supportive services payment records, HUD administrative data, and responses to the FSS 36-month survey.⁵⁷

The analysis of program data, administrative data, and survey responses suggests the following:

- Levels of program engagement declined over 3 years. By the end of Year 3, about 40 percent of FSS group members had exited from the program. On average, FSS group members who were still enrolled in the program interacted with an FSS case manager about once every 6 months, a decrease in frequency compared with Year 1.
- The vast majority of FSS group members engaged in some type of goal-related activity during the first 3 years of followup: About 80 percent participated in at least one FSS-related activity, and most of those who do not have a program activity recorded appear, per program records, to have been working for pay during at least part of the followup.
- Typically, FSS group members participated in short-term activities, such as job search or financial counseling sessions or workshops. Most FSS group members who engaged in an FSS-related service began participation soon after enrollment in FSS and participated during 6 months or less of the followup period.
- Programs with stronger monitoring and engagement practices (smaller caseload sizes, an expectation of more frequent contacts, and a focus on establishing short-term goals) tended to have higher rates of exiting from the FSS program, compared with programs without these attributes, but they also worked more intensively with FSS group members who remained in the program.
- Based on survey responses, in Year 3 of followup, the FSS program led to a moderate increase of about 10 percentage points above the control group level in overall use of services. The FSS program increased receipt of financial counseling by a much larger margin: 23 percentage points.
- On average, however, the cluster of FSS programs that strongly emphasized monitoring and engagement did not experience the largest impacts on service use in Year 3, in part because participation rates were relatively high for control group respondents in these localities.

⁵⁶ Some programs refer to this role as *case coordination*, while others view it as *case management*. In this and the following chapters, the terms *housing authority*, *housing agency*, *PHA*, *FSS program*, and *site* are used interchangeably. Similarly, the terms *client* and *participant* are used interchangeably.

⁵⁷ The research team collected quantitative data from paper notes and records or electronic records from PHA management information systems in 12 of the 18 housing agencies. For details about the 36-month survey, see appendix F. As noted earlier, the survey achieved a high response rate (77 percent), and there is little evidence of bias or potential problems in generalizing the results to the larger impact sample.

Program Participation in the Middle Years of the 5-Year Family Self-Sufficiency Contract

The FSS program offers participants a broad array of services, plus access to an escrow account, that are designed to work together to promote earnings growth and financial self-sufficiency over 5 years. At program enrollment, participants work with case managers to complete an ITSP that lists the participant's program goals, the specific actions required to achieve these goals, and the expected completion dates of goals and actions. A typical ITSP includes an employment goal, such as working at the same job for at least 12 months; an education or training goal, such as getting an associate's degree at a community college; and either a financial security goal or a homeownership-related goal. Most FSS group members committed to participating in a job search or post-employment activity. In addition, many agreed to pursue several related goals within a domain; for example, in the financial security domain, they might agree to receive financial counseling, prepare a family budget, and raise their credit score (Verma et al., 2019: 71–73).

During the first years of the 5-year FSS program, the primary challenges for case managers involve referring participants to appropriate services that would move them into work or increase their earnings and thus help them begin accruing escrow as soon as possible. As participants enter the middle years of their FSS contract period, their relationship to the program and their prospects for attaining their program goals become more varied. As shown in chapter 3, some have made significant progress toward meeting their goals, others are pursuing activities toward attaining their goals, and still others are in a more tenuous situation. Thus, the challenges for case managers during the middle phase of the FSS contract period vary by participant and involve (1) how often and how actively to contact participants in various situations of engagement, (2) whether to attempt to keep participants engaged in the program by referring them to additional services (including, in some housing agencies, mandatory workshops on job search skills, workplace issues, or life skills) or to consider employment with occasional check-ins as sufficient engagement, (3) whether to modify participants' ITSPs by changing or dropping goals to make it easier for them to graduate from the program, and (4) whether to actively encourage participants who have become disconnected from the program to reengage, or to drop them from the program and open a place for a new enrollee. Using administrative data and survey responses, chapter 3 considers how different case management strategies were pursued.

Family Self-Sufficiency Enrollment Status

By the end of the 3-year followup period covered in this report, a relatively large proportion of FSS group members had exited the program. Exhibit 3.1 shows estimates based on HUD and PHA administrative data and the 36-month survey. These data provide exit rates and reasons for exit. The top panel of the table, which is based on administrative data, shows that about 61 percent of the FSS group remained enrolled in FSS at the end of the 3 years. The administrative data include limited information about exit reasons, and only about 4 percent of the FSS participants appear to have graduated from FSS.⁵⁸ A higher proportion of exits appears to be related to participants leaving the voucher program or moving to another PHA, being terminated from FSS, or leaving the program voluntarily.⁵⁹

⁵⁸ The measure of continued enrollment in the FSS program is calculated with data from local housing agencies and federal data from HUD. The FSS group member was considered to have left the FSS program if either data source indicated departure from the program. An alternative measure of program enrollment, based solely on local housing agency data, shows that 61 percent of FSS group members were still enrolled in Month 36.

⁵⁹ Those who exited from the program include about 6 percent of FSS group members who never enrolled (see exhibit 4.2). These sample members are included in the impact analysis presented in this report. See chapter 4 for additional information on FSS group members who left the program during Years 1 to 3.

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The bottom panel of exhibit 3.1 shows termination outcomes based on the 36-month survey data. Nearly 80 percent of FSS group survey respondents reported that they were still enrolled in FSS, a larger proportion than was recorded with administrative data. Yet, among these enrollees, nearly half of the FSS group respondents described themselves as not using or participating in any FSS-related services.⁶⁰ These participants were still enrolled in the program but, in their perspective, were not in contact with program staff members or engaged in any FSS-related services.

The staff member interviews conducted in 2018 provide some insights into the termination policies and processes for taking this action. PHAs can terminate the FSS Contract of Participation and hence remove participants from the FSS program if case managers determine that participants have not fulfilled their responsibilities under their contract. If the contract is terminated, the PHA closes the escrow account, and the family forfeits any accumulated escrow funds. The FSS household also no longer has access to FSS program services.

The majority of sites (all but three) continue to have policies that allow them to terminate FSS participants who do not show up for appointments and are not responsive to case managers' attempts to reach them. Commonly, the policy calls for at least three staff member attempts to contact participants; these efforts are often made by phone, e-mail, and at least one letter. There may be one or two warnings, and then the last letter will give a deadline by which the person must respond, or his or her case will be terminated.

⁶⁰ The calculation is as follows: 37.2 percent enrolled and not using FSS services / 79.0 percent enrolled = 47.1 percent.

Exhibit 3.1. Family Self-Sufficiency and Housing Choice Voucher Program Statuses, Years 1 to 3, Family Self-Sufficiency Service Use and 36-Month Survey Respondent Samples

Outcomes and Statuses (%)	FSS Group
Administrative Data	
Still enrolled in FSS program	61.3
Exited from FSS program after enrollment	38.8
Left HCV program or moved to another HCV program	26.5
Graduated from FSS program	4.2
Left FSS program voluntarily	11.8
Asked to leave FSS program	9.0
Sample size	1,285
Survey Responses	
Current FSS program status	
Enrolled and using FSS services	41.8
Enrolled and not using FSS services	37.2
No longer enrolled in the FSS program	21.0
Reasons for leaving the FSS program, if no longer enrolled	
Left HCV program	45.5
Left FSS program voluntarily	38.4
Moved out of area	14.1
Graduated	12.1
Asked to leave FSS program	12.1
Purchased a home	5.6
Sample size	988

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. The FSS 36-Month Survey respondent sample includes FSS impact sample members who responded to the FSS 36-Month Survey. Rounding may cause slight discrepancies in calculating sums. Detail on program statuses may not sum to totals because some FSS group members exited from both the HCV program and the FSS program. Detail on reasons for leaving the FSS program may not sum to totals because FSS group survey respondents could report more than one reason.

SOURCES: MDRC calculations using housing authority administrative data, HUD Inventory Management System/Public and Indian Housing Information Center data, and responses to the FSS 36-Month Survey.

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The final letter gives clients a certain number of days to appeal or come back into compliance. As one case manager put it:

“If we see that the quarterly event, workshop, and service event was missed, or the participant’s quarterly progress report hasn’t been sent for the last three quarters. If that individual isn’t corresponding to our calls or our letters—because we’re gonna write letters and start calling after the second miss.”

Another case manager noted:

“It’s not based on just the caseworker’s judgment. It’s based on the documentation that we have that shows that we have repeatedly attempted to make contact with the family and the family is unresponsive. So, before the staff closes any cases, we have to prove that we made numerous attempts and the family’s not responsive.”

Some sites do not have clear-cut policies about the termination process, but supervisors want to see that case managers attempted to reach clients over the course of many months. Even where policies seem clear, staff members appear to give participants an “extra try” before proceeding with termination. A staff member at the site that tries to use escrow as an incentive to bring clients back into compliance said:

“[W]e let them know how much money they have, because sometimes that will motivate them to come back. ‘Oh, I have all this money in my escrow?’ Then they come back, and if that one doesn’t work out, then we’ll terminate them.”

Some sites also use termination letters as warnings—not intending to terminate the participant right away but expecting that the letter might prompt a response. In this way, case managers may be able to accommodate clients and do what they can to avoid terminations. As one case manager related: “If they communicate with us, we’re pretty flexible with them. We’ll try to accommodate them. There have been cases where we give them three and four appointments sometimes, just because.” When case managers are deciding how to proceed with terminating clients, however, they look to the person’s history in the program—whether the person has been responsive in the past, whether the person is employed, or if the person has earned escrow. Some amount of reluctance to terminate is also based on thinking that some clients are making progress on their own or that they may be dealing with life crises. One case manager said:

“Because, you know, sometimes they’re out there doing things. They just don’t make you aware that they’re doing things until you say, well, I don’t have—I haven’t heard from you, please send me this, I need this and then they send me all this stuff and you say, well why didn’t you tell me.”

Some terminations are voluntary: Participants are given the option to leave the program. They are told (depending on the site policy) that they can come back and start the program anew after waiting a year or two. As one case manager expressed it, “Maybe now is not the time to focus on FSS... So, just take some time off and focus on you. You have to have that conversation.”

Some case managers also described how staff turnover affects participant engagement in the program. When new staff members are hired, they may not be able to establish a relationship with some clients, or it may take them time to “get up to speed.” New staff members often “clean” files and terminate participants after long periods of inactivity.

Some sites may have been reluctant to terminate because of HUD requirements to maintain minimum caseload sizes to sustain their funding for case manager positions. Some case managers felt strongly that inactive participants *should* be terminated from the program. As one case manager put it:

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“If I had the power, I’d close people because they just are doing nothing. Absolutely nothing. They feel that we’re just babysitting them. Just babysitting. Not doing something. And those are the ones that give the biggest fight, and they’ve done nothing.”

Contact with Case Manager

To analyze contact patterns between FSS participants and case managers, the evaluation draws on information recorded by the housing agencies. These data are used to create measures of the timing and mode of communications between FSS staff members and participants (in-person meeting, phone call, exchange of e-mails or other electronic documents, or mailing of paper forms or documents). For each FSS participant, the data focus on Year 3 (about Months 25 to 36) of followup.

For this analysis, a “communication” is counted if it involved an exchange between the FSS participant and the FSS case manager, either simultaneously, as in a face-to-face meeting or phone call, or sequentially, as during a documented exchange of electronic communications or when the FSS group member mailed or dropped off at the housing agency office a letter or a completed progress report.⁶¹ To analyze the incidence of communications, the month of followup was chosen as the unit of analysis. Indicators of the number of months with at least one communication were created.⁶² Separate averages were calculated for each mode of communication. An additional analysis uses responses from the FSS 36-month survey. Respondents were asked when they had last communicated with an FSS case manager since random assignment, a somewhat longer followup period than was covered by the analysis of housing agency records.

⁶¹ Not counted as communications are “attempted contacts,” such as phone messages left by the FSS coordinator, e-mails or paper forms sent by the FSS coordinator when there was no subsequent reply by the FSS group member, letters and notices mailed by the FSS coordinator, and recorded communications between the FSS coordinator and other members of the FSS group member’s household. For several housing authorities, this analysis also excludes the routine monthly mailing or e-mailing to all or to large numbers of FSS participants of fliers from service providers, newsletters, notices of upcoming job fairs or housing agency events, and job listings.

⁶² Thus, for example, months with five phone conversations were treated similarly in the analysis to months with one phone conversation. This analysis strategy acknowledges the difficulty of creating an equivalent metric for measuring the incidence of communications when two parties in communication can routinely exchange multiple e-mails or text messages in rapid succession.

Exhibit 3.2. Contacts Between Family Self-Sufficiency Participants and Case Managers, Year 3, Family Self-Sufficiency Service-Use Sample

Contacts	FSS Group	Enrolled in Month 36
Enrolled in FSS in Month 36 (%)	65.3	100.0
Had one or more contacts (%)	50.3	68.0
In-person	35.3	49.1
By phone	23.5	31.3
By e-mail, text, social media, or fax	8.7	11.8
By mail or delivery of form or letter	22.0	30.3
Average number of months with one or more contacts	1.5	2.0
Number of months with one or more contacts (%)		
0	49.7	32.0
1–3	36.7	48.7
4–6	9.7	13.7
7–9	2.9	4.1
10–12	1.0	1.5
Sample size	714	466

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads-of-household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 public housing agencies, and were age 18 to 61 at their time of random assignment. “Contacts” are defined as interactions between FSS group members and FSS case managers in which the FSS group member was actively involved. Contacts include conversations that took place in person or by phone; communications by email, text, social media, or fax that were initiated by the FSS group member; and completed forms or letters that were mailed or delivered in person by the FSS group member. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than total because FSS group members may have had more than one type of contact.

SOURCE: MDRC calculations using housing authority administrative data.

Exhibit 3.2 summarizes the findings on the incidence and types of communications between FSS group members and FSS case managers, based on housing agency records (paper documents or electronic data) for 12 of the 18 PHAs that were the focus of this analysis. Exhibit 3.2 presents information for all FSS group participants in the 12 sites targeted for this analysis and for those still enrolled in FSS in Month 36. As exhibit 3.2 shows, one-half of the FSS group (and nearly 70 percent of FSS group members still enrolled in Year 3) had at least one contact with an FSS case manager, most often in face-to-face meetings at the housing agency office. Nearly one-fourth of FSS group members had at least one phone conversation with their FSS case manager, and about 9 percent communicated with their FSS case manager by email, text, social media, or fax—typically by returning a progress report.

Across all housing authorities, FSS group members and FSS case managers averaged less than two exchanges, equivalent to communications occurring every 8 or 9 months—or once every 6 months among FSS group members still enrolled in the program. The incidence of communications with FSS case managers decreased over time. As noted in a previous report on the FSS evaluation, during the first year of the program, FSS group members communicated with their case manager every 4 or 5 months (Verma et al., 2019). The average

for Year 3 also falls below the established standard requirement of quarterly or monthly communications that most housing agencies had set at the start of the evaluation.⁶³

Participation in Services and Referrals

HUD provides funding for case management and coordination, but housing agencies rely on local community organizations to provide services to FSS participants. The study sites offer participants information about or connections to a broad range of services through both formal and informal partnerships with service providers.

This section examines FSS participants' patterns of engagement in FSS program activities during the first 36 months of followup.⁶⁴ Program data from housing agency records offices, supplemented by HUD administrative data and by participant responses to the FSS 36-month survey, were used to create measures of FSS participation: use of FSS-related services and recorded employment (per HUD guidelines, an important measure of FSS program success).⁶⁵

As discussed below, the vast majority of FSS group members demonstrated at least a minimal level of engagement in the program during the first 3 years of followup: they participated in at least one goal-related activity, started a job, or maintained employment that they began before enrolling in the FSS program. As measured, levels of engagement appear to have diminished over time, although much more so for the use of FSS services than for employment recorded by the program.

Service Use and Recorded Employment

Exhibit 3.3 and appendix exhibit B.1 summarize the patterns of FSS group members' service use and employment documented in PHA records over the first 3 years of followup and, separately, in Year 3.⁶⁶ As exhibit 3.3 shows, according to housing agency data, about 80 percent of FSS group members used at least one FSS-related service during Years 1 to 3, and three-fourths of FSS group members worked for pay. Nearly two-thirds of the FSS group combined service use with employment, whereas only about 8 percent of FSS group members enrolled in the program but never used an FSS service and had no recorded employment through Month 36.

Use of FSS-related services followed no set pattern during Years 1 to 3. At program enrollment, when filling out their ITSP, nearly all FSS group members committed to pursue at least one financial security goal. Not surprisingly, the largest proportion of FSS group members participated in financial security–related activities (45 percent), most often by attending at least one financial management workshop or by receiving individual financial counseling. (See appendix exhibit B.1 for detailed findings on service use.) A little more than one-third of FSS group members participated in a job search, self-employment preparation, or post-employment services activity—with job search activities (individual or group) as the most frequently used services. A slightly smaller proportion of FSS group members attended an education or training program, mostly post-secondary education or vocational training. Although use of social services was rarely included as a goal in FSS group members' ITSP, a sizable proportion (35 percent) of FSS group members received social services from the

⁶³ See chapter 4, page 82, for analysis of contacts and engagement of FSS group members by program eligibility status and accrual of escrow credits. As noted in chapter 4, on average, FSS group members with the largest balances in their escrow account also had highest incidence of contacts with their FSS case managers during Year 3.

⁶⁴ For this analysis, the terms *used services* and *participated in activities* are used interchangeably.

⁶⁵ Data collected from housing authorities included case notes, service referral forms, workshop attendance sheets, communications from service providers, participant progress reports, management information system records, service-use tracking spreadsheets, communications between FSS group members and FSS case managers, and HCV program status forms.

⁶⁶ The rest of this analysis focuses on the experiences of the FSS sample members in the 12 sites targeted for this analysis (or the “service-use sample”), all of whom enrolled in the FSS program following random assignment.

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FSS program, usually by attending at least one workshop in life skills, parenting, or building self-esteem. In contrast, whereas most FSS group members had agreed to pursue at least one homeownership-related goal, only about 16 percent of FSS group members had taken steps toward doing so by the end of Year 3. Most of these FSS group members attended at least one workshop that covered the financial requirements for purchasing a home or received individual counseling. More closely reflecting the pattern of goal setting in ITSPs, about one in five FSS group members received some type of support service, most often in the form of transportation assistance or financial aid, and few received health coverage assistance or health-related services from the FSS program.

Exhibit 3.3. Use of Family Self-Sufficiency-Related Services and Recorded Employment During Years 1 to 3, Family Self-Sufficiency Service-Use Sample

Outcome (%)	Years 1 to 3	Year 3
Used FSS services (%)	80.4	36.3
Financial security	45.2	10.6
Job search or post-employment	37.4	9.8
Post-employment only	2.4	0.3
Social services	35.3	12.5
Education or training	31.4	17.9
Supportive services	21.7	5.0
Homeownership preparation	15.8	3.8
Health coverage and services	7.0	2.1
Had program-recorded employment (%)	75.4	54.8
FSS service use and employment status (%)		
Service-use and program-recorded employment	63.3	28.3
Service-use only	17.1	8.0
Program-recorded employment only	12.0	26.5
Neither service use nor program-recorded employment	7.6	37.3
Sample size (total = 714)		

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 public housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than 100 percent because FSS group members could use more than one service.

SOURCE: MDRC calculations using housing authority administrative data.

The “Year 3” column in exhibit 3.3 demonstrates the decrease in service use over time. According to agency records, a little over one-third of FSS group members used at least one FSS-related service during Year 3, and fewer than one in five FSS group members participated in any specific activity. Even financial counseling and workshops, which can be organized as a series of monthly meetings, engaged only about 10 percent of FSS group members. Only longer-term education and training activities (often in pursuit of a license or credential) involved nearly one-fifth of FSS group members.

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The relatively high rate of employment among FSS group members helps explain why FSS group members participated intermittently or stopped after completing one or two short-term activities. According to housing agency data, about 45 percent of FSS group members entered the program already employed (not shown in exhibit 3.3). In any month of followup, more than twice as many FSS group members were employed as were participating in FSS activities, and in Year 3, almost a similar proportion of FSS group members worked for pay but did not use FSS-related services, compared with those who combined service use and employment. The high incidence of employment among FSS group members is a positive outcome both in general and because employment is a required graduation goal. Nonetheless, combining work and service receipt is often difficult for low-income heads of households, particularly those with young children. As the months of followup proceed, FSS group members who maintain employment but have ceased participating in FSS activities or, as occurred for 12 percent of FSS group members, have not yet participated in FSS activities may find it increasingly difficult to reconnect with the program and complete all goals listed in their ITSP.

Most FSS group members began to participate in FSS-related services within the first 6 months of random assignment (see exhibit 3.4). Many of these FSS group members started their involvement with the FSS program by attending short-term workshops on job search skills, financial security, homeownership preparation, or life skills soon after enrolling in the program. In addition, about 7 percent of FSS group members continued attending a post-secondary education or vocational training program that they had started before enrolling in the FSS program (see appendix exhibit B.1). Relatively few FSS group members who had not begun participating in FSS-related services and activities by the end of Month 6 began participation during the remaining 2.5 years of followup.⁶⁷

Most FSS group members participated in FSS-related services on a short-term basis. The majority of FSS group members participated in FSS activities 6 months or less out of the 3 years of followup, and about 30 percent of FSS group members participated during 7 months or more. (See exhibit 3.4.)

⁶⁷ As exhibit 3.4 shows, 22 percent of FSS group members first participated in an FSS activity after Month 6 of followup, and 20 percent never participated during the followup.

Exhibit 3.4. Indicators of Timing and Duration of Service Use and Program-Recorded Employment During Years 1 to 3, Family Self-Sufficiency Service-Use Sample

Outcome	FSS Group
Service Use	
First month with service use (%)	
1–3	39.4
4–6	18.8
7–12	9.9
13–36	12.0
No service use	19.9
Average number of months with service use	
	6.7
Months with service use (%)	
0	19.9
1–3	37.3
4–6	13.7
7–12	11.2
13–36	17.9
Employment	
First month with program-recorded employment (%)	
1–3	51.3
4–6	4.1
7–12	8.4
13–36	11.6
No recorded employment	24.6
Average number of months with program-recorded employment	
	17.3
Months with program recorded employment (%)	
0	24.6
1–3	3.2
4–6	3.5
7–12	10.8
13–36	57.8
Sample size	714

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 public housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums.

SOURCE: MDRC calculations using housing authority administrative data.

Variation in Program Engagement

The FSS program coordinates access and referrals to a wide range of services to help participants find jobs, advance in careers, and improve their financial security. Use of these services may vary among study participants who enter the program with different levels of employment, education, or financial circumstances. Variation in how housing authorities operate the FSS program may also affect levels of service use. This section explores these relationships.

Program Engagement by Baseline Employment and Education

Exhibits 3.5 and 3.6, respectively, show comparisons of indicators of FSS program engagement by self-reported employment and educational attainment at study enrollment.⁶⁸ Among subgroups defined by these baseline characteristics, most FSS group members maintained at least a minimal connection to the program through the end of the followup period. For example, for the employment-based subgroups, between 61 and 68 percent of FSS group members continued enrollment in the program through Month 36 (see exhibit 3.5).⁶⁹

Across all subgroups, a large majority engaged in FSS-related services during Years 1 to 3—with rates of service use varying from 72 percent (for participants with full-time employment at random assignment) to 84 percent (for participants without employment). Subgroups varied more substantially in their incidence of use of specific FSS-related services. For example, as shown in exhibit 3.5, considerably larger proportions of FSS group members who reported no employment or part-time employment at their time of random assignment (44 and 38 percent, respectively) engaged in job search or post-employment activities during Years 1 to 3, compared with FSS group members who were working full time at random assignment (26 percent). These more disconnected-from-work subgroups also averaged higher rates of using social and supportive services compared with FSS group members who were employed full time. Among educational attainment subgroups (exhibit 3.6), FSS group members with no degree or credential at random assignment recorded much lower attendance at financial security and homeownership preparation counseling and workshops (29 and 8 percent, respectively) compared with other FSS group members with a high school diploma, GED, or post-secondary degree.

Frequency of contact was relatively low in Year 3 for all subgroups but varied somewhat among educational attainment subgroups. For example, across these subgroups, the incidence of having at least one contact with an FSS case manager in Year 3 varied between 41 percent (for participants with a high school degree or GED at random assignment) and 56 percent (for participants with some college attendance).

Subgroups also differed in the extent to which FSS group members combined services and employment during Year 3 of followup (see the bottom panels of exhibits 3.5 and 3.6). For instance, FSS group members who reported being unemployed at random assignment had the highest incidence (46 percent) of no engagement (neither service use nor program-recorded employment) during Year 3 compared with other employment status subgroups. In addition, among educational attainment subgroups (exhibit 3.6), there is a relatively strong association between educational attainment level and level of engagement in the program. The subgroup with a 2-year college degree or higher had the highest rate of combining employment and service use in Year 3 and the lowest rate of no service use nor program-recorded employment.

⁶⁸ As noted in chapter 1, this study prioritizes these individual-level subgroups to assess variation in outcomes.

⁶⁹ The enrollment measure is based on housing agency data, which, as noted above, yields slightly higher rates of enrollment than measures based on data from HUD.

Exhibit 3.5. Selected Indicators of Contacts and Service Use During Years 1 to 3, by Self-Reported Employment Status at Random Assignment

Outcome	Not Employed	Employed Part Time	Employed Full Time
Years 1 to 3			
Services and Employment			
Used FSS-related service	83.7	83.2	72.1***
Job search or post-employment services	43.9	38.2	25.9***
Financial counseling	42.6	52.4	42.6*
Education or training	32.5	32.5	31.0
Homeownership preparation	14.4	16.2	17.8
Health coverage or health assistance	6.1	8.4	7.1
Social services	39.3	34.6	29.4*
Supportive services	24.5	22.5	16.2*
Had program-recorded employment	55.5	92.1	91.9***
Year 3			
Contacts with Case Managers			
Had 1 contact or more (%)	49.4	55.5	46.7
Had contact during 3 months or more (%)	18.4	24.1	19.8
Average number of months with contacts	1.3	1.8	1.4**
Service Use and Employment (%)			***
Service use and program-recorded employment	24.5	31.9	31.0
Service use only	12.9	4.2	3.6
Program-recorded employment only	16.9	39.3	29.9
Neither service use nor program-recorded employment	45.7	24.6	35.5
Still enrolled in FSS program in Month 36	66.3	67.5	61.4
Sample size (total = 714)	326	191	197

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums and differences. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using baseline data and housing authority administrative data.

Exhibit 3.6. Selected Indicators of Contacts and Service Use During Years 1 to 3, by Self-Reported Level of Educational Attainment at the Time of Random Assignment

Outcome	No Degree or credential	High school degree or GED	Some college	2-Year college degree or higher
Years 1 to 3				
FSS-Related Service Use and Employment (%)				
Used FSS-related service	73.1	81.9	82.1	83.0
Job search or post-employment services	32.4	34.5	38.5	44.4
Financial counseling	29.0	52.0	47.9	48.9***
Education or training	27.6	28.2	33.5	39.3
Homeownership preparation	8.3	16.4	16.3	22.2**
Health coverage or health assistance	6.9	6.8	7.4	6.7
Social services	32.4	31.1	35.8	43.0
Supportive services	16.6	18.1	28.0	20.0**
Had program-recorded employment	71.0	70.6	80.2	77.0*
Year 3				
Contacts with Case Managers				
Had 1 contact or more (%)	49.0	41.2	55.6	53.3**
Had contact during 3 months or more (%)	12.4	18.6	24.5	23.0**
Average number of months with contacts	1.1	1.2	1.7	1.9***
Service Use and Employment (%)				***
Service use and program-recorded employment	18.6	21.5	33.5	37.8
Service use only	9.7	8.5	7.4	6.7
Program-recorded employment only	25.5	28.8	26.5	24.4
Neither service use nor program-recorded employment	46.2	41.2	32.7	31.1
Still enrolled in FSS program in Month 36	62.1	65.0	66.1	67.4
Sample size (total = 714)	145	177	257	135

FSS = Family Self-Sufficiency; GED = General Educational Development.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums and differences. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using baseline data and housing authority administrative data.

Program Engagement Across Study Sites

Levels of engagement with the program vary considerably by site. This analysis, shown in exhibit 3.7, uses one program enrollment measure and four participation outcome measures: (1) enrollment in FSS during the last month of Year 3; (2) having participant–case manager contacts during at least 1 month of followup; (3) having participant–case manager contacts during at least 3 months of followup; (4) using FSS-related services during at least 1 month of followup; and (5) using FSS-related services during at least 3 months of followup. The third and fifth of these measures represent relatively high levels of participation and engagement by FSS group members. These measures are created for each housing agency, and all the measures focus on Year 3 of followup.

The second row of exhibit 3.7, the median value for all housing authorities, shows that about one-half of the FSS group members from any housing agency had at least one contact with an FSS case manager during Year 3 of followup. The extremes were housing authorities in which two-thirds of FSS group members had at least one contact and housing authorities in which only about one-third of FSS group members had at least one contact. Similarly, among the housing agencies with the highest incidence of service use, about one-half of FSS group members used at least one FSS-related service during Year 3 of followup, compared with one in six FSS group members in housing authorities with the lowest incidence. Averages for housing authorities also fell along a wide continuum for measures of more extensive engagement with the FSS program, having contacts with an FSS case manager within 3 months or more and using FSS-related services during 3 months or more. Implementation, using data from interviews with FSS administrators and case managers and data collected from FSS group members' ITSP forms. As the middle panel of exhibit 3.7 shows, the implementation features tested were (1) maintaining small FSS caseloads, (2) expecting relatively frequent contacts, and (3) setting Year 1 program goals for a large majority of FSS group members. The research team examined similar associations for indicators of sites' tendency to emphasize types of service use when preparing ITSPs, as measured by the percentage of FSS group members with an FSS goal in the domain of (4) job search or post-employment services, (5) education or training, or (6) financial security.

It was also hypothesized that housing agencies with implementation features that suggest a stronger commitment to close monitoring of and frequent engagement with FSS participants would demonstrate a higher incidence of contacts and service use compared with housing authorities without these features. With some exceptions, the findings from this analysis confirm this hypothesis. Tests of association between indicators of service type and participation outcomes were more exploratory. Housing authorities could plausibly attain relatively high rates of contacts or service use by encouraging FSS group members to participate in a series of short-term employment-related activities, such as job search workshops, or in longer term education or training activities with frequent check-ins.

One simple way to examine whether FSS program implementation features are likely to affect participants' contacts and service-use outcomes involves calculation of Pearson's product moment correlation coefficients. Site averages for each of the six implementation features listed previously were correlated with site averages for each of five outcomes, resulting in a matrix of 30 correlation coefficients. The middle panel of exhibit 3.7 shows the results of these tests. Correlation coefficients with a negative coefficient suggest a negative association between an indicator of program implementation and an indicator of contacts or service use.

As exhibit 3.7 shows, three implementation features that likely reflect each site's commitment to monitoring and engagement—maintaining small FSS caseloads, expecting relatively frequent contacts, and setting Year 1 program goals for a large majority of FSS group members—have at least a moderately strong and positive association with indicators related to contacts and service use, as evidenced by correlation coefficients that

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range between 0.65 and 0.90 for having had contacts in 3 months or more and between 0.56 and 0.63 for using FSS-related services.⁷⁰ At the same time, housing authorities that strongly emphasized monitoring and engagement also tended to have higher-than-average rates of exiting from FSS. One possible way to summarize these findings is that these programs were not highly successful at keeping participants engaged in FSS (or more consistently terminated participants who stopped engaging in the program) but worked more intensively with participants who remained in the program.

The three implementation features related to monitoring and engagement also have moderately strong and positive associations with each other. These results suggest that these separate indicators are attributes of a general implementation feature, which will be referred to as a housing agency's level of "emphasis on monitoring and engagement." To use this concept in additional analyses, the three indicators were combined into a composite measure and average values were calculated for each housing agency.⁷¹ The bottom row of exhibit 3.7 shows the results of tests of association between housing authorities' emphasis on monitoring and engagement and indicators of incidence of FSS group members' contacts and service use. The correlation coefficients for the measure of continued enrollment in FSS (-0.67), having contacts during 3 months or more (0.83), and using FSS services (0.64) are consistent with the findings for each component measure.

Exhibit 3.7 also shows that in some instances, a housing agency's emphasis on a type of goal or activity has a moderately strong and positive association with program engagement outcomes. Housing authorities that emphasized job search or post-employment goals tended to have higher-than-average incidences of FSS services use during Year 3 (correlation coefficient = 0.43). Similarly, programs that emphasized education and training goals had a higher-than-average incidence of contacts between participants and FSS case managers during Year 3 (correlation coefficient = 0.48).

⁷⁰ Correlation coefficients of between 0.700 and 1.000 are considered to indicate a relatively strong and positive association between an indicator of program implementation and a participation outcome, whereas values of between 0.400 and 0.699 suggest a moderately strong and positive association, and values of between 0.000 and 0.399 suggest little or no association.

⁷¹ See appendix exhibit B.3 for additional details on the measure creation.

Exhibit 3.7. Indicators of Contacts and Family Self-Sufficiency Service Use in Year 3, by Housing Authority, Family Self-Sufficiency Service-Use Sample

Outcome	Enrolled in FSS Program in Month 36	Had One Contact or More	Had Contact in 3 Months or More	Used FSS Services	Used FSS Services in 3 Months or More
Average value for the 3 highest-ranking housing authorities (%)	81.0	66.9	41.9	50.4	32.5
Median value for all housing authorities (%)	69.0	47.5	20.3	38.1	17.4
Average value for the 3 lowest-ranking housing authorities (%)	40.9	36.0	3.1	16.7	7.3
Correlation Coefficients (Housing Authority Averages)					
Average FSS caseload size ^a	-0.63	0.34	0.71	0.63	0.41
Expected number of contacts per year	-0.52	0.35	0.90	0.56	0.56
Proportion of FSS group with a Year 1 goal	-0.68	0.16	0.65	0.57	0.35
Proportion of FSS group with a job search or post-employment goal	-0.09	0.23	0.00	0.43	0.37
Proportion of FSS group with an education or training goal	0.12	0.48	0.06	0.25	0.36
Proportion of FSS group with a financial security goal	0.16	0.25	0.12	0.18	0.33
Emphasis on monitoring and engagement (composite score) ^b	-0.67	0.31	0.83	0.64	0.49
Number of housing authorities (total = 12)					

FSS = Family Self-Sufficiency.

^aAverage caseload sizes were multiplied by -1 to test whether small caseload sizes are positively correlated with greater incidence of contacts and service use.

^bThe FSS monitoring and engagement composite score incorporates three components: average caseload size, expected number of contacts per year, and the proportion of FSS group members with a Year 1 goal. A Z-score for each component was calculated using the site value and the mean of all 18 sites. The Z-scores were summed to create the composite value.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads-of-household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, in 12 housing agencies and were age 18 to 61 at the time of random assignment.

SOURCES: MDRC calculations from housing authority service-use data and information provided by FSS administrators and case managers.

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Exhibit 3.8 looks more closely at the association between housing agencies' program implementation approach (or emphasis on monitoring and engagement) and FSS group members' service-use outcomes. As exhibit 3.8 shows, the percentage of FSS group members who used at least one FSS-related service in Years 1 to 3 was highest by a wide margin in housing agencies that most strongly emphasize monitoring and engagement. Similarly, FSS group members in these housing agencies were more likely to have a record of service use and employment during Year 3. These PHAs also record the highest rate of having three contacts or more during Year 3.

Exhibit 3.9 displays variation in service use among housing agencies that differed in their emphasis on encouraging participation in (1) job search and post-employment activities, (2) education and training activities, and (3) financial counseling and workshops.⁷² As exhibit 3.9 shows, a PHA's level of emphasis on specific types of services had scattered effects on FSS group members' overall levels of participation. For example, about 70 percent of FSS group members in PHAs with a low emphasis on job search and post-employment activities used any FSS service in Years 1 to 3, about 13 percentage points below the levels for PHAs with a medium or high emphasis. The percentage of FSS group members who used any services varied to a lesser extent (by 8 percentage points) among PHAs that differed in their emphasis on participation in financial counseling and workshops. Finally, PHAs' level of emphasis on participation in education and training activities had no effect on group members' participation rates in any FSS services.

In contrast, rates of participation for specific types of FSS activities were strongly affected by PHAs' level of emphasis. For instance, about 47 percent (with rounding) of FSS group members in PHAs with the strongest emphasis on education and training attended an education or training course during Years 1 to 3—a rate of participation about 20 percentage points higher than for the PHAs with a low or medium emphasis. Similarly, the rate of participation in job search activities (41 percent) was highest in PHAs with the strongest emphasis on job search and post-employment services, and the level of participation in financial counseling or workshops was highest in PHAs that most strongly emphasized financial services (51 percent).

⁷² See appendix E for an explanation of how PHAs were categorized as having a low, medium, or high emphasis on participation in each of these three types of activities.

Exhibit 3.8. Use of Family Self-Sufficiency Services and Recorded Employment During Years 1 to 3 Among Housing Authorities with Similar Levels of Emphasis on Monitoring and Engagement, Family Self-Sufficiency Service-Use Sample

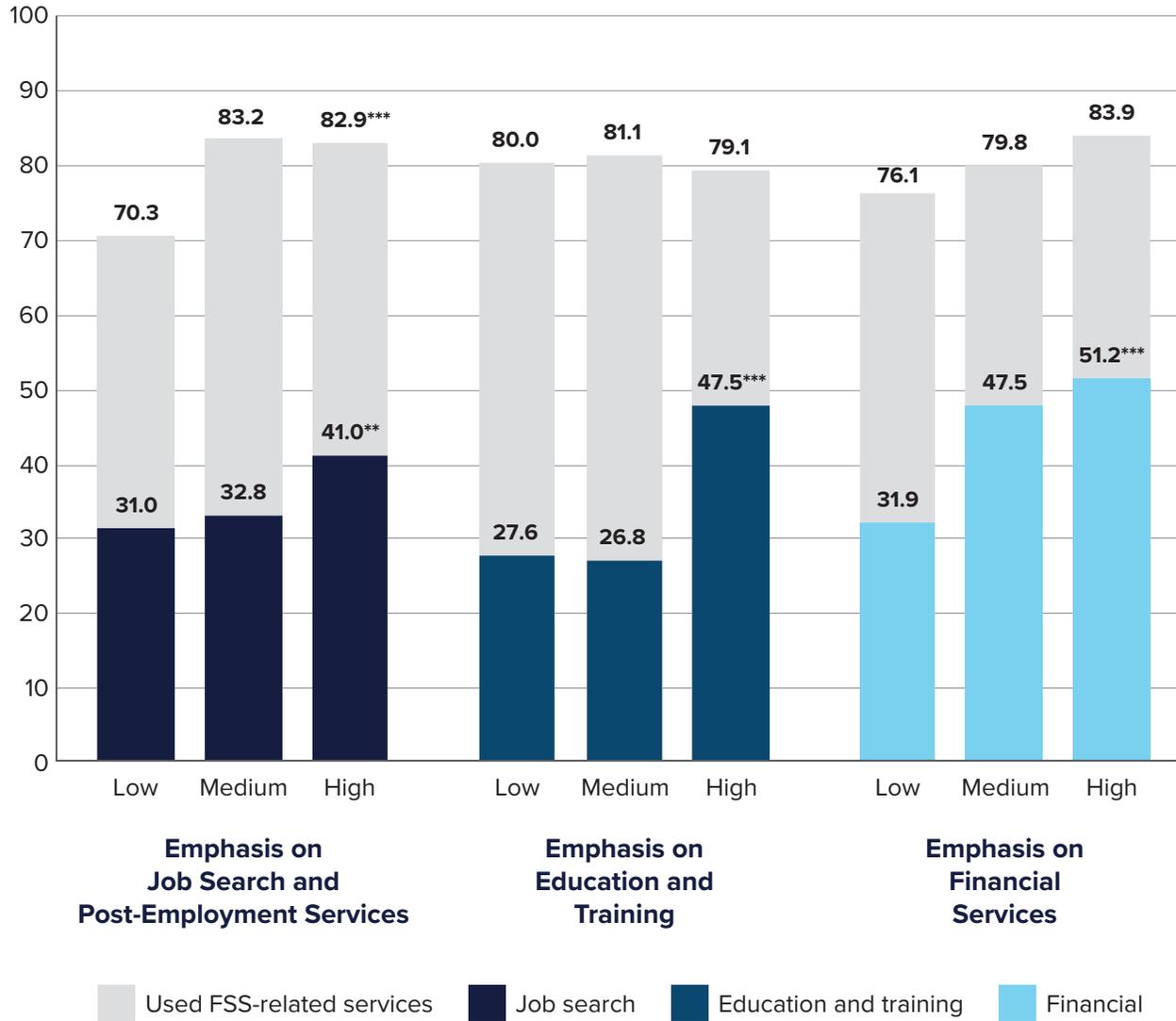
Outcome (%)	Monitoring and Engagement		
	Low	Medium	High
Years 1 to 3			
Services and Employment			
Used FSS-related service	75.2	73.9	93.9***
Job search or post-employment services	20.4	37.8	58.4***
Financial counseling	47.8	33.0	55.1***
Education or training	27.0	27.8	43.0***
Homeownership preparation	13.3	13.5	21.5**
Health coverage or health assistance	1.9	5.2	15.4***
Social services	23.0	20.4	66.8***
Supportive services	7.0	25.7	36.0***
Had program-recorded employment	71.1	74.3	81.8**
Year 3			
Contacts with Case Managers			
Had 1 contact or more (%)	50.0	48.3	52.8
Had contact during 3 months or more (%)	10.7	17.4	35.5***
Average number of months with contacts	1.0	1.2	2.3***
Service Use and Employment (%)			***
Service use and program-recorded employment	21.9	25.7	39.3
Service use only	8.9	5.7	9.3
Program-recorded employment only	34.8	27.4	15.0
Neither service use nor program-recorded employment	34.4	41.3	36.4
Still enrolled in FSS program in Month 36	74.8	60.4	58.4***
Sample size (total = 714)	270	230	214

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums and differences. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The FSS monitoring and engagement composite score incorporates three components: average caseload size, expected number of contacts per year, and the proportion of FSS group members with a Year 1 goal. A Z-score for each component was calculated using the site value and the mean of all 18 sites. The Z-scores were summed to create the composite.

SOURCES: MDRC calculations using baseline data and housing authority administrative data.

Exhibit 3.9. Use of Services During Years 1 to 3, by Program Emphasis on Service Type



FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, in 12 housing agencies, and were age 18 to 61 at the time of random assignment. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The FSS monitoring and engagement composite score incorporates three components: average caseload size, expected number of contacts per year, and the proportion of FSS group members with a Year 1 goal. A Z-score for each component was calculated using the site value and the mean of all 18 sites. The Z-scores were summed to create the composite.

Participants’ Assessment of the Family Self-Sufficiency Program

FSS group respondents to the 36-month survey, both current and former enrollees, answered a series of questions concerning their involvement with the FSS program. Exhibit 3.10 summarizes their responses. As exhibit 3.10 shows, current enrollees reported a relatively positive assessment of their engagement in the program. About three-fourths of current enrollees stated that they were satisfied with the FSS program, and a similar proportion reported that they had made at least some progress toward meeting their program goals in the past year. Most current enrollees related that they expected to end their involvement in FSS within 3 years, although relatively few of these respondents accurately listed all the requirements for graduation. Current enrollees listed a wide range of goals as their primary objective, with homeownership as the most frequently named goal (21 percent). Current enrollees also cited purchasing a home as the most likely use of their escrow dollars (30 percent).

Exhibit 3.10. Indicators of Engagement with the Family Self-Sufficiency Program, by Current Enrollment Status, Family Self-Sufficiency Group Members in the 36-Month Survey Respondent Sample

Outcome (%)	Currently Enrolled	No Longer Enrolled	Total
Contacts During the Past 12 Months			
Had a contact with an FSS case manager	82.8	84.4	83.1
Assessed sufficiency of contacts			***
No contacts	17.6	15.6	17.2
Too few	24.1	34.5	26.3
Right number	56.4	45.5	54.2
Too many	1.8	4.5	2.4
Expected Number of Years Left in FSS Program			
Less than one year	10.9	–	–
1–1.99 years	27.8	–	–
2–2.99 years	41.1	–	–
3 years or more	20.1	–	–
Knowledge of FSS Graduation Requirements			
Did not name any requirements	11.6	29.1	15.3***
Correctly named as requirement			
Head of household employment	73.6	51.9	69.0***
No receipt of welfare cash benefits	44.9	18.9	39.4***
Attaining all program goals	74.6	57.8	71.1***
Incorrectly named as requirement			
No receipt of food stamp/SNAP benefits	34.7	16.0	30.8***
Leaving Housing Choice Voucher program	29.8	22.3	28.2**

(continued)

Exhibit 3.10. Indicators of Engagement with the Family Self-Sufficiency Program, by Current Enrollment Status, Family Self-Sufficiency Group Members in the 36-Month Survey Respondent Sample continued

Outcome (%)	Currently Enrolled	No Longer Enrolled	Total
Most Important Program Goal			
Homeownership	21.2	—	—
Employment or career advancement	16.5	—	—
Attainment of education or training credential	15.1	—	—
Improvement in personal or family well-being	14.5	—	—
Better management of household finances	13.5	—	—
Other	4.9	—	—
All goals equally important	14.4	—	—
Amount of progress toward goal attainment in the past 12 months			
A lot	30.8	—	—
Some	42.3	—	—
Very little	17.4	—	—
None	9.5	—	—
Planned or actual use of escrow dollars			
To buy a house	30.2	2.0	24.7
To pay off loans, debts, or bills	3.0	7.2	3.8
To pay for education	2.4	0.0	1.9
To make a big purchase	2.0	2.0	2.0
To start a business	0.8	0.0	0.6
Since Enrollment in FSS Program			
Communications with case managers were			
Important	82.1	87.3	83.1
How often referrals to services were helpful			
Always	31.0	22.1	29.2
Often	20.2	20.6	20.2
Sometimes	26.4	23.1	25.8
Never	17.7	22.6	18.7
No referrals	4.7	11.6	6.1

(continued)

Exhibit 3.10. Indicators of Engagement with the Family Self-Sufficiency Program, by Current Enrollment Status, Family Self-Sufficiency Group Members in the 36-Month Survey Respondent Sample continued

Outcome (%)	Currently Enrolled	No Longer Enrolled	Total
Most often cited obstacles to attainment of FSS goals			
Health or disability	10.5	12.7	10.9
Transportation problems	9.9	10.2	10.0
Needed services unavailable	4.6	25.0	8.9***
Childcare problems	8.7	3.0	7.6***
Communications	5.4	10.7	6.5***
Satisfaction with FSS program			***
Satisfied	76.8	51.3	71.5
Neither satisfied nor dissatisfied	11.2	17.6	12.5
Dissatisfied	12.1	31.2	16.0
Sample size	781	207	988

FSS = Family Self-Sufficiency.

NOTES: The FSS group survey respondent sample includes all Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, were age 18 to 61 at their time of random assignment, and responded to the FSS 36-Month Survey. A chi-square test was applied to differences between current enrollees and FSS group members who reported that they had left the program. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Nevertheless, current enrollees communicated a more mixed view on some aspects of their involvement with the FSS program. Nearly all current enrollees related that they had communicated with their FSS case manager in the past year, but only a little more than one-half of these respondents judged that they had had the minimum required number of contacts. Similarly, only about one-half of current enrollees assessed their referrals to FSS services as being always or often helpful to them, and a somewhat larger proportion related that they experienced at least one obstacle to the attainment of their goals, such as transportation or childcare problems.

As might be expected, former enrollees, on average, expressed a less positive view of their involvement with the FSS program. For example, only about one-half of former enrollees declared themselves as satisfied with the FSS program, about 25 percentage points below the average for current enrollees. In addition, by margins of about 10 percentage points, former enrollees were less likely to report having had the right number of contacts with FSS case managers or helpful referrals to FSS services. Finally, a much larger proportion of former enrollees reported that their FSS program had not offered them services that they needed. Former enrollees were also more likely to cite “communications problems” (a possible indicator of dissatisfaction with FSS case management).

Effects of Family Self-Sufficiency on Use of Services

This section compares the use of services by members of the FSS and control groups during the first 3 years of followup based on responses to the FSS 36-month survey. As chapter 1 discusses, control group members could not receive services from the FSS program and access to FSS escrow accounts for 3 years after random assignment, but they could seek alternative services in their community. Their reported levels of service use represent what would be expected to occur in the absence of an FSS program among voucher holders who were interested in FSS. The average differences between the two research groups in total services received or in receipt of specific types of services represent the effects, or impacts, of the FSS program on service receipt.⁷³

Survey respondents in both research groups were asked whether they had received any of 14 types of services and financial supports in the past 12 months. Using ordinary least squares regression to estimate differences between research groups in service receipt, the analysis controls for possible differences in respondent characteristics measured around the time of random assignment. Exhibit 3.11 displays the results of these comparisons.⁷⁴ These findings provide important context for interpreting the estimates of the FSS program's effects on employment, earnings, and other self-sufficiency outcomes that are presented in the chapters that follow.⁷⁵

As exhibit 3.11 shows, respondents in both research groups reported relatively high levels of participation in employment-related or self-sufficiency-related activities. According to survey responses, nearly 70 percent of control group members reported using at least one service in the previous 12 months, and more than three-fourths of the control group were employed for at least 1 month. When participating in activities, control group respondents most often sought out assistance in enrolling in or paying for healthcare coverage, attended education or training programs, or participated in job search activities. However, compared with the FSS group relatively few control group members reported receiving assistance in managing their family finances or in preparing to purchase a home.

The FSS program led to a moderate overall increase of 10 percentage points (with rounding) above the control group level in participating in any employment-related or self-sufficiency-related activities.⁷⁶ The FSS program realized moderate-level increases above control group levels in the domains of job search activities, homeownership preparation, post-employment services, and education and training but had a much larger effect (of more than 20 percentage points) on the use of financial counseling services. FSS group respondents were also more likely than their counterparts in the control group to combine employment and service use. Higher levels of participation in education and training activities do not, however, appear to increase the attainment of academic credentials (such as conferral of a degree or a diploma) within the 36-month followup period. There are no differences across study groups in these outcomes. There is a small and statistically significant impact, however, on members earning occupational credentials or licenses.

⁷³ Some FSS group members may also report their use of services that they found on their own initiative.

⁷⁴ For this analysis, statistically significant differences of less than 5 percentage points are small, from 5 to 14.99 percentage points are moderate, and of 15 percentage points or higher are large.

⁷⁵ When conducting a randomized controlled trial of employment-related or other types of services, it is generally assumed that the program will lead to at least a moderate increase in service receipt above the level for the control group. If service levels are similar between the two research groups, the evaluation may not provide a fair test of the services in question.

⁷⁶ This pattern was also observed at 18 months of followup (see Verma et al., 2019).

Exhibit 3.11. Impacts on Use of Services and Employment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
In the past 12 months				
Used any services (%)	79.5	69.0	10.5***	0.000
Job search	38.8	24.4	14.4***	0.000
Post-employment services	22.4	15.7	6.6***	0.000
Financial counseling	40.6	17.9	22.8***	0.000
Education or training	30.6	24.9	5.7***	0.005
Homeownership preparation	17.5	6.2	11.3***	0.000
Health coverage or health assistance	25.9	27.7	-1.8	0.383
Social services	19.3	19.1	0.3	0.892
Supportive services	20.2	17.1	3.1*	0.077
Ever employed (%)	78.0	76.4	1.6	0.342
Average number of domains of service use or employment	3.1	2.4	0.7***	0.000
3 or more domains (%)	55.6	39.3	16.3***	0.000
Earned academic credential	9.1	7.3	1.8	0.140
High school diploma or equivalency certificate	2.4	1.7	0.7	0.286
Post-secondary degree	6.7	5.6	1.2	0.285
Earned occupational credential or license	15.1	12.5	2.6*	0.096
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

The evaluation also examined FSS program impacts on service use according to sample members’ baseline employment and educational attainment. These findings are shown in appendix exhibits B.4 through B.6. Among these subgroups, large majorities of respondents in both research groups reported using at least one service during the 12 months before their 36-month survey interview. The FSS program generally increased service use above the levels for the control group, but for only one subgroup—respondents with a high school diploma or equivalency certificate—did the FSS program lead to large impacts (of 15 percentage points or more) in the use of any services. Among all subgroups, the FSS program increased the use of assistance with job search or post-employment services, financial counseling, and homeownership preparation services by

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moderate to large margins above the levels reported by the control group. FSS led to little or no effect on attendance in education and training courses, nor on receipt of supportive, social, or health services.

Educational attainment subgroups showed greater variation in the incidence and magnitude of impacts on the use of specific types of services, compared with subgroups based on self-reported employment at baseline. For example, among survey respondents with a 2-year college degree or higher, the FSS program led to especially large increases (of 31 percentage points and 17 percentage points, respectively) above control group levels in the use of financial counseling and homeownership preparation services. These effects were nearly three times larger than the increases above the control group for the FSS group among respondents with no degree or educational credential at baseline. In contrast, FSS group members with a 2-year college degree or higher were the only subgroup among the four educational attainment subgroups with a lower incidence of receipt of supportive services compared with control group.⁷⁷

As appendix exhibits B.5 and B.7 show, around 10 to 20 percent of survey respondents in the FSS group reported having earned an academic degree or occupational credential after random assignment. The FSS program led to small or moderate-level increases above control group levels in the attainment of an academic degree or occupational credential among the more disadvantaged subgroups—respondents without employment and respondents without a high school degree or equivalent at baseline. Among other subgroups, similar proportions of respondents in each research group reported the attainment of an academic degree or occupational credential.

Effects of Program Implementation Features on Service Use

As noted above, the incidence of FSS service use was highest among FSS group members in housing agencies with the strongest emphasis on monitoring and engagement. Nonetheless, programs with unusually high rates of service use may not have the largest *increases* in service use compared with what would have happened in the absence of the program. For example, in a relatively service-rich locality, a similarly large proportion of control group members could participate in alternative services on their own initiative. To test for correlations between possible effects of housing authorities' emphasis on monitoring and engagement and levels of service use, housing authorities were grouped into three clusters, representing relatively low, medium, or high levels of emphasis on monitoring and engagement. Then, separate estimates of program effects on service use for each cluster were calculated.

As shown in appendix exhibit B.8, according to survey responses, each type of implementation practice led to at least a moderate increase in overall service use above the levels reported by control group respondents, although the FSS-control group difference of 5 percentage points for housing agencies with a high emphasis on monitoring and engagement is not statistically significant. The impact on the use of any services was about twice as large among the housing agencies with a low or moderate emphasis on monitoring and engagement. (These differences in impacts among the housing agency clusters are not statistically significant.) Variation in control group participation patterns account for most of this difference in impacts. Whereas about 80 percent of FSS group respondents in all three types of housing authorities reported participating in at least one activity during the 12 months before their 36-month survey interview, the incidence of service use for control group respondents ranged from 65 percent in housing agencies with the least emphasis on monitoring and engagement to 76 percent in housing authorities with the strongest emphasis. Only for homeownership

⁷⁷ Variation among educational attainment subgroups in the magnitude and direction of impacts on these three outcomes is statistically significant at the 10 percent level or less.

Chapter 3. Participant Engagement

preparation and, to a lesser extent, the provision of financial counseling is where we witness the greatest impact the among housing authorities with the strongest emphasis on monitoring and engagement.

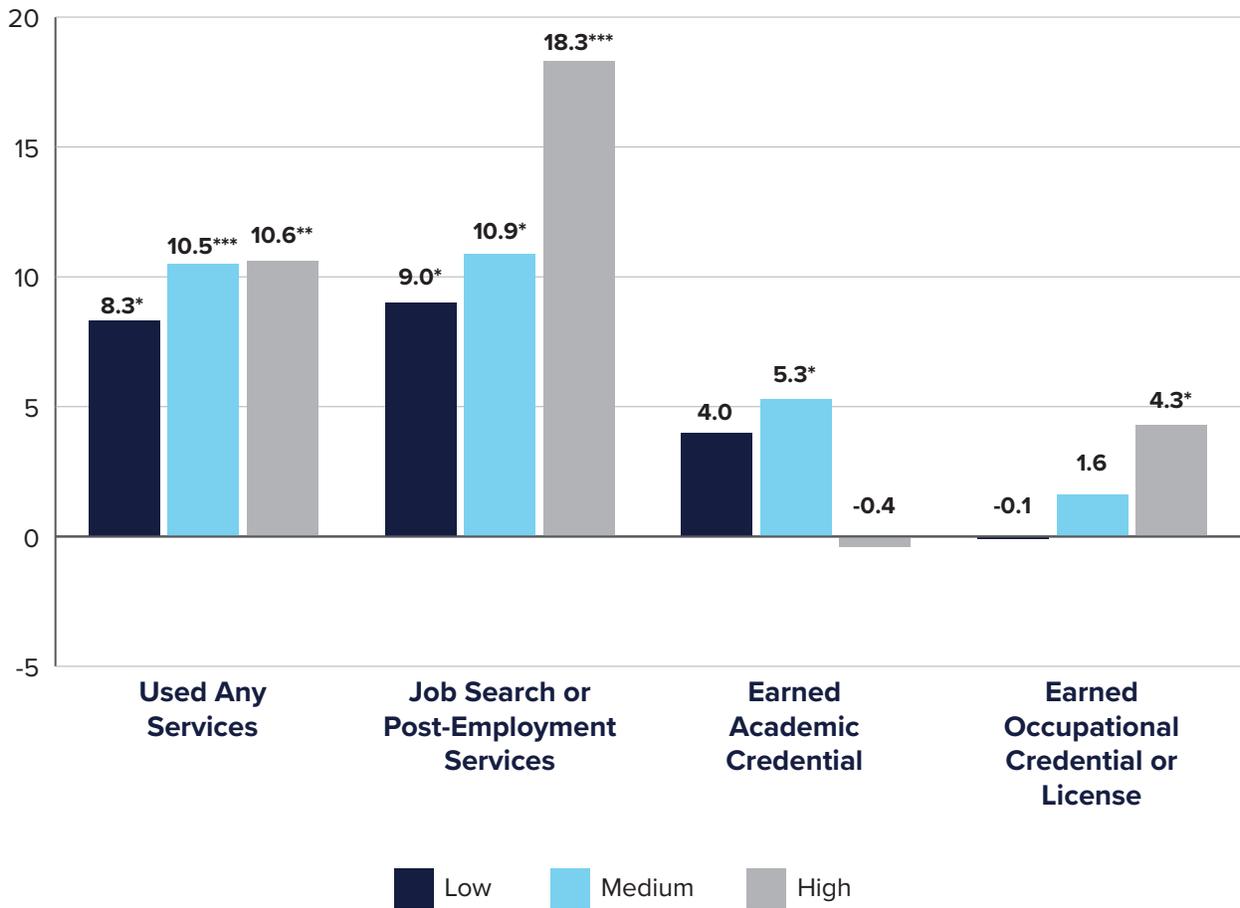
As appendix exhibit B.9 shows, none of the program approaches had much effect on the incidence of earning an academic degree or occupational credential. The one exception was the group of programs with a medium-level of emphasis on monitoring and engagement. Within this group, about 11 percent of respondents in the FSS group reported having earned an academic degree since random assignment, an increase of 5 percentage points above the control group level.

Other implementation strategies could potentially affect impacts on service use. One possibility is the type of services that public housing agencies emphasized. Exhibits 3.12 to 3.14 show how impacts on service use vary, depending on how strongly the PHA emphasized job search and post-employment services, education and training, or financial services. As these exhibits show, the FSS program consistently increased overall service use above control group levels (from 7 to 14 percentage points), irrespective of the PHA's emphasis on service type. As expected, the impact on the use of job search services was largest (18 percentage points) among PHAs with the strongest emphasis on job search and post-employment services. Similarly, PHAs with the strongest emphasis on education and training averaged the largest impact (12 percentage points) on attendance in education and training courses among all PHAs. In contrast, the FSS program led to consistently large increases of more than 20 percentage points above control group levels in the use of financial counseling and attendance at financial education workshops. Also shown in exhibits 3.12 to 3.14, FSS programs, including those with a strong emphasis on education and training, led to only small and scattered increases above the control group in earning an academic or occupational credential.

These results are relevant when considering the possible impacts of FSS on employment and earnings and other financial outcomes, presented in chapter 6. Given that FSS programs with different types of implementation practices all led to increases in service use above control group levels, it is reasonable to expect that most programs would eventually lead to positive effects. This report examines whether these types of effects are realized within a 3-year period.⁷⁸

⁷⁸ A final report will estimate the effects of the FSS program on a variety of outcomes calculated with administrative records over an additional 2 to 3 years of followup—beyond the time when most FSS group members would be expected to complete their FSS Contract of Participation. Impacts on other aspects of service use, such as the duration and quality of services and the attainment of academic or occupational credentials, could also contribute to program effects on employment, earnings, and other financial outcomes.

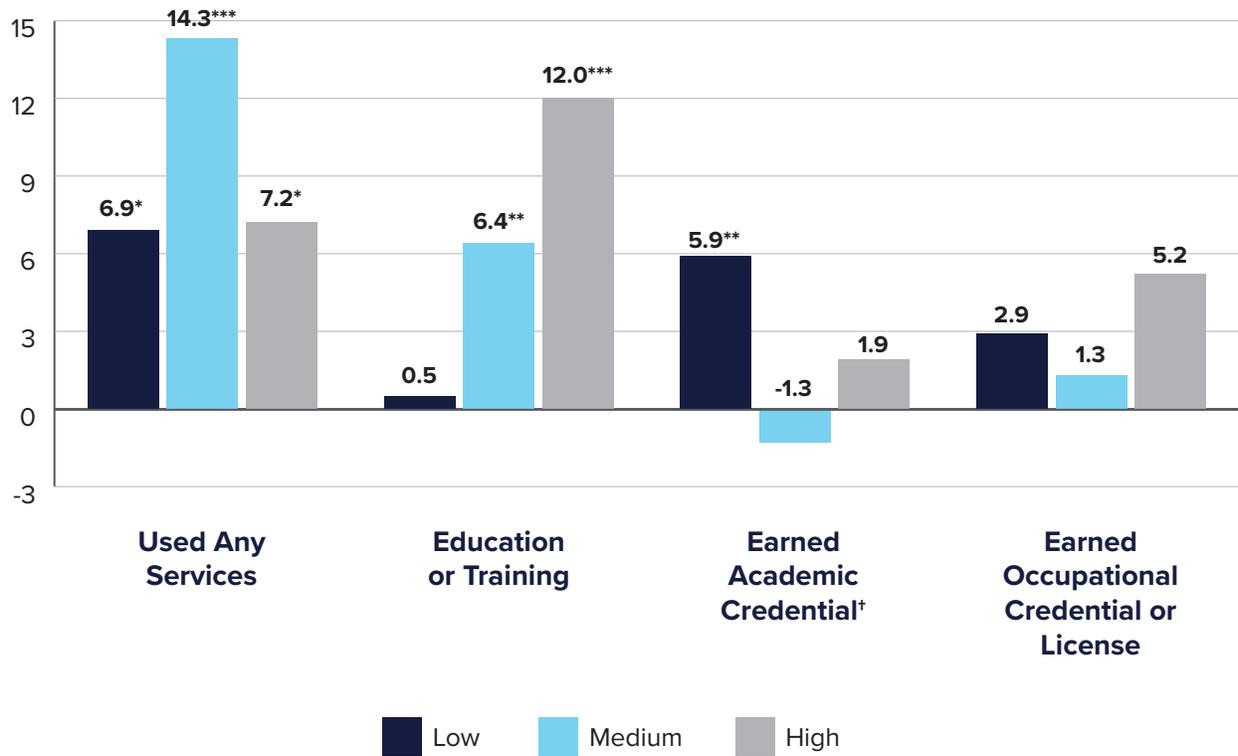
Exhibit 3.12. Impacts on Use of Services During Years 1 to 3, by Program Emphasis on Job Search and Post-Employment Services



NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

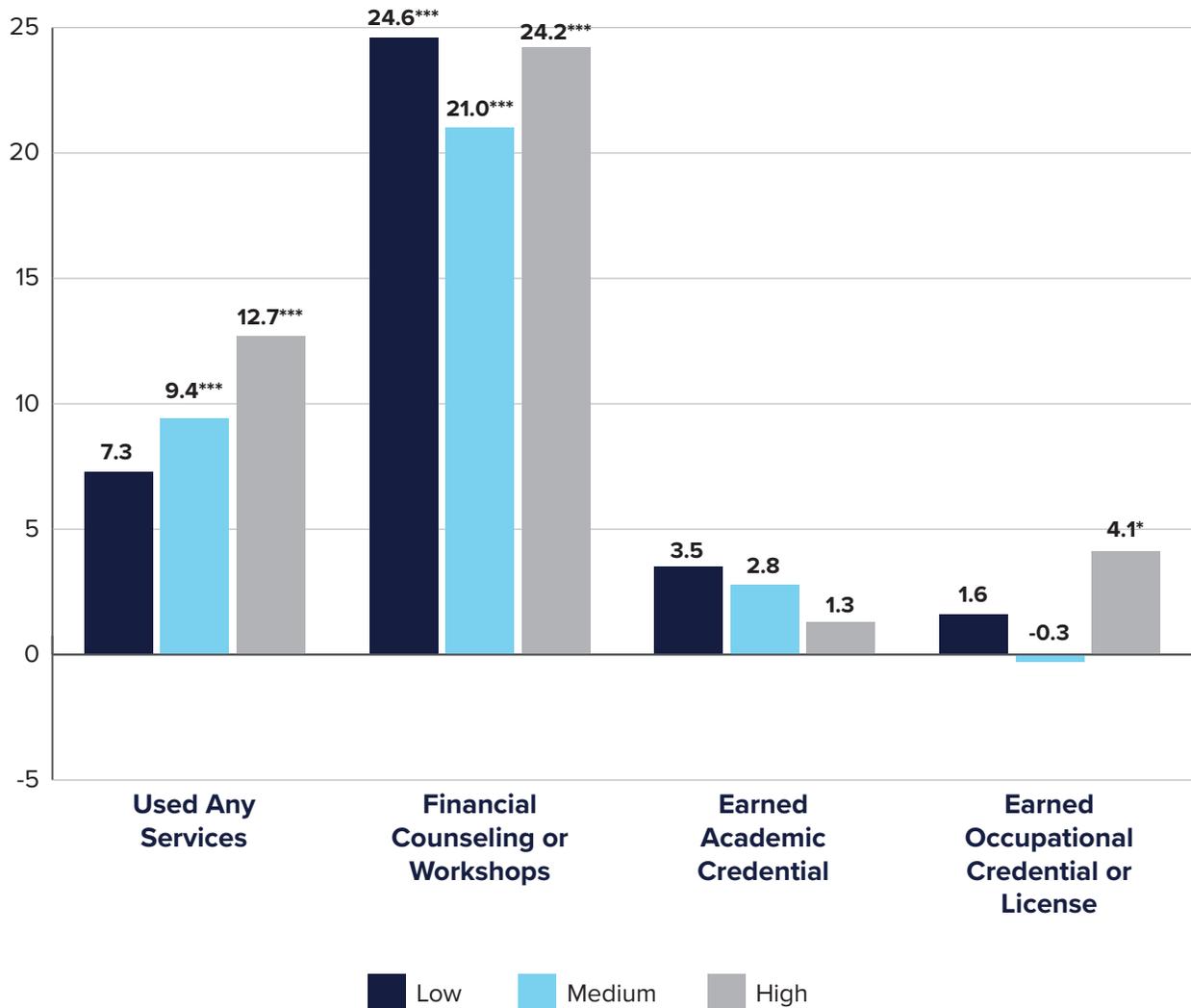
Exhibit 3.13. Impacts on Use of Services During Years 1 to 3, by Program Emphasis on Education and Training



NOTES: The Family Self-Sufficiency (FSS) 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Exhibit 3.14. Impacts on Use of Services During Years 1 to 3, by Program Emphasis on Financial Services



NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Conclusions

FSS is a relatively ambitious and long-term voluntary program that requires ongoing commitment from participants to work toward self-sufficiency goals. FSS group members' patterns of service use resemble patterns recorded in other voluntary employment-focused programs for recipients of housing assistance, consisting of a relatively high incidence of involvement, primarily in short-term job search or financial security activities in the first year or so after enrollment, followed by a drop-off in engagement.⁷⁹ As discussed above, certain types of case management practices can increase participants' engagement with the program. Nonetheless, sustaining participants' involvement in FSS during future years will likely be a challenge for administrators and case managers. According to the FSS program design, participants, as they continue their involvement with the program, are expected to experience tangible signs of progress, such as the attainment of educational or vocational credentials, increased credit scores and other improvements in household finances, increased earnings, and the accumulation of funds in an escrow account. In turn, it is hoped that reaching these milestones will motivate participants to maintain their engagement, eventually leading to their graduation and the disbursement of their escrow dollars. The following chapters begin to explore whether FSS group members are experiencing potential improvements in self-sufficiency in the form of accrual of escrow credits (chapter 4), increases in employment and earnings compared with the control group (chapter 5), or increases in indicators of self-sufficiency and financial well-being (chapter 6).

⁷⁹ See, for example, Nuñez, Verma, and Yang (2015: 34–42) and Greenberg et al. (2015: 25–28) for analyses of trends in service use by recipients of housing assistance.

Chapter 4. Escrow Accruals and Graduation

The escrow account, a core feature of the Family Self-Sufficiency (FSS) program, is intended to encourage families to increase their earnings, reduce their reliance on public cash assistance programs, and build savings. Under the Housing Choice Voucher (HCV) program, most families pay 30 percent of their monthly adjusted income, known as the total tenant payment (TTP), for their rent and utility expenses, and the public housing agencies (PHAs) subsidize the remaining portion owed. As a result, in most instances, when a household's income increases, its TTP also increases. In the FSS program, when the tenant pays the increased TTP, the housing agency credits the family's escrow account based on the increase in earned income (HUD, 2017a).⁸⁰ Upon graduation from FSS, the escrow balance in the account, with accrued interest, is disbursed to the FSS participant (the head of household), with no restrictions on the use of the money. Under special circumstances, FSS allows participants to access their escrow funds earlier than graduation—that is, receive an interim disbursement—for approved purposes related to their self-sufficiency goals, such as paying for emergency car repairs to prevent job loss.

The first report produced as part of this evaluation, which focused on the first 18 months of followup, showed that 38 percent of the FSS group had received an escrow credit during that followup period, and 35 percent of the FSS group maintained a positive balance in Month 18. Chapter 4 extends that analysis and examines escrow credits and balances during the first 3 years of followup. It first presents findings on escrow credits and accruals for the whole FSS group. Then, it explores how the incidence of escrow accrual and the accumulation of credits over time varied for selected subgroups. Next, the chapter considers whether the patterns of escrow accrual varied by housing agency and, if so, whether these differences appear to be related to variation in how particular housing authorities implement FSS.

The findings show the following:

- Over the 3-year followup period, nearly 52 percent of the FSS group had received at least one escrow credit.
- By the last month of Year 3, 40 percent of the FSS group members still maintained a positive balance. Those with a positive balance in Month 36 had an average of nearly \$3,700 in their account (about \$1,450 among all FSS group members), and about one-fourth of these participants had accrued more than \$5,000.
- On average, FSS group members who were underemployed at random assignment—that is, who were working part-time hours or receiving relatively low annual earnings—were more likely to accrue escrow credits compared with subgroups who were working full-time hours or receiving relatively high earnings. Their incidence of escrow accrual also exceeded the rate for FSS group members who were without employment at random assignment.
- A larger proportion of FSS group members with a positive balance at the end of Year 3 maintained contact with their FSS case manager and used an FSS service during Year 3, compared with FSS group members with no balance. Nonetheless, a relatively large proportion of FSS group members with a positive balance were working during Year 3 but did not participate in FSS services.

⁸⁰ The amount of escrow credited to the account depends on the household's income level; those with the lowest incomes are credited the amount equal to the rental increase, and those with higher incomes are credited with a percentage of the increase.

- Housing agencies differed substantially—from about 27 to 58 percent—in the proportion of FSS group members with a positive balance at the end of Year 3. Housing agencies with the highest rates of service use *did not* rank highest in escrow accrual, either because participants had not yet begun employment or for other reasons.

How Family Self-Sufficiency Escrow Works

Escrow calculations can be complicated (HUD, 2016a). When the head of household enrolls in the FSS program and completes a Contract of Participation (COP), the FSS case manager records on the COP the participant’s “baseline” earnings from the most recent HCV recertification meeting. The earnings noted on the COP serve as the standard for calculating escrow credits in future months. Throughout the FSS contract period, FSS participants continue to pay their TTP for rent and utilities according to the same rules as other HCV holders. The housing agency maintains a single, interest-bearing depository account and records the balance for each individual in a separate ledger. When the head of household reports an increase in earned income to the housing agency (and the increase is verified), the FSS participant’s out-of-pocket payment for rent and utilities increases, but under FSS program rules the housing agency issues an escrow credit for the amount of the increase attributable to an increase in earned income and deposits the money in the FSS participant’s escrow account.

The likelihood of accruing escrow can vary due to a number of factors. FSS participants’ employment status at program enrollment, level of educational attainment, and other characteristics and life experiences can often affect their chances of increasing earnings over time, which, in turn, affects whether—and how quickly—their escrow balance increases. In particular, the relationship between a participant’s relative advantages in the labor market and escrow accrual may be complex. At the extremes, FSS participants who are not working at program entry could potentially benefit most from the FSS escrow because all their future earnings would be included in the calculation of escrow credits. Unemployed adults, however, may also face the most severe barriers to finding and maintaining employment, which is required for graduation and earning the escrow. In contrast, FSS participants who enter the program while they are working full time or receiving relatively high earnings may have the best prospects of increasing their earnings by finding a better job, increasing their hours, or advancing with their current employer (Verma et al., 2017).⁸¹ They may also be most likely to maintain their employment after they start accruing credits. The increase in their earnings, however, may be relatively small compared with their current earnings and lead to only a small amount being credited to their escrow account each month.

Housing agency practices and messages can also affect the incidence of escrow credits and the rate of increase of escrow account balances. HUD FSS program rules require PHAs to issue an annual escrow account statement to program participants. In addition, at most sites, the possibility of accumulating escrow is used to motivate participants throughout the contract period to stay engaged in the program and meet their goals to graduate and thus receive the amount accrued in their escrow accounts. Staff members interviewed reported that they often use the escrow account as an incentive to participate because “money talks.” They noted that accruing escrow was usually an HCV holder’s main incentive for joining FSS. According to them, even FSS group members who initially showed little or no interest in building escrow became more motivated to accrue

⁸¹ In the Work Rewards FSS study, those working at study entry were more likely to meet the graduation requirements than those who were not working. About 31 percent of the FSS-only households in the subgroup who was not working at the time of random assignment graduated from FSS, whereas 55 percent from the working subgroup graduated. The working subgroup also collected more escrow savings on average than the nonworking subgroup. Those in the FSS-only group (who received only the FSS program and made up one of three different programs groups in the study) who were working at random assignment received an average disbursement of more than \$2,000; those who were not working at random assignment received an average disbursement of \$1,000.

escrow once they saw their balance increase and gained a more tangible understanding of how escrow accrual worked. According to staff members, interest in accruing escrow credits also gets stronger among participants with a positive balance as they get closer to graduation and the funds seem more attainable.

Interim Escrow Disbursements

As chapter 1 notes, most FSS programs in the national evaluation have a policy that permits participants to request one or more interim (pre-graduation) disbursements of a portion of the funds in their escrow account. Federal guidelines on issuing interim disbursements stress the importance of using these funds “for purposes consistent with [the participant’s] goals (for example, to pay for education or training or to purchase or repair a vehicle to get to work).” (HUD, 2017b: 93). Housing agencies have discretion on how to interpret these guidelines—for example, whether to approve the use of interim disbursements to reduce debt or prevent eviction. Irrespective of policy, the data examined in chapter 4 show that in practice, few interim disbursements were granted. Per case managers, and consistent with the policy, participants most often used their interim disbursement to pay for car repairs, uniforms, training fees, or books.

Early Graduations and Escrow Disbursements

FSS participants can spend 5 years or more in the program before they qualify for graduation but may graduate in less time under special circumstances. For example, per HUD guidelines, an employed head of household in the FSS program may graduate early if the household’s adjusted monthly income exceeds the maximum level for eligibility to receive a housing subsidy. FSS case managers may also allow a participant to graduate early if he or she was employed and had already met all or most of the other FSS goals, but could no longer participate in the program.⁸² By definition, early graduates have less time to accrue escrow deposits than graduates who remain in FSS throughout their entire contract period, especially if they experience earnings increases.

Patterns of Escrow Accrual

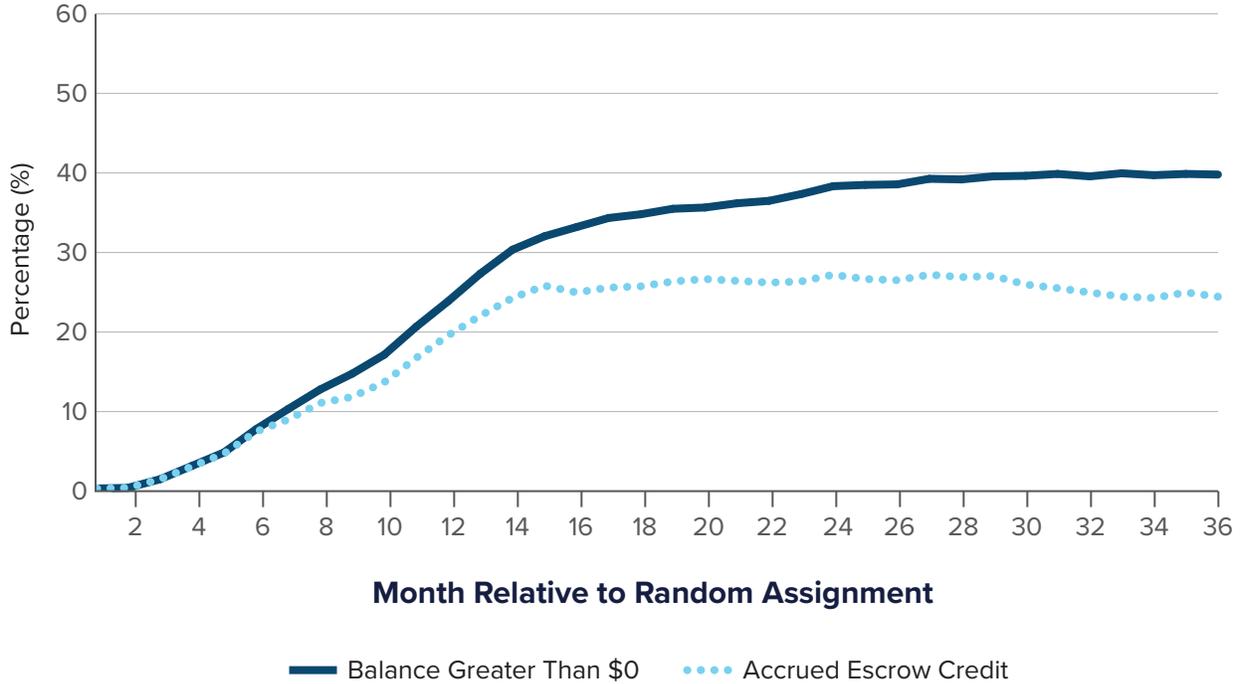
Following HUD guidance, housing agencies compare current earnings (projected into an annual total) with baseline earnings recorded in the COP to determine the amount of escrow to credit to a participant’s account (HUD, 2017b: 92–93).⁸³ For the study sample, exhibit 4.1 shows the pattern during the 36-month followup period for this report. The solid line displays the percentage of the FSS group members with a positive escrow balance in each month of followup, and the dashed line shows the percentage of the FSS group with an escrow credit deposited to their escrow account in each month of followup. FSS group members began opening accounts and accruing escrow credits at a rapid pace during the last half of Year 1 and the first half of Year 2. At the end of Year 1, nearly one-fourth of FSS group members had an escrow account with a positive balance. One year later, the proportion had increased to 39 percent. During Year 2, around one-fourth of FSS group members accrued an escrow credit in any given month, the highest rate of escrow accrual recorded during the followup. This rate of escrow accrual resulted from additional FSS group members opening new accounts and because once FSS group members began accruing credits, they often continued to do so during several months. During Year 3, the proportion of FSS group members with a positive balance in their account remained steady at around 40 percent. Relatively few additional FSS group members (about 8 percent, as

⁸² As seen in one FSS group member’s case file, a situation that can sometimes lead to an early graduation occurs when an FSS participant who has accrued escrow moves to a new locality whose housing agency has no openings in their FSS program or does not operate an FSS program.

⁸³ In reality, and as HUD’s newly released FSS resource guide describes, the housing agencies are required to deposit all escrow funds for all FSS participants into a single, interest-bearing depository account and to account for these funds through a subsidiary ledger that records the balance of each FSS participant’s individual account value (within the single account).

exhibit 4.2 shows) opened an escrow account during Year 3, and a similar proportion of FSS group members who had accrued escrow credits either graduated early (and received their escrow dollars) or, more often, left the FSS program and forfeited their escrow credits.

Exhibit 4.1. Monthly Indicators of Positive Escrow Balance and Credit Accrual, Family Self-Sufficiency Impact Sample



NOTES: The FSS impact sample includes Housing Choice Voucher heads of household that were randomly assigned between October 18, 2013, and December 22, 2014, and were 18 to 61 at the time of random assignment.

SOURCE: MDRC calculations from housing authority administrative data.

Exhibit 4.2 provides some context for the patterns displayed in exhibit 4.1. The top panel reports the percentage of FSS group members with household earnings recorded at baseline. About 43 percent of FSS group members reported no household earnings at program entry. Nearly 13 percent of the FSS group reported earnings of up to \$10,000. This group included the largest proportion of part-time employees (64 percent), according to FSS group members’ responses to questions about their employment status, recorded in the Baseline Information Form (BIF) that they completed at the time of random assignment. About 16 percent of FSS group members received annual household earnings of between \$10,001 and \$20,000. This group includes a relatively even mix of part-time and full-time employees, according to responses to the BIF. The last group, composing about 22 percent of FSS group members, reported annual earnings in excess of \$20,000. Most members of this group (72 percent) were working full time at random assignment. As discussed above, FSS group members with no reported earnings at baseline could accumulate hundreds of dollars per month in escrow once they found employment. Those with some earnings recorded at baseline would need to increase their hours of work or find a higher paying job to accrue escrow savings.

Chapter 4. Escrow Accruals and Graduation

The rest of exhibit 4.2 displays several important indicators of escrow accrual. The first column (“FSS Group”) shows results for all members of the impact sample, including FSS group members with no escrow accrual in Years 1 to 3; the second column displays findings for FSS group members who had at least one escrow credit; and the third column displays findings for FSS group members with a positive balance in their escrow account during Month 36, the final month of followup covered in this report. About 52 percent of all FSS group members (the impact sample) accrued at least one credit.⁸⁴ Most FSS group members with an escrow balance in the 36-month followup period started accruing escrow after Year 1, usually during Year 2.

The typical FSS group member with at least one escrow credit continued accruing credits during 12 to 13 additional months. During the first 3 years of followup, only about 4 percent of FSS group members in the impact sample graduated or received an interim escrow disbursement. Exits from the FSS program (unrelated to graduations) accounted for a fairly large drop-off in escrow accumulation, as about one in five FSS group members who had accrued credits to their escrow account no longer maintained a positive balance in Month 36.⁸⁵ Balances for many escrow account holders who remained in the FSS program, however, increased steadily month by month. As of Month 36, FSS group members with a positive balance had an average of nearly \$3,700 in their account (nearly \$1,500 among all FSS group members), and over one-fourth of these participants had accrued more than \$5,000.⁸⁶

⁸⁴ For this analysis, the FSS impact sample includes HCV heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, and were age 18 to 61 at the time of random assignment. This amount increases to about 55 percent of FSS group members receiving an escrow credit when only those who enrolled in the program are included in the calculation (not shown in the exhibit).

⁸⁵ The middle column of exhibit 4.2 shows that 77 percent of FSS group members who accrued at least \$1 in escrow credits during Years 1 to 3 maintained a positive balance in Month 36. By inference, about 23 percent no longer had escrow credits at that time, including about 5 percent who graduated early from FSS.

⁸⁶ Similar to savings and money market accounts, escrow accounts earned negligible amounts of interest in the short term. With few exceptions, FSS group members with a positive balance accumulated less than \$30 of interest through Month 36.

Exhibit 4.2. Accrual and Disbursement of Family Self-Sufficiency Escrow Credits in Years 1 to 3, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	1 or More Months of Escrow Accrual	Current Balance Greater Than \$0
Years 1–3			
Annual household earnings recorded at FSS enrollment (%)			
Never enrolled	6.2	n/a	n/a
\$0	43.0	42.6	43.5
\$1–\$10,000	12.8	16.2	15.9
\$10,001–\$20,000	16.2	22.0	23.1
More than \$20,000	21.8	19.2	17.5
At least one month of credit accrual (%)	51.7	100.0	100.0
Year of initial credit accrual (%)			
No credit accrued	48.3	n/a	n/a
Year 1	24.5	47.4	44.4
Year 2	19.1	37.1	37.2
Year 3	8.0	15.5	18.5
Average months of credit accrual	7.1	13.8	15.1
Months of credit accrual (%)			
0	48.3	n/a	n/a
1–6	13.2	25.6	19.8
7–12	12.2	23.6	23.4
13–24	18.8	36.3	38.7
25–36	7.5	14.5	18.1
Average credit per month of accrual (\$)	n/a	243	238
Month 36			
Had balance in Month 36 (%)	40.0	77.4	100.0
Average balance in Month 36 (\$)	1,462	2,830	3,656
Month 36 balance (%)			
\$0	60.0	22.6	0.0
\$1–\$500	7.5	14.5	18.7
\$501–\$2,000	11.1	21.5	27.8
\$2,001–\$5,000	10.8	20.9	27.0
\$5,001 or more	10.6	20.5	26.5

(continued)

Exhibit 4.2. Accrual and Disbursement of Family Self-Sufficiency Escrow Credits in Years 1 to 3, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	1 or More Months of Escrow Accrual	Current Balance Greater Than \$0
Received escrow disbursement (%)	3.5	6.8	1.6
Received interim disbursement	0.8	1.5	1.6
Received graduate disbursement	2.7	5.3	0.0
Sample size	1,285	664	514

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums.

SOURCE: MDRC calculations from housing authority administrative data.

Pathways to Accruing Escrow Credits

The FSS COP states that one of the FSS participant’s primary responsibilities is to “seek and maintain suitable employment after completion of the job training programs listed in the individual training and services plan” (HUD, 2017a). This requirement implies that FSS participants should sequence their self-sufficiency efforts and focus on completing their education and training or other services before attempting to increase their earnings and accrue escrow credits. In practice, there is a fair amount of flexibility in how the PHAs exercise this requirement. Analysis of FSS group members’ patterns of service use and program-recorded employment during Months 1 to 36, discussed in chapter 3, suggests that FSS group members engaged in service use, employment, and accrual of escrow credits in different ways. Nevertheless, from the standpoint of accruing escrow credits, maintaining employment during Year 3 mattered most of them. About two-thirds of FSS group members with program-recorded employment in Year 3 had a positive balance in their escrow account at the end of the year. This average was similar for groups of FSS group members who (1) combined employment and service use in Year 3, (2) were employed but no longer used FSS-related services in Year 3, or (3) were employed and never used FSS-related services at any time since program enrollment.⁸⁷

Variation in Escrow Accrual for Selected Subgroups

This section explores whether most FSS group members experienced a similar pattern of escrow accrual during Years 1 to 3, or whether the incidence of escrow accrual or the amount accrued varied by subgroup. Evidence from the recently completed Work Rewards evaluation in New York City, which followed study participants for 6 years, found that FSS participants who were working at the time of random assignment were more likely to regularly earn escrow credits and successfully graduate from the program. The households in the nonworking subgroup appeared to have accrued escrow credits at higher rates earlier in the program but were less likely to graduate from FSS than those in the working subgroup (Verma et al., 2017). The national FSS evaluation also examines escrow accruals for the same subgroups.

Exhibit 4.3 displays important indicators of escrow accrual for selected subgroups, using data on baseline earnings collected from COP forms, housing agency administrative records, and responses to the BIF. These results suggest that FSS group members who were working intermittently or were working part time at program enrollment were relatively successful in accumulating escrow credits through Month 36. As exhibit 4.3 shows, about 57 percent of FSS group members with recorded household earnings of between \$10,001 and \$20,000 per year (consistent with intermittent or part-time employment) had a positive balance in their escrow account in Month 36, as did 49 percent of FSS group members with household earnings of between \$1 and \$10,000, and 47 percent of FSS group members who reported at random assignment that they were working part time. These proportions exceed the averages both for FSS group members without employment and for FSS group members with the highest level of earnings or with full-time employment. These three underemployed subgroups also averaged the largest number of months of escrow accrual (10.2, 8.9, and 8.5 months, respectively) of any related subgroup. Finally, the subgroup with household earnings of between \$1 and \$10,000 had the largest average balance in their escrow account (\$2,066).

⁸⁷ By FSS rules, an FSS group member who began accruing escrow credits but then left or lost employment could still maintain a positive balance at the end of Year 3 and resume accruing credits upon finding a new job. In practice, this rarely happened. It may be hypothesized that the group who combined employment and FSS service use has a greater likelihood of graduating from the FSS program and receiving the money in their FSS account, because these FSS group members appear to be more engaged and have probably fulfilled more program goals than the group with only program-recorded employment.

Exhibit 4.3. Indicators of Family Self-Sufficiency Escrow Account Accrual in Months 1 to 36 for Selected Subgroups

Subgroup and Outcome	Sample Size	Number of Months with Escrow Credits	Escrow Balance Greater Than \$0 (%)	Month 36	
				Average Escrow Balance (\$)	Escrow Balance of More Than \$2,000 (%)
Annual Household Earnings at FSS Enrollment					
No earnings	552	6.9	40.2	1,808	25.2
\$1–\$10,000	165	8.9	49.1	2,066	26.1
\$10,001–\$20,000	208	10.2	56.7	1,669	27.4
\$20,001 or more	280	6.2	31.8	622	11.8
Employment Status at Random Assignment					
Not employed	568	5.9	34.9	1,486	21.3
Employed 1–34 hours per week	336	8.5	46.7	1,601	22.9
Employed 35 hours per week or more	372	7.8	41.4	1,298	19.9
Highest Level of Educational Attainment at Random Assignment					
No degree or credential	259	6.7	40.5	1,399	22.4
High school diploma or equivalency certificate	320	7.3	38.1	1,507	20.0
Some college	470	6.6	39.8	1,271	20.0
2-year college degree or higher	236	8.6	42.4	1,852	25.0
PHA Emphasis on Monitoring and Engagement					
Low	472	7.8	46.8	1,645	24.6
Medium	551	7.4	39.9	1,379	19.8
High	262	5.5	27.9	1,307	19.1

FSS = Family Self-Sufficiency; PHA = public housing agency.

NOTES: The FSS impact sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, and were age 18 to 61 at the time of random assignment. PHA emphasis on monitoring and engagement is defined by intensity of contact and case management practices, as divided into three levels.

SOURCES: MDRC calculations from baseline data, Contract of Participation forms, and housing authority administrative data.

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In contrast, smaller proportions of FSS group members who worked full-time hours at program entry or who lived in households with relatively high earnings had a positive balance in Month 36. Moreover, members of these subgroups who accrued credits tended to add relatively small amounts to their balance month by month. For example, only 32 percent of the subgroup with estimated annual household earnings that exceeded \$20,000 had a positive balance in their escrow account in Month 36. Moreover, in Month 36, members of this subgroup averaged only \$622 in escrow credits, less than one-half of the average for all other subgroups with less than or equal to \$20,000 per year in household earnings.

The findings also highlight challenges in accruing escrow experienced by members of subgroups with greater barriers to employment. For example, FSS group members who reported on the BIF that they were not working at random assignment recorded a relatively low incidence (about 35 percent) of having a positive balance in their escrow account. Yet, members of this subgroup who subsequently found employment or increased their earnings often realized relatively large increases in their escrow account during each month in which they accrued credits. For example, among FSS group members with a positive escrow balance in Month 36, the subgroup with no self-reported employment at random assignment had the highest average escrow balance (\$4,262) among the three employment-status subgroups. This pattern of escrow accumulation was similar for subgroups based on the amount of household earnings recorded on FSS group members' COP forms.⁸⁸

One exception to the finding that FSS group members with greater advantages in the labor market tended to accrue fewer escrow credits concerns the subgroups defined by the highest educational attainment. As exhibit 4.3 shows, in Month 36, FSS group members in all four educational-attainment subgroups had a similar likelihood (about 40 percent) of maintaining a positive balance in their escrow account, but FSS group members with at least a 2-year college degree had a higher average balance (\$1,852) compared with FSS group members with less educational attainment.

Variation in Escrow Accrual by Housing Agency

Exhibits 4.3 (bottom panel) and 4.4 summarize the variation in measures of escrow accrual among the 18 housing agencies.⁸⁹ The differences among housing authorities were substantial. For example, for the three housing authorities with the highest incidence of escrow accrual, an average of 58 percent of FSS group members had a positive balance in their escrow account in Month 36, whereas the three housing authorities with the lowest incidence averaged only 27 percent (see exhibit 4.4). Similarly, the typical FSS group member in the three housing authorities ranked first to third had a balance of \$2,708 in escrow credits in Month 36, more than four times the average for housing authorities ranked 16th through 18th on this measure (\$635). A similar difference prevails for the highest and lowest ranking housing authorities for the indicator of having an escrow balance of more than \$2,000.⁹⁰

⁸⁸ The calculation for the not-employed subgroup is $\$1,486 / .349 = \$4,262$. The comparable average for FSS group members with no recorded household earnings on their COP form was \$4,496.

⁸⁹ For this analysis, escrow accrual results are presented for the FSS service-use sample ($n = 1,004$). Housing authority averages for this sample closely resemble results for FSS group members in the larger impact sample ($n = 1,285$).

⁹⁰ See chapter 7, pages 125–127 in this report for additional analysis of variation in rates of escrow accrual among housing agencies.

Exhibit 4.4. Indicators of Escrow Credits Accrual in Months 1 to 36 by Housing Authority, Family Self-Sufficiency Service-Use Sample

Outcome	Escrow Balance Greater Than \$0 (%)	Average Escrow Balance (\$)	Escrow Balance Over \$2,000 (%)
Average value for the 3 highest-ranking housing authorities	58.3	2,708	37.7
Median value for all housing authorities	40.0	1,443	22.0
Average value for the 3 lowest-ranking housing authorities	27.0	635	9.6
Correlation Coefficients (housing authority averages)			
Average FSS caseload size ^a	-0.17	0.00	-0.11
Number of expected contacts	-0.19	-0.01	-0.08
Proportion of FSS group with a Year 1 goal	-0.60	-0.32	-0.33
Proportion of FSS group with a job search or post-employment goal	-0.03	0.00	0.11
Proportion of FSS group with an education or training goal	0.40	0.56	0.52
Proportion of FSS group with a financial security goal	0.38	0.47	0.35
Emphasis on monitoring and engagement (composite score) ^b	-0.38	-0.13	-0.21
Number of housing authorities (total = 18)			

FSS = Family Self-Sufficiency.

^aAverage caseload sizes were multiplied by -1 to test whether small caseload sizes are positively correlated with greater incidence of escrow accrual and higher positive balances.

^bThe FSS monitoring and engagement composite score incorporates three components: average caseload size, expected number of contacts per year, and the proportion of FSS group members with a Year 1 goal. A Z-score for each component was calculated using the site value and the mean of all 18 sites. The Z-scores were summed to create the composite value.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, and were age 18 to 61 at the time of random assignment.

SOURCE: MDRC calculations from housing authority administrative data and information provided by FSS administrators and case managers.

Measures displayed in the bottom panel of exhibit 4.4 present results of simple tests of association (correlation coefficients) among the indicators of housing agency implementation features that are presented in chapter 3 and housing agency averages for escrow credit accrual. As is true for the analysis in chapter 3, correlation coefficients with values close to +1.000 suggest a strong positive association between the program implementation feature and the accumulation of escrow credits. For example, the coefficient at the bottom of the first column “Escrow Balance Greater Than \$0,” shows the result of testing whether FSS group members in housing authorities that strongly emphasized monitoring and engagement also tended to have high rates of maintaining a balance of at least \$1 in their escrow account during Month 36 and vice versa. Alternatively, values close to -1.000 suggest that housing agency program implementation features that were intended to increase service use were associated with low rates of escrow credit accrual. Finally, coefficients of between -0.399 and +0.399 show little or no association between the implementation feature and escrow accrual

outcome. As exhibit 4.4 shows, the correlations do not support the hypothesis that housing authorities that strongly emphasize monitoring and engagement are likely to have a relatively high incidence of escrow accrual or relatively high average balances after 3 years. In fact, the few measures with a moderately strong association with escrow outcomes show a negative correlation—probably (as discussed in chapter 3) because of the relatively high incidence of participants exiting from FSS in housing authorities with a stronger emphasis on monitoring and engagement. The bottom panel of exhibit 4.3 shows similar results. For all measures of escrow accrual, the housing agencies with the least emphasis on monitoring and engagement had the highest levels, on average, and the housing agencies with the strongest emphasis on monitoring and engagement had the lowest.

Who Appears to Be Benefiting Most From Enrollment in Family Self-Sufficiency?

This section extends the analysis of subgroup variation in escrow accrual and explores the characteristics and experiences of participants who appear most likely to be benefiting from their access to FSS services and the escrow incentive.⁹¹ For this analysis, FSS group members are divided into five groups, based on their enrollment status within the HCV and FSS programs in Month 36 and the balance in their escrow accounts, if any, at that time. FSS group members who maintained a balance of more than \$2,000 in their escrow account in Month 36 are considered to be benefiting the most from their engagement in the program. Other groups who could also be benefiting include FSS group members who maintained a positive balance up to \$2,000 in Month 36 and FSS group members who left the HCV program before Month 36.⁹² The remaining two groups—FSS group members who left the FSS program but continued to receive HCV subsidies and FSS group members who remained enrolled in FSS but have a \$0 balance in their escrow account—are considered to be the least likely to have benefited from their enrollment in the program through the end of Year 3.⁹³

Exhibit 4.5 displays selected baseline characteristics of members of the five groups. As exhibit 4.5 shows, the two groups of FSS group members with a positive balance in their escrow account in Month 36 share some characteristics (associated with greater employability) that differ from those of FSS leavers who remained enrolled in the HCV program and FSS enrollees with no escrow balance. On average, FSS group members with an escrow balance are about 2 to 3 years younger, have slightly larger household sizes, are more likely to have children, and are more likely to have infants or preschool-age children than FSS group members in the two “less likely to benefit” outcome groups. FSS group members with a positive balance in Month 36 were also more likely to have been employed at random assignment. Overall, they were less likely to report experiencing a barrier to employment at random assignment, although the pattern of responses varies by type of barrier. More specifically, FSS group members with a positive balance reported a higher incidence of problems with childcare, but a much lower incidence of problems with physical or mental health. FSS group members with a positive balance were also more likely to report receipt of Supplemental Nutrition Assistance Program benefits (food stamps) than FSS group members in the other outcome groups.

⁹¹ A later report will include findings of a more comprehensive analysis that will include additional followup on earning and disbursement of escrow credits and use formal predictive analytics methodology.

⁹² At least some HCV households leave assistance because their household income increases above the maximum level for receipt of a housing subsidy. This group also includes most families that graduate from the FSS program before 6 years. See Smith et al. (2015: 21). Using survey and administrative data, the authors compared the characteristics and experiences of participants in the Moving to Opportunity program evaluation who left housing assistance with those of participants who continued to receive assistance. The authors found that about 35 percent of study participants left housing assistance during the followup period. Among “leavers,” about 52 percent left for positive reasons, such as increased earnings or homeownership, whereas 48 percent left for negative reasons, such as eviction or violation of program rules. Leavers for positive reasons reported greater financial security and better housing conditions than respondents who remained on assistance, but those who left for negative reasons fared about the same as those still on assistance.

⁹³ It is acknowledged that some FSS group members in these outcome groups could also have benefited from their receipt of FSS-related services—for example, by attaining an academic degree or occupational credential or by improving their credit score or ability to budget or save.

Exhibit 4.5. Baseline Characteristics of the Family Self-Sufficiency Group, by Housing Choice Voucher and Family Self-Sufficiency Program and Escrow Accrual Statuses

Characteristic	Enrolled in Housing Choice Voucher Program					Total
	Not Enrolled in HCV Program	Not Enrolled in FSS	Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
Household Characteristics						
Average number of household members ^a	3.2	3.3	2.9	3.5	3.5	3.2***
Households with more than 1 adult (%)	37.4	37.8	30.6	31.9	39.9	35.3
Average number of children in household	1.7	1.8	1.5	2.1	1.9	1.8***
Number of children (%)						***
No children	22.2	24.7	34.6	10.9	18.5	22.8
1 child	27.6	22.6	21.6	27.2	23.3	24.2
2 children	24.4	23.8	18.7	29.3	25.8	24.1
3 children or more	25.8	28.9	25.1	32.6	32.4	28.9
For households with children, age of youngest child (%)						**
0–5 years	35.3	39.5	37.1	40.3	48.4	40.5
6–12 years	42.4	38.4	49.8	43.1	36.8	42.1
13–17 years	22.4	22.0	13.2	16.6	14.8	17.4
Primary language spoken at home is English (%)	92.2	88.9	95.8	94.1	87.9	91.9***
Receives TANF (%)	10.5	15.4	17.6	18.2	18.8	16.3
Receives food stamps/SNAP (%)	62.4	68.5	69.2	78.7	76.4	71.2***
Length of time receiving Section 8 Housing Choice Voucher (%)						
Less than 4 years	35.6	29.1	33.3	34.7	28.7	32.2
4–7 years	22.8	23.5	20.5	20.8	22.4	21.9
7 years or more	41.6	47.4	46.2	44.5	48.9	45.9
Total annual household income (%)						**
Less than \$10,000	37.0	44.0	45.3	35.2	43.1	41.3
\$10,000–\$19,999	30.1	31.0	27.7	40.3	34.5	32.5
\$20,000 or more	32.9	25.0	27.0	24.6	22.5	26.2

(continued)

Exhibit 4.5. Baseline Characteristics of the Family Self-Sufficiency Group, by Housing Choice Voucher and Family Self-Sufficiency Program and Escrow Accrual Statuses continued

Characteristic	Enrolled in Housing Choice Voucher Program					Total
	Not Enrolled in HCV Program	Not Enrolled in FSS	Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
Payment for rent and utilities (%)						*
Less than \$400	34.2	44.0	44.1	40.0	46.9	42.2
\$400–\$599	20.5	22.2	20.1	22.1	22.3	21.4
\$600 or more	45.2	33.8	35.8	37.9	30.8	36.3
During the past 12 months, household experienced at least one financial hardship (%)	57.9	57.9	57.1	60.3	55.6	7.7
Not able to buy prescription drug	11.9	14.5	14.4	13.1	11.0	13.0
Not able to buy food	24.7	26.4	26.2	30.0	23.8	26.2
Not able to pay telephone bill	26.0	25.5	26.5	32.5	32.6	28.7
Not able to pay rent	17.4	18.3	18.2	19.8	16.1	17.9
Not able to pay utility bill	42.5	41.3	43.8	43.5	46.2	43.5
Sample Member Characteristics						
Female (%)	91.0	89.8	88.6	95.0	93.1	91.4*
Age (%)						***
19–34 years	38.5	31.1	33.0	38.9	37.8	35.7
35–44 years	38.0	35.7	29.2	44.8	37.5	36.6
45–61 years	23.5	33.2	37.8	16.3	24.7	27.7
Average age (years)	38.3	40.6	41.0	37.3	38.0	39.1***
Married, living with spouse or cohabitating (%)	8.6	12.8	6.3	9.6	12.4	9.8*
Race/Ethnicity (%)						
Black, non-Hispanic/Latino	75.6	72.3	75.9	74.1	63.6	72.2
Hispanic/Latino	14.0	13.2	12.7	16.3	21.5	15.6
Other	10.4	14.5	11.4	9.6	14.9	12.2

(continued)

Exhibit 4.5. Baseline Characteristics of the Family Self-Sufficiency Group, by Housing Choice Voucher and Family Self-Sufficiency Program and Escrow Accrual Statuses continued

Characteristic	Enrolled in Housing Choice Voucher Program					Total
	Not Enrolled in HCV Program	Not Enrolled in FSS	Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
Education (%)						
No high school diploma or GED	12.3	15.0	14.0	13.0	13.5	13.6
High school diploma or GED	12.8	17.2	14.0	13.0	13.5	14.1
Some college or received technical/trade license	56.2	51.5	54.0	56.9	51.5	53.9
2-year degree or higher	18.7	16.3	18.1	17.2	21.5	18.4
Has trade license or training certificate	51.1	43.4	49.5	44.8	46.2	47.1
Employment Status						
Currently employed (%)	60.0	51.9	46.2	67.5	55.7	55.6***
Current employment type (%)						***
Regular job	53.6	42.6	39.5	59.9	46.3	47.7
Self-employed	3.2	4.7	3.5	3.0	2.6	3.4
Temporary or seasonal job	3.2	4.7	3.2	4.6	6.6	4.5
Currently working 35 hours or more per week (%)	37.3	22.6	26.4	33.8	27.1	29.1***
Average hours worked per week	20.9	16.0	15.4	21.5	16.8	17.9***
Average weekly earnings (\$)	257	188	179	238	181	205***
Barriers to Employment (%)						
Has any problem that limits work	34.8	47.7	47.6	36.8	38.9	41.6***
Physical, emotional, or mental health	18.6	26.6	28.7	13.0	15.1	20.8***
Childcare access or cost	14.0	17.9	16.8	21.5	21.7	18.5
Other	11.4	18.2	16.6	11.8	12.4	14.2
Limited English-speaking ability	2.7	3.8	1.6	3.3	6.5	3.6**
No access to public transportation	20.0	13.8	14.4	18.2	16.8	16.5
No access to an automobile	19.1	21.5	20.1	14.7	16.8	18.5

(continued)

Exhibit 4.5. Baseline Characteristics of the Family Self-Sufficiency Group, by Housing Choice Voucher and Family Self-Sufficiency Program and Escrow Accrual Statuses continued

Characteristic	Enrolled in Housing Choice Voucher Program					Total
	Not Enrolled in HCV Program	Not Enrolled in FSS	Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
FSS Program (%)						
Heard of escrow before random assignment	45.5	45.5	44.6	39.7	44.2	43.9
Interest in FSS services related to						
Job-related services	64.1	71.9	66.3	70.7	78.5	70.4***
Social services	25.0	38.3	32.7	27.6	36.0	32.2***
Financial services	98.2	95.3	97.1	95.0	91.6	95.4***
Sample Size	221	235	315	239	275	1,285

FSS = Family Self-Sufficiency; GED = General Educational Development; HCV = Housing Choice Voucher; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families.

*Maximum response option for number of adults in a household is four.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than total for questions that allow more than one response.

SOURCES: MDRC calculations from Baseline Information Form data and housing agency administrative data.

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FSS group members with a balance of \$2,001 or more in Month 36 are further distinguished by having relatively low income at random assignment (they had the smallest proportion of FSS group members with a household income of \$20,000 or higher) and reporting the least out-of-pocket housing costs (they had the smallest proportion of FSS group members with housing-related expenses of \$600 or more per month). FSS group members with a balance of \$1 to \$2,000 in their escrow account reported the highest level of employment at random assignment, although about one-half of these FSS group members reported working part-time hours.

FSS group members who left HCV assistance after random assignment were similar in age to members with a positive escrow balance and in having a higher reported employment rate and lower incidence of reporting a barrier to employment compared with the two “less likely to benefit” groups.

As a group, FSS group members who left HCV assistance after random assignment appear to have entered the study in better financial condition than other FSS group members. HCV leavers are distinguished by having the highest incidence of full-time employment at random assignment among all outcome groups, the lowest incidence of receipt of SNAP benefits, the highest incidence of reporting \$20,000 or more in household income, and the highest incidence of paying \$600 or more per month for housing-related expenses.

Exhibit 4.6 looks at indicators of service use and contacts with FSS case managers for the same five groups. The exhibit shows a relatively clear relationship between the level of engagement with FSS and the amount of FSS group members’ escrow balance in Month 36. As would be expected, the two groups of FSS group members who exited from the program (HCV leavers and FSS-only leavers) had the lowest incidence of use of FSS-related services among the five outcome groups, especially during Year 3 of followup.⁹⁴ In contrast, FSS group members with a balance of more than \$2,000 in Month 36 had the largest proportion of FSS group members who used FSS-related services for 6 months or more during Years 1 to 3 and also the highest incidence of service use (54 percent) and contacts (80 percent, with rounding) with FSS case managers during Year 3. FSS group members who continued their enrollment in the program but had no balance in their escrow account at the end of followup had much lower levels of engagement in Year 3. A little more than one-half of the group had at least one contact with their FSS case manager, and a slightly smaller proportion (47 percent) used at least one FSS-related service. FSS group members with a balance of \$1 to \$2,000 in Month 36 recorded levels of service use and contacts in Year 3 that were between those for the groups with a zero balance or with a balance of \$2,001 or more.

⁹⁴ Nonetheless, most FSS group members in both groups (62 percent and 76 percent, respectively) participated in at least one FSS-related activity during Years 1 to 3.

Exhibit 4.6. Selected Indicators of Contacts and Service Use During Years 1 to 3, by Housing Choice Voucher and Family Self-Sufficiency Enrollment Status and Escrow Balance

Outcome	Left HCV Program	Not Enrolled in FSS	Enrolled in Housing Choice Voucher Program			Total
			Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
Years 1 to 3						
Services and Employment (%)						
Used FSS-related services	61.7	76.4	86.5	85.8	85.6	80.4***
Job search or post-employment services	20.9	37.0	44.4	42.5	37.9	37.4***
Financial counseling	27.8	38.6	58.4	48.3	46.0	45.2***
Education or training	13.0	29.1	28.1	45.8	41.4	32.1***
Homeownership preparation	10.4	11.8	19.1	15.8	19.0	15.8
Health coverage or health assistance	0.0	7.9	8.4	5.8	10.3	7.0**
Social services	27.0	30.7	39.9	27.5	44.8	35.3***
Supportive services	10.4	20.5	22.5	25.8	26.4	21.7**
Had program-recorded employment	60.0	65.4	64.0	93.3	92.0	75.4***
Used FSS-related services for 6 months or more	13.0	24.4	33.7	40.8	43.7	32.4***
Year 3						
Contacts With Case Managers						
Had 1 contact or more (%)	5.2	27.6	52.8	70.0	80.5	50.3***
Had contact during 3 months or more (%)	1.7	8.7	21.9	25.0	36.2	20.3***
Average number of months with contacts	0.1	0.6	1.5	2.0	2.5	1.5***
Service Use and Employment (%)						***
Service-use and program-recorded employment	3.5	11.0	29.2	40.8	47.7	28.3
Service use only	0.0	3.1	17.4	9.2	6.3	8.0
Program-recorded employment only	6.1	17.3	24.7	41.7	37.9	26.5
Neither service use nor program-recorded employment	90.4	68.5	28.7	8.3	8.0	37.3
Sample size (total = 714)	115	127	178	120	174	

(continued)

Exhibit 4.6. Selected Indicators of Contacts and Service Use During Years 1 to 3, by Housing Choice Voucher and Family Self-Sufficiency Enrollment Status and Escrow Balance continued

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of HCV heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums and differences. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using housing authority administrative data.

It is also noteworthy that for both groups with a positive escrow balance in Month 36, a relatively large proportion of FSS group members (around 40 percent for each group) had program-recorded employment but no use of FSS-related services during Year 3. Many of these FSS group members participated in FSS-related activities before Year 3 and were maintaining at least minimal contact with their FSS case manager during Year 3.

Exhibit 4.7 shows the average change in employment and earnings over 3 years for each of the five groups, using data reported to HUD's Inventory Management System/PIH (Office of Public and Indian Housing) Information Center (IMS/PIC) system. For these outcomes, FSS group members with a balance of \$2,001 or more clearly stand out. On average, these group members increased their reported estimated annual earnings by more than \$9,000, more than twice the increase of any other group. About two-thirds of the group members experienced an increase in earnings over 3 years, a rate that also exceeded the increase for all other groups. Only one other group, FSS group members with an escrow balance of between \$1 and \$2,000, had more than half of its members report an increase in earnings over time. An important reason for these positive results for the group with a balance that exceeded \$2,000 was the relatively large proportion of group members (34 percent) who found employment during the followup period. Members of the other two groups considered to be benefiting as well from their involvement in the FSS program had the highest incidence of employment around the time of random assignment and at the end of followup, whereas members of the two groups deemed least likely to be benefiting from FSS recorded the highest incidence of joblessness at both points in time.

For the most part, these patterns of outcomes are similar when earnings from other household members are included in the totals. The main exception concerns households that left the FSS program but continued to receive HCV assistance. FSS-group households in this group averaged an increase in earnings over time of about \$5,400, an amount that exceeded the average increase for FSS-group households with a balance of from \$1 to \$2,000.

Exhibit 4.7. Change in Reported Annual Head-of-Household Earnings and Total Household Earnings During Years 1 to 3, by Housing Choice Voucher and Family Self-Sufficiency Enrollment Status and Escrow Balance in Month 36

Outcome	Enrolled in Housing Choice Voucher Program					Total
	Left HCV Program	Not Enrolled in FSS	Enrolled in FSS with Balance of \$0	Enrolled in FSS with Balance of \$1–\$2,000	Enrolled in FSS with Balance of \$2,001 or More	
Head-of-Household Earnings						
Average earnings in Month 1 (\$)	11,941	8,226	8,779	10,417	7,628	9,288***
Average increase in estimated annual earnings (\$)	4,163	3,857	1,226	3,300	9,199	4,335***
Change in earnings (%)						***
Decrease	19.1	17.7	22.2	27.6	16.7	20.7
No change	36.7	36.7	46.8	20.7	17.1	31.9
Increase	44.2	45.6	31.0	51.7	66.2	47.5
Head of Household Employment (%)						

In Month 1 and in current or most recent month	50.2	33.2	30.6	47.8	38.3	39.4
In Month 1 only	8.4	10.2	10.8	15.1	11.2	11.1
In current or most recent month only	13.5	19.9	12.5	16.4	33.5	19.3
No employment at either time	27.9	36.7	46.1	20.7	17.1	30.2
Total Household Earnings						
Average earnings in Month 1 (\$)	13,216	10,360	10,143	11,744	9,917	10,970**
Average increase in estimated annual earnings (\$)	6,238	5,355	2,558	4,809	12,274	6,223***
Change in earnings (%)						***
Decrease	17.1	20.4	22.9	26.7	17.3	20.9
No change	32.9	27.9	41.1	12.9	11.7	25.6
Increase	50.0	51.8	36.0	60.3	71.1	53.4
Household Employment (%)						

In Month 1 and in current or most recent month	52.8	38.9	35.7	54.3	46.6	45.1
In Month 1 only	7.9	11.1	10.1	13.8	10.5	10.7
In current or most recent month only	15.7	22.1	13.8	19.0	31.2	20.4
No employment at either time	23.6	27.9	40.4	12.9	11.7	23.8
Sample size	221	235	315	239	275	1,285

(continued)

Exhibit 4.7. Change in Reported Annual Head-of-Household Earnings and Total Household Earnings During Years 1 to 3, by Housing Choice Voucher and Family Self-Sufficiency Enrollment Status and Escrow Balance in Month 36 continued

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Calculations of change in annual earnings use the most recent available estimate reported to HUD, which could occur prior to or after Month 36 of follow-up, depending on each study participant's date of random assignment, HCV program status, and, if applicable, date of exit from the HCV program. Rounding may cause slight discrepancies in calculating sums and differences. Sample sizes for specific outcomes may vary because of missing values. A chi-square test was performed on subgroup differences in frequency distributions and an F-test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using housing authority administrative data and HUD Inventory Management System/Office of Public and Indian Housing Information Center data.

Conclusions

As suggested by existing evidence and the year-by-year decline in the number of newly opened escrow accounts by FSS group members, it appears likely that few additional FSS group members will begin accruing escrow credits during the remaining 2 years of their FSS contract.⁹⁵ (One exception could be FSS group members who complete education and training activities and then find jobs or increase their hours of employment.) FSS group members who entered the study without employment include participants with serious barriers to employment or who need to care for other family members. In addition, under current economic conditions, FSS group members who were working full time at program enrollment may have difficulty finding better paying jobs and may have little chance of receiving a raise or promotion in the near term. Finally, FSS group members who worked at relatively well-paying jobs face limits in how much more they can earn before losing their eligibility to receive a housing subsidy and to continue in the FSS program. Still, it should be expected that perhaps one-fourth to one-third of FSS group members will graduate and receive a disbursement of at least \$5,000 and possibly much higher. Over the final 2 years of the FSS contract period, the prospect of imminent graduation and escrow disbursement may provide a powerful incentive to these FSS participants to maintain their employment and to stay sufficiently engaged in the FSS program to qualify for graduation at the end of Year 5. Their continued employment may result in gains in average employment and earnings for the entire FSS group, compared with the control group—results that may not be seen until after Year 3.

Possibly, many FSS group members will also not graduate from the program after 5 years or will graduate without accruing escrow. As discussed in a previous report on FSS, some case managers assert that FSS services can help participants find jobs and advance in their careers even when participants realize that receiving an escrow disbursement is unlikely. By facilitating participants' attainment of an educational or occupational credential, higher credit scores, or even greater self-confidence, the FSS program may lead to better employment and earning outcomes for nongraduates. (Chapters 5 and 7 consider the effects of the FSS program on employment and earnings during Years 1 to 3 of followup, for the full sample and for selected subgroups, respectively.) With nearly 40 percent of the FSS group already having left the program by the end of Year 3, however, the number of FSS group members who may derive future benefits from their access to services and case management is limited.

⁹⁵ See Verma et al. (2017) on new earners of escrow credits in later years (pages 40, 42-43) and figure 3.2 (p. 53).

Chapter 5. Impacts on Employment and Earnings

The Family Self-Sufficiency program is meant to encourage participants to find a steady job or, if they are already working, to increase their earnings. As described in previous chapters, staff members provide referrals to a range of supportive services designed to help participants move into work or pursue training, including adult basic education courses. FSS participants who go to work or increase their earnings pay more rent, but the housing agency credits the household's escrow account based on the increased rent attributable to in the earned income, which they can then get back after graduating from FSS. The escrow account serves as both an asset-building instrument and a work incentive. Still, the escrow account represents a potentially distant work incentive, in that participants do not generally have access to their escrow funds for 5 years, or until they graduate from the program. This chapter focuses on the program's effects on employment and earnings during the first 3 years (36 months) after program enrollment, recognizing that participants could still be pursuing a wide range of goals during this period. It builds on the 2-year results in the earlier report on this evaluation. The early data revealed high levels of employment for both study groups, but no notable differences in earnings or employment outcomes for the FSS and control groups. There was some evidence that participation in FSS may have led to a shift to full-time from part-time employment at the time of the 18-month survey. This longer term analysis uses data from administrative records and the 36-month survey, which provides information about job characteristics, to determine whether the FSS program group experienced a higher employment rate or earned more on average than members of the control group (chapter 7 examines variations in the effects by subgroup). Focusing on the full sample, chapter 5 considers whether, over a longer followup period, the FSS group experienced a higher employment rate or earned more on average than members of the control group.

In brief, for the full impact sample:

- Analysis of National Directory of New Hires (NDNH) quarterly wage data reveal high levels of employment for both study groups and no statistically significant impacts on employment and earnings during the 3-year followup period.
- FSS and control group respondents to the FSS 36-month survey reported similar incidences of employment during the followup period. Among survey respondents, however, FSS group members reported working an additional 2–3 weeks in a full-time job compared with the control group, during the 12 months before the survey.

Data Sources and Methods

Program impacts in the FSS study are estimated using administrative records and survey responses. Earnings and employment impact estimates use NDNH quarterly wage data and responses to the 36-month survey.⁹⁶ NDNH data provide quarterly earnings and are available for the impact sample for two quarters before and 13 quarters after the quarter of random assignment.⁹⁷ NDNH records provide data on employment and earnings in all work covered by unemployment insurance, including across state lines (for those who commute into another state for work or who moved to a different state after random assignment) and on federal employment not captured in state unemployment insurance records. The records do not cover earnings from self-employment, some agricultural work, and informal jobs. Other research suggests that administrative data may miss relatively more employment for low-income populations than for higher income groups, given the former group's greater prevalence of work in informal jobs (Abraham et al., 2009). NDNH records also do not provide information about the hours worked during a quarter or week or on the characteristics of jobs held, such as hourly wage rates, benefits, and schedule. For this reason, the evaluation draws on the 36-month survey to examine study participants' job characteristics. Responses to the 36-month survey may also pick up employment in jobs not covered by NDNH records.

Exhibit 5.1 includes an explanation of how to read the impact tables in this report. The study design uses random assignment to create the FSS and control groups. Therefore, effects or impacts of the FSS program can be calculated as the difference in average outcomes between the research groups. Differences that are statistically significant (indicated by asterisks in the exhibits) are considered to be true program effects and not the result of chance.⁹⁸ The effects of the program are presented for the FSS impact sample, which excludes voucher holders age 62 or older at the time of random assignment, and for the subgroups included in the analyses of service use in the previous chapters. The essential research question for subgroup analysis is whether the *differences in impacts across subgroups* are statistically significant. (Subgroup differences that are statistically significant are noted with daggers in the exhibits.)

⁹⁶ For a description of the variables included in the presented models and for analyses of the sensitivity of results to outliers and to different data-weighting approaches, see appendix C.

⁹⁷ Employment recorded during the quarter of random assignment may have occurred before the study participant's date of random assignment. Accordingly, the analysis excludes this quarter from the followup period.

⁹⁸ An exception to this statement concerns a situation in which only one comparison among a series of related comparisons shows a statistically significant difference between the research groups—for example, if FSS group members averaged higher earnings than control group members during only one quarter of followup. In this situation, less credence would be given to this single impact estimate, even if the difference were statistically significant.

Exhibit 5.1. How to Read the Impact Tables in This Report

In the context of this evaluation, an “impact” is a measure of how much the intervention—Family Self-Sufficiency (FSS)—changed outcomes for program participants. The group outcome for the intervention is compared with that of the control group. The top row of the excerpted table below, for example, shows that 26 percent of the FSS group was working part time at the time of the 18-month survey, compared with 29 percent of the control group.

Because participants were assigned randomly to either the program group or the control group, the effects of the program can be estimated by the difference in outcomes between the two groups. The “Difference” column in the table excerpt shows the differences between the two research groups’ outcomes—that is, the program’s estimated impacts on the outcomes. For example, the estimated program impact of the FSS program on the number of individuals working part-time study can be calculated by subtracting 29 percent from 26 percent, yielding a decrease, or estimated impact, of 3 percentage points.

The p-value shows the probability that this difference, or impact, arose by chance. In the table excerpt below, the difference between the program and control groups in current part-time employment has a 16.6 percent probability of arising as a result of chance rather than as a result of the FSS-only program. In contrast, the difference on the measure current full-time employment has a 4.5 percent probability of having arisen by chance. For this evaluation, only differences that have a 10 percent probability or less of arising by chance are considered “statistically significant” and therefore represent true program effects. The number of asterisks indicates whether the impact is statistically significant at the 1 percent (***), 5 percent (**), or 10 percent (*) level, meaning that there is only a 1,5, or 10 percent probability, respectively, that the impact arose by chance.

Impacts on Employment
Family Self-Sufficiency 18-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	P-Value
Currently employed (%)				
Works part-time hours	26.0	29.0	-3.0	0.166
Works full-time hours	41.5	37.1	4.3	0.045**

FSS = Family Self-Sufficiency.

Program Impacts on Employment and Earnings

Employment and Earnings Trends for Control Group Members

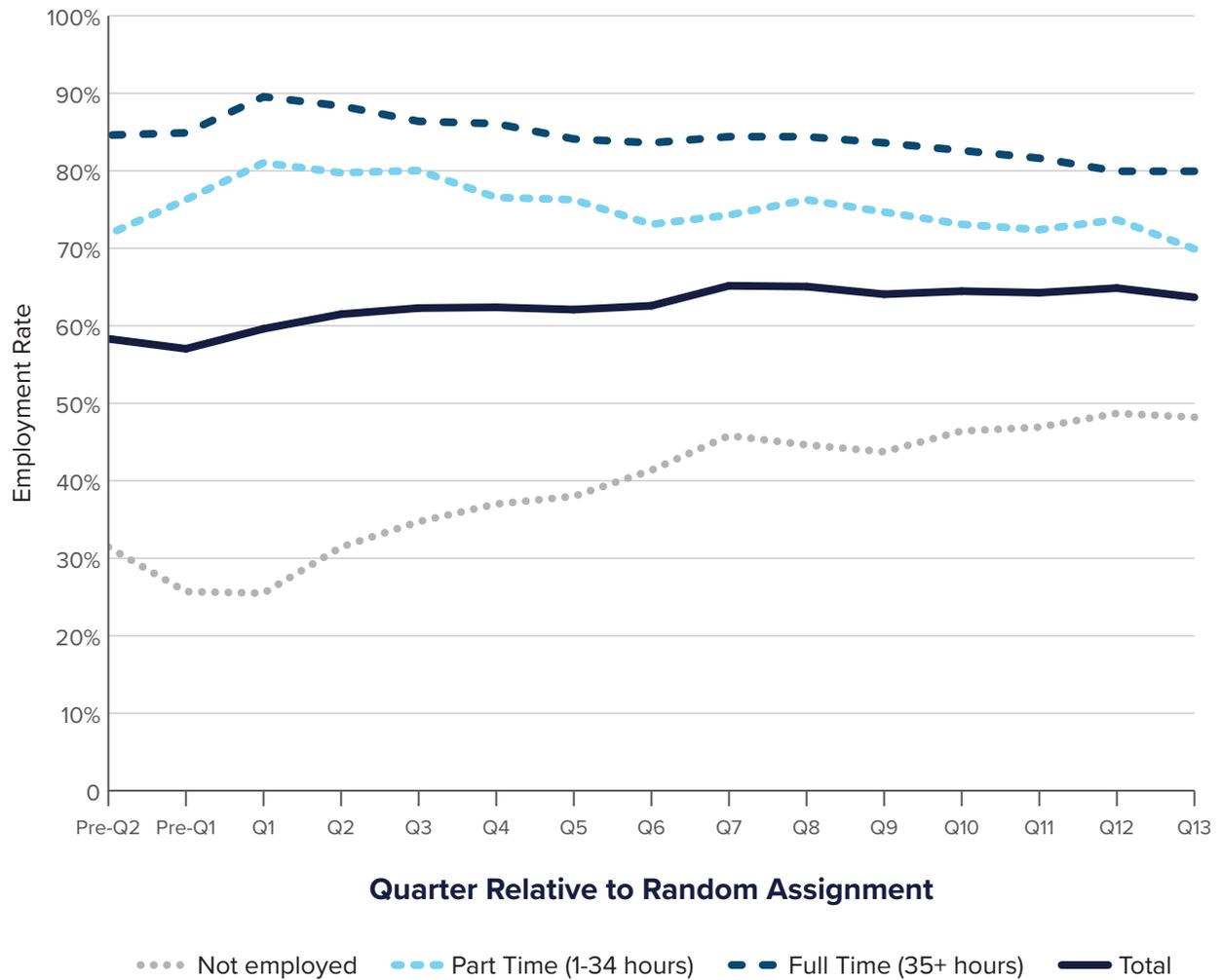
Exhibits 5.2 and 5.3 and appendix exhibit C.1 display the quarterly employment and earnings trends for control group members, calculated with NDNH data. These averages, which reflect what would have happened in the absence of the program, provide the basis of comparison for estimating the impacts of the FSS program on employment and earnings. As shown by the solid line in exhibit 5.2 employment levels for control group members overall increased slightly over time, from about 58 percent in the second quarter before random assignment to around 63 percent in Quarter 13 following random assignment. Control group members who reported on the BIF that they were not working (see the dotted line) experienced the biggest increase during the followup period, of more than 16 percentage points, whereas employment rates remained relatively static for other control group members.

As exhibit 5.3 shows, on average, control group members earned more over time—from \$2,683 per quarter (including zeros for control group members without employment) in the second quarter before random assignment to \$3,493 in Quarter 13 after random assignment. This increase was a result of some control group members entering employment and other control group members increasing their hours or weeks of employment or earning more on the job. The average quarterly earnings also increased for control group members in all three subgroups based on members' self-reported employment at random assignment. Once again, control group members in the subgroup that reported no employment at random assignment experienced the biggest increase during these quarters.

Impacts on Employment and Earnings

Though the FSS program is designed to provide services and referrals to address a variety of difficulties faced by participants, including lack of adequate childcare, mental and physical health issues, and transportation challenges, this component is in service to the ultimate goal of the program: to move people to work and build economic self-sufficiency. The escrow incentive is designed with the same goal and is thus attached to increases in earnings. Therefore, an important test of the FSS model is an assessment of its ability to increase employment, employment quality, and earnings. Exhibit 5.5 presents some staff members' reflections on the strategies they use to support both working and not-working FSS participants.

Exhibit 5.2. Quarterly Employment Rate Among Control Group Members, by Self-Reported Employment Status at Random Assignment, Family Self-Sufficiency Impact Sample

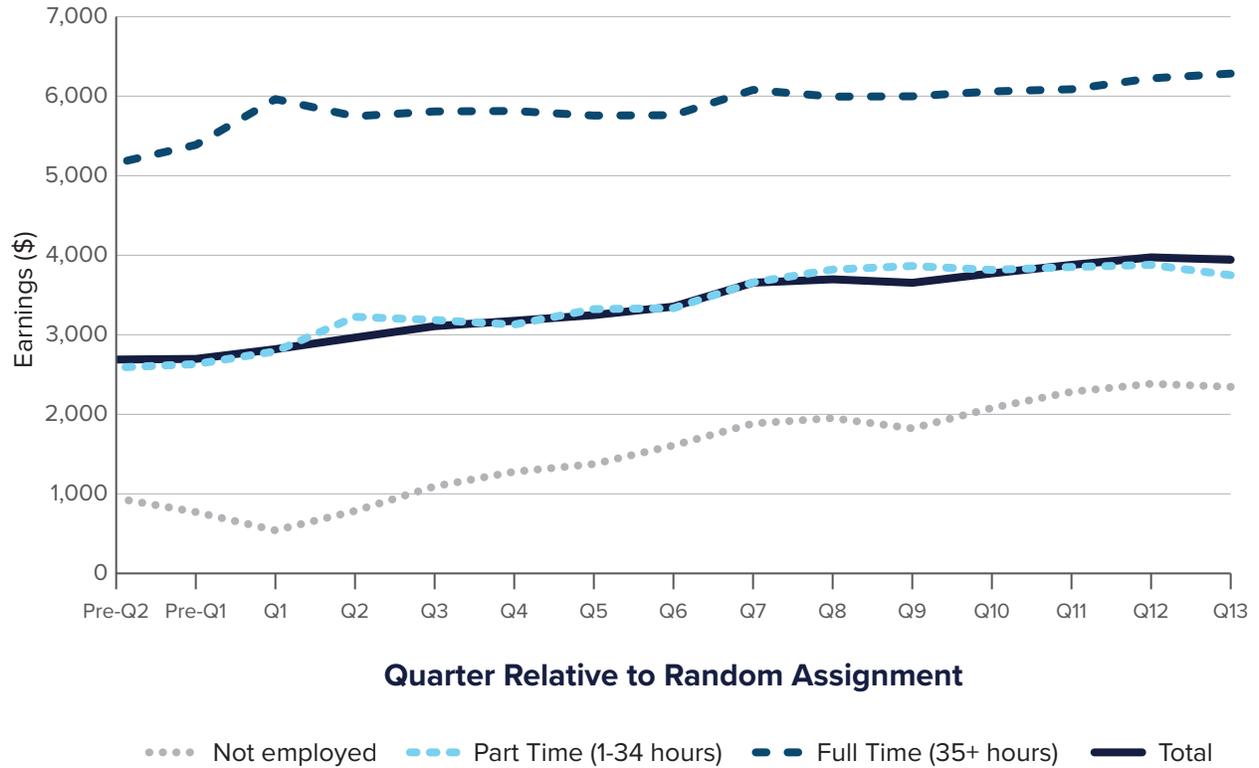


FSS = Family Self-Sufficiency.

NOTE: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment.

SOURCE: MDRC calculations using baseline data and quarterly wage data from the National Directory of New Hires.

Exhibit 5.3. Average Quarterly Earnings Among Control Group Members, by Self-Reported Employment Status at Random Assignment, Family Self-Sufficiency Impact Sample



NOTES: The Family Self-Sufficiency impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment.
SOURCE: MDRC calculations using quarterly wage data from the National Directory of New Hires.

Chapter 5. Impacts on Employment and Earnings

The bottom half of exhibit 5.4 shows program impacts on yearly earnings, as measured by the NDNH data. The control group averaged \$12,144 over the first year of followup. This exhibit rose to \$15,300 in the third year of followup. Over this 3-year followup period, members of both groups averaged a bit more than \$41,000 in earnings, which translates into yearly earnings of nearly \$14,000.⁹⁹

Overall, after 12 quarters, more than halfway through the 5-year FSS program duration, no evidence exists that FSS has led to changes in quarterly earnings or consistent impacts in employment covered by NDNH. To determine whether the program affected job characteristics and outcomes that cannot be observed from NDNH data, the evaluation also considers self-reported data collected from respondents to the FSS 36-month survey.

Exhibit 5.6 shows responses to a set of questions in the FSS 36-month survey that are focused on current employment and employment in the 12 months before the survey interview. Survey respondents were asked if they were currently employed, if they were looking for work, and what were the characteristics of their jobs in the prior 12 months. The top panel of the exhibit shows comparable recent work history for the two groups. Roughly 78 percent of the FSS group worked during the prior 12 months, compared with about 76 percent of the control group. About one-half of those in the FSS group worked for 12 months in the prior year, compared with 48 percent of the control group. Both groups also reported working similar numbers of jobs. According to survey responses, however, FSS group members averaged slightly more months of full-time employment in the prior 12 months. FSS group members reported working full time close to 6 months during this period, compared with 5 months for the control group, a difference that is statistically significant. FSS group members were more likely to report they were looking for full-time work, compared with their control group counterparts (31.5 percent versus 27.0 percent).

Using the FSS 36-month survey, the research team also explored whether the program had impacts on current work in terms of the types of jobs, the hourly wages, and the hours worked. For those who were not employed at the time of the survey, their reasons for not working were explored. As these outcomes are not covered in NDNH records, the survey is the only source of this information. These results are displayed in exhibit 5.7. The analysis provides some important insights into the types of jobs held by FSS participants and their control group counterparts.

⁹⁹ Using quasi-experimental methodology and a matched comparison group, an analysis of the Compass Working Capital FSS program, administered by the nonprofit agency for the PHAs in Lynn and Cambridge, Massachusetts, shows that the program produced employment and earnings impacts for participants. The study, which used income data available to HUD, found that the Compass FSS program was associated with an average gain in annual household earnings of \$6,305 between the fourth quarter of 2010 and the first quarter of 2016 (Geyer et al., 2017).

Exhibit 5.4. Impacts on Employment and Earnings, Years 1 to 3, Family Self-Sufficiency Impact Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Employment (%)				
Ever employed				
Year 1	73.4	72.5	0.9	0.496
Year 2	74.8	72.8	1.9	0.182
Year 3	74.2	72.5	1.7	0.257
Years 1 through 3	83.4	81.7	1.7	0.170
Average quarterly employment rate				
Year 1	61.6	61.4	0.2	0.887
Year 2	64.0	63.7	0.3	0.847
Year 3	64.9	63.9	1.0	0.502
Years 1 through 3	63.5	63.0	0.5	0.679
Earnings (\$)				
Total earnings				
Year 1	11,967	12,144	-177	0.596
Year 2	14,178	14,043	135	0.757
Year 3	15,505	15,300	204	0.685
Years 1 through 3	41,650	41,487	163	0.884
Average annual earnings (%)				
				0.697
\$0	16.6	18.3	-1.7	
\$1–\$10,000	31.6	31.2	0.3	
\$10,001–\$25,000	31.6	30.4	1.2	
Greater than \$25,000	20.3	20.1	0.2	
Sample size (total = 2,548)	1,282	1,266		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCE: MDRC calculations using quarterly wage data from the National Directory of New Hires.

Exhibit 5.5. Strategies to Support Participants' Work Efforts: Family Self-Sufficiency Program Staff Members' Reflections

Staff cited the need to conduct a “deeper dive” to better understand how to support participants with their employment needs. They cited several reasons why participants were not working: lack of relevant job skills, education, and work experience relative to the local job market; unmet childcare and transportation needs; need for improvement in soft skills in the workplace; and pressing family, mental health, and life skill issues. They described a variety of strategies for working with unemployed clients who may need more support. These include:

- Requiring unemployed participants to meet with their case managers more frequently, usually monthly and preferably by face-to-face meetings, either at the public housing agency office, the client’s home, or a venue in the community, such as at a café.
- Helping clients develop a sense of self-motivation and a strong work ethic and helping them assess the direction of their lives—where they are currently, where they want to go.
- Sending job leads and listings to their participants. Sometimes these leads are tailored for a specific client, but often these leads are not customized.
- Reviewing participants’ resumes and offering recommendations on how to improve them to better align with their job search objectives in the local labor market.
- Referring job seekers to community partners or job developers that specialize in providing job search assistance, as well as to special events such as job fairs.
- Requiring them to attend mandatory job search workshops.
- Providing a limited number of participant stipends, especially for transportation needs. These stipends took the form of bus tickets and gas cards.

While most sites indicated that some of their participants experience rapid job turnover, only staff at one site stated that this development was a big issue for their program; rapid job turnover was exacerbated at this site by the number of clients who obtained their jobs through temp agencies.

Supervisors and case managers in a number of sites reported that many of their employed participants were seeking better jobs, which staff defined as having higher pay (which would also help them build escrow at a faster rate), being full-time positions, or being in their field of interest. Staff in most of the other sites said that the number of working clients who wanted better jobs varied by circumstance.

- Some participants were content with their current positions because they were employed in their field of choice or had a schedule that permitted them the time to work on other FSS goals, such as going to school or improving their credit rating, or to attend to their family or household responsibilities.
- For clients who wanted to find better jobs, case managers helped them work toward this goal in several ways. Staff at one site reviewed and critiqued participants’ resumes, while staff at another site helped participants assess their job search objectives and aspirations.

FSS = Family Self-Sufficiency.

SOURCE: 2018 field research interviews with program staff in study sites.

Exhibit 5.6. Impacts on Employment in the 12 Months Prior to Interview, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
In the 12 Months Prior to Interview				
Ever employed (%)	78.0	76.4	1.6	0.342
Average number of jobs	1.1	1.1	0.0	0.860
Number of jobs (%)				0.717
Not employed	22.1	23.6	-1.5	
1	53.2	51.5	1.7	
2	18.0	17.4	0.6	
3 or more	6.8	7.5	-0.8	
Average number of months with employment	7.9	7.6	0.3	0.150
Number of months with employment (%)				0.865
Not employed	22.1	24.0	-1.9	
1–6	13.6	14.0	-0.4	
7–11	14.0	13.9	0.1	
12	50.3	48.1	2.2	
Average number of months with mostly full-time employment	5.6	5.0	0.6**	0.014
Number of months with mostly full-time employment (%)				0.452
Not employed	47.4	52.4	-5.0	
1–6	6.6	6.5	0.2	
7–11	8.8	7.9	0.9	
12	37.2	33.2	3.9	
In the Month Prior to Interview (%)				
Employed	66.5	65.6	1.0	0.629
Looked for a job	36.8	36.2	0.7	0.759
Looked for a full-time job	30.5	26.8	3.7*	0.070
Employed and looked for a job	21.8	21.9	-0.1	0.947
Not employed and looked for a job	15.1	14.3	0.9	0.590
Sample size (total = 1,936)	988	948		

(continued)

Exhibit 5.6. Impacts on Employment in the 12 Months Prior to Interview, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

For example, most respondents in each research group who were working at the time of their interview reported working in a regular job (self-employment or employment in temporary or seasonal jobs was rare). The largest proportion of respondents worked full-time hours and worked the regular daytime shift. Respondents tended to work at relatively low-paying jobs with few or no benefits. For example, only a little more than 10 percent of respondents in each research group reported working at a job with weekly earnings equivalent to 130 percent of the federal poverty threshold and with paid vacation and sick days and access to medical coverage.

Few notable differences are evident across the range of jobs characteristics presented in this exhibit. Members in both the FSS and control groups appear to be in jobs with similar characteristics. As exhibit 5.6 shows, FSS group respondents reported working slightly more hours per week, an increase of about one hour (a statistically significant difference). FSS group respondents also reported earning nearly \$20 (or 7 percent) more per week than their counterparts in the control group, although this difference is slightly above the 10 percent level of statistical significance (p-value = 0.113).

Exhibit 5.7. Impacts on Current Employment and Job Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Current Employment				
Employed (%)	65.5	63.5	2.0	0.331
Job type (%)				0.962
Employee	54.6	53.5	1.1	
Self-employed	6.2	6.0	0.3	
Temporary or seasonal job	4.1	4.0	0.1	
Average hours of work per week	22.7	21.3	1.3*	0.083
Hours of work (%)				0.315
1–20	9.6	11.9	-2.3	
21–34	14.2	14.2	0.0	
35 or more	41.6	37.3	4.3	
Average hourly wage (\$)	8.51	8.05	0.46	0.155
Hourly wage (%)				0.934
\$0.01–\$8.99	12.4	12.3	0.1	
\$9.00–\$11.99	16.9	15.9	1.1	
\$12.00–\$14.99	12.3	11.5	0.8	
\$15.00–\$19.99	14.9	14.6	0.3	
\$20 or higher	7.2	6.8	0.3	
Average weekly earnings (\$)	291	273	19	0.113
Weekly earnings (%)				0.718
\$1–\$199	7.7	8.9	-1.2	
\$200–\$399	19.1	19.0	0.1	
\$400–\$599	19.6	17.4	2.2	
\$600 or higher	17.2	16.0	1.2	
Usual work schedule (%)				0.806
Regular daytime shift	41.2	39.1	2.1	
Regular evening or night shift	8.2	8.0	0.3	
Rotating or split shift	7.9	9.1	-1.1	
Irregular shift	5.1	4.6	0.5	

(continued)

Exhibit 5.7. Impacts on Current Employment and Job Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Employer-provided benefits (%)				
Paid sick days	32.4	33.2	-0.8	0.706
Paid vacation days	34.2	33.2	1.0	0.613
Paid overtime	37.5	35.1	2.4	0.249
A retirement plan	31.1	31.9	-0.8	0.697
A health or medical insurance plan offered	39.4	36.7	2.7	0.171
With paid vacation and sick days and medical plan offered	11.8	13.2	-1.4	0.309
Earnings at 130 percent of federal poverty threshold or higher (%)	23.0	22.2	0.8	0.665
<i>If currently not employed, main reason</i>				
<i>Respondent's illness or disability</i>	<i>36.0</i>	<i>42.2</i>	<i>-6.2</i>	
<i>No jobs available</i>	<i>17.7</i>	<i>21.4</i>	<i>-3.7</i>	
<i>In school or training</i>	<i>8.2</i>	<i>6.5</i>	<i>1.7</i>	
<i>Illness or disability, other household member</i>	<i>8.2</i>	<i>6.2</i>	<i>2.0</i>	
<i>Temporarily laid off</i>	<i>6.4</i>	<i>6.8</i>	<i>-0.4</i>	
<i>Taking care of household member</i>	<i>4.8</i>	<i>3.3</i>	<i>1.5</i>	
<i>Unable to find childcare</i>	<i>4.0</i>	<i>4.2</i>	<i>-0.2</i>	
<i>Other</i>	<i>14.6</i>	<i>9.4</i>	<i>5.2</i>	
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

Results displayed in italics are non-experimental. No tests of statistical significance were performed on differences between research groups in means or proportions.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Conclusions

Overall, the findings reviewed in chapter 5 continue to provide only slight evidence for the program's impacts on earnings and employment. For the full sample, the NDNH data reveal no impacts on quarterly earnings or employment. Given that FSS is a 5-year program and that participants can be focused on a range of self-sufficiency goals during this time, it may be too early to conclude whether the program is effective at shifting outcomes in this domain. Chapter 7 examines the program's effects on subgroups and whether study participants, defined by baseline characteristics such as their work and educational status or the type of FSS program they were enrolled in, respond differently to the services and escrow incentive offered by FSS.

Chapter 6. Impacts on Income, Subsidy Receipt, and Well-Being

Chapter 6 analyzes whether the Family Self-Sufficiency (FSS) program led to positive effects on household income and on a series of self-sufficiency and financial security outcomes. The analysis uses responses to the FSS 36-month survey as the primary source for calculating financial and material well-being outcomes and estimating program impacts, capturing circumstances and outcomes for the period *before* FSS escrow payments were made to program graduates.¹⁰⁰ Additional measures were calculated using HUD administrative data on household income, participant housing expenditures, and rent subsidies.

The FSS program seeks to promote Housing Choice Voucher program households' self-sufficiency and financial security in several ways. First and foremost, FSS programs offer participants access to services and an escrow account that promote new employment, employment stability, and earnings growth. As discussed in chapter 5, after 3 years, FSS heads of households experienced similar incidences of employment and earnings on average to their counterparts in the control group. Nonetheless, the program could still improve FSS group households' financial situation in two other ways. Once a head of household enrolls in FSS, other adult household members covered by the housing voucher can receive FSS services. (Either way, their earnings are counted toward the issuance of escrow credits.) In this way, FSS could potentially increase participants' household earnings and income, beyond what they would have received in the absence of the program, without directly affecting the head of household's employment and earnings. In addition, as discussed in chapter 2, many FSS programs strongly encourage participants to attend workshops or meet with counselors to receive instruction in managing personal and household finances or qualifying to purchase a home. As advocates for financial empowerment services often attest, these activities can lead to tangible financial gains, even without increases in income.¹⁰¹ For example, participants in financial security activities can learn to (1) increase savings; (2) reduce debt; (3) increase credit scores; (4) forgo high-cost, nontraditional lending sources; and (5) avoid financial hardship. Participants in financial security or homeownership preparation activities could also benefit in less tangible ways—for example, by reducing stress and experiencing a greater sense of control over life decisions and more optimism for the future.¹⁰²

The main findings from this analysis are as follows:

- As of the end of Year 3, the FSS program had few statistically significant effects on indicators of financial well-being, such as average household income and incidence of material hardships and food insecurity. In addition, the differences between research groups were inconsistent. The FSS program increased the use of bank accounts and reported higher credit scores, compared with control group levels, but FSS group members, on average, incurred greater amounts of debt.
- Consistent with programs that emphasize the use of financial security and homeownership preparation counseling and workshops, FSS led to positive effects on attitudinal outcomes. FSS group members, when surveyed, were more likely than control group respondents to assess that they had improved their financial situation in the past year and were better able to plan for the future.

¹⁰⁰ It is possible an exit survey will be conducted as part of the ongoing evaluation, which will provide information on the post-exit circumstances of participants, including those who received substantial escrow disbursements.

¹⁰¹ See, for example, Collins and Gjertson (2013); Abbi (2012); Lopez-Fernandini (2012); McKernan, Ratcliffe, and Vinopal (2009).

¹⁰² In this chapter, the terms *material well-being*, *financial well-being*, and *financial security* are used interchangeably.

- A slightly larger proportion of FSS group households than control group households remained enrolled in the HCV program in Month 36. During Month 36, FSS group members also averaged slightly higher out-of-pocket expenses (of \$19) for rent and utilities and lower amounts of housing subsidies. The differences in total housing subsidies over 3 years and in Year 3 are not statistically significant.

Impacts on Household Income

Exhibit 6.1 shows the income sources for respondents in each research group. It shows the typical control group household as having received a little more than \$1,600 (equivalent to nearly \$20,000 per year) in income from all sources during the month preceding their interview. About two-thirds of control group respondents reported working for pay in the prior month, and nearly 20 percent of control group households received earnings from an additional household member. A large majority (79 percent) of control group respondents reported that their household received income from at least one public benefit program, most often SNAP benefits (food stamps), free and reduced-price school lunches, and disability benefits. As observed at random assignment, relatively few control group households (12 percent) indicated that they were receiving Temporary Assistance for Needy Families (TANF) cash welfare benefits. About one in five control group respondents reported receiving child support.

When surveyed, control group respondents often described themselves as encountering difficulties in maintaining a steady income. Nearly one-half of the control group related that their monthly income varied at least a little month by month, and most control group respondents reported that they had experienced at least 1 month with zero or unusually low income in the past 12 months.

FSS group respondents reported patterns of income receipt and average income levels that resembled those of the control group. As of the end of Year 3, the FSS program did not increase the incidence of having a second wage earner in the household, nor did the program increase household income above the control group average.¹⁰³ According to survey responses, FSS led to a small decrease (of 2 percentage points) in the receipt of TANF cash welfare benefits. As discussed above, FSS households need to remain off TANF for at least 12 months to qualify for graduation from the program. Possibly, this decrease in the receipt of TANF benefits will continue or become larger in later years, as FSS group members approach the end of their FSS contract.¹⁰⁴

Exhibit 6.1 also shows that both study groups experienced relatively similar patterns of income volatility. Survey respondents were asked whether their household's total monthly income stayed about the same each month, varied a little month by month, or varied a lot month by month. A little more than one-half of the respondents in both groups said their household income stayed about the same. About 13 percent of the FSS group and 11 percent of the control group reported that their income varied a lot from month to month. These differences are not statistically significant across groups. About 40 percent of the respondents in each group reported experiencing 3 or more months in the prior year in which their household income was zero or unusually low.

¹⁰³ The difference in monthly household income (of \$53) between the FSS and control groups is not statistically significant.

¹⁰⁴ The evaluation does not collect TANF administrative data from state or local human services agencies. For reasons that are not clear, FSS also led to small increases above control group levels in the receipt of Supplemental Nutrition Program for Women, Infants, and Children (WIC) benefits. Appendix exhibit D.1 displays measures of head of household and total household income for FSS and control group households, calculated with federal HUD IMS/PIC administrative data. In contrast to findings from NDNH quarterly wage data, the housing data show positive effects on earnings. Possibly, the additional incentive to the FSS group to declare income (to receive escrow credits) resulted in a higher average compared with the control group. In addition, the exhibit includes current enrollees in the HCV program. It is also another possible factor driving these results could be that additional control group members with relatively high earnings may have exited from FSS and were not included in the calculations.

Exhibit 6.1. Impacts on Household Income and Income Sources, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Household Income in Month Before Interview				
Household employment (%)	72.6	72.0	0.7	0.723
Employment by household member (%)				0.857
Respondent only	52.2	52.3	-0.1	
Other household member only	6.0	6.1	-0.1	
Respondent and other household member	14.4	13.5	0.9	
Receipt of publicly-funded benefits (%)	81.0	79.0	2.0	0.244
SNAP/food stamps	57.3	58.3	-1.0	0.622
TANF	9.6	11.9	-2.3*	0.081
SSI-SSDI	26.4	27.1	-0.6	0.700
Unemployment Insurance	3.8	3.2	0.6	0.450
WIC	12.5	8.5	4.0***	0.004
Home energy assistance	13.3	10.8	2.5*	0.066
Free or reduced-priced lunch	50.9	49.4	1.4	0.443
Other income (%)				
Child support	20.0	21.7	-1.7	0.339
Alimony	0.4	0.2	0.2	0.427
Other	4.7	5.2	-0.5	0.620
Average total household income (\$)	1,686	1,633	53	0.281
Total household income (%)				0.694
No income	2.8	2.6	0.2	
\$1–\$499	7.5	8.3	-0.8	
\$500–\$999	19.7	20.6	-0.9	
\$1,000–\$1,999	36.7	35.9	0.8	
\$2,000–\$2,999	18.7	20.3	-1.6	
\$3,000 or more	14.6	12.3	2.3	
Trends in Monthly Household Income				
Stability of monthly household income (%)				0.290
Income amount stays about the same	53.9	54.3	-0.4	
Income amount varies a little	33.0	35.0	-2.0	
Income amount varies a lot	13.2	10.8	2.4	

(continued)

Exhibit 6.1. Impacts on Household Income and Income Sources, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Number of months with zero or unusually low income in year before interview (%)				0.828
0	44.8	45.9	-1.1	
1–2	14.3	13.6	0.8	
3 or more	40.8	40.5	0.3	
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency. SNAP = Supplemental Nutrition Assistance Program. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance. TANF = Temporary Assistance for Needy Families. WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Impacts on Material Hardship and Food Insecurity

Having described themselves as receiving relatively low and sometimes irregular monthly incomes, many control group respondents then related that they had encountered at least one material hardship in the past year. Specifically, about 6 in 10 control group respondents stated that they could not pay for necessities, such as rent and utilities, telephone bills, food, medical care, or prescription drugs during at least 1 month in the previous year. (See exhibit 6.2.) The FSS group was somewhat more likely to report difficulty paying their utility bills, a difference of 4 percentage points that is statistically significant. As exhibit 6.2 shows, about 40 percent of control group members reported experiencing two or more material hardships and one in five control group members experienced a material hardship during 4 months or more in the year before the interview. A similar proportion of control group respondents stated that they sometimes did not have enough to eat. (FSS respondents were slightly less likely than their control counterparts to say they often did not have enough to eat.) As with measures of household income, for the most part, the FSS program led to only small and inconsistent differences between the FSS and control groups in the incidence of material hardship and food insecurity.

Impacts on Connection to Traditional Financial Institutions and Sources of Credit

Having a savings, money market, or checking account at a bank or credit union and using these institutions to cash checks or as a source of credit can often protect households from paying high fees and high interest rates. Moreover, accumulating savings can enable households to deal with sudden decreases in income or unexpected expenses without accumulating debt. Having savings of \$2,000 or more can also help households who are interested in purchasing a home to qualify for a mortgage. Irrespective of whether they accrued escrow credits, FSS group members may also have responded to encouragement to save from their meetings with financial counselors or attendance at financial management workshops.

At their 36-month interview, as exhibit 6.3 shows, a majority (61 percent) of control group respondents reported that they currently maintained a bank account (checking or savings).¹⁰⁵ Apparently, most of these respondents were keeping checking accounts and paying out month by month about as much as or more than they were depositing.

Only a little more than one in five control group respondents stated that they had any savings, and control group respondents, as a group, saved less than \$200. These savings rates are extremely low and underscore the relatively precarious financial position that many control group members were in. Adding to their financial insecurity, the typical control group respondent reported having accumulated nearly \$14,000 in non-housing-related debt, and nearly 80 percent of control group respondents answered a hypothetical question about how they would likely pay for an emergency expense of \$400 by relating that they would increase their debt.¹⁰⁶ Most control group members (63 percent) also reported having used a nontraditional financial service, such as overdrawing on their checking account. As with other measures of financial security, the FSS program led to few and inconsistent differences with the control group on measures of savings, debt, and the use of traditional and nontraditional financial services. As exhibit 6.3 shows, by 6 percentage points, a larger proportion of FSS group respondents reported having a bank account. By a slightly larger margin, FSS group respondents were more likely than their counterparts in the control group to use traditional financial services, although most of these FSS group members also used nontraditional financial services. Yet, for reasons that are not clear, FSS group respondents averaged an additional \$1,600 (12 percent) in debt, compared with the control group.¹⁰⁷ The FSS program had no effect on savings, beyond the accrual of escrow credits.

¹⁰⁵ In New York City's Work Rewards demonstration, the 42-month survey showed that under one-half (or 43 percent) of the control group respondents reported having a bank account. Banking and savings rates were generally lower for the Work Rewards sample. See Verma et al. (2017).

¹⁰⁶ See Azurdia and Freedman (2016); Pew Charitable Trusts (2015); Cramer, King, and Schreur (2015); Hannagan and Morduch (2015); Abbi (2012) for related research on how low- and moderate-income households cope with sudden loss of income or emergency expenses.

¹⁰⁷ The evaluation does not collect information on sources of debt for this report.

Exhibit 6.2. Impacts on Material Hardship and Food Insufficiency, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Any material hardship in the past 12 months	59.8	59.0	0.8	0.712
Hardship paying commonly recurring monthly bills	50.7	47.0	3.7*	0.089
Did not pay full rent or mortgage	24.7	22.1	2.6	0.169
Did not pay utility bill	38.3	34.3	4.0*	0.055
Did not pay telephone bill	27.3	27.8	-0.5	0.814
Health and physical well-being hardships	37.6	40.6	-3.0	0.162
Did not buy prescription drug	16.6	17.4	-0.8	0.657
Did not see a doctor or get medical assistance	17.0	16.9	0.2	0.931
Did not buy food	24.3	27.1	-2.8	0.156
Number of material hardships in the past 12 months				0.833
0 hardship	40.2	41.2	-0.9	
1 hardship	18.2	18.4	-0.2	
2 hardships	16.1	16.2	0.0	
3 hardships	12.1	10.3	1.8	
4 or more hardships	13.4	14.0	-0.6	
Number of months experiencing hardships paying commonly recurring bills in the past 12 months				0.294
0 months	49.5	53.1	-3.7	
1–3	32.3	28.0	4.3	
4–6	12.4	13.4	-1.0	
7–12	5.8	5.4	0.4	
Any severe material hardship in the past 12 months ^a	23.4	24.5	-1.1	0.560
Did not pay full rent or mortgage	6.7	5.7	1.0	0.380
Did not pay utility bill	11.9	12.1	-0.2	0.888
Did not pay telephone bill	9.0	10.1	-1.0	0.444
Did not buy food	10.7	11.3	-0.6	0.685
Food insufficiency in prior month (%)			**	0.045
Had enough of food wanted to eat	50.1	48.5	1.6	
Had enough food, but not the kinds wanted to eat	29.8	29.7	0.1	
Sometimes did not have enough to eat	15.7	14.6	1.2	
Often did not have enough to eat	4.4	7.2	-2.9	
Sample size (total = 1,936)	988	948		

(continued)

**Exhibit 6.2. Impacts on Material Hardship and Food Insufficiency, Family Self-Sufficiency
36-Month Survey Respondent Sample** continued

FSS = Family Self-Sufficiency.

^aA severe material hardship is defined here as a hardship lasting 4 or more months.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Impacts on Financial Well-Being and Confidence in Handling Family Finances

FSS case managers and financial counselors who work with FSS participants often try to help participants fix problems in their credit history and boost their credit score. Increasing credit scores can lead to multiple benefits, including paying lower interest rates on credit cards, qualifying for a mortgage, and even improving an applicant's chances of being hired for a new job. As a first step, financial counselors and workshop leaders often teach participants how to access and interpret their credit reports, learn their credit scores, and identify problems that need immediate attention. As exhibit 6.4 shows, according to survey responses, control group members were experiencing considerable problems with their credit. About 80 percent of control group respondents reported that they did not have a credit score, did not know their score, or had a score below 600, which is generally considered to be a low and disadvantageous level. One-half of control group respondents also assessed their credit rating as “bad” or “very bad.”

Consistent with their greater use of financial security and homeownership preparation services, by a margin of 6 percentage points, a larger proportion of FSS group respondents knew their credit score sufficiently well to place it within a range of scores. Moreover, by a similar margin, a larger proportion of FSS group members reported having a credit score of 600 or higher. Compared with the control group, a slightly smaller proportion of FSS group respondents assessed their credit rating as “bad” or “very bad,” although the difference of 2 percentage points is not statistically significant.

Typically, financial counselors and workshop leaders also teach strategies for improving the management of family finances, including budgeting income and expenditures in an organized and formal way, monitoring expenses more carefully, and spending less on non-necessities. Exposure to these financial empowerment strategies can have “spillover” effects by giving participants a sense of gaining better control over their financial situations and greater confidence in their ability to plan for the future. As exhibit 6.4 shows, the FSS program did not affect respondents' actual financial situation, as measured by their reported ability to have money left over at the end of the month but the FSS group realized gains above the control group in measures of their perception of financial well-being and goal orientation and attainment. Specifically, by a margin of 7 percentage points, a larger proportion of FSS group respondents reported that their financial situation had improved over the past year.¹⁰⁸ The FSS program also led to increases over control group levels of similar magnitude in the proportion of respondents who characterized themselves as meeting goals and having the ability to “get out of a jam.”

¹⁰⁸ The financial well-being scale comprises the four financial hardship measures shown in the table (financial situation better than the last year, not worrying about having enough money in the future, generally affording buying needed things, and sometimes having enough money to buy something or go somewhere just for fun).

Exhibit 6.3. Impacts on Use of Financial Services, Savings, and Debt, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Use of Banking/Financial Services				
Currently has bank account (%)	67.5	61.3	6.2***	0.001
Currently has savings (%)	20.3	22.5	-2.2	0.236
Average savings (\$)	145	170	-26	0.344
Savings (%)				0.404
No savings	82.9	79.8	3.0	
\$1–\$499	8.7	10.7	-2.0	
\$500–\$1,999	5.7	5.7	0.0	
\$2,000 or more	2.8	3.8	-0.9	
Use of Non-Traditional Financial Services in the Past 12 Months (%)				
Used any non-traditional financial service	63.3	62.6	0.7	0.751
Cashed check at check casher	27.5	27.5	0.0	0.985
Paid bill at check casher	30.4	29.1	1.3	0.528
Took cash advance on credit card	7.8	6.0	1.8	0.128
Bounced check or overdrew checking account	28.5	26.9	1.6	0.426
Got payday loan	13.0	13.6	-0.6	0.693
Used any non-traditional financial services at least once per month	36.7	37.3	-0.6	0.795
Cashed check at check casher	17.3	16.2	1.2	0.492
Paid bill at check casher	21.2	20.4	0.9	0.635
Took cash advance on credit card	2.9	2.6	0.3	0.680
Bounced check or overdrew checking account	8.5	9.9	-1.5	0.257
Got payday loan	3.0	2.7	0.4	0.653
Used two non-traditional financial services or more	30.7	28.3	2.5	0.238
Type of financial services used in past 12 months			**	0.040
Only non-traditional financial services used	20.6	24.8	-4.2	
Only traditional financial services used	25.0	22.9	2.2	
Traditional and non-traditional financial services used	42.7	38.3	4.4	
No financial services used	11.6	14.0	-2.4	

(continued)

Exhibit 6.3. Impacts on Use of Financial Services, Savings, and Debt, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Debt				
Currently has debt (%)	76.2	76.0	0.2	0.893
Average current debt (\$)	15,403	13,778	1,625**	0.045
Debt (%)				0.879
No debt	24.6	24.7	-0.1	
\$1–\$1,999	9.7	11.1	-1.4	
\$2,000–\$9,999	22.1	21.4	0.7	
\$10,000–\$19,999	16.7	16.4	0.3	
More than \$20,000	26.9	26.4	0.5	
How would pay for an emergency expense of \$400 (%)				0.177
With money in savings, checking, or cash on hand	20.6	18.8	1.8	
Increase debt	76.6	79.2	-2.7	
Sell something	2.8	2.0	0.9	
Was late on payment of debt or bill in past 12 months (%)	38.1	37.8	0.3	0.882
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Exhibit 6.4. Impacts on Financial Strain, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Financial Well-Being				
Financial well-being score (4-low; 16-high)	11.0	10.7	0.3**	0.048
Strongly or somewhat agree with the following (%)				
Financial situation is better than last year	54.3	47.4	6.9***	0.003
Doesn't worry about having enough money in the future	21.8	20.3	1.5	0.433
Can generally afford to buy needed things	63.0	62.2	0.8	0.720
Sometimes have enough money to buy something or just go somewhere for fun	23.1	23.4	-0.2	0.899
Financial situation at the end of the month (%)				0.344
Has money left over	13.4	13.2	0.2	
Has just enough money to make ends meet	52.7	50.9	1.8	
Does not have enough money to make ends meet	33.9	35.9	-2.0	
Credit score (%)			***	0.005
Does not know or have score	47.5	53.4	-5.9	
Less than 600	26.9	26.9	-0.1	
600–649	12.6	8.6	4.0	
650 or higher	13.1	12.0	1.9	
Self-assessed credit rating (%)				0.532
Bad or very bad	50.0	52.2	-2.2	
Average	34.2	31.8	2.4	
Good or very good	15.8	16.0	-0.1	

(continued)

Exhibit 6.4. Impacts on Financial Strain, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Goal-oriented thinking				
Average score on “State of Hope” scale ^a	21.2	20.7	0.5**	0.031
Agree with the following statements: (%)				
At this time, I am meeting the goals that I set for myself	55.5	50.7	4.8**	0.035
I can think of many ways to reach my current goals	81.4	78.9	2.5	0.175
Right now, I see myself as pretty successful	39.9	37.5	2.4	0.294
There are lots of ways around the problems I am facing now	66.1	63.5	2.6	0.252
At the present time, I am energetically pursuing my goals	66.8	60.6	6.2***	0.005
If I should find myself in a jam, I could think of many ways to get out of it.	74.1	68.9	5.3**	0.011
Sample size (total = 1,936)	988	948		

FSS = Family Self-Sufficiency.

^aThe State of Hope scale was used to measure goal-oriented thinking (6 = low; 30 = high).

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Impacts on Housing Status, Housing Expenditures, and Rent Subsidies

The FSS program implements a 5-year strategy to increase voucher holders' household income through better employment and, possibly, additional household members' employment, leading to graduation and the disbursement of escrow dollars. In the longer term (beyond graduation), FSS is intended to facilitate voucher holders' transition to homeownership or unsubsidized housing. During the 5-year contract period, the effects of FSS on housing status, expenditures, and subsidies are more difficult to predict. It should be expected that FSS group members would have a greater incentive than control group members to remain enrolled in the HCV program to accrue escrow credits and qualify for escrow disbursement, and possibly to maintain their access to FSS-related services and case management. Among study participants who remained in the HCV program, FSS group members would also be expected to pay more out-of-pocket for rent and utilities as their earnings increase. Nevertheless, other factors, such as the lack of availability of low- and moderate-cost rental housing in each locality, household composition, and household income levels likely affect study participants' housing choices, expenditures, and subsidies.

Exhibit 6.5 displays important summary measures of both groups' cumulative expenditures and rent subsidies during Years 1 to 3 and in Month 36, calculated for the impact sample from HUD administrative data. As exhibit 6.5 shows, a slightly larger proportion of FSS group households than control group households remained enrolled in the HCV program in Month 36. During Month 36, FSS group members also averaged slightly higher out-of-pocket expenses (of \$19) for rent and utilities. Concomitantly, FSS group members averaged lower amounts of housing subsidies, but the differences over 3 years and in Year 3 are not statistically significant—exhibit 6.6 displays findings on study participants' current and recent housing situations, calculated from responses to the FSS 36-month survey. According to survey data, around 80 percent of respondents in both research groups reported that they were currently residing in subsidized or public housing.¹⁰⁹ Most other respondents lived in unsubsidized rental housing at the time of their interview. The FSS program did not affect the incidence of living in any particular type of housing, nor did the program lead to increases or decreases in the amount of rent that respondents paid. Among survey respondents, about one-third of each research group moved to a new home during the followup period, and 10 percent moved two times or more. Respondents from both research groups assessed their current living situations positively. A little more than one-half of each group expressed satisfaction with both their current home and neighborhood, whereas only a little over 10 percent expressed dissatisfaction with both. The remaining respondents indicated mixed assessments of their current home and neighborhood.

¹⁰⁹ It is possible that some HCV holders transitioned to public housing after random assignment. Nevertheless, it may be assumed that some respondents who reported living in public housing were actually residing in subsidized private housing.

Exhibit 6.5. Impacts on Shelter Costs and Housing Subsidies, Years 1 to 3, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Enrolled in HCV program in Month 36 (%)	81.4	79.0	2.4	0.120
Gross Rent (Contract Rent + Utilities Allowance)				
Average gross rent in Month 36, if received HCV (\$)	1,395	1,406	-11	
Gross rent in Month 36, if received HCV (%)				
Less than \$1,000	23.8	24.1	-0.3	
\$1,000–\$1,499	39.1	38.7	0.4	
\$1,500 or above	37.1	37.2	-0.1	
Family Share of Rent and Utilities				
Family share in Month 36 (%)			**	0.048
Exited HCV				
\$0	18.6	21.2	-2.6	
\$1–\$100	0.7	0.5	0.3	
\$101–\$300	10.0	10.8	-0.8	
\$301–\$700	18.0	18.5	-0.5	
\$701 or above	31.1	29.9	1.1	
Average family share in months received HCV (\$)	21.5	19.1	2.4	
Average family share in Month 36, if received HCV (\$)	500	489	11	
Average family share in Month 36, if received HCV (\$)	513	494	19	
Housing Subsidy				
Total housing subsidy (\$)				
Year 1	9,800	9,774	26	0.833
Year 2	8,982	8,890	92	0.577
Year 3	8,363	8,566	-203	0.300
Years 1–3	27,146	27,231	-86	0.839
Average housing subsidy in Month 36, if received HCV (\$)	877	907	-31	
Sample size (total = 2,548)	1,281	1,267		

(continued)

Exhibit 6.5. Impacts on Shelter Costs and Housing Subsidies, Years 1 to 3, Family Self-Sufficiency Impact Sample continued

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Rent and subsidy calculations used data from each household's HCV annual and interim eligibility re-examinations. Recorded amounts were copied to successive months until a new eligibility re-examination took place, or the household left housing assistance. Cumulative totals for former HCV households cover their months of eligibility following random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. For each dollar amount outcome, values above the 99th percentile were considered as outliers and dropped from the calculations. As a result of this procedure, adjusted mean values for total family share and subsidies detail do not sum to total rent plus utility allowance. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Results displayed in italics are non-experimental. No tests of statistical significance were performed on differences between research groups in means or proportions. Sample sizes for specific outcomes may vary because of missing values. Rounding may cause slight discrepancies in calculating sums and differences.

SOURCE: HUD Inventory Management System/Office of Public and Indian Housing Information Center data.

Exhibit 6.6. Impacts on Housing, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Current Housing Status				
Housing type (%)				0.772
Owns home or apartment	2.7	2.3	0.5	
Rents home or apartment	93.6	94.0	-0.4	
Lives in public housing	5.9	7.7	-1.8	
Lives in subsidized rental housing	76.8	73.5	3.2	
Lives in unsubsidized private housing	10.9	12.8	-2.0	
Does not pay rent (at-risk housing)	3.7	3.7	0.0	
Average rent paid (\$)	497	474	23	0.204
Rent (%)				0.285
Does not pay rent	13.8	13.9	-0.1	
\$1–\$299	26.6	26.6	0.0	
\$300–\$499	16.5	18.0	-1.6	
\$500–\$799	18.6	20.8	-2.2	
\$800 or higher	24.6	20.7	3.9	
Moves				
Number of moves (%)				0.834
Did not move	67.6	67.7	-0.1	
1 time	22.0	22.9	-1.0	
2 times	7.5	7.1	0.4	
3 times or more	2.9	2.3	0.6	
Primary reason for most recent move (%)				0.520
Did not move	67.7	67.8	-0.1	
Moved for negative reasons (compelled to move by problems in previous home or locality)	18.8	20.4	-1.6	
Moved for positive reasons (expected better housing or personal or family well-being)	13.5	11.9	1.7	
Satisfaction with current living conditions (%)				0.923
Satisfied with housing and neighborhood	56.7	56.6	0.1	
Mixed assessment of satisfaction	31.5	31.4	0.1	
Dissatisfied with housing and neighborhood	11.8	12.0	-0.2	
Sample size (total = 1,936)	988	948		

(continued)

Exhibit 6.6. Impacts on Housing, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCE: MDRC calculations using responses to the FSS 36-Month Survey.

Conclusions

As discussed in chapters 2 and 3, FSS group members' involvement in employment-related and financial security services decreased over time, as did the rate at which FSS group members opened escrow accounts. Most likely, in the future years FSS group members' ability to achieve greater financial well-being, compared with the control group, will largely depend on how many FSS group members increase their earnings, add new credits to their escrow account, and graduate from the program and receive their escrow dollars. A one-time infusion of \$5,000 or more can make a big difference to a household's finances, irrespective of whether the household uses the money to make a large purchase, fund the education of a family member, or reduce debt. Therefore, future research on the implementation of the program needs to focus on how successful the FSS programs will be in keeping participants at least minimally engaged and helping them graduate from the program.

Chapter 7. Variation in Program Impacts

Findings on program impacts for the entire impact sample may mask positive or negative effects for certain groups who may have had different exposure to the Family Self-Sufficiency program or may have responded differently to FSS services and financial incentives.¹¹⁰ Chapter 7 first examines the FSS interim impacts for subgroups defined by characteristics of study participants, recorded at baseline. Next, the chapter considers whether programs with similar program implementation orientations and practices led to more positive (or negative) effects on employment, earnings, and indicators of financial security, compared with other programs. In addition, exploratory analyses were conducted to examine variations in subgroup effects for FSS programs clustered according to implementation outcomes recorded *after* random assignment.

These analyses draw on housing agency program records, quarterly wage data from NDNH, HUD administrative rent and subsidy data, and responses to the FSS 36-month survey. Like in chapters 5 and 6, for each subgroup, the analysis considers whether differences in average outcomes between the FSS group and the control group are statistically significant at the 10 percent level or less. In addition, exhibits in chapter 7 present the results of an H-statistic, which shows the likelihood that the observed variation in program effects among related subgroups is statistically significant and did not occur by chance.¹¹¹

For subgroups defined by baseline characteristics, the main findings include the following:

- There are isolated differences in impacts by subgroup on measures of employment and earnings and financial well-being, but there is no consistent pattern of variation to suggest that the program is more effective for selected subgroups of respondents.
- The FSS program appears to have positive effects on self-reported measures of employment and financial well-being among more disadvantaged subgroups. This pattern was not seen for employment and earnings outcomes measured with NDNH wage data, however.

For FSS program clusters with similar implementation features, the main findings include the following:

- With one exception, there are isolated differences in impacts when study participants are grouped together into “site clusters” based on similar implementation features for FSS programs—but no consistent pattern of variation.
- Over 3 years of followup, FSS programs with a strong emphasis on monitoring and engagement was associated with earnings decreases relative to the control group of about \$8,000 (or 20 percent) per study participant.

¹¹⁰ Throughout this chapter, the terms *housing agency*, *public housing agency (PHA)*, *site*, and *FSS program* will be used interchangeably.

¹¹¹ Findings for subgroups or groups of PHAs with *similar post-random assignment outcomes* should be considered as less reliable than findings for subgroups defined based on similar baseline characteristics or for groups of PHAs with similar implementation approaches or practices in effect at the time the study was launched. Outcomes may change over time, which could affect the membership of post-random assignment subgroups or groupings of PHAs. For now, these findings may provide insights as to why impacts occurred (or did not), but they are not suitable for hypothesis testing or predicting impacts in future years. More generally, the larger number of comparisons between research groups increases the risk that some positive impact estimates for one or more subgroups will occur due to natural sampling variation and are not true effects of the FSS program.

- An exploratory and tentative analysis suggests that FSS programs can facilitate escrow accrual in several ways, including allowing some employed FSS group members to accumulate escrow while delaying or forgoing participation in FSS activities. Following this strategy appears to boost average total earnings above control group levels by about \$3,750 per study participant over 3 years.

Program Impacts by Subgroups

Subgroups Based on Participant Baseline Characteristics

Exhibits 7.1A to 7.1E and appendix exhibits E.1 to E.3 show FSS program impacts on selected outcomes for subgroups based on baseline characteristics of the impact sample around the time of random assignment: employment status, highest educational attainment, estimated annual household income, receipt of Supplemental Security Income or Social Security Disability Insurance (SSI/SSDI) benefits, reported having a barrier to employment, and percentage of rent and utilities expenses paid out of pocket during the month of random assignment.¹¹² Of particular importance for the FSS evaluation is examining whether the FSS program's combination of services and financial incentives leads to increases above the control group more consistently among subgroups with greater disadvantages in the labor market or subgroups with fewer disadvantages.¹¹³ Each exhibit illustrates the impacts for a range of selected outcomes for a particular subgroup.

For measures of employment and earnings recorded from NDNH data, mean values for control group members (and for FSS group members) varied substantially by subgroup. However, the FSS program led to only small and not statistically significant differences (or impacts) on these measures when average values for each research group are compared. For example, in any given quarter, about 84 percent of control group members who reported working full-time hours at baseline were employed, according to NDNH quarterly wage data—over twice the rate for control group members with no reported employment at baseline (see appendix exhibit E.1). Control group members' average quarterly employment rate exceeded the rate for FSS group members by about 2 percentage points, but the difference is not statistically significant. Similarly, control group members with full-time employment at baseline averaged \$71,000 in total earnings over 3 years, more than three times the average for control group members with no employment at baseline. Moreover, the proportion of control group members in the full-time employment subgroup who averaged more than \$25,000 per year in earnings (46 percent) was nearly 10 times as high as the proportion for control group members with no employment at baseline. For both these measures, averages for the FSS group are slightly smaller, but

¹¹² Employment status, highest educational attainment, having a barrier to employment, and SSI/SSDI benefits receipt are self-reported; estimated household income and out-of-pocket rent and utilities expenses were collected from HUD administrative data. Appendix exhibits E.1 through E.3 include regression-adjusted mean values for FSS and control group members, as well as FSS–control group differences (impacts) in outcomes. These tables also include results for two additional subgroups: having or not having at least one barrier to employment (self-reported) and percentage of household income used to pay for rent and utilities (family share, from HUD administrative data). This subgroup analysis should be considered as *exploratory*. Future reports will present results of a more formal analysis that will include outcomes data covering additional years of followup and a machine learning framework which includes cross validation to help reduce the number of tests and help validate any patterns we see.

¹¹³ The most disadvantaged subgroups include those who are not employed at random assignment, have no educational degree or credential, have no annual household income or income up to \$10,000, reported one or more barriers to employment, are receiving SSI or SSDI benefits, and are paying up to 25 percent of their housing expenses out of pocket (the last measure is related to the amount of household income). The moderately disadvantaged subgroups include those who are employed part-time hours, have a high school diploma or equivalent or some college, have an annual household income of \$10,001 to \$20,000, and are paying between 25.01 and 50.00 percent of their housing expenses out of pocket. The least disadvantaged subgroups include those who are employed with full-time hours, have a 2-year college degree or higher, have an annual household income of more than \$20,000, and are paying more than 50 percent of their household expenses out-of-pocket. The remaining subgroups may be considered as “mixed,” meaning that they include study participants with a broad range of characteristics that could affect their future employment or earnings. An example of a mixed subgroup would be “not receiving SSI/SSDI” and “not having a barrier to employment.”

Chapter 7. Variation in Program Impacts

once again, the differences are not statistically significant. With few exceptions, these patterns of impacts are repeated for the other subgroups.¹¹⁴

As discussed in chapter 6 (for the full impact sample), respondents to the FSS 36-month survey reported a more complex pattern of employment outcomes and impacts. For most subgroups, the FSS group reported a higher incidence of working full-time hours at the time of the interview compared with control group members. Statistically significant increases above the control group ranged from 4 percentage points to 12 percentage points. Impacts were recorded for four subgroups with greater disadvantages and for three additional subgroups.¹¹⁵ Although the impacts are not statistically significant across subgroups, these findings suggest that the FSS program may have facilitated more disadvantaged study participants to realize slightly better employment outcomes (more hours of work but not higher earnings) compared with their control group counterparts.

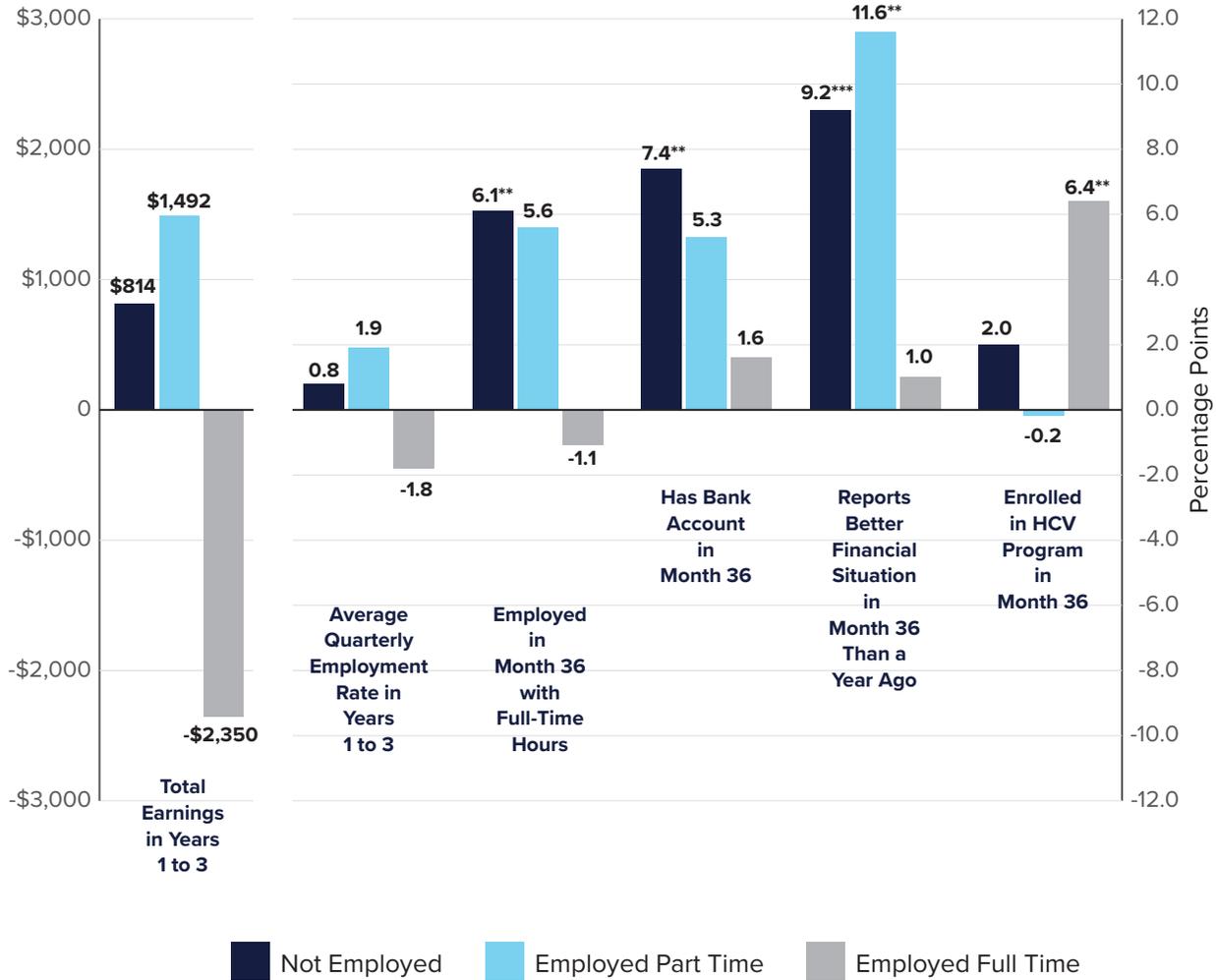
As appendix exhibit E.2 shows, control group members reported relatively low household incomes, ranging from \$1,268 per month (or about \$15,000 per year) for control group respondents with no household income at baseline to \$2,246 (or about \$27,000 per year) for control group respondents with more than \$20,000 in annual household income at baseline. About one-half to three-fourths of control group members reported having a bank account, although average savings were extremely low—averaging less than \$250 for all subgroups. Average debt levels greatly exceeded savings for all subgroups, with control group members with a 2-year college degree or higher reporting the largest amount of debt by far of any subgroup (an average of nearly \$27,000). Control group respondents in all subgroups had a mixed reaction when asked whether their current financial situation was better than their situation a year ago. Among all subgroups, more than 40 percent of control group respondents assessed their financial situation as better than a year ago, but only in subgroups of less disadvantaged respondents (those who are employed with full-time hours, whose household income is above \$20,000, or who are paying more than 50 percent of their housing expenses out of pocket) did a majority of control group members report that they were better off. Most control group members reported that they were in good, very good, or excellent health, although control group members in the more disadvantaged subgroups reported the lowest incidence of having good health compared with other subgroups.

For three outcomes—average monthly household income, having a checking or savings account, and assessing one's financial situation as better than a year ago—FSS group respondents in most subgroups responded more positively than control group respondents. For two of these measures (not monthly household income) most of the positive impacts for the FSS group were either statistically significant or were slightly above the 10 percent level of statistical significance. In addition, FSS group members in nearly all subgroups reported higher debt levels than control group members, but most differences are not statistically significant.

¹¹⁴ As appendix exhibit E.1 shows, the FSS program increased the average quarterly employment rate by 3 percentage points above the control group level among study participants who paid more than 50 percent of their household income for rent and utilities. The FSS program also led to an impact of nearly 5 percentage points above the control group in the measure of having average annual earnings of more than \$25,000 among study participants whose highest educational credential was a high school diploma or equivalent.

¹¹⁵ The more disadvantaged subgroups are those who are not employed at random assignment, have no educational degree or credential, have an annual household income of up to \$10,000, and are paying up to 25 percent of their housing expenses out of pocket.

Exhibit 7.1A. Impacts on Selected Outcomes, by Employment Status at Random Assignment

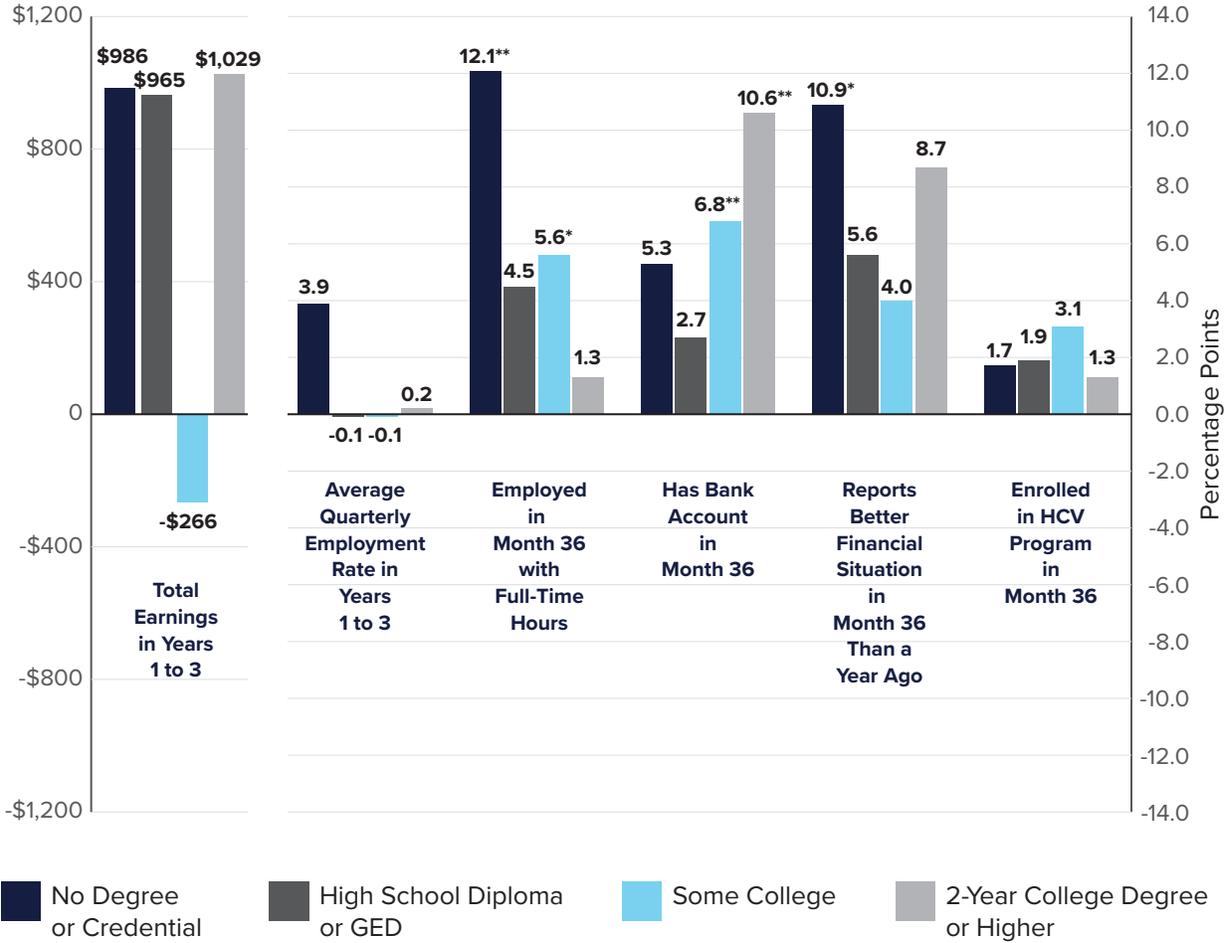


FSS = Family Self-Sufficiency; GED = General Educational Development; HCV = Housing Choice Voucher; SSI/SSDI = Supplemental Security Income/Social Security Disability.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of followup, expressed as a percentage. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations from baseline data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

Exhibit 7.1B. Impacts on Selected Outcomes, by Educational Attainment at Random Assignment

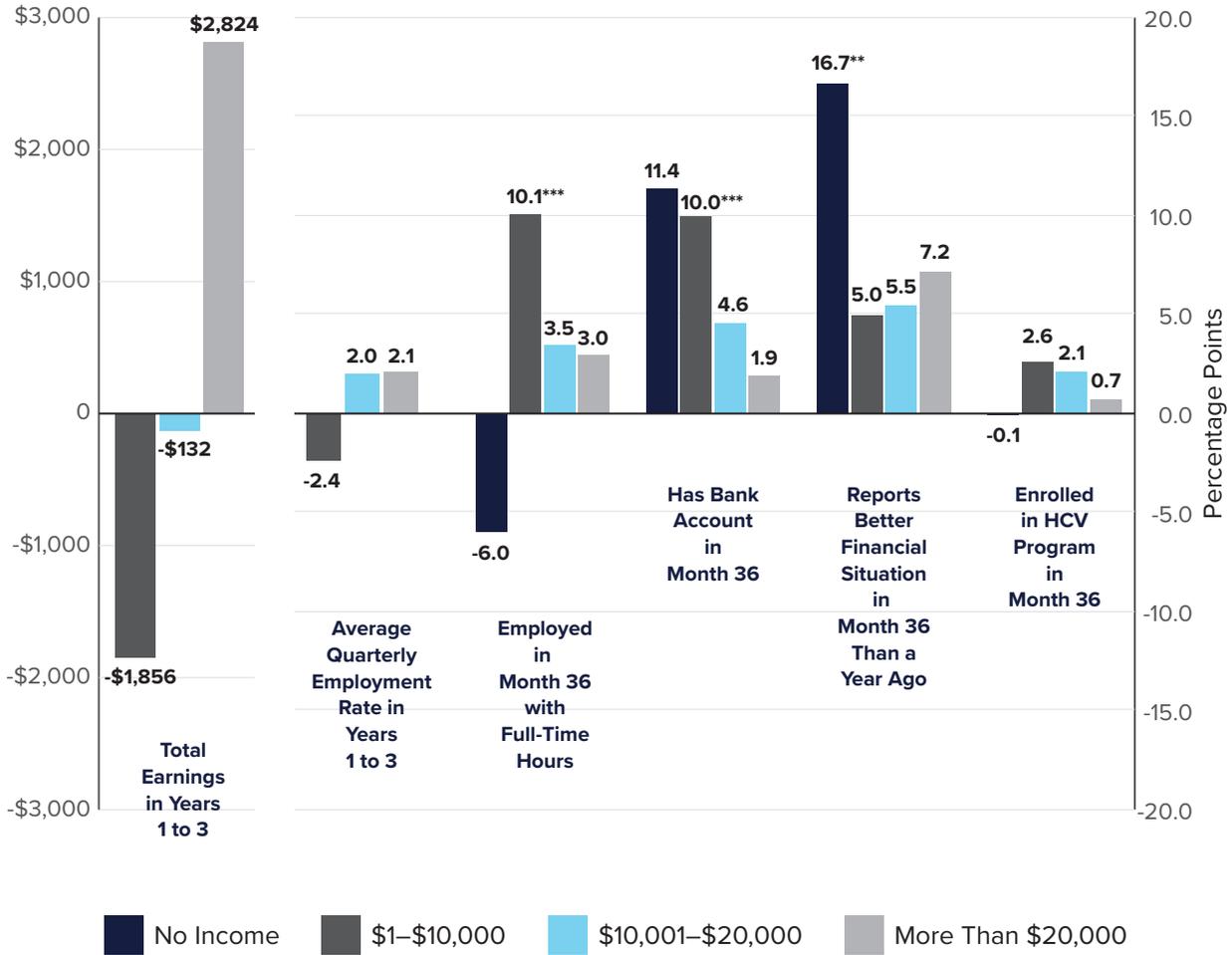


FSS = Family Self-Sufficiency; GED = General Educational Development; HCV = Housing Choice Voucher; SSI/SSDI = Supplemental Security Income/Social Security Disability.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of followup, expressed as a percentage. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations from baseline data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

Exhibit 7.1C. Impacts on Selected Outcomes, by Total Household Income at Random Assignment

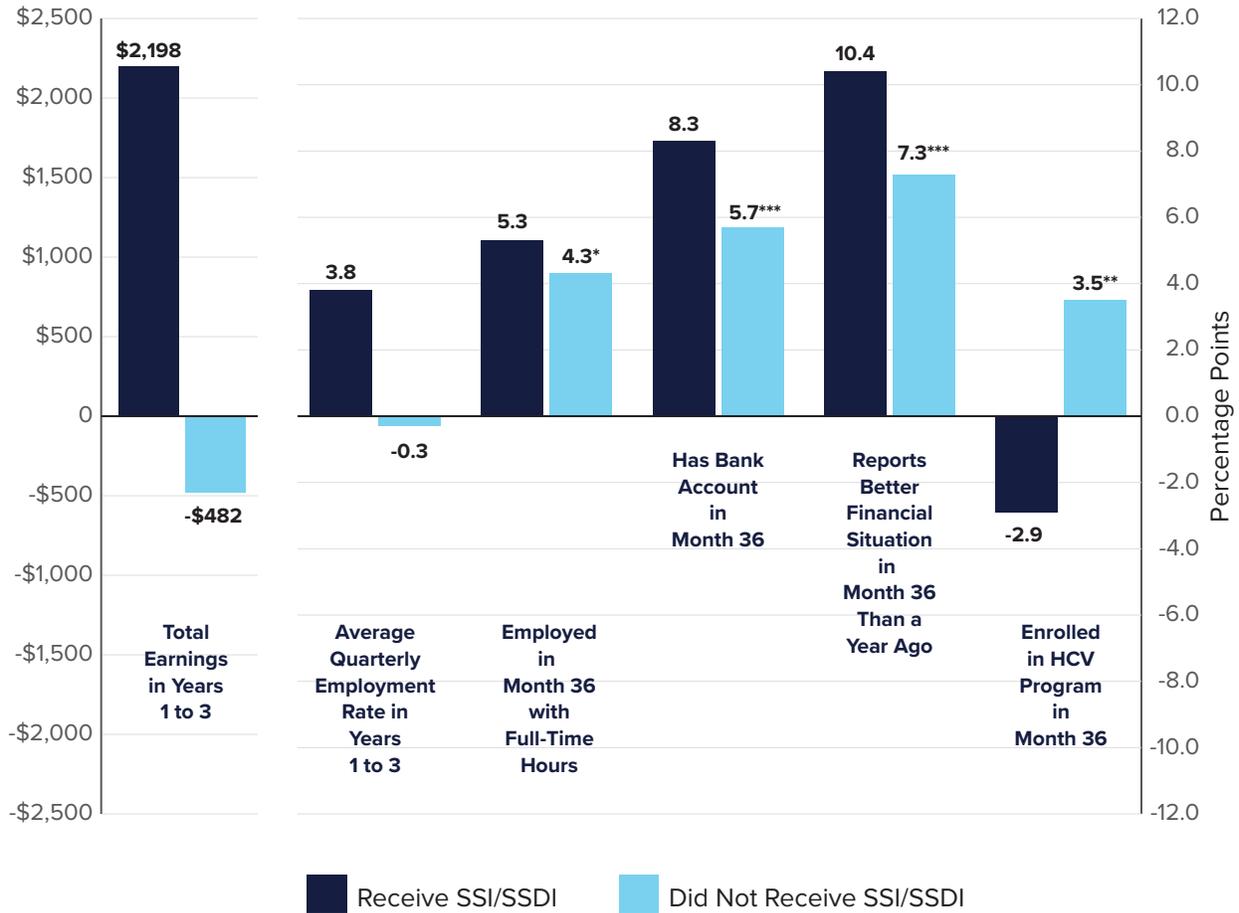


FSS = Family Self-Sufficiency. GED = General Educational Development. HCV = Housing Choice Voucher. SSI/SSDI = Supplemental Security Income/Social Security Disability.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of followup, expressed as a percentage. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations from baseline data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

Exhibit 7.1D. Impacts on Selected Outcomes, by Disability Status at Random Assignment

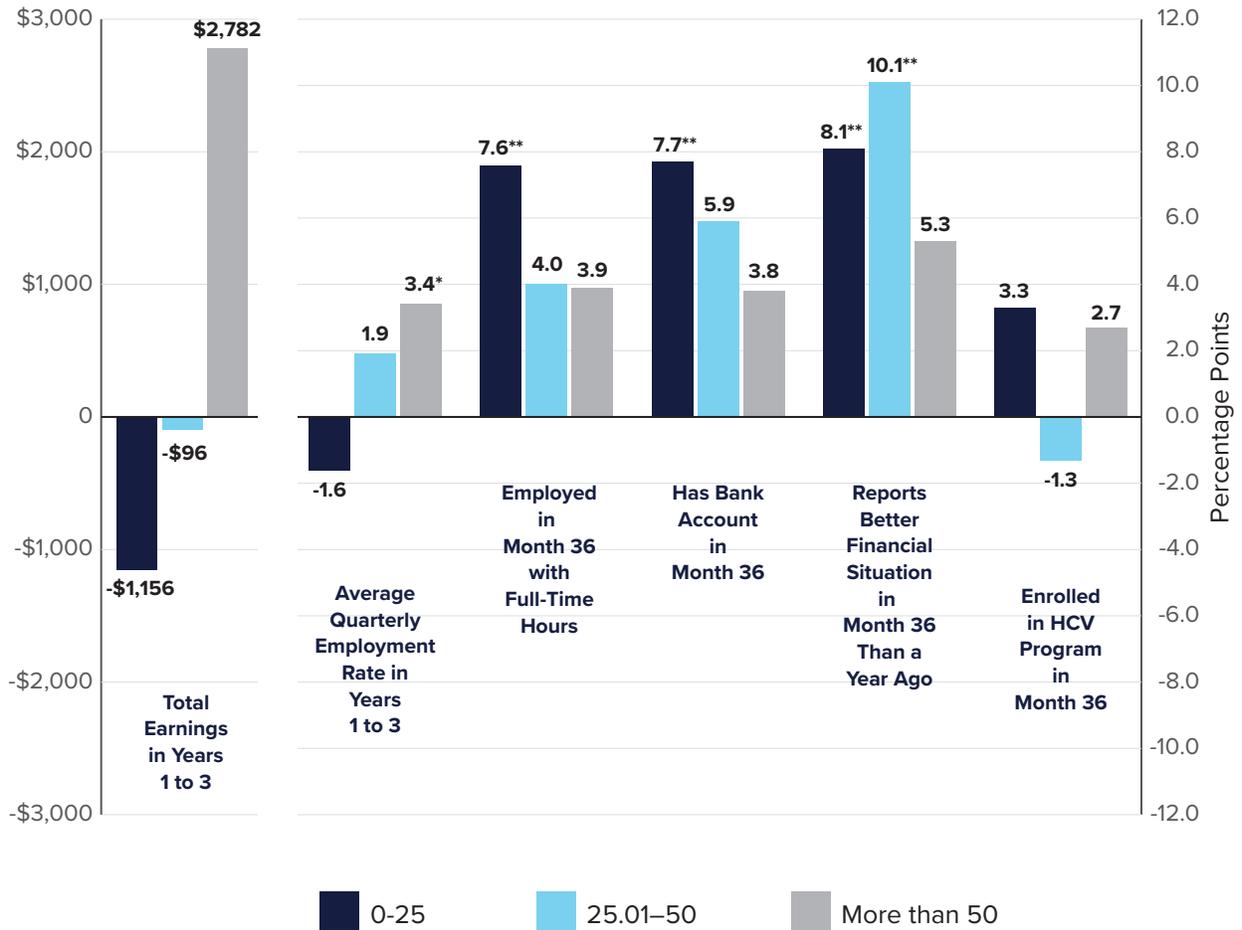


FSS = Family Self-Sufficiency; GED = General Educational Development; HCV = Housing Choice Voucher; SSI/SSDI = Supplemental Security Income/Social Security Disability.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of followup, expressed as a percentage. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations from baseline data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

Exhibit 7.1E. Impacts on Selected Outcomes, by Percentage of Rent and Utilities Expenses Paid by Household at Random Assignment



FSS = Family Self-Sufficiency. GED = General Educational Development. HCV = Housing Choice Voucher. SSI/SSDI = Supplemental Income/Social Security Disability Insurance.

NOTES: The FSS impact sample includes HCV households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of followup, expressed as a percentage. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations from baseline data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

Variation in Housing Outcomes

Appendix exhibit E.3 also displays research group means and differences (impacts) for rent and housing subsidy outcomes for subgroups defined with baseline data. Most outcomes presented in the table are nonexperimental because they exclude FSS and control group members who exited the HCV program before the end of Year 3. Among control group members, enrollment levels in HCV (experimental comparison) show a fair amount of variation, ranging from just over two-thirds (for control group members who paid more than one-half of their housing expenses out of pocket) to 85 percent (for SSI/SSDI recipients and control group members who paid between one-fourth and one-half of their housing expenses out of pocket). Among most subgroups, a slightly larger proportion of FSS group members continued their enrollment in the HCV program, but the differences are not statistically significant (see exhibits 7.1A to 7.1E). In contrast, FSS led to an impact of 6 percentage points above the control group level among study participants who entered the evaluation with full-time employment.¹¹⁶

A relatively consistent pattern appears when comparing rent and subsidy outcomes for ongoing HCV enrollees (nonexperimental). On average, at the end of Year 3, FSS group members in most subgroups are paying a larger share of their housing costs out of pocket and are receiving smaller subsidies than their counterparts in the control group.

Subgroups Based on Program Implementation Features

This section considers whether the impacts of FSS on employment, earnings, and other outcomes varied by implementation features adopted by different PHAs. As a first step, the analysis tests whether impacts on important outcomes differed by PHA for any reason. To address this issue, statistical tests were run for 3-year employment and earnings outcomes, using quarterly wage data from NDNH, to determine whether any differences in impacts by PHA could be found and whether this variation was unlikely to have occurred by chance. Test results showed that impacts varied by PHA overall, although sample sizes for most PHAs are too small to reliably estimate the magnitude of site-specific impacts. Nonetheless, results from these initial statistical tests and results of additional testing of impacts by PHA that control for sample member characteristics strongly suggest that in the first 3 years of followup, some PHAs have positive impacts on employment and earnings, some PHAs have effects close to zero, and some PHAs have negative impacts.¹¹⁷ Future reports will draw on longer-term data and continue to explore this pattern and attempt to examine the factors driving the cross-site variation in impacts.

Next, the analysis considers whether PHAs with similar implementation orientation and practices have impacts of a similar magnitude and direction. (See exhibit 7.2 for a description of the program clusters examined in chapter 7.) PHAs may vary in impacts for reasons unrelated to differences in program implementation. For example, variation in impacts by PHA could result from differences in the characteristics of the research samples—as when certain PHAs have an unusually large proportion of subgroups who experienced positive or negative impacts on crucial outcomes. In theory, this caveat could apply to FSS, although, as discussed above, the analysis based on 3 years of followup has not identified subgroups with consistently positive or negative

¹¹⁶ At this point, it is not clear why the impact would be largest for FSS group members with full-time employment at random assignment. Possibly, earnings levels for FSS group members will increase more quickly as more FSS group members finish their participation in FSS activities, graduate from the program, and receive their disbursement.

¹¹⁷ See Bloom et al. (2017) for a description of the statistical test. Test results showed that variation in the overall pattern of impacts by PHA is statistically significant at the 1 percent level, meaning that it was unlikely that all PHAs had the same impacts—negative, positive, or close to zero.

impacts.¹¹⁸ PHAs may also vary in impacts because of differences in local labor markets or local housing markets that may affect employment opportunities or employment choices for FSS and control group members in unique ways. (This issue will be explored in later reports and with additional followup.) Grouping together PHAs based on their implementation features, however, helps alleviate this measurement issue by combining participants from different regions of the United States; from small-, medium-, and large-sized cities and from suburban areas; and from high-growth and slow-growth labor and housing markets.

Program Clusters Based on Program Focus

PHAs could vary in impacts because of differences in how FSS administrators and case managers work with participants to set their individual goals and training plans and whether these individual self-sufficiency road maps emphasize work, education, and training, or focus on other aspects of financial security and management. For this analysis, the PHAs are grouped into site clusters based on information recorded by case managers in FSS group members' Individual Training and Services Plan (ITSP) soon after random assignment (for most, recorded the same day as or shortly after enrollment), interviews with FSS program administrators and case managers, and documents collected onsite. Exhibits 7.3A to 7.3C and appendix exhibits E.4 and E.5 display the impacts on employment, earnings, and other outcomes for site clusters based on the relative emphasis of each FSS program's (1) job search and post-employment services focus, (2) education and training focus, and (3) financial services focus.

¹¹⁸ Results from additional tests using conditional impacts and with additional covariates that record the interaction between subgroup characteristics and membership in the FSS group suggest that variation in impacts by PHA is only partly explained by variation in the baseline characteristics of each PHA. An additional (informal) test involving the creation of site clusters of PHAs suggested that impacts could be positive for one or more subgroups in one cluster of PHAs and negative for subgroups in a different cluster.

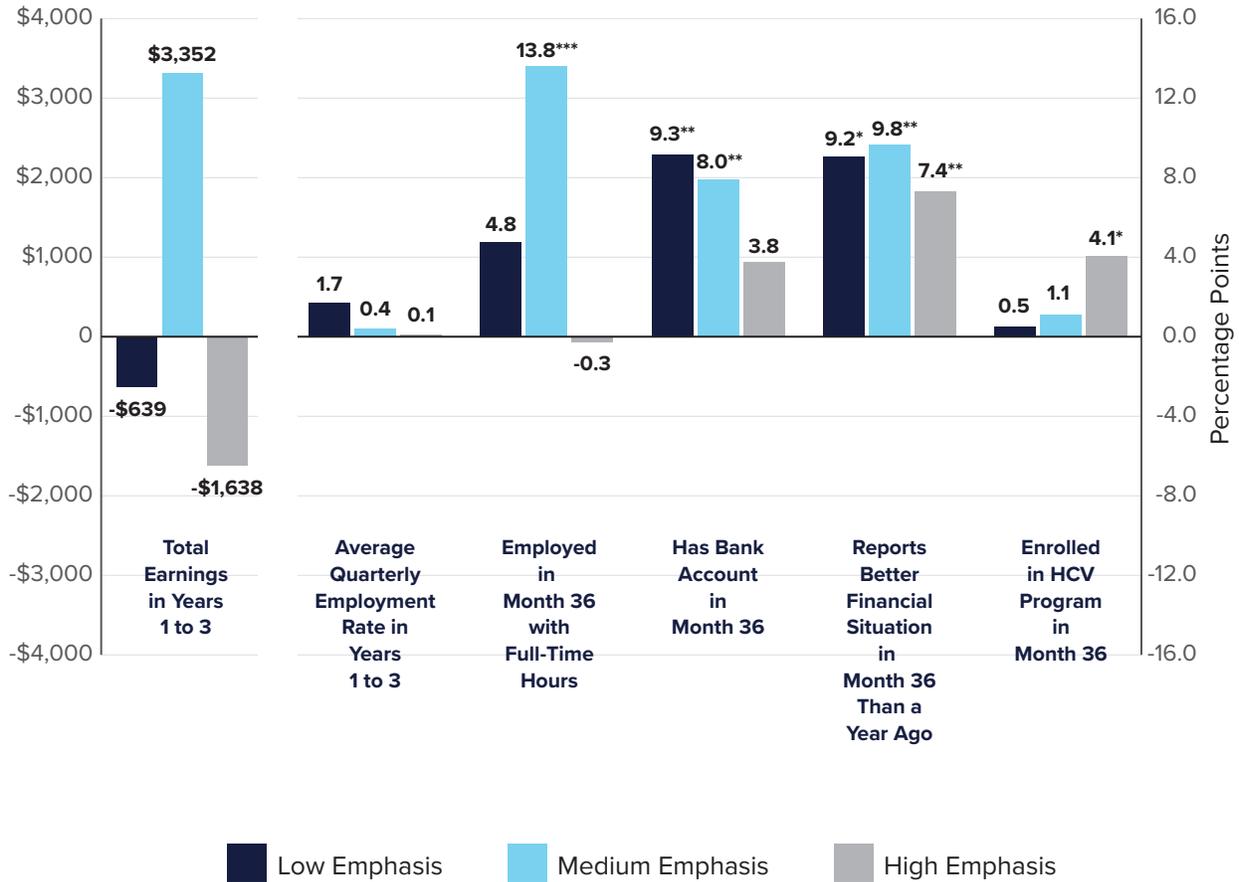
Exhibit 7.2. Program Clusters: Data and Definitions

Site Cluster Measure	Source Data	Component Measure(s) per PHA
Program Emphasis and Orientation		
Emphasis on job search and post-employment services	Individual Training and Services Plans (ITSPs)	Proportion of initial ITSPs that listed participation in job search, self-employment preparation, or post-employment services as a goal or service.
Emphasis on education and training	Individual Training and Services Plans (ITSPs)	Proportion of initial ITSPs that listed participation in education or training as a goal or service.
Emphasis on financial services	Individual Training and Services Plans (ITSPs)	Proportion of initial ITSPs that listed participation in financial counseling or workshops as a goal or service.
Emphasis on monitoring and engagement	Interviews with FSS administrators and case managers; Individual Training and Services Plans (ITSPs)	<ol style="list-style-type: none"> 1. Average FSS caseload size. 2. Expected number of communications with an FSS case manager per year. 3. Proportion of ITSPs that included at least one goal to be completed in Year 1.
Participant Engagement Outcomes (exploratory analysis)		
FSS service use in Year 3	PHA FSS service use data	<ol style="list-style-type: none"> 1. Proportion of FSS group members who participated in FSS services in Year 3. 2. Proportion of FSS group members who participated in FSS activities during 3 months or more in Year 3.

FSS = Family Self-Sufficiency. PHA = public housing agency.

Exhibits 7.3A, 7.3B, and 7.3C show the impacts of having a low, medium, or high emphasis on each type of program service. For each test, the FSS program’s impacts were estimated on average quarterly employment and average total earnings over 3 years, as measured with NDNH quarterly wage data. As these exhibits show, none of the clusters of PHAs had a statistically significant effect on quarterly employment or earnings. There was some variation of impacts among site clusters on full-time employment, measured with survey responses, as exhibits 7.3A and 7.3B show. PHAs with medium levels of emphasis on job search and post-employment services and with low levels of emphasis on education and training increased the incidence of full-time employment among survey respondents by relatively large margins. In contrast, FSS group survey respondents, irrespective of their PHA’s program emphasis, more often reported having a bank account and that their financial situation had improved in the past 12 months, compared with their counterparts in the control group. (See exhibits 7.3A, 7.3B, and 7.3C.)

Exhibit 7.3A. Impacts on Selected Outcomes, by Program Emphasis on Job Search and Post-Employment Services

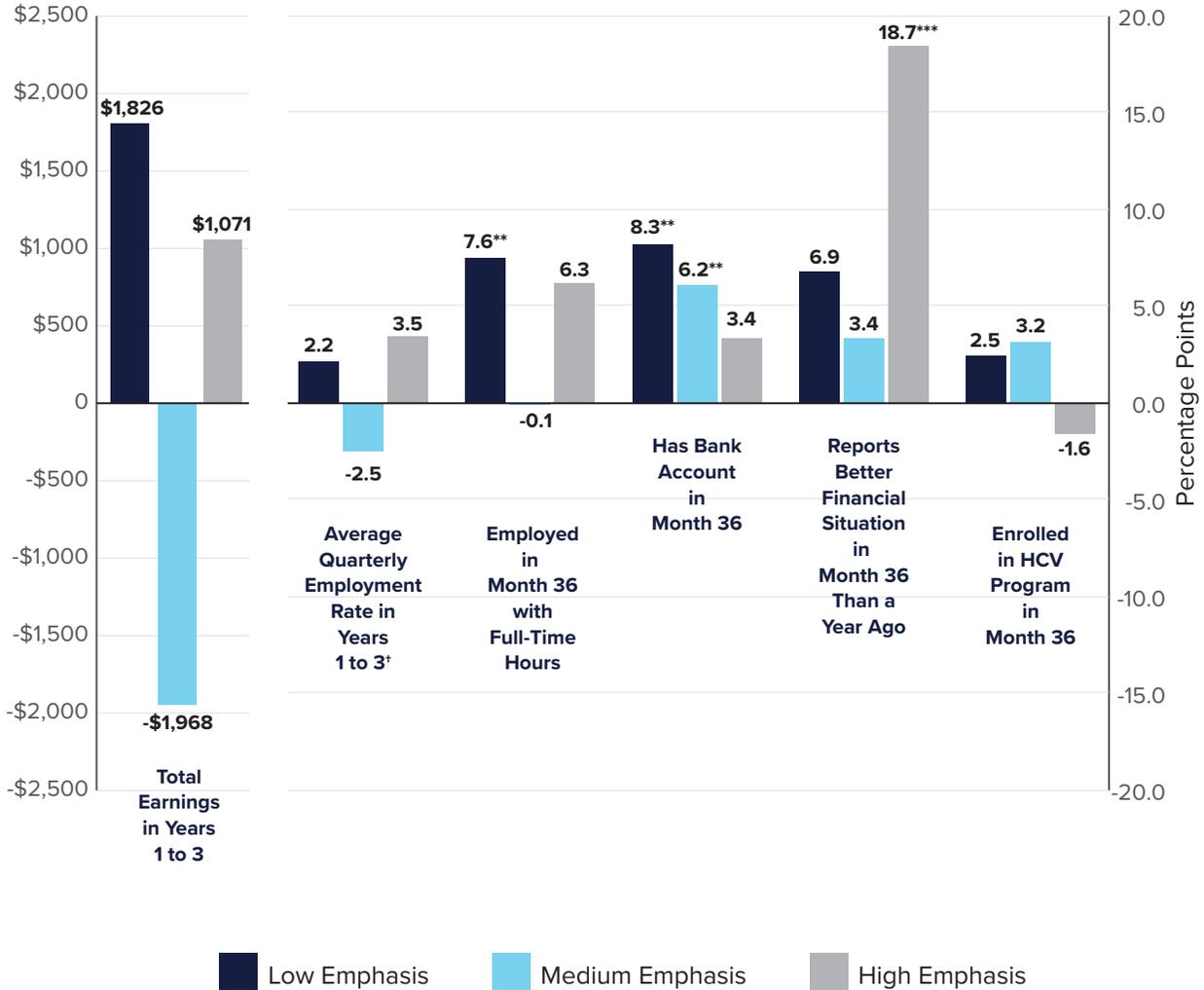


FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS 36-Month Survey respondent sample includes HCV heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: Baseline Information Form data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, and responses to the FSS 36-Month Survey.

Exhibit 7.3B. Impacts on Selected Outcomes, by Program Emphasis on Education and Training

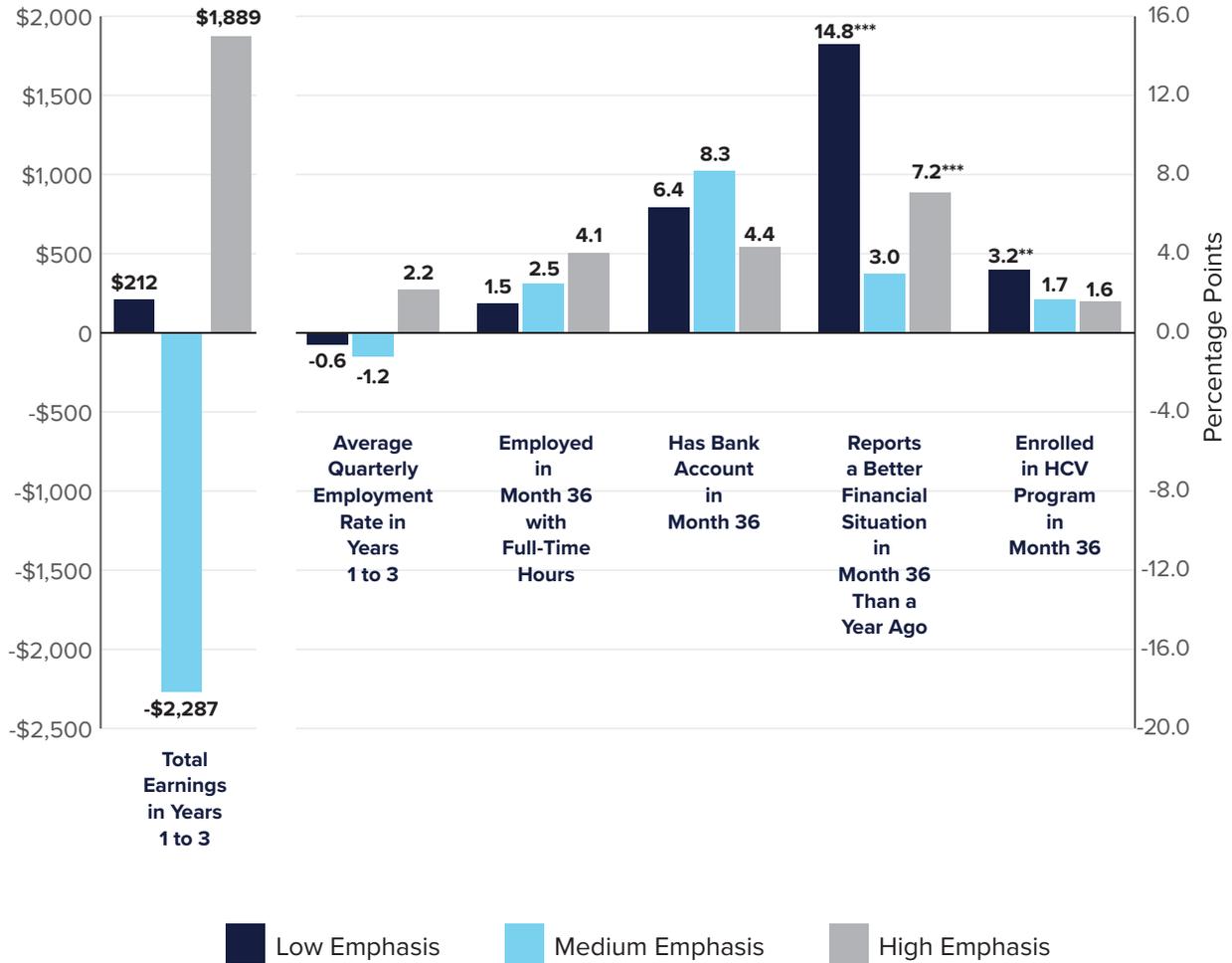


FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS 36-Month Survey respondent sample includes HCV heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: Baseline Information Form data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, and responses to the FSS 36-Month Survey.

Exhibit 7.3C. Impacts on Selected Outcomes, by Program Emphasis on Financial Services

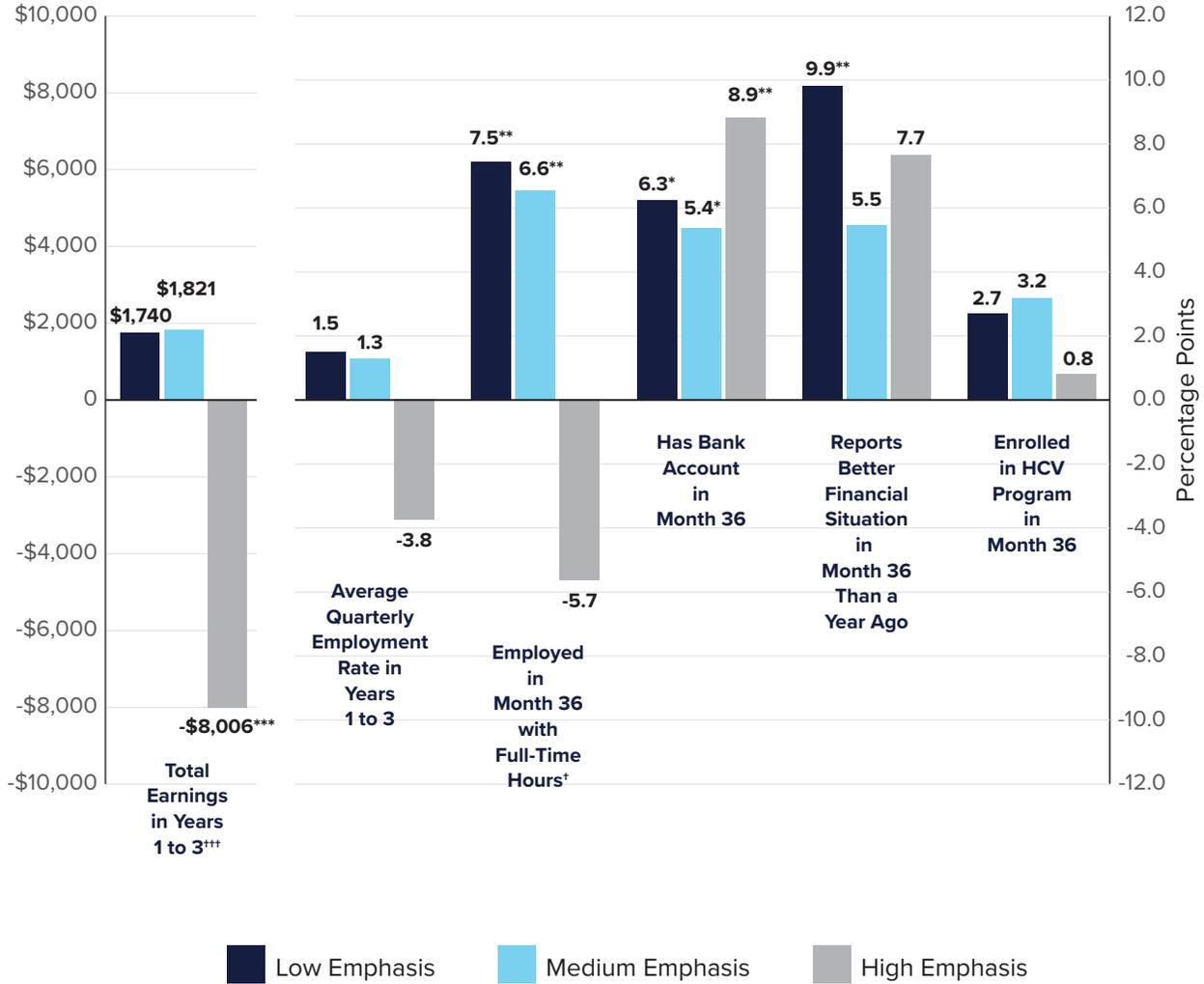


FSS = Family Self-Sufficiency; HCV = Housing Choice Voucher.

NOTES: The FSS 36-Month Survey respondent sample includes HCV heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: Baseline Information Form data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, and responses to the FSS 36-Month Survey.

Exhibit 7.3D. Impacts on Selected Outcomes, by Program Emphasis on Monitoring and Engagement



FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS 36-Month Survey respondent sample includes HCV heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. In addition, a chi-square test for categorical variables was run to determine whether there is a difference in the distribution of related outcomes by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: Baseline Information Form data, HUD Inventory Management System/Office of Public and Indian Housing Information Center data, and responses to the FSS 36-Month Survey.

Program Clusters Based on Site Monitoring and Engagement Practices

Another test of variation in program implementation features, also presented in Verma et al. (2019), concerns the measure of how strongly administrators and case managers in PHAs emphasizes monitoring and engagement with FSS group members. As discussed in previous chapters, the data used to group PHAs into low-emphasis, medium-emphasis, and high-emphasis site clusters are based on the PHAs' FSS program implementation features and practices at study launch—caseload sizes, expectations about the frequency of contacts, and focus on establishing short-term goals. Sites classified as having a high or strong emphasis on monitoring and engagement have smaller caseload sizes, expect FSS group members and case managers to have more frequent contacts and focus on establishing short-term goals. As discussed in chapter 3, PHAs that ranked high on this measure tended to have relatively high participation rates for the FSS group, although differences in participation with the control group were not especially large. In addition, some previous studies that analyzed links between program implementation practices and impacts on employment and earnings found that programs that ranked high on the studies' version of a monitoring and engagement indicator did not lead to statistically significant increases in employment and earnings.¹¹⁹

Appendix exhibit E.4 shows the PHAs in the monitoring and engagement clusters. From 61 to 65 percent of control group members were employed in any given quarter during Years 1 to 3. Average total earnings for control group members ranged from about \$39,000 to \$49,000, with the highest average earned by control group members in housing agencies with the strongest emphasis on monitoring and engagement. This variation in earnings is also reflected in the differences among the clusters of housing agencies in the proportion of control group members who averaged more than \$25,000 per year in earnings.

For outcomes calculated with NDNH quarterly wage data, the FSS program did not affect employment or earnings levels in housing agencies with a low or medium emphasis on monitoring and engagement. In addition, on average, FSS group members in all three types of programs earned about the same amount (about \$40,000) during Years 1 to 3. FSS programs with the strongest emphasis on monitoring and engagement, however, led to a relatively large and statistically significant decrease in total earnings (of about \$8,000) compared with the control group. Similarly, by a margin of nearly 7 percentage points, a larger proportion of control group members than FSS group members earned more than \$25,000 per year. Not shown in any exhibit, the FSS programs with a high emphasis on monitoring and engagement led to an increase of similar magnitude in the proportion of study participants with low annual earnings (up to \$10,000). This pattern of earnings differences suggests that some FSS group members were working part time or working intermittently, whereas control group members were more likely to work full-time hours or in jobs with more weeks or months of employment. This conjecture is supported by findings from survey data. As exhibit 7.3D shows, the FSS programs with low or medium emphasis on monitoring and engagement led to increases in employment with full-time hours at 36 months, but programs with a high emphasis on monitoring and engagement did not.

Additional findings based on survey data show that FSS programs with a strong emphasis on monitoring and engagement did not lead to better outcomes in other measures of financial or personal well-being compared with other types of programs. As exhibit 7.3D shows, FSS programs with a high emphasis on monitoring and engagement led to relatively large and positive impacts on having a savings or checking account, but other types of FSS programs also led to increases in this outcome that were nearly as large. Likewise, all three types of programs increased the proportion of study participants who assessed their financial situation as better than the previous year, but only the largest increase, recorded for programs with a low emphasis on monitoring and engagement, is statistically significant.

¹¹⁹ See Bloom, Hill, and Riccio (2001: 40–42).

Supplemental Exploratory Analyses

So far, results from cross-site variation analysis suggest that some FSS programs led to effects on total earnings in Years 1 to 3 that vary from negative to positive. In addition, the analyses of the variation of impacts by program implementation clusters suggest that FSS programs with a strong emphasis on monitoring and engagement led to negative impacts on total earnings over 3 years. So far, the analyses reviewed above did not suggest reasons why *any type* of FSS program would lead to positive impacts on employment and earnings. Additional supplemental analyses of program effects have been conducted to see whether they may offer additional clues for exploring this issue. Appendix exhibit E.7 shows the impact results for two additional site clusters that are created with data collected *after* random assignment. The first measure uses PHA averages on two indicators of FSS service use during Year 3, and the second measure uses PHA averages on two indicators of escrow accrual during Year 3. For each measure, PHA averages are combined into a single score, which is then used to group PHAs into “low,” “medium,” and “high” categories. Thus, an FSS program (PHA) with a high score for the composite measure of service use would have recorded a greater incidence of service use in Year 3 compared with the average for all PHAs. Similarly, an FSS program (PHA) with a high score for the composite measure of escrow accrual would have recorded a greater incidence of having a positive balance in Month 36 compared with the average for all PHAs.¹²⁰ These measures should be seen as exploratory because they are based on outcomes that occurred after random assignment. They are also tentative because data for future reports will cover Years 4 through 6 of followup and could change the rankings of the PHAs.

As discussed in chapter 3, FSS programs that strongly emphasized monitoring and engagement had relatively high rates of service use. As a result, the pattern of impacts for PHAs clustered on the service-use measure resembles the pattern for PHAs clustered by their emphasis on monitoring and engagement. For example, during Years 1 to 3, the PHAs with high scores on service use led to an average decrease in total earnings of about \$4,000 compared with the control group. (See appendix exhibit E.7. This decrease could potentially be reversed after FSS group members complete their participation in education and training or other services and start employment.)

Appendix exhibit E.7 shows a much different pattern of impacts for the site cluster based on escrow accrual. During Years 1 to 3, FSS programs (PHAs) with lower-than-average levels of escrow accrual led to a decrease in total earnings of about \$3,200 compared with the control group, whereas FSS programs with higher-than-average levels of escrow accrual led to an increase in total earnings of about \$3,750. (The variation in impacts on total earnings is statistically significant.)

Thus, a tentative explanation for site-level variation in impacts in total earnings could point to FSS programs with a strong emphasis on monitoring and engagement leading to negative impacts through the end of Year 3 and FSS programs with a high incidence of escrow accrual leading to positive impacts. There are several outstanding questions concerning this finding:

- **Can PHAs have a high emphasis on monitoring and engagement and a high incidence of indicators of escrow accrual?**

Among the 18 PHAs in the FSS evaluation, different PHAs ranked high in their emphasis on monitoring and engagement or in participants’ escrow accrual—there is no overlap. This variation is not inevitable, although possibly the tendency of programs with a high emphasis on monitoring and engagement to boost service use could (at least temporarily) decrease employment levels and therefore escrow accrual.

¹²⁰ It is reasonable to assert that FSS programs with a higher-than-average incidence of escrow accrual have a greater likelihood of eventually attaining a higher-than-average graduation rate compared with other FSS programs. These programs also have a greater likelihood of having FSS group members who increased their earnings over time to a greater extent than other FSS group members.

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- Do PHAs have high rates of escrow accrual because they enroll larger proportions of subgroups (such as HCV heads of household with part-time employment) who are most likely to accrue escrow?
- Does a high rate of escrow accrual simply reflect the results of other program implementation features that led to greater job finding and earnings advancement?
- Alternatively, are FSS programs with higher-than-average escrow accrual taking steps to increase the incidence or the amount of escrow accrued?

There is some evidence that variation in escrow accrual at least partly reflects differences in implementation practices among PHAs in the FSS evaluation. First, a conditional test of escrow accrual rates showed that all but one of the PHAs in the “high escrow accrual” group would remain in the high group after controlling for differences in sample member characteristics. Second, it appears that PHAs vary in the likelihood of accumulating escrow, even when controlling for differences in the incidence of employment and earnings increases. To test this hypothesis, an approximate “escrow coverage” rate for each PHA was calculated by dividing the number of FSS group members with a positive balance in Month 36 by the number with an increase in household earnings since random assignment, as recorded from federal HUD administrative data.¹²¹ As of the end of Year 3, PHAs in the high escrow accrual cluster had an escrow coverage rate of a little over 60 percent, whereas PHAs in the low escrow accrual cluster had an escrow coverage rate of a little under 40 percent (not shown in the exhibit). Correspondingly, among FSS group members with increased earnings, PHAs in the low escrow accrual cluster had a higher incidence of exiting from FSS and a higher incidence of continued enrollment in the FSS program, but with a zero balance in their escrow account in Month 36 (not shown in the exhibit). Third, PHAs in the high escrow cluster appear to be using a case management approach that features moderate levels of monitoring and low levels of engagement for employed FSS group members. During each year of followup, the PHAs in the high escrow cluster averaged the highest incidence of program-recorded employment but no participation in FSS activities. Yet, during Year 3, FSS group members in PHAs in the high escrow accrual group had a higher incidence of having at least one contact with an FSS case manager than their counterparts in PHAs in the low escrow accrual group (not shown in the exhibit). It may therefore be inferred that FSS case managers in PHAs in the high escrow cluster often knew about FSS group members’ employment status and were willing to tailor their program participant goals.

Conclusion

As discussed in chapter 3, for this evaluation of 18 FSS programs, housing agencies with a relatively strong emphasis on monitoring and engagement did not have the highest rates of escrow accrual. That finding is not inevitable and could conceivably change in later years as PHAs continue helping participants graduate from the program. Nonetheless, it is reasonable to hypothesize that some aspects of program implementation in the high monitoring and engagement housing agencies led to lower levels of earnings (at least temporarily) compared with the control group and more negative impacts compared with housing agencies with high rates of escrow accrual. Possibly, the FSS programs with high levels of monitoring and engagement are encouraging some participants to invest more of their time to participate in FSS-related activities, including longer term education and training, whereas other FSS programs are more likely to let employed participants continue working without an expectation of additional participation in education and training, financial counseling, or other FSS activities. In time, FSS group members who cut back on their hours or weeks of employment to attend education and training courses or receive other services may complete their attendance and move

¹²¹ This measure is approximate because some FSS group members could be ineligible to accrue escrow, even with an earnings increase—for example, because of unpaid rent.

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into full-time employment, possibly with higher earnings commensurate with their newly earned academic or occupational credentials. FSS group members who complete attendance at financial security workshops or counseling sessions may also realize other benefits, for example, from higher credit scores. These questions will be explored further in later reports.

Chapter 8. Summary and Looking Forward

This report updates and expands upon MDRC’s first report examining the implementation and early effects of the FSS program for housing voucher (HCV) recipients. These reports are part of the national evaluation of the FSS program sponsored by HUD. FSS programs offer participants referrals to a broad array of services, plus access to a long-term escrow account, designed to work together to promote earnings growth and financial self-sufficiency over the 5-year program period. At program enrollment, participants work with case managers to set goals and action steps to achieve them. Most FSS participants commit to at least one employment-related goal, along with other goals related to financial security, education, or homeownership. The evaluation results, covering 3 years of the 5-year program, provide a glimpse of the outcomes and effects at about the midway point. So far, through the end of Year 3, the evidence appears mixed: while FSS appears to encourage higher rates of participation in self-sufficiency activities, as yet it has had limited effects on increasing employment or earnings or improving other aspects of financial well-being compared with outcomes for a control group without access to FSS services or financial incentives. Given these are interim results, it is too soon to make a firm assessment about the program’s eventual effectiveness. Participants have another 2 years (and longer for those receiving extensions) to attain their FSS goals, and new patterns of outcomes and effects may emerge over the remaining followup period. Nevertheless, the interim results reveal some important questions and patterns. These insights and observations from the interim report, and how they will be further explored over the remainder of the evaluation, are the focus of this chapter.

What the Interim Findings Suggest

Program engagement is beginning to taper off. FSS is a voluntary program that requires long-term commitment from participants. Across all housing authorities, FSS group members averaged fewer than two interactions with the coordinator or case manager, equivalent to communications occurring every 8 or 9 months—or once every 6 months among FSS group members who are still enrolled in the program (this is lower than the quarterly or monthly expectations set by most sites, and less frequent than during the first year of followup). The declining program contacts and service-use patterns described in this report for the FSS group look similar to those observed in other voluntary employment-focused programs, consisting of a higher involvement, primarily in short-term job search or financial security activities, in the first year or so after enrollment, followed by a drop-off in engagement.

By the end of Year 3, nearly 40 percent of FSS group members had exited the program. Voluntary withdrawals from FSS, moves to other PHAs, and terminations from the HCV program accounted for most exits. By the end of Year 3, only 4 percent of FSS group members had graduated from the program. Further, among study participants who were still officially enrolled in FSS, about one-third did not appear to be engaged in some type of FSS-related activity or employed, per records maintained by the program.

When interviewed, most FSS administrators and case managers cited two factors that strongly influenced participants’ engagement and how much progress they make toward achieving their goals. The first is participants’ internal motivation to succeed. One case manager noted that a PHA could have the best resources and the best coordinators, but unless clients are motivated to improve their own situation, they will not succeed. The second factor staff members cited was the case managers’ skills in motivating clients. Staff members recognized that participants deal with things that “many people have never had to go through,” but

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coordinators are able to work with them and keep them focused on moving toward their goals. Staff placing escrow as a central element of the FSS self-sufficiency strategy cited that the opportunity to make a down payment on a home, to get out of debt, or to support children should be motivating in and of itself.

The ongoing evaluation will continue to examine patterns of engagement for those who remain enrolled in FSS and how the levels and types of engagement observed so far could result in the types of outcomes intended for the FSS program. How strongly will participants engage with the program in future years? Will they maintain meaningful contact with their case managers, build credentials and work history, and accrue escrow? Also, what strategies will FSS administrators and coordinators use to keep participants engaged and working toward graduation? Hypothetically, as participants continue with the program, they may require less intense support from case managers and may experience tangible signs of progress, such as attainment of educational or vocational credentials, improved credit scores and other improvements in household finances, increased earnings, and accumulation of funds in an escrow account. In turn, it is hoped that such progress will motivate participants to stay connected with the program, eventually leading to graduation and escrow receipt.

Escrow credits appears to have plateaued, but families who have accumulated escrow have sizeable balances. At the end of Year 1, nearly one-fourth of the FSS group had accrued some escrow. Over the next year, additional FSS group members began accruing escrow, and by the end of Year 2, the proportion with escrow dollars in their account had increased to 39 percent. By the end of Year 3, the proportion of FSS group members with any escrow accrual remained at around 40 percent. Relatively few additional FSS group members started accruing escrow during Year 3, and about the same number of FSS group members who had previously accrued escrow left the program and forfeited their escrow. Those with a positive balance at the end of Year 3 had an average of nearly \$3,700 in their account (about \$1,450 among all FSS group members), and about one-fourth of these participants had accrued more than \$5,000. On average, FSS group members who were underemployed at random assignment—that is, who were working part-time or receiving relatively low annual earnings—appear more likely to have accrued escrow compared with subgroups who were working full-time or receiving relatively high earnings. As of the end of Year 3, about 20 percent of the FSS group still enrolled had no escrow balance. Questions remain about the escrow accrual over the remainder of the FSS contract. Will those who have yet to start accruing escrow begin doing so during the remaining years of their FSS contract? Will the prospect of graduation and escrow disbursement encourage FSS participants with a positive balance to maintain their employment, continue accruing escrow credits, and qualify for graduation at the end of Year 5? Who is most likely to earn an escrow disbursement?

Participants may pursue different pathways toward economic self-sufficiency, but program effects on employment and earnings are yet to emerge midway through the program. The report shows high levels of employment for both study groups. In the first year of followup, soon after participants enrolled in the study, the FSS group's employment rate was around 73 percent and the control group's rate was around 72 percent. These percentages are not statistically significantly different from each other, suggesting that the program did not have an impact on employment in the early stages. This pattern is evident for each year of followup, with program and control group members showing fairly high levels of attachment to the labor force (quarterly employment rates are somewhat lower, reflecting employment churning). Participation in FSS may have led to more months of full-time employment in the prior year, as measured by the 36-month survey. The subgroup analysis, focusing on baseline employment and education statuses, also does not point to clear differences in impacts for these groups. There is some suggestive evidence that FSS may have facilitated more disadvantaged study participants to realize slightly better employment outcomes (more hours of work but not higher earnings) compared with the control group. These impacts, however, are not statistically significant across groups. As participants near graduation, will their employment trajectories diverge from those of their control

group counterparts? Will the incentive to claim their escrow accruals influence their work patterns during the remainder of their enrollment in FSS? These and related questions will be monitored as the evaluation proceeds.

The absence of consistent program effects on employment and earnings may leave little room for spillover effects on other domains of well-being. An intervention designed to help families make progress toward self-sufficiency through increased earnings and reduced reliance on benefits should eventually lead to changes in receipt of government benefits, such as Temporary Assistance for Needy Families program benefits, Supplemental Nutrition Assistance Program benefits, and housing assistance. For the most part, the FSS group respondents reported patterns of income receipt and average income levels that resemble those of the control group. By the end of Year 3, according to survey responses, FSS led to a small and statistically significant decrease (of 2 percentage points) in the receipt of TANF cash welfare benefits. FSS households are required to go off TANF for at least 12 months leading up to graduation. It is possible that this pattern may hold as FSS group members approach the end of their FSS contract. The evaluation is not collecting TANF agency administrative records, so this pattern will not be verified as part of this study.

A self-sufficiency program should also demonstrate improvements in other aspects of families' well-being. At the 3-year mark (a period that precedes the receipt of escrow for most of those who will graduate and earn disbursements), the program is showing a few notable improvements in financial well-being or reductions in the incidence of material hardships or food insecurity. In addition, some of the observed differences between research groups appear to be inconsistent. The FSS program was effective in increasing participants' connections to mainstream financial institutions, and participants were more likely to be aware of their credit and reported higher credit scores, compared with the control group. FSS group members, on average, however, incurred greater debt (it is unclear what is driving the higher debt levels). Consistent with programs that emphasize the use of financial security and homeownership preparation counseling and workshops, FSS led to positive effects on attitudinal and perceived well-being outcomes. FSS group members, when surveyed, were more likely than control group respondents to assess that they had improved their financial situation in the past year and were better able to plan for the future.

Impacts on some financial security outcomes may occur without increases in earnings or in household income. The FSS program led to a large increase in attendance at financial security workshops and counseling. So far, the FSS program has not increased nonretirement savings above control group levels (not counting the escrow account as potential savings); nor has it reduced average debt levels. Nonetheless, FSS group members' greater access to financial security-related services (and to homeownership preparation services) could lead to other positive effects, especially if FSS group members continue to use traditional financial instruments more often than control group members. Most important, FSS could lead to increases in average credit scores above control group levels, which can positively affect a range of financial outcomes, including access to credit and, in some instances, likelihood of employment. Future reports and papers will address this issue in more detail.

Housing subsidy receipt rates and subsidy levels are almost indistinguishable between the two study groups. FSS participants are subject to the same rent policies as non-FSS voucher recipients. However, the housing authority credits an interest-bearing escrow account for FSS participants based on increases in household earned income during the term of the FSS contract. In this way, escrow builds "forced savings," a potentially sizeable reward once FSS goals are achieved. Three years out, a slightly larger proportion of FSS group households than control group households remained enrolled in the HCV program. During Month 36, FSS group members also averaged slightly higher out-of-pocket expenses (of \$19) for rent and utilities and lower amounts of housing subsidies. However, the differences in total housing subsidies over 3 years and in Year 3

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are not statistically significant. The evaluation will continue to examine the long-term interaction between employment and housing outcomes. But what will happen to FSS group members who graduate from the program and receive a full escrow disbursement? Possibly, some FSS graduates will leave housing assistance, either to move to private rental housing without a subsidy or to use their escrow disbursement to purchase a home. If so, the public housing agency will be able to assist new households. Thus, FSS may lead to long-term effects on housing. Later analysis of HUD administrative data and responses to an exit survey, slated for 2020, will address these questions.

There is variation across housing agencies. A central goal of the evaluation is to examine whether variation in program implementation approaches affects program outcomes, and whether some implementation approaches are associated with positive outcomes. Site clusters were used to explore these patterns of variation by program approach. The analyses show some intriguing—and puzzling—findings. PHAs with stronger monitoring and engagement practices (smaller caseload sizes, an expectation of more frequent contacts, and a focus on establishing short-term goals) tended to have higher rates of exit from the FSS program, compared with programs without these attributes, but they also worked more intensively with FSS group members who remained in the program. The housing agencies with a relatively strong emphasis on monitoring and engagement, however, did not have the highest rates of escrow accrual. Further, based on the employment and earnings patterns seen across these clusters of housing agencies, it is reasonable to hypothesize that some aspects of program implementation in the high monitoring and engagement housing agencies lead to lower levels of earnings (at least temporarily) compared with the control group and more negative impacts compared with other housing agencies. Possibly, the FSS programs with high levels of monitoring and engagement are encouraging some participants to invest more of their time to participate in FSS-related activities, including longer term education and training, whereas other FSS programs are more likely to let employed participants continue working without the expectation of additional participation in education and training, financial counseling, or other FSS activities. These questions and other exploratory analyses related to variation will be examined in future reports.

The Evaluation Going Forward

The FSS evaluation is slated to end in 2021, providing 6 to 7 years of followup for the study sample. This length of followup allows the evaluation to track participants through the end of their 5-year FSS contracts and examine post-FSS circumstances for those who do not receive extensions (programs can extend participation by 2 additional years, for a total of up to 7 years, for participants who are deemed on track to graduate and earn escrow). Two additional reports will be published during this time. In addition to updating many of the administrative data-based results (for example, employment, earning, escrow, and housing subsidy) included in this report, future deliverables will also be informed by: an additional round of field research with program staff and a small number of FSS participants; a formal followup survey, conducted with both FSS and control group members, to help estimate the program's longer-term effects on a range of economic and material well-being outcomes after the end of the FSS program for most participants; and an analysis of financial behaviors using credit data. The longer timeframe and more comprehensive data will support a more complete assessment of the FSS program's effects. It will also provide the information needed to assess whether—or the ways in which—the program may need to be strengthened to help support families in making progress toward self-sufficiency.

Appendix A

Appendix Exhibit A.1. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample by Research Group

Characteristic	FSS Group	Control Group	Total
Average number of household members ^a	3.2	3.2	3.2
Average number of adults in household ^a	1.5	1.4	1.5
Households with more than one adult (%)	35.3	32.0	33.7*
Average number of children in household			
0	22.8	24.8	23.8
1	24.2	21.1	22.7
2	24.1	25.3	24.7
3 or more	28.9	28.8	28.8
For households with children, age of youngest child (%)			
0–2 years	21.0	20.6	20.8
3–5 years	19.5	21.3	20.4
6–12 years	42.1	40.5	41.3
13–17 years	17.4	17.5	17.5
Primary language spoken at home is English (%)	91.9	92.4	92.2
Receives TANF (%)	16.3	15.3	15.8
Receives food stamps/SNAP (%)	71.2	67.9	69.6*
Length of time receiving Section 8 Housing Choice Voucher (%)			
Less than 1 year	5.0	4.9	5.0
1–3 years	27.2	28.1	27.6
4–6 years	21.9	21.3	21.6
7–9 years	15.2	15.3	15.2
10 years or more	30.7	30.4	30.6
Total household income (%)			
\$0	4.4	4.7	4.5
\$1–\$4,999	18.0	16.1	17.0
\$5,000–\$9,999	18.9	18.5	18.7
\$10,000–\$14,999	18.4	16.9	17.6
\$15,000–\$19,999	14.1	14.4	14.3
\$20,000–\$24,999	10.3	12.0	11.2

(continued)

Appendix Exhibit A.1. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample by Research Group continued

Characteristic	FSS Group	Control Group	Total
\$25,000–\$29,999	7.8	8.5	8.2
\$30,000 or more	8.1	9.0	8.5
Payment for rent and utilities (%)			
\$0	2.1	1.7	1.9
\$1–\$99	5.6	5.4	5.5
\$100–\$199	10.4	8.7	9.5
\$200–\$299	11.1	11.4	11.2
\$300–\$399	13.1	12.9	13.0
\$400–\$499	11.1	10.0	10.5
\$500–\$599	10.4	11.2	10.8
\$600–\$699	7.6	8.1	7.8
\$700–\$799	7.0	7.6	7.3
\$800–\$899	5.2	5.9	5.5
\$900–\$999	2.9	3.6	3.3
\$1,000 or more	13.7	13.5	13.6
During the past 12 months, household experienced at least one financial hardship (%)	57.7	60.4	59.0
Not able to buy prescription drug	13.0	13.6	13.3
Not able to buy food	26.2	31.6	28.9***
Not able to pay telephone bill	28.7	27.8	28.2
Not able to pay rent	17.9	19.1	18.5
Not able to pay utility bill	43.5	43.3	43.4
Sample size	1,285	1,271	2,556

FSS = Family Self-Sufficiency. SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families. *Maximum response option for number of adults in a household is four.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than total for questions that allow more than one response.

SOURCE: MDRC calculations from Baseline Information Form data.

Appendix Exhibit A.2. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Research Group

Characteristic	FSS Group	Control Group	Total
Sample member characteristics			
Female (%)	91.4	89.8	90.6
Age (%)			
19–24 years	1.7	2.7	2.2
25–34 years	34.0	33.8	33.9
35–44 years	36.6	34.5	35.6
45–59 years	26.7	27.9	27.3
60–61 years	1.0	1.2	1.1
Average age (years)	39	39	39
Marital status (%)			
Married, living with spouse	8.3	7.2	7.7
Married, not living with spouse	7.1	6.6	6.8
Cohabiting	1.5	1.3	1.4
Single, widowed, or divorced	83.1	84.9	84.0
Citizenship status (%)			
U.S.-born	87.6	87.8	87.7
Naturalized	8.0	8.1	8.1
Non-citizen	4.4	4.0	4.2
Race/ethnicity (%) ^a			
Black, non-Hispanic/Latino	72.2	74.4	73.3
Hispanic/Latino	15.6	16.1	15.8
White, non-Hispanic/Latino	7.1	6.2	6.7
Native American	0.3	0.3	0.3
Asian	2.7	1.3	2.0
Other	0.4	0.3	0.4
Multi-racial	1.7	1.4	1.6

(continued)

Appendix Exhibit A.2. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Research Group continued

Characteristic	FSS Group	Control Group	Total
Education			
Highest degree or diploma earned (%)			
GED certificate	3.5	2.5	3.0
High school diploma	10.5	10.8	10.6
Some college or received technical/trade license	53.9	56.2	55.0
Associate's or 2-year college degree	11.3	10.2	10.8
4-year college or graduate degree	7.1	5.9	6.5
None of the above	13.6	14.4	14.0
Has trade license or training certificate (%)	47.1	47.0	47.0
Employment status			
Currently employed (%)	55.6	56.9	56.2
Regular job	47.7	49.2	48.4***
Self-employed	3.4	5.1	4.2***
Temporary or seasonal job	4.5	2.5	3.5***
Currently working 35 hours or more per week (%)	29.1	32.0	30.5
Average hours worked per week	17.9	18.8	18.3
Average weekly earnings (\$)	205	221	213
Barriers to employment			
Has any problem that limits work (%)	41.6	40.8	41.2
Physical health	18.4	19.3	18.8
Emotional or mental health	7.6	7.7	7.6
Childcare access or cost	18.5	17.2	17.8
Need to care for disabled household member	7.9	6.7	7.3
Previously convicted of a felony	6.7	6.0	6.3
Limited English-speaking ability (%)	3.6	4.1	3.8
Does not have access to transportation for employment (%)			
No public transportation access	16.5	19.1	17.8*
No automobile access	18.5	17.9	18.2

(continued)

Appendix Exhibit A.2. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Research Group continued

Characteristic	FSS Group	Control Group	Total
FSS program			
Heard of escrow before random assignment (%)	43.9	44.2	44.0
Interest in FSS services related to (%)			
Job-related services	70.4	70.6	70.5
Social services	32.2	32.7	32.4
Financial services	95.4	95.5	95.5
Sample size	1,285	1,271	2,556

FSS = Family Self-Sufficiency; GED = General Educational Development.

*Chi-square test may not be valid due to small cell sizes.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100 percent for questions that allow more than one response.

SOURCE: MDRC calculations from Baseline Information Form data.

Appendix A

Appendix Exhibit A.3. Staffing, Escrow, and Graduation Policies

Housing Authority	Case Management Staffing			Escrow			Graduation Requirements ^a			
	Number with FSS Caseload	HCV Responsibilities	Home-ownership Responsibilities	At Least One Annual In-Person Meeting Expected	Interim Escrow Disbursement Permitted	Withdrawal Limits	Employment Hours	Employment Earnings	Employment Stability	Limitations on Revising Goals
Housing Authority #1	5 or more (including supervisor; if excluding, 4)	No	Yes	Yes	Yes	Up to 50% of the balance	30 hours per week	--	6 months	1 year (final goal); 6 months (interim goals)
Housing Authority #2	1-4	Yes	No	Yes	Yes	Up to 25% of the balance	--	--	--	6 months
Housing Authority #3	1-4	No	No	No	Yes	Up to 50% of the balance (up to 2 disbursements)	--	--	--	1 year
Housing Authority #4	1-4	Yes	Yes	Yes	No	N/A	--	At local minimum wage or more	--	6 months
Housing Authority #5	5 or more	Yes	No	No	Yes	None	--	Wages must make clients self-sufficient from HCV (zero HAP)	--	--
Housing Authority #6	5 or more	Yes	Yes	Yes	Yes	Less than 100% of the balance	--	Earnings must be sufficient for clients to sustain themselves	--	--
Housing Authority #7	1-4	No	Yes	Yes	Yes	Up to 50% of the balance	32 hours per week	Earnings must be deemed "reasonable" by Housing Authority staff	--	--
Housing Authority #8	1-4	Yes	No	Yes	No	N/A	32 hours per week	--	--	2 years

(continued)

Appendix A

Appendix Exhibit A.3. Staffing, Escrow, and Graduation Policies continued

Housing Authority	Case Management Staffing				Escrow		Graduation Requirements ^a			
	Number with FSS Caseload	HCV Responsibilities	Home-ownership Responsibilities	At Least One Annual In-Person Meeting Expected	Interim Escrow Disbursement Permitted	Withdrawal Limits	Employment Hours	Employment Earnings	Employment Stability	Limitations on Revising Goals
Housing Authority #9	1-4	No	Yes	Yes	Yes	Cannot withdraw more than \$1,000 in a calendar year. For enrollees after June 1, 2018, there is a maximum \$5,000 limit during the entire term of FSS participation	32 hours per week	--	--	6 months
Housing Authority #10	5 or more	Yes	No	Yes	Yes	None	--	--	12 months	--
Housing Authority #11	1-4	Yes (1 CM)	Yes	Yes	Yes	Cannot withdraw until after 12 months of accruing escrow and maintaining employment	Full-time	--	12 months	2.5 years
Housing Authority #12	1-4	Yes	Yes	Yes	Yes	Less than 100% of the balance	--	More than minimum wage	--	--
Housing Authority #13	1-4	No	No	Yes	Yes	Up to 30% of the balance (one time)	30 hours per week	--	--	3 months
Housing Authority #14	1-4	No	Yes	Yes	Yes	Enrolled for at least one year; Up to 25% of the balance (annually); car repairs require 20% contribution by participant	30 hours per week	--	6 months	--

(continued)

Appendix A

Appendix Exhibit A.3. Staffing, Escrow, and Graduation Policies continued

Housing Authority	Case Management Staffing			Escrow			Graduation Requirements ^a			
	Number with FSS Caseload	HCV Responsibilities	Home-ownership Responsibilities	At Least One Annual In-Person Meeting Expected	Interim Escrow Disbursement Permitted	Withdrawal Limits	Employment Hours	Employment Earnings	Employment Stability	Limitations on Revising Goals
Housing Authority #15	1–4	Yes	Yes	Yes	Yes	Less than 100% of the balance	30 hours per week	--	--	--
Housing Authority #16	5 or more	Yes	Yes	Yes	Yes	Up to 50% of the balance	Full time	Suitable employment is defined as earned income exceeding the 50th percentile of the area income limit. (Can be waived for good cause.)	12 months	--
Housing Authority #17	1–4	Yes	Yes	No	Yes	None	Full time	--	12 months	6 months
Housing Authority #18	1–4	Yes (2 CM)	Yes	Yes	No	N/A	Full time	If employed at start, must increase income	--	1 year

FSS = Family Self-Sufficiency. HCV = Housing Choice Vouchers. TANF = Temporary Assistance for Needy Families.

^aUnless otherwise noted, all requirements are as of graduation. No receipt of TANF benefits for 12 months is a requirement at all sites. Further, some sites have different employment requirements for disabled and/or elderly clients. These are not included in the exhibit.

SOURCE: Information collected during MDRC interviews with FSS administrators and case managers in quarter 4, 2015, and in quarter 2, 2018.

Appendix B

Appendix Exhibit B.1. Use of Family Self-Sufficiency Services (Detailed) and Recorded Employment During Years 1 to 3, Family Self-Sufficiency Service-Use Sample

Outcome (%)	FSS Group
Used FSS services	80.4
Job search	36.1
Job readiness or job search workshop	11.1
Individual job search, job search counseling, and job referrals	35.6
Work experience or volunteer jobs	3.5
Self-employment assistance	1.5
Post-employment services	2.4
Education or training	31.4
Basic education	6.9
Post-secondary education	12.6
Vocational training or occupational credential	15.4
Financial security or homeownership preparation	48.0
Household finances, money management, budgeting, credit repair, or debt reduction	45.2
Workshops	22.8
Individual counseling	33.2
Homeownership preparation workshops or counseling	15.8
Work supports	21.7
Transportation	9.1
Childcare	3.8
Equipment and other	3.1
Financial aid	9.7
Social services	35.3
Life skills or self-esteem-building workshops	23.3
Housing or utilities assistance	5.9
Commodities assistance (food, clothing, or holiday gifts)	11.5
Legal assistance, crisis intervention, or mentoring	5.5
Health services	7.0
Program-recorded employment or self-employment	75.4
Sample size	714

(continued)

Appendix B

Appendix Exhibit B.1. Use of Family Self-Sufficiency Services (Detailed) and Recorded Employment During Years 1 to 3, Family Self-Sufficiency Service-Use Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014, in 12 public housing agencies and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums. Detail may sum to more than total because FSS group members could participate in more than one service.

SOURCE: MDRC calculations using housing authority administrative data.

Appendix B

Appendix Exhibit B.2. Selected Indicators of Contacts and Service Use During Years 1 to 3, by Self-Reported Employment Status at Random Assignment

Outcome	Not Employed	Employed
Years 1 to 3		
Services and employment		
Used FSS-related service	83.7	77.6**
Job search or post-employment services	43.9	32.0***
Financial counseling	42.6	47.4
Education or training	32.5	31.7
Homeownership preparation	14.4	17.0
Health coverage or health assistance	6.1	7.7
Social services	39.3	32.0**
Supportive services	24.5	19.3*
Had program-recorded employment	55.5	92.0***
Year 3		
Contacts with case managers		
Had 1 contact or more (%)	49.4	51.0
Had contact during 3 months or more (%)	18.4	21.9
Average number of months with contacts	1.3	1.6*
Service use and employment (%)		***
Service use and program-recorded employment	24.5	31.4
Service use only	12.9	3.9
Program-recorded employment only	16.9	34.5
Neither service use nor program-recorded employment	45.7	30.2
Still enrolled in FSS program in Month 36	66.3	64.4
Sample size (total = 714)	326	388

FSS = Family Self-Sufficiency.

NOTES: The FSS service-use sample includes all or a randomly selected subsample of Housing Choice Voucher heads of household who were randomly assigned to the FSS group between October 18, 2013, and December 22, 2014 in 12 housing agencies, and were age 18 to 61 at the time of random assignment. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum more than total. A chi-square test was performed on subgroup differences in frequency distributions and an F- test was performed on subgroup differences in means. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

SOURCES: MDRC calculations using baseline data and housing authority administrative data.

Appendix B

Appendix Exhibit B.3. Composite Score Component Values, by Site, Family Self-Sufficiency Service-Use Sample

	Caseload Size	Expected Frequency of Contact	Had Year 1 Goal (%)	Standardized Caseload Size	Standardized Expected Frequency of Contact	Standardized Had Year 1 Goal	Composite Score
Housing authority #1	52	7.3	36.1	0.73	0.73	-0.43	1.02
Housing authority #2	245	1.0	0.0	-2.23	-1.31	-1.57	-5.11
Housing authority #3	54	4.0	53.6	0.70	-0.34	0.12	0.48
Housing authority #4	36	6.0	85.7	0.97	0.30	1.14	2.42
Housing authority #5	80	4.0	53.8	0.30	-0.34	0.13	0.09
Housing authority #6	101	1.9	79.7	-0.02	-1.02	0.95	-0.09
Housing authority #7	69	4.0	85.0	0.47	-0.34	1.12	1.25
Housing authority #8	140	2.0	11.4	-0.62	-0.99	-1.21	-2.82
Housing authority #9	69	4.0	60.0	0.47	-0.34	0.33	0.45
Housing authority #10	40	12.0	82.8	0.91	2.24	1.05	4.20
Housing authority #11	178	4.0	76.5	-1.20	-0.34	0.85	-0.70
Housing authority #12	68	8.8	64.6	0.48	1.22	0.47	2.17
Housing authority #13	32	12.0	100.0	1.04	2.24	1.59	4.86
Housing authority #14	143	4.0	30.8	-0.66	-0.34	-0.60	-1.60
Housing authority #15	43	4.0	8.7	0.87	-0.34	-1.30	-0.77
Housing authority #16	183	4.0	13.0	-1.28	-0.34	-1.16	-2.78
Housing authority #17	60	4.0	15.2	0.61	-0.34	-1.09	-0.83
Housing authority #18	200	4.0	38.0	-1.54	-0.34	-0.37	-2.25

FSS = Family Self-Sufficiency.

NOTES: For each standardized variable the unit of measure is a z-score, indicating the number of standard deviations the site-level mean is either above or below the cross-site mean. Caseload size indicates the average caseload size for a case manager at a particular housing authority. The expected frequency of contact for some sites is conditional upon the circumstances of the participant and is often based on employment status. As a result, the number of expected contacts in a year varies across individuals. The z-scores for average caseload sizes were multiplied by -1 to test whether small caseload sizes are positively correlated with greater expected frequency of contacts and greater incidence of having a Year 1 goal.

SOURCES: MDRC calculations from FSS group members' Individual Training and Services Plan (ITSP) forms completed at program enrollment and from information provided by FSS administrators and case managers.

Appendix Exhibit B.4. Impacts on Use of Services in the 12 Months Prior to Interview by Self-Reported Employment Status at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Not employed				
Used any services	78.4	70.9	7.5**	0.012
Job search or post-employment services	49.9	32.3	17.6***	0.000
Financial counseling	40.4	19.7	20.7***	0.000
Education or training	31.7	24.4	7.3**	0.018
Homeownership preparation	16.4	6.8	9.6***	0.000
Health coverage or health assistance	26.2	30.0	-3.8	0.223
Social services	21.6	22.6	-1.1	0.708
Supportive services	20.8	17.7	3.1	0.254
Sample size (total = 867)	447	420		
Employed Part-Time				
Used any services	81.6	69.6	12.1***	0.003
Job search or post-employment services	49.7	34.1	15.6***	0.001
Financial counseling	43.3	15.9	27.4***	0.000
Education or training	27.9	24.1	3.8	0.353
Homeownership preparation	15.9	6.1	9.8***	0.001
Health coverage or health assistance	27.3	26.3	1.0	0.816
Social services	19.9	16.9	3.1	0.412
Supportive services	19.9	17.6	2.4	0.516
Sample size (total = 495)	255	240		
Employed Full-Time				
Used any services	78.3	66.7	11.7***	0.003
Job search or post-employment services	38.7	29.3	9.4**	0.021
Financial counseling	38.4	16.9	21.5***	0.000
Education or training	31.3	26.5	4.8	0.218
Homeownership preparation	20.1	5.8	14.3***	0.000
Health coverage or health assistance	23.2	26.5	-3.3	0.372
Social services	14.8	16.3	-1.5	0.649
Supportive services	18.1	17.2	0.9	0.792
Sample size (total = 574)	286	288		

(continued)

Appendix Exhibit B.4. Impacts on Use of Services in the 12 Months Prior to Interview by Self-Reported Employment Status at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and responses to the FSS 36-Month Survey.

Appendix Exhibit B.5. Impacts on Education and Training, by Self-Reported Employment Status at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Not employed				
Earned academic credential	10.4	5.9	4.5**	0.018†
High school diploma or equivalency certificate	2.9	1.5	1.5	0.155
Post-secondary degree	7.5	4.5	3.0*	0.059††
Earned occupational credential or license	17.7	13.8	4.0	0.122
Sample size (total = 867)	447	420		
Employed part-time				
Earned academic credential	7.8	11.1	-3.3	0.234†
High school diploma or equivalency certificate	2.7	1.8	0.9	0.513
Post-secondary degree	5.1	9.3	-4.2*	0.078††
Earned occupational credential or license	13.3	13.1	0.2	0.951
Sample size (total = 495)	255	240		
Employed full-time				
Earned academic credential	8.2	5.8	2.4	0.280†
High school diploma or equivalency certificate	1.8	1.4	0.4	0.715
Post-secondary degree	6.4	4.5	2.0	0.301††
Earned occupational credential or license	12.2	10.7	1.5	0.595
Sample size (total = 574)	286	288		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and responses to the FSS 36-Month Survey.

Appendix B

Appendix Exhibit B.6. Impacts on Use of Services in the 12 Months Prior to Interview by Self-Reported Level of Educational Attainment at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
No degree or credential				
Used any services	70.5	64.2	6.3	0.235
Job search or post-employment services	45.6	26.8	18.8***	0.000
Financial counseling	29.6	18.6	11.1**	0.019††
Education or training	24.4	21.5	2.9	0.548
Homeownership preparation	9.0	2.7	6.3**	0.020††
Health coverage or health assistance	18.5	24.1	-5.5	0.234
Social services	16.4	19.1	-2.8	0.523
Supportive services	18.2	13.1	5.2	0.223†
Sample size (total = 358)	179	179		
High school degree or GED				
Used any services	77.6	61.6	16.0***	0.000
Job search or post-employment services	45.0	31.4	13.6***	0.003
Financial counseling	35.5	13.7	21.8***	0.000††
Education or training	21.9	15.8	6.1	0.107
Homeownership preparation	20.1	4.4	15.8***	0.000††
Health coverage or health assistance	28.2	24.3	3.9	0.370
Social services	21.1	16.6	4.5	0.232
Supportive services	20.5	15.6	4.9	0.176†
Sample size (total = 476)	243	233		
Some college				
Used any services	81.9	73.8	8.2**	0.011
Job search or post-employment services	46.3	33.1	13.2***	0.000
Financial counseling	43.5	20.2	23.2***	0.000††
Education or training	33.3	30.5	2.8	0.424
Homeownership preparation	15.4	6.7	8.7***	0.000††
Health coverage or health assistance	28.5	31.0	-2.5	0.485
Social services	20.9	19.9	1.0	0.748
Supportive services	22.8	17.4	5.4*	0.080†
Sample size (total = 738)	362	376		

(continued)

Appendix Exhibit B.6. Impacts on Use of Services in the 12 Months Prior to Interview by Self-Reported Level of Educational Attainment at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
2-year college degree or higher				
Used any services	83.8	75.7	8.1*	0.069
Job search or post-employment services	50.0	35.2	14.8***	0.009
Financial counseling	50.2	18.9	31.3***	0.000††
Education or training	42.7	28.0	14.7***	0.007
Homeownership preparation	26.8	9.6	17.2***	0.000††
Health coverage or health assistance	24.6	29.5	-4.8	0.344
Social services	16.8	21.4	-4.6	0.293
Supportive services	16.1	24.5	-8.4*	0.059†
Sample size (total = 364)	204	160		

FSS = Family Self-Sufficiency. GED = General Educational Development.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and responses to the FSS 36-Month Survey.

Appendix B

Appendix Exhibit B.7. Impacts on Education and Training, by Self-Reported Level of Education Attainment at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
No degree or credential				
Earned academic credential	6.9	2.9	4.1*	0.098
High school diploma or equivalency certificate	6.8	2.5	4.3*	0.070
Post-secondary degree	0.2	0.4	-0.2	0.699
Earned occupational credential or license	11.1	3.1	8.0***	0.008
Sample size (total = 358)	179	179		
High school degree or GED				
Earned academic credential	6.0	4.1	2.0	0.363
High school diploma or equivalency certificate	4.6	2.5	2.1	0.258
Post-secondary degree	1.4	1.5	-0.1	0.930
Earned occupational credential or license	11.9	11.4	0.5	0.880
Sample size (total = 476)	243	233		
Some college				
Earned academic credential	9.2	6.7	2.5	0.218
High school diploma or equivalency certificate	0.7	0.9	-0.2	0.783
Post-secondary degree	8.5	5.8	2.7	0.164
Earned occupational credential or license	18.7	15.1	3.6	0.216
Sample size (total = 738)	362	376		
2-year college degree or higher				
Earned academic credential	17.5	14.2	3.3	0.416
High school diploma or equivalency certificate	0.0	0.0	0.0	0.000
Post-secondary degree	17.5	14.2	3.3	0.416
Earned occupational credential or license	16.0	18.5	-2.5	0.565
Sample size (total = 364)	204	160		

(continued)

Appendix Exhibit B.7. Impacts on Education and Training, by Self-Reported Level of Education Attainment at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers

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Appendix Exhibit B.8. Impacts on Use of Services in the 12 Months Prior to Interview for Housing Authorities with Similar Levels of Emphasis on Monitoring and Engagement, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on monitoring and engagement				
Used any services	75.6	65.0	10.7***	0.003
Job search or post-employment services	44.0	28.1	16.0***	0.000
Financial counseling	31.6	13.8	17.8***	0.000
Education or training	28.7	19.9	8.8***	0.008
Homeownership preparation	12.6	3.8	8.8***	0.000
Health coverage or health assistance	25.1	23.0	2.0	0.538
Social services	18.5	16.0	2.5	0.402
Supportive services	19.1	15.3	3.8	0.188
Sample size (total = 703)	358	345		
Medium emphasis on monitoring and engagement				
Used any services	81.1	69.4	11.7***	0.000
Job search or post-employment services	46.6	31.2	15.5***	0.000
Financial counseling	43.5	19.0	24.5***	0.000
Education or training	31.1	24.9	6.2**	0.044
Homeownership preparation	19.2	9.2	10.0***	0.000
Health coverage or health assistance	28.3	29.2	-1.0	0.760
Social services	17.9	20.9	-3.0	0.282
Supportive services	20.5	15.9	4.6*	0.089
Sample size (total = 839)	427	412		
High emphasis on monitoring and engagement				
Used any services	81.8	76.4	5.3	0.225
Job search or post-employment services	50.6	40.4	10.2*	0.061
Financial counseling	49.3	24.0	25.3***	0.000
Education or training	33.3	33.9	-0.6	0.910
Homeownership preparation	20.4	6.0	14.4***	0.000
Health coverage or health assistance	23.6	31.3	-7.7	0.113
Social services	25.0	19.7	5.3	0.252
Supportive services	20.4	24.0	-3.7	0.420
Sample size (total = 394)	203	191		

(continued)

Appendix Exhibit B.8. Impacts on Use of Services in the 12 Months Prior to Interview for Housing Authorities with Similar Levels of Emphasis on Monitoring and Engagement, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.9. Impacts on Education and Training for Housing Authorities with Similar Levels of Emphasis on Monitoring and Engagement, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on monitoring and engagement				
Earned academic credential	7.9	5.9	2.0	0.325†
High school diploma or equivalency certificate	2.2	2.5	-0.3	0.802†
Post-secondary degree	5.7	3.5	2.3	0.164
Earned occupational credential or license	13.6	11.6	2.0	0.450
Sample size (total = 703)	358	345		
Medium emphasis on monitoring and engagement				
Earned academic credential	11.1	6.6	4.5**	0.021†
High school diploma or equivalency certificate	2.9	0.7	2.2**	0.016†
Post-secondary degree	8.2	5.9	2.3	0.188
Earned occupational credential or license	14.3	11.5	2.8	0.240
Sample size (total = 839)	427	412		
High emphasis on monitoring and engagement				
Earned academic credential	7.0	11.1	-4.2	0.187†
High school diploma or equivalency certificate	1.6	2.6	-1.0	0.486†
Post-secondary degree	5.4	8.5	-3.1	0.261
Earned occupational credential or license	19.9	15.9	4.1	0.337
Sample size (total = 394)	203	191		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix B

Appendix Exhibit B.10. Impacts on Use of Services in the 12 Months Prior to Interview, by Self-Reported Employment Status at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Not employed				
Used any services	78.4	70.9	7.5**	0.012
Job search or post-employment services	49.9	32.3	17.6***	0.000
Financial counseling	40.4	19.7	20.7***	0.000
Education or training	31.7	24.4	7.3**	0.018
Homeownership preparation	16.4	6.8	9.6***	0.000
Health coverage or health assistance	26.2	30.0	-3.8	0.223
Social services	21.6	22.6	-1.1	0.708
Supportive services	20.8	17.7	3.1	0.254
Sample size (total = 867)	447	420		
Employed				
Used any services	80.5	67.4	13.1***	0.000
Job search or post-employment services	44.2	31.2	13.0***	0.000
Financial counseling	41.1	16.1	25.1***	0.000
Education or training	29.6	25.5	4.1	0.130
Homeownership preparation	18.3	5.7	12.6***	0.000
Health coverage or health assistance	25.4	26.2	-0.8	0.769
Social services	17.6	16.2	1.5	0.538
Supportive services	18.9	17.5	1.4	0.555
Sample size (total = 1,069)	541	528		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and responses to the FSS 36-Month Survey.

Appendix Exhibit B.11. Impacts on Educational Credential Attainment, by Self-Reported Employment Status at the Time of Random Assignment, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Not employed				
Earned academic credential	10.4	5.9	4.5**	0.018†
High school diploma or equivalency certificate	2.9	1.5	1.5	0.155
Post-secondary degree	7.5	4.5	3.0*	0.059
Earned occupational credential or license	17.7	13.8	4.0	0.122
Sample size (total = 867)	447	420		
Employed				
Earned academic credential	8.3	8.0	0.3	0.858†
High school diploma or equivalency certificate	2.2	1.6	0.6	0.495
Post-secondary degree	6.1	6.4	-0.3	0.850
Earned occupational credential or license	13.0	11.5	1.5	0.462
Sample size (total = 1,069)	541	528		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and responses to the FSS 36-Month Survey.

Appendix Exhibit B.12. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Job Search and Post-Employment Services, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on job search and post-employment services				
Used any services	78.2	69.9	8.3*	0.059
Job search or post-employment services	40.7	31.7	9.0*	0.061
Financial counseling	37.9	19.1	18.8***	0.000
Education or training	28.5	23.4	5.1	0.236
Homeownership preparation	14.0	6.8	7.2**	0.015
Health coverage or health assistance	23.8	26.5	-2.7	0.539
Social services	21.3	22.7	-1.4	0.741
Supportive services	25.6	16.5	9.2**	0.021
Sample size (total = 443)	223	220		
Medium emphasis on job search and post-employment services				
Used any services	80.9	70.4	10.5***	0.007
Job search or post-employment services	46.1	35.2	10.9**	0.013
Financial counseling	42.6	18.7	23.8***	0.000
Education or training	30.2	25.8	4.3	0.292
Homeownership preparation	23.1	7.7	15.4***	0.000
Health coverage or health assistance	28.0	32.2	-4.2	0.319
Social services	15.1	18.9	-3.8	0.276
Supportive services	20.3	19.5	0.8	0.828
Sample size (total = 518)	261	257		
High emphasis on job search and post-employment services				
Used any services	78.9	68.3	10.6***	0.000
Job search or post-employment services	48.9	30.7	18.3***	0.000
Financial counseling	39.6	18.2	21.4***	0.000
Education or training	31.3	25.8	5.4*	0.063
Homeownership preparation	16.1	5.1	11.0***	0.000
Health coverage or health assistance	25.6	26.0	-0.4	0.888
Social services	20.9	17.3	3.6	0.167
Supportive services	17.7	16.1	1.6	0.503
Sample size (total = 975)	504	471		

(continued)

Appendix Exhibit B.12. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Job Search and Post-Employment Services, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.13. Impacts on Educational Credential Attainment, by Program Emphasis on Job Search and Post-Employment Services, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on job search and post-employment services				
Earned academic credential	10.4	6.4	4.0	0.147
High school diploma or equivalency certificate	2.0	1.7	0.3	0.827
Post-secondary degree	8.4	4.7	3.7	0.124
Earned occupational credential or license	10.9	11.0	-0.1	0.978
Sample size (total = 443)	223	220		
Medium emphasis on job search and post-employment services				
Earned academic credential	12.4	7.1	5.3*	0.052
High school diploma or equivalency certificate	2.8	0.7	2.1*	0.084
Post-secondary degree	9.6	6.4	3.2	0.191
Earned occupational credential or license	17.0	15.5	1.6	0.646
Sample size (total = 518)	261	257		
High emphasis on job search and post-employment services				
Earned academic credential	7.0	7.5	-0.4	0.791
High school diploma or equivalency certificate	2.3	2.3	0.1	0.960
Post-secondary degree	4.7	5.2	-0.5	0.720
Earned occupational credential or license	16.0	11.7	4.3*	0.056
Sample size (total = 975)	504	471		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.14. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Education and Training, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on education and training				
Used any services	76.9	70.0	6.9*	0.069
Job search or post-employment services	47.1	35.7	11.4***	0.006
Financial counseling	36.1	20.6	15.5***	0.000†††
Education or training	26.4	25.9	0.5	0.899
Homeownership preparation	16.1	4.3	11.8***	0.000
Health coverage or health assistance	28.6	27.4	1.2	0.764†
Social services	19.2	21.1	-1.8	0.603
Supportive services	24.1	21.7	2.5	0.496
Sample size (total = 586)	286	300		
Medium emphasis on education and training				
Used any services	82.0	67.8	14.3***	0.000
Job search or post-employment services	48.6	30.4	18.1***	0.000
Financial counseling	47.7	17.1	30.6***	0.000†††
Education or training	30.4	24.0	6.4**	0.034
Homeownership preparation	19.5	8.6	10.9***	0.000
Health coverage or health assistance	26.6	26.4	0.2	0.941†
Social services	20.1	17.3	2.8	0.289
Supportive services	18.7	15.1	3.7	0.157
Sample size (total = 888)	457	431		
High emphasis on education and training				
Used any services	77.4	70.2	7.2*	0.089
Job search or post-employment services	42.2	29.5	12.7***	0.007
Financial counseling	32.1	15.9	16.3***	0.000†††
Education or training	36.7	24.7	12.0***	0.007
Homeownership preparation	14.7	4.6	10.1***	0.000
Health coverage or health assistance	21.0	31.1	-10.1**	0.019 †
Social services	19.2	18.7	0.5	0.893
Supportive services	18.0	15.2	2.8	0.433
Sample size (total = 462)	245	217		

(continued)

Appendix Exhibit B.14. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Education and Training, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.15. Impacts on Educational Credential Attainment, by Program Emphasis on Education and Training, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on education and training				
Earned academic credential	12.3	6.4	5.9**	0.018†
High school diploma or equivalency certificate	3.4	1.8	1.6	0.251
Post-secondary degree	8.9	4.6	4.4**	0.043
Earned occupational credential or license	15.6	12.7	2.9	0.339
Sample size (total = 586)	286	300		
Medium emphasis on education and training				
Earned academic credential	6.8	8.1	-1.3	0.469†
High school diploma or equivalency certificate	1.8	2.1	-0.3	0.718
Post-secondary degree	5.0	5.9	-1.0	0.530
Earned occupational credential or license	14.2	12.9	1.3	0.579
Sample size (total = 888)	457	431		
High emphasis on education and training				
Earned academic credential	9.2	7.3	1.9	0.470†
High school diploma or equivalency certificate	2.0	1.0	1.0	0.388
Post-secondary degree	7.2	6.3	0.9	0.713
Earned occupational credential or license	16.5	11.3	5.2	0.136
Sample size (total = 462)	245	217		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.16. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Financial Services, Family Self-Sufficiency 36-Month Survey Respondent Sample

Service Use (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on financial services				
Used any services	75.0	67.8	7.3	0.139
Job search or post-employment services	45.5	31.9	13.6**	0.012
Financial counseling	40.2	15.6	24.6***	0.000
Education or training	21.8	23.9	-2.1	0.655
Homeownership preparation	15.5	6.4	9.1***	0.007
Health coverage or health assistance	27.8	32.7	-5.0	0.329
Social services	23.0	22.0	1.0	0.835
Supportive services	19.7	18.2	1.5	0.725
Sample size (total = 364)	184	180		
Medium emphasis on financial services				
Used any services	80.9	71.6	9.4***	0.006
Job search or post-employment services	50.4	37.6	12.9***	0.002
Financial counseling	42.1	21.1	21.0***	0.000
Education or training	32.5	27.5	5.0	0.171
Homeownership preparation	14.1	5.3	8.8***	0.000
Health coverage or health assistance	24.7	22.9	1.8	0.609
Social services	20.1	20.8	-0.7	0.834
Supportive services	22.4	20.9	1.5	0.652
Sample size (total = 639)	317	322		
High emphasis on financial services				
Used any services	80.2	67.6	12.7***	0.000
Job search or post-employment services	44.8	27.5	17.3***	0.000
Financial counseling	40.2	16.1	24.2***	0.000
Education or training	32.7	23.7	9.0***	0.002
Homeownership preparation	20.1	7.0	13.1***	0.000
Health coverage or health assistance	25.7	29.4	-3.7	0.221
Social services	17.6	16.6	1.0	0.702
Supportive services	18.2	14.7	3.5	0.155
Sample size (total = 933)	487	446		

(continued)

Appendix Exhibit B.16. Impacts on Use of Services in the 12 Months Prior to Interview by Program Emphasis on Financial Services, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix Exhibit B.17. Impacts on Educational Credential Attainment, by Program Emphasis on Financial Services, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes (%)	FSS Group	Control Group	Difference (Impact)	p-Value
Low emphasis on financial services				
Earned academic credential	7.8	4.3	3.5	0.194
High school diploma or equivalency certificate	1.1	2.2	-1.1	0.394
Post-secondary degree	6.7	2.1	4.6**	0.043
Earned occupational credential or license	13.2	11.6	1.6	0.668
Sample size (total = 364)	184	180		
Medium emphasis on financial services				
Earned academic credential	10.0	7.1	2.8	0.213
High school diploma or equivalency certificate	2.9	1.5	1.4	0.245
Post-secondary degree	7.0	5.6	1.4	0.469
Earned occupational credential or license	15.1	15.5	-0.3	0.915
Sample size (total = 639)	317	322		
High emphasis on financial services				
Earned academic credential	9.4	8.1	1.3	0.485
High school diploma or equivalency certificate	2.6	1.5	1.1	0.250
Post-secondary degree	6.8	6.6	0.2	0.899
Earned occupational credential or license	15.4	11.3	4.1*	0.075
Sample size (total = 933)	487	446		

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads-of-household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between the FSS group and the control group. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using responses to the FSS 36-Month Survey, data collected from Individual Training and Services Plan forms, and information provided by FSS administrators and case managers.

Appendix C

Appendix Exhibit C.1. Impacts on Employment and Earnings by Quarter, Family Self-Sufficiency Impact Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Quarterly Employment (%)				
Not employed at random assignment				
Quarter 2	25.9	30.2	-4.3*	0.079
Quarter 3	33.9	33.2	0.7	0.788
Quarter 4	38.4	35.6	2.7	0.289
Quarter 5	40.8	36.8	4.0	0.126
Quarter 6	42.9	40.2	2.6	0.311
Quarter 7	45.5	44.9	0.5	0.848
Quarter 8	45.0	43.7	1.3	0.628
Quarter 9	44.0	42.8	1.2	0.649
Quarter 10	45.3	45.5	-0.2	0.932
Quarter 11	46.0	46.0	-0.1	0.981
Quarter 12	48.0	47.8	0.2	0.939
Quarter 13	47.9	47.1	0.9	0.755
Employed part-time (1-34 hours) at random assignment				
Quarter 2	81.8	80.8	1.1	0.688
Quarter 3	78.4	81.2	-2.8	0.344
Quarter 4	79.7	77.6	2.2	0.489
Quarter 5	81.2	77.0	4.2	0.170
Quarter 6	77.3	74.1	3.2	0.326
Quarter 7	78.2	75.4	2.9	0.376
Quarter 8	75.9	77.5	-1.6	0.622
Quarter 9	77.3	75.7	1.6	0.621
Quarter 10	77.1	74.1	3.0	0.374
Quarter 11	78.8	73.5	5.3	0.103
Quarter 12	75.7	74.9	0.9	0.789
Quarter 13	74.5	71.1	3.4	0.320

(continued)

Appendix Exhibit C.1. Impacts on Employment and Earnings by Quarter, Family Self-Sufficiency Impact Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Employed full-time (35 hours or more) at random assignment				
Quarter 2	87.7	88.2	-0.5	0.795
Quarter 3	84.9	86.6	-1.8	0.412
Quarter 4	84.1	86.3	-2.2	0.320
Quarter 5	82.5	84.8	-2.3	0.345
Quarter 6	81.6	84.0	-2.4	0.351
Quarter 7	82.0	84.9	-2.9	0.254
Quarter 8	80.7	84.3	-3.7	0.155
Quarter 9	78.7	84.4	-5.6**	0.035
Quarter 10	80.4	83.3	-2.9	0.271
Quarter 11	81.2	81.8	-0.6	0.824
Quarter 12	81.6	80.0	1.6	0.568
Quarter 13	82.0	80.4	1.6	0.566
Total Impact Sample				
Quarter 2	58.8	60.8	-2.0	0.154
Quarter 3	60.7	61.7	-1.0	0.510
Quarter 4	62.9	61.7	1.2	0.421
Quarter 5	63.9	61.5	2.4	0.122
Quarter 6	63.4	62.1	1.3	0.410
Quarter 7	65.1	64.7	0.4	0.799
Quarter 8	63.9	64.5	-0.5	0.734
Quarter 9	63.4	63.5	-0.1	0.947
Quarter 10	64.2	64.1	0.2	0.921
Quarter 11	65.1	63.8	1.3	0.439
Quarter 12	65.2	64.5	0.7	0.686
Quarter 13	65.1	63.3	1.8	0.292

(continued)

Appendix Exhibit C.1. Impacts on Employment and Earnings by Quarter, Family Self-Sufficiency Impact Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Total Earnings (\$)				
Not employed at random assignment				
Quarter 2	610	730	-120	0.189
Quarter 3	1,026	1,022	4	0.973
Quarter 4	1,195	1,205	-10	0.936
Quarter 5	1,374	1,310	64	0.637
Quarter 6	1,585	1,544	41	0.780
Quarter 7	1,910	1,807	103	0.542
Quarter 8	1,970	1,885	85	0.615
Quarter 9	2,028	1,755	273	0.106
Quarter 10	2,182	2,026	156	0.411
Quarter 11	2,288	2,220	68	0.720
Quarter 12	2,386	2,325	61	0.759
Quarter 13	2,369	2,279	90	0.637
Employed part-time (1-34 hours) at random assignment				
Quarter 2	3,167	3,186	-19	0.914
Quarter 3	3,241	3,133	108	0.575
Quarter 4	3,307	3,149	158	0.454
Quarter 5	3,571	3,314	257	0.253
Quarter 6	3,707	3,345	362	0.144
Quarter 7	3,512	3,689	-177	0.473
Quarter 8	3,769	3,904	-136	0.610
Quarter 9	3,915	3,922	-7	0.981
Quarter 10	4,079	3,824	255	0.359
Quarter 11	4,052	3,882	170	0.541
Quarter 12	4,140	3,953	187	0.499
Quarter 13	4,134	3,801	333	0.239

(continued)

Appendix C

Appendix Exhibit C.1. Impacts on Employment and Earnings by Quarter, Family Self-Sufficiency Impact Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Employed full-time (35 hours or more) at random assignment				
Quarter 2	5,639	5,696	-57	0.768
Quarter 3	5,656	5,765	-109	0.599
Quarter 4	5,497	5,774	-277	0.233
Quarter 5	5,338	5,805	-467*	0.066
Quarter 6	5,736	5,755	-20	0.940
Quarter 7	5,854	6,074	-220	0.401
Quarter 8	5,637	5,936	-300	0.268
Quarter 9	5,885	6,000	-115	0.687
Quarter 10	5,963	6,038	-75	0.800
Quarter 11	5,921	6,062	-141	0.631
Quarter 12	5,944	6,222	-278	0.378
Quarter 13	5,963	6,256	-293	0.340
Total Impact Sample				
Quarter 2	2,781	2,870	-90	0.285
Quarter 3	2,983	3,015	-32	0.737
Quarter 4	3,041	3,090	-49	0.636
Quarter 5	3,162	3,169	-6	0.955
Quarter 6	3,399	3,271	128	0.275
Quarter 7	3,520	3,579	-59	0.632
Quarter 8	3,556	3,618	-63	0.621
Quarter 9	3,704	3,574	129	0.325
Quarter 10	3,821	3,698	123	0.372
Quarter 11	3,843	3,811	32	0.814
Quarter 12	3,930	3,911	19	0.897
Quarter 13	3,911	3,880	31	0.827
Sample size (total = 2,548)	1,282	1,266		

(continued)

Appendix Exhibit C.1. Impacts on Employment and Earnings by Quarter, Family Self-Sufficiency Impact Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCES: MDRC calculations using baseline data and quarterly wage data from the National Directory of New Hires.

Appendix Exhibit C.2. Regression Coefficients for Estimated Impacts on Total Earnings in Quarters 2 to 13, Family Self-Sufficiency Impact Sample

	Parameter Estimate	p-Value
Intercept	7,396	0.142
Assigned to FSS Group (impact)	163	0.884
Covariates		
Sample member characteristics		
Female	1,797	0.393
Age 18–34	7,556	<.0001
Age 35–44	5,991	0.000
Married or cohabitating	1,394	0.521
Black	960	0.521
1 child	2,055	0.246
2 children	3,830	0.041
3 or more children	866	0.669
Has a child age 5 or younger	570	0.693
Education		
High school diploma or GED	-27	0.988
Some college	1,742	0.295
2-year college degree or higher	9,206	<.0001
Has trade license or training certificate	898	0.438
Public assistance		
Received SNAP/food stamps	-665	0.660
Received SSI or SSDI	-6,541	0.000
Received TANF	483	0.794
Received Housing Choice Voucher less than 4 years	17	0.990
Received Housing Choice Voucher 4–7 years	3,280	0.028
Hardship and barriers to employment		
Has any barrier to employment	-5,533	<.0001
Reported 1 hardship in the year before random assignment	-111	0.943
Reported 2 hardships in the year before random assignment	-888	0.601
Reported 3 or more hardships in year before random assignment	-1,261	0.413

(continued)

Appendix Exhibit C.2. Regression Coefficients for Estimated Impacts on Total Earnings in Quarters 2 to 13, Family Self-Sufficiency Impact Sample continued

	Parameter Estimate	p-Value
Employment		
Currently employed	6,614	0.000
Currently employed full-time	4,008	0.019
Employed 1–6 months in the year before random assignment	5,665	0.003
Employed 7–11 months in the year before random assignment	3,065	0.191
Employed 12 months in the year before random assignment	-159	0.945
Earnings		
Employed in the quarter before random assignment	-264	0.894
Employed in the second quarter before random assignment	-1,701	0.373
Total earnings in the 2 quarters before random assignment	4	<.0001
Total earnings squared in the 2 quarters before random assignment	0	0.522
Enrollment		
Randomly assigned in quarter 4, 2013	-2,817	0.420
Randomly assigned in quarter 1, 2014	-1,767	0.275
Randomly assigned in quarter 2, 2014	1,253	0.402
Housing Authority of the City of Alameda	6,770	0.084
Orange County Housing Authority	3,556	0.384
Housing Authority of the City of Riverside	-615	0.874
Housing Authority of the City of Deerfield Beach	1,783	0.744
Housing Authority of the City of Ft. Lauderdale	-770	0.860
Baltimore County Housing Office	-3,057	0.482
Housing Opportunities Commission of Montgomery County	3,426	0.418
Housing Authority of Kansas City	1,907	0.662
Jersey City Housing Authority	-1,220	0.800
Akron Metropolitan Housing Authority	-6,745	0.194
Columbus Metropolitan Housing Authority	876	0.861
Lucas Metropolitan Housing Authority	-3,202	0.556
Youngstown Metropolitan Housing Authority	136	0.979
Dallas Housing Authority	4,049	0.330
Fort Worth Housing Authority	-1,040	0.831
Houston Housing Authority	2,529	0.531
Tarrant County Housing Assistance Office	-4,467	0.312

(continued)

Appendix Exhibit C.2. Regression Coefficients for Estimated Impacts on Total Earnings in Quarters 2 to 13, Family Self-Sufficiency Impact Sample continued

	Parameter Estimate	p-Value
Enrolled in FSS for help with employment	-1,301	0.333
Medical coverage		
Public medical insurance	-3,788	0.027
Private medical insurance	3,944	0.051
Savings		
Had checking or savings account	3,604	0.008
Had savings between \$1–\$500	-757	0.574
Had savings greater than \$500	1,263	0.544
Debt		
\$1–\$1,000	-1,902	0.363
\$1,001–\$5,000	1,895	0.314
\$5,001–\$10,000	3,142	0.124
\$10,001–\$20,000	1,625	0.390
\$20,001 or greater	5,297	0.007
R-squared		0.541
Sample size	2,548	

FSS = Family Self-Sufficiency; GED = General Educational Development; SNAP = Supplemental Nutrition Assistance Program; SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance; TANF = Temporary Assistance for Needy Families.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. No special weights were applied to responses to adjust for differences in sample size by site.

SOURCES: MDRC calculations using baseline data and quarterly wage data from the National Directory of New Hires.

Appendix C

Appendix Exhibit C.3. Unadjusted and Adjusted Impacts on Employment and Earnings in Quarters 2 to 13, Family Self-Sufficiency Impact Sample

Outcomes	Adjusted Impacts				Unadjusted Impacts			
	FSS Group	Control Group	Difference (Impact)	p-Value	FSS Group	Control Group	Difference (Impact)	p-Value
Ever employed (%)	83.4	81.7	1.7	0.170	83.0	82.1	0.8	0.573
Average quarterly employment rate (%)	63.5	63.0	0.5	0.679	62.9	63.5	-0.6	0.699
Total earnings (\$)	41,650	41,487	163	0.884	40,751	42,397	-1,646	0.307
Sample size (total = 2,548)	1,282	1,266			1,282	1,266		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Regression-adjusted estimates used ordinary least squares, controlling for pre-random assignment characteristics of sample members. No special weights were applied to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCE: MDRC calculations using quarterly wage data from the National Directory of New Hires.

Appendix C

Appendix Exhibit C.4. Total Earnings in Quarters 2 to 13 by Level of Exclusion for Outlier Values, Family Self-Sufficiency Impact Sample

Outcome	Sample Size	Mean	Standard Deviation	95th Percentile	99th Percentile	Maximum
Earnings (\$)						
Include all values	2,548	41,823	41,391	119,665	166,389	313,506
Reset values above \$25,000 to \$0	2,548	41,569	40,620	119,453	159,552	211,989
Exclude top 1 percent	2,523	40,280	38,600	114,908	142,987	166,389
Exclude top 5 percent	2,421	36,273	33,885	101,094	115,224	119,665

FSS = Family Self-Sufficiency.

NOTE: The FSS Impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment.

SOURCE: MDRC calculations using quarterly wage data from the National Directory of New Hires.

Appendix Exhibit C.5. Impacts on Total Earnings in Quarters 2 to 13 by Level of Exclusion for Outlier Values, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Earnings (\$)				
Include all values	41,875	41,770	105	0.926
Reset values above \$25,000 to \$0	41,650	41,487	163	0.884
Exclude top 1 percent	40,586	39,968	618	0.568
Exclude top 5 percent	36,647	35,894	752	0.448
Sample size (total = 2,548)	1,282	1,266		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific outcomes may vary because of exclusion of outliers and missing values. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. No special weights were applied to responses to adjust for differences in sample size by site. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCE: MDRC calculations using quarterly wage data from the National Directory of New Hires.

Appendix Exhibit C.6. Impacts on Employment and Earnings During Quarters 2 to 13 by Weighting Strategy, Family Self-Sufficiency Impact Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Unweighted				
Ever employed (%)	83.4	81.7	1.7	0.170
Average quarterly employment rate (%)	63.5	63.0	0.5	0.679
Total earnings (\$)	41,650	41,487	163	0.884
Equal weighting				
Ever employed (%)	83.5	81.6	1.9	0.114
Average quarterly employment rate (%)	63.6	62.9	0.6	0.574
Total earnings (\$)	41,449	41,755	-306	0.773
Weighting by total FSS households^a				
Ever employed (%)	83.5	81.6	1.9	0.111
Average quarterly employment rate (%)	63.5	63.0	0.5	0.685
Total earnings (\$)	41,576	41,628	-52	0.962
Sample size (total = 2,548)	1,282	1,266		

FSS = Family Self-Sufficiency.

^aTotal FSS caseload includes 5,686 households enrolled in FSS as of December 31, 2014. The total includes FSS group members and FSS participants who enrolled in the program before the start of random assignment, enrolled in the program after the end of random assignment, or withdrew from the research sample.

NOTES: The FSS Impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating sums and differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCES: MDRC calculations using quarterly wage data from the National Directory of New Hires and December 2014 FSS caseload data from the U.S. Department of Housing and Urban Development (HUD) Public and Indian Housing Information Center (PIC) database.

Appendix D

Appendix Exhibit D.1. Differences by Research Group in Estimated Annual Income After 3 Years of Follow-Up, Family Self-Sufficiency Impact Sample Members Currently Enrolled in the Housing Choice Voucher Program

Outcome	FSS Group	Control Group	Difference
Head-of-household income			
Received income (%)	94.2	94.8	-0.5
Earnings	56.7	54.1	2.6
Business revenue	2.8	3.0	-0.1
Unemployment benefits	3.4	3.6	-0.2
TANF, General Assistance, or food stamps/SNAP	33.1	31.5	1.6
Disability insurance or pension	16.3	15.5	0.8
Child support	19.7	20.4	-0.7
Other income	6.5	9.6	-3.1
Average total annual income (\$)	17,604	16,864	740
Earnings	12,247	11,082	1,165
Business revenue	77	69	8
Unemployment benefits	227	161	66
TANF, General Assistance, or food stamps/SNAP	1,706	1,613	93
Pension/disability insurance	1,450	1,395	55
Child support	746	756	-9
Other income	250	316	-66
Total annual income (%)			
Less than \$5,000	16.7	17.9	-1.1
\$5,000–\$9,999	14.7	15.8	-1.2
\$10,000–\$14,999	17.7	16.8	0.9
\$15,000–\$19,999	12.2	15.3	-3.2
\$20,000–\$29,999	22.9	18.6	4.3
\$30,000 or more	15.9	15.7	0.2

(continued)

Appendix Exhibit D.1. Differences by Research Group in Estimated Annual Income After 3 Years of Follow-Up, Family Self-Sufficiency Impact Sample Members Currently Enrolled in the Housing Choice Voucher Program continued

Outcome	FSS Group	Control Group	Difference
Total household income			
Received income (%)	98.5	98.4	0.1
Earnings	64.2	60.3	3.9
Business revenue	3.2	3.1	0.1
Unemployment benefits	4.0	3.8	0.2
TANF, General Assistance, or food stamps/SNAP	34.5	33.5	1.0
Disability insurance or pension	27.7	27.0	0.6
Child support	20.2	21.3	-1.1
Other income	9.7	12.7	-3.0
Total household income			
Average total annual income (\$)	22,301	21,494	807
Earnings	14,985	14,069	916
Business revenue	110	99	11
Unemployment benefits	284	180	103
TANF, General Assistance, or food stamps/SNAP	1,842	1,774	68
Other income	527	625	-97
Pension/disability insurance	2,691	2,680	11
Child support	770	797	-26
Other income	527	625	-97
Total annual income (%)			
Less than \$5,000	10.0	10.7	-0.7
\$5,000–\$9,999	11.4	13.6	-2.2
\$10,000–\$14,999	15.2	14.4	0.8
\$15,000–\$19,999	11.8	14.1	-2.4
\$20,000–\$29,999	25.4	21.8	3.7
\$30,000 or more	26.1	25.3	0.8
Sample size (total = 1,836)	919	917	

(continued)

Appendix Exhibit D.1. Differences by Research Group in Estimated Annual Income After 3 Years of Follow-Up, Family Self-Sufficiency Impact Sample Members Currently Enrolled in the Housing Choice Voucher Program continued

FSS = Family Self-Sufficiency. SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Income calculations used data from each household's most recent Housing Choice Voucher eligibility reexamination that took place between Months 26 through 37 after their date of random assignment. For these calculations, households with no reported income or who exited or became ineligible from the Housing Choice Voucher program were excluded from the calculations. Estimates of differences between research groups are non-experimental, because enrollment in the FSS program could affect the incidence or timing of exits from the Housing Choice Voucher program after random assignment. If so, FSS and control group members who remain in the Housing Choice Voucher program could differ in observed or unobserved characteristics or experiences that may affect their income levels. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. For each dollar amount outcome, values above the 99th percentile were considered as outliers and dropped from the calculations. As a result of this procedure, adjusted mean values for specific types of income do not sum to total income. Sample sizes for specific outcomes may vary because of missing values. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100 percent because study participants may receive more than one type of income.

SOURCES: MDRC calculations using U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data.

Appendix Exhibit D.2. Differences by Research Group in Estimated Annual Income After 3 Years of Follow-Up, Family Self-Sufficiency Impact Sample Members

Outcome	FSS Group	Control Group	Difference
Head-of-household income			
Received income (%)	83.7	82.5	1.2
Earnings	51.2	48.0	3.2
Business revenue	2.5	2.5	-0.1
Unemployment benefits	2.9	3.0	-0.1
TANF, General Assistance, or food stamps/SNAP	28.4	27.4	1.1
Disability insurance or pension	13.7	13.2	0.5
Child support	18.4	18.2	0.1
Other income	6.0	8.1	-2.1
Average total annual income (\$)	15,829	15,287	542
Earnings	11,115	10,217	898
Business revenue	63	53	10
Unemployment benefits	180	156	24
TANF, General Assistance, or food stamps/SNAP	1,452	1,440	12
Pension/disability insurance	1,205	1,158	47
Child support	698	639	59
Other income	211	287	-75
Total annual income (%)			
Less than \$5,000	26.6	27.9	-1.3
\$5,000–\$9,999	13.0	13.3	-0.3
\$10,000–\$14,999	14.5	14.6	-0.1
\$15,000–\$19,999	10.8	12.4	-1.6
\$20,000–\$29,999	20.2	16.5	3.7
\$30,000 or more	14.9	15.3	-0.4
Total household income			
Received income (%)	87.0	85.5	1.4
Earnings	57.0	53.1	3.9
Business revenue	2.7	2.7	0.0
Unemployment benefits	3.5	3.2	0.3
TANF, General Assistance, or food stamps/SNAP	30.0	28.9	1.1
Disability insurance or pension	24.3	23.1	1.2

(continued)

Appendix D

Appendix Exhibit D.2. Differences by Research Group in Estimated Annual Income After 3 Years of Follow-Up, Family Self-Sufficiency Impact Sample Members continued

Outcome	FSS Group	Control Group	Difference
Child support	18.7	19.0	-0.3
Other income	8.5	10.5	-2.0
Total household income			
Average total annual income (\$)	20,078	19,184	894
Earnings	13,478	12,651	826
Business revenue	86	77	9
Unemployment benefits	228	169	59
TANF, General Assistance, or food stamps/SNAP	1,594	1,562	32
Other income	441	541	-101
Pension/disability insurance	2,366	2,270	97
Child support	716	671	44
Other income	441	541	-101
Total annual income (%)			
Less than \$5,000	20.9	22.1	-1.2
\$5,000–\$9,999	10.3	11.5	-1.3
\$10,000–\$14,999	12.2	12.2	0.0
\$15,000–\$19,999	10.2	11.9	-1.7
\$20,000–\$29,999	22.4	19.4	2.9
\$30,000 or more	24.1	22.9	1.2
Sample size (total = 2,492)	1,252	1,240	

FSS = Family Self-Sufficiency. SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Income calculations used data from each household’s most recent Housing Choice Voucher eligibility reexamination that took place between Months 26 through 37 after their date of random assignment. For these calculations, households with no reported income or who exited or became ineligible from the Housing Choice Voucher program were set to zero in the calculations. Estimates of differences between research groups are non-experimental, because enrollment in the FSS program could affect the incidence or timing of exits from the Housing Choice Voucher program after random assignment. If so, FSS and control group members who remain in the Housing Choice Voucher program could differ in observed or unobserved characteristics or experiences that may affect their income levels. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. For each dollar amount outcome, values above the 99th percentile were considered as outliers and dropped from the calculations. As a result of this procedure, adjusted mean values for specific types of income do not sum to total income. Sample sizes for specific outcomes may vary because of missing values. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100.0 percent because study participants may receive more than one type of income.

SOURCES: MDRC calculations using U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data.

Appendix E

Appendix Exhibit E.1. Impacts on Selected Employment and Earnings Outcomes in Years 1 to 3, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Average quarterly employment rate (%)						
Employment status						
Not employed	42.0	41.2	0.8	0.667	575	551
Employed part-time	78.0	76.1	1.9	0.391	335	313
Employed full-time	82.3	84.1	-1.8	0.311	372	402
Educational attainment						
No degree or credential	58.8	54.9	3.9	0.154	257	253
High school degree or GED	60.6	60.7	-0.1	0.965	319	297
Some college	66.5	66.6	-0.1	0.967	470	512
2-year college degree or higher	67.0	66.8	0.2	0.936	236	204
Total household income						
\$1–\$10,000	50.5	53.0	-2.4	0.321	318	320
\$10,001–\$20,000	58.6	56.6	2.0	0.343	438	401
More than \$20,000	75.6	73.5	2.1	0.203	526	545
Reported barrier to employment						
Yes	50.6	49.3	1.3	0.478	534	517
No	72.1	73.1	-1.0	0.501	748	749
Disability status						
Received SSI/SSDI	38.3	34.4	3.8	0.173	177	188
Did not receive SSI/SSDI	67.6	67.9	-0.3	0.821	1,105	1,078
Percentage of rent and utilities expenses paid by household						
0–25	54.5	56.0	-1.6	0.406	583	550
25.01–50	64.1	62.2	1.9	0.338	419	410
More than 50	80.6	77.2	3.4*	0.086	280	306
Percentage of household income used for rent and utilities						
0–30	64.3	63.0	1.3	0.363	832	816
More than 30	62.1	62.7	-0.6	0.748	450	450

(continued)

Appendix Exhibit E.1. Impacts on Selected Employment and Earnings Outcomes in Years 1 to 3, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Total earnings (\$)						
Employment status						
Not employed	20,923	20,109	814	0.572	575	551
Employed part-time	44,596	43,103	1,492	0.512	335	313
Employed full-time	69,033	71,383	-2,350	0.338	372	402
Educational attainment						
No degree or credential	32,548	31,561	986	0.641	257	253
High school degree or GED	38,105	37,140	965	0.639	319	297
Some college	44,019	44,285	-266	0.888	470	512
2-year college degree or higher	52,794	51,765	1,029	0.768	236	204
Total household income						
\$1–\$10,000	25,185	27,041	-1,856	0.380	318	320
\$10,001–\$20,000	30,180	30,312	-132	0.937	438	401
More than \$20,000	61,093	58,270	2,824	0.153	526	545
Reported barrier to employment						
Yes	27,651	28,770	-1,119	0.481	534	517
No	51,369	50,552	817	0.603	748	749
Disability status						
Received SSI/SSDI	17,890	15,692	2,198	0.281	177	188
Did not receive SSI/SSDI	45,483	45,966	-482	0.702	1,105	1,078
Percentage of rent and utilities expenses paid by household						
0–25	27,989	29,144	-1,156	0.457	583	550
25.01–50	40,596	40,693	-96	0.961	419	410
More than 50	69,520	66,738	2,782	0.318	280	306
Percentage of household income used for rent and utilities						
0–30	42,242	41,497	745	0.585	832	816
More than 30	40,980	41,064	-84	0.966	450	450
Average annual earnings greater than \$25,000 (%)						
Employment status						
Not employed	5.7	4.8	0.8	0.513	575	551
Employed part-time	18.7	16.4	2.3	0.408	335	313

(continued)

Appendix Exhibit E.1. Impacts on Selected Employment and Earnings Outcomes in Years 1 to 3, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Employed full-time	42.5	45.7	-3.2	0.329	372	402
Educational attainment						
No degree or credential	12.7	11.2	1.5	0.514	257	253
High school degree or GED	19.8	15.1	4.7*	0.055	319	297
Some college	20.2	23.0	-2.8	0.214	470	512
2-year college degree or higher	31.2	29.1	2.2	0.581	236	204
Total household income						
\$1–\$10,000	6.0	9.1	-3.1	0.116†	318	320
\$10,001–\$20,000	8.7	9.2	-0.5	0.779†	438	401
More than \$20,000	38.6	34.9	3.7	0.134†	526	545
Reported barrier to employment						
Yes	9.9	12.6	-2.6	0.116†	534	517
No	27.5	25.7	1.8	0.344†	748	749
Disability status						
Received SSI/SSDI	7.0	4.6	2.4	0.282	177	188
Did not receive SSI/SSDI	22.3	23.0	-0.7	0.635	1,105	1,078
Percentage of rent and utilities expenses paid by household						
0–25	8.1	10.0	-1.9	0.226	583	550
25.01–50	18.1	19.3	-1.1	0.626	419	410
More than 50	46.9	41.8	5.1	0.168	280	306
Percentage of household income used for rent and utilities						
0–30	20.6	20.4	0.2	0.889	832	816
More than 30	20.0	19.6	0.3	0.882	450	450
Sample size (total = 2,548)	1,282	1,266				

FSS = Family Self-Sufficiency. GED = General Educational Development. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data, U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data, and quarterly wage data from the National Directory of New Hires.

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Currently employed with full-time hours (%)						
Employment status						
Not employed	28.7	22.6	6.1**	0.036	446	417
Employed part-time	36.9	31.3	5.6	0.211	254	240
Employed full-time	64.3	65.4	-1.1	0.798	286	286
Educational attainment						
No degree or credential	38.3	26.1	12.1**	0.013	179	178
High school degree or GED	40.0	35.6	4.5	0.310	242	231
Some college	43.4	37.8	5.6*	0.098	362	375
2-year college degree or higher	47.3	46.0	1.3	0.795	203	159
Total household income						
No income	35.6	41.6	-6.0	0.467	109	92
\$1–\$10,000	32.9	22.8	10.1***	0.004	349	312
\$10,001–\$20,000	38.4	34.8	3.5	0.384	269	278
More than \$20,000	59.5	56.5	3.0	0.478	257	257
Reported barrier to employment						
Yes	29.4	29.1	0.3	0.914†	410	387
No	50.7	42.6	8.1***	0.004†	576	556
Disability status						
Received SSI/SSDI	18.4	13.1	5.3	0.238	124	154
Did not receive SSI/SSDI	45.6	41.3	4.3*	0.060	862	789
Percentage of rent and utilities expenses paid by household						
0–25	34.8	27.2	7.6**	0.019	414	383
25.01–50	41.0	37.1	4.0	0.315	293	280
More than 50	56.3	52.4	3.9	0.338	245	256
Rent burden ^a						
Lower	41.5	33.3	8.1***	0.009†	445	440
Higher	42.8	39.6	3.2	0.279†	469	446
Average total household income in prior month (\$)						
Employment status						
Not employed	1,419	1,327	92	0.187	429	402

(continued)

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Employed part-time	1,631	1,671	-41	0.723	246	230
Employed full-time	2,122	2,084	38	0.694	274	272
Educational attainment						
No degree or credential	1,539	1,473	66	0.549	171	170
High school degree or GED	1,613	1,499	114	0.250	236	222
Some college	1,656	1,661	-6	0.942	350	360
2-year college degree or higher	2,055	1,821	234	0.100	192	152
Total household income						
No income	1,214	1,268	-54	0.713	108	91
\$1–\$10,000	1,290	1,292	-2	0.977	336	300
\$10,001–\$20,000	1,763	1,648	116	0.245	261	267
More than \$20,000	2,303	2,246	57	0.618	242	243
Reported barrier to employment						
Yes	1,588	1,488	100	0.175	394	368
No	1,767	1,720	47	0.499	555	536
Disability status						
Received SSI/SSDI	1,655	1,387	268**	0.037†	120	146
Did not receive SSI/SSDI	1,697	1,673	24	0.664†	829	758
Percentage of rent and utilities expenses paid by household						
0–25	1,340	1,333	6	0.928	400	366
25.01–50	1,803	1,697	106	0.278	281	278
More than 50	2,121	2,001	120	0.273	236	238
Rent burden ^a						
Lower	1,625	1,472	153**	0.023†††	427	424
Higher	1,788	1,743	45	0.575†††	453	425
Has bank account (%)						
Employment status						
Not employed	61.9	54.5	7.4**	0.019	441	409
Employed part-time	65.7	60.4	5.3	0.179	250	238
Employed full-time	75.5	73.9	1.6	0.637	283	283

(continued)

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Educational attainment						
No degree or credential	57.7	52.4	5.3	0.310	178	176
High school degree or GED	57.5	54.8	2.7	0.523	240	228
Some college	71.3	64.6	6.8**	0.039	356	367
2-year college degree or higher	82.1	71.6	10.6**	0.011	200	159
Total household income						
No income	63.2	51.8	11.4	0.109	109	89
\$1–\$10,000	58.2	48.2	10.0***	0.008	344	307
\$10,001–\$20,000	71.5	66.9	4.6	0.231	267	274
More than \$20,000	77.3	75.4	1.9	0.613	252	256
Reported barrier to employment						
Yes	62.8	61.7	1.2	0.712††	407	383
No	70.7	61.1	9.7***	0.000††	567	547
Disability status						
Received SSI/SSDI	72.1	63.8	8.3	0.167	126	154
Did not receive SSI/SSDI	66.7	60.9	5.7***	0.007	848	776
Percentage of rent and utilities expenses paid by household						
0–25	59.0	51.3	7.7**	0.019	411	373
25.01–50	69.4	63.5	5.9	0.113	291	279
More than 50	78.3	74.5	3.8	0.305	239	255
Rent burden ^a						
Lower	67.2	61.1	6.0**	0.039	439	432
Higher	68.3	60.8	7.5***	0.010	465	442
Average savings (\$)						
Employment status						
Not employed	114	124	-10	0.785	421	403
Employed part-time	156	160	-3	0.954	241	230
Employed full-time	185	245	-61	0.323	273	268
Educational attainment						
No degree or credential	101	133	-31	0.548	171	175
High school degree or GED	156	149	7	0.905	233	223

(continued)

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Some college	125	200	-75	0.111	342	352
2-year college degree or higher	251	121	129*	0.093	189	151
Total household income						
No income	103	151	-48	0.589	105	88
\$1–\$10,000	105	139	-34	0.440	326	303
\$10,001–\$20,000	188	150	38	0.491	257	264
More than \$20,000	200	204	-5	0.941	245	243
Reported barrier to employment						
Yes	129	162	-33	0.413	389	374
No	160	172	-12	0.754	546	527
Disability status						
Received SSI/SSDI	182	89	93	0.176	120	151
Did not receive SSI/SSDI	148	177	-30	0.322	815	750
Percentage of rent and utilities expenses paid by household						
0–25	109	146	-37	0.352	391	365
25.01–50	185	144	40	0.459	281	270
More than 50	149	218	-69	0.235	231	244
Rent burden ^a						
Lower	146	124	22	0.519†	415	420
Higher	161	191	-30	0.506†	451	429
Average debt (\$)						
Employment status						
Not employed	13,575	12,181	1,394	0.227	430	404
Employed part-time	15,472	14,209	1,263	0.459	241	231
Employed full-time	18,289	15,701	2,589	0.108	275	271
Educational attainment						
No degree or credential	6,353	6,083	271	0.857	167	173
High school degree or GED	9,718	8,856	862	0.515	233	223
Some college	16,636	14,257	2,379*	0.063	353	366
2-year college degree or higher	29,964	26,585	3,379	0.259	193	144

(continued)

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Total household income						
No income	16,247	12,438	3,809	0.194	107	88
\$1–\$10,000	13,512	13,500	12	0.993	328	301
\$10,001–\$20,000	16,815	13,123	3,691**	0.030	261	266
More than \$20,000	16,005	15,585	419	0.796	248	247
Reported barrier to employment						
Yes	15,136	12,754	2,382*	0.069	397	376
No	15,651	14,448	1,202	0.256	549	530
Disability status						
Received SSI/SSDI	14,745	11,958	2,787	0.235	122	150
Did not receive SSI/SSDI	15,480	14,162	1,318	0.134	824	756
Percentage of rent and utilities expenses paid by household						
0–25	14,724	13,369	1,355	0.276	399	363
25.01–50	16,358	12,676	3,682**	0.026	277	274
More than 50	15,853	14,804	1,050	0.523	237	246
Rent burden ^a						
Lower	15,554	13,332	2,222*	0.067	429	419
Higher	14,838	14,115	723	0.544	452	434
Financial situation better than last year (%)						
Employment status						
Not employed	53.0	43.8	9.2***	0.009	439	412
Employed part-time	54.4	42.9	11.6**	0.015	251	239
Employed full-time	56.7	55.8	1.0	0.825	285	284
Educational attainment						
No degree or credential	56.0	45.1	10.9*	0.067	175	175
High school degree or GED	53.3	47.7	5.6	0.237	239	228
Some college	53.9	49.9	4.0	0.301	362	372
2-year college degree or higher	53.5	44.8	8.7	0.127	199	160
Total household income						
No income	60.4	43.7	16.7**	0.044	109	92
\$1–\$10,000	50.8	45.9	5.0	0.231	344	310

(continued)

Appendix E

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
\$10,001–\$20,000	52.9	47.4	5.5	0.223	266	275
More than \$20,000	57.6	50.3	7.2	0.112	254	254
Reported barrier to employment						
Yes	54.2	44.6	9.6***	0.009	401	385
No	55.1	48.5	6.7**	0.031	574	550
Disability status						
Received SSI/SSDI	52.3	41.9	10.4	0.129	121	152
Did not receive SSI/SSDI	55.1	47.8	7.3***	0.004	854	783
Percentage of rent and utilities expenses paid by household						
0–25	52.6	44.5	8.1**	0.028	410	378
25.01–50	56.3	46.2	10.1**	0.020	291	282
More than 50	56.2	50.9	5.3	0.263	241	251
Rent burden*						
Lower	55.2	45.1	10.0***	0.003	441	436
Higher	53.3	48.6	4.8	0.168	463	443
In good, very good, or excellent health (%)						
Employment status						
Not employed	59.7	57.3	2.4	0.479	441	418
Employed part-time	66.3	62.3	3.9	0.382	255	239
Employed full-time	72.0	70.3	1.6	0.689	284	281
Educational attainment						
No degree or credential	63.3	51.0	12.4**	0.029	175	179
High school degree or GED	61.6	58.0	3.6	0.442	242	229
Some college	64.2	66.3	-2.0	0.577	359	372
2-year college degree or higher	74.9	69.2	5.7	0.249	204	158
Total household income						
No income	62.3	54.6	7.7	0.364	108	91
\$1–\$10,000	65.5	59.3	6.1	0.118	345	312
\$10,001–\$20,000	61.3	60.7	0.7	0.880	269	277
More than \$20,000	69.8	70.3	-0.5	0.905	256	254

(continued)

Appendix Exhibit E.2. Characteristics, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Reported barrier to employment						
Yes	60.6	54.7	6.0	0.100	406	384
No	68.3	67.7	0.7	0.813	574	554
Disability status						
Received SSI/SSDI	45.7	50.2	-4.5	0.507	124	154
Did not receive SSI/SSDI	67.9	64.8	3.1	0.183	856	784
Percentage of rent and utilities expenses paid by household						
0–25	62.8	61.6	1.2	0.726	411	381
25.01–50	65.2	58.6	6.7	0.115	293	280
More than 50	67.0	68.0	-1.0	0.825	242	253
Rent burden ^a						
Lower	65.7	59.3	6.4*	0.055	444	437
Higher	65.0	64.7	0.3	0.927	464	444
Sample size (total = 1,936)	988	948				

FSS = Family Self-Sufficiency. GED = General Educational Development. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance.

^aBased on HUD Housing Choice Voucher program regulations, households described as having a “lower rent burden” did not have to pay more than required out-of-pocket expenses for rent and utilities in month 1 (the month of random assignment) because their gross rent was less than or equal to the area payment standard (representing the maximum housing subsidy allowed) and because the household was paying less than or equal to 30 percent of their adjusted monthly income for rent and utilities (representing the expected percentage of household income to be paid for rent and utilities). In contrast, households described as having a “higher rent burden” paid more than required out-of-pocket expenses for rent and utilities because their gross rent was higher than the area payment standard and because the household was paying more than 30 percent of their adjusted monthly income for rent and utilities. Not shown in Exhibit: Results for 130 respondents (7 percent) who had a combination of “lower” and “higher” rent burden in month 1.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data, U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data, and responses to the FSS 36-Month Survey.

Appendix Exhibit E.3. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
Enrolled in HCV program in Month 36 (%)						
Employment status						
Not employed	83.5	81.5	2.0	0.374	572	550
Employed part-time	82.6	82.8	-0.2	0.953	336	312
Employed full-time	76.6	70.2	6.4**	0.046	373	405
Educational attainment						
No degree or credential	81.7	80.1	1.7	0.654	257	256
High school degree or GED	81.5	79.5	1.9	0.545	319	297
Some college	80.6	77.5	3.1	0.237	470	510
2-year college degree or higher	79.6	78.4	1.3	0.760	235	204
Total household income						
No income	79.3	79.4	-0.1	0.990	115	108
\$1–\$10,000	83.8	81.2	2.6	0.340	433	410
\$10,001–\$20,000	85.4	83.3	2.1	0.465	342	352
More than \$20,000	73.2	72.5	0.7	0.826	391	397
Reported barrier to employment						
Yes	84.1	80.6	3.5	0.149	532	516
No	78.3	77.5	0.8	0.699	749	751
Disability status						
Received SSI/SSDI	82.0	84.9	-2.9	0.488	176	187
Did not receive SSI/SSDI	80.9	77.4	3.5**	0.042	1105	1080
Percentage of rent and utilities expenses paid by household						
0–25	85.4	82.1	3.3	0.153	529	520
25.01–50	83.8	85.1	-1.3	0.633	386	366
More than 50	70.2	67.5	2.7	0.439	325	358
Rent burden ^a						
Lower	81.1	82.2	-1.1	0.633	591	593
Higher	80.0	75.3	4.6*	0.055	599	604

(continued)

Appendix Exhibit E.3. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
<i>Average gross rent in Month 36, if received HCV (\$)</i>						
<i>Employment status</i>						
<i>Not employed</i>	1,365	1,365	0		479	447
<i>Employed part-time</i>	1,407	1,426	-19		275	261
<i>Employed full-time</i>	1,452	1,448	3		286	284
<i>Educational attainment</i>						
<i>No degree or credential</i>	1,417	1,496	-78		210	205
<i>High school degree or GED</i>	1,347	1,351	-4		263	233
<i>Some college</i>	1,384	1,395	-11		381	393
<i>2-year college degree or higher</i>	1,470	1,413	57		186	161
<i>Total household income</i>						
<i>No income</i>	1,233	1,231	1		93	84
<i>\$1–\$10,000</i>	1,297	1,340	-43		366	330
<i>\$10,001–\$20,000</i>	1,391	1,381	11		293	292
<i>More than \$20,000</i>	1,575	1,575	0		288	286
<i>Reported barrier to employment</i>						
<i>Yes</i>	1,347	1,363	-15		450	413
<i>No</i>	1,436	1,440	-4		590	579
<i>Disability status</i>						
<i>Received SSI/SSDI</i>	1,254	1,256	-2		144	159
<i>Did not receive SSI/SSDI</i>	1,424	1,433	-9		896	833
<i>Percentage of rent and utilities expenses paid by household</i>						
<i>0–25</i>	1,420	1,430	-10		452	427
<i>25.01–50</i>	1,394	1,376	18		326	309
<i>More than 50</i>	1,329	1,386	-57		229	241
<i>Rent burden^a</i>						
<i>Lower</i>	1,352	1,334	18		481	486
<i>Higher</i>	1,451	1,486	-35		481	453

(continued)

Appendix Exhibit E.3. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
<i>Average family share in Month 36, if received HCV (\$)</i>						
<i>Employment status</i>						
<i>Not employed</i>	409	403	6		479	447
<i>Employed part-time</i>	532	506	26		275	261
<i>Employed full-time</i>	675	654	21		286	284
<i>Educational attainment</i>						
<i>No degree or credential</i>	515	502	13		210	205
<i>High school degree or GED</i>	489	478	11		263	233
<i>Some college</i>	517	491	27		381	393
<i>2-year college degree or higher</i>	588	513	75		186	161
<i>Total household income</i>						
<i>No income</i>	350	348	2		93	84
<i>\$1–\$10,000</i>	360	361	0		366	330
<i>\$10,001–\$20,000</i>	497	477	20		293	292
<i>More than \$20,000</i>	767	750	16		288	286
<i>Reported barrier to employment</i>						
<i>Yes</i>	443	457	-14		450	413
<i>No</i>	577	526	50		590	579
<i>Disability status</i>						
<i>Received SSI/SSDI</i>	458	449	9		144	159
<i>Did not receive SSI/SSDI</i>	525	510	15		896	833
<i>Percentage of rent and utilities expenses paid by household</i>						
<i>0–25</i>	398	371	28		452	427
<i>25.01–50</i>	535	535	0		326	309
<i>More than 50</i>	725	681	43		229	241
<i>Rent burden^a</i>						
<i>Lower</i>	488	451	38		481	486
<i>Higher</i>	552	550	2		481	453

(continued)

Appendix Exhibit E.3. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
<i>Average housing subsidy in Month 36, if received HCV (\$)</i>						
<i>Employment status</i>						
<i>Not employed</i>	963	962	1		479	447
<i>Employed part-time</i>	883	920	-36		275	261
<i>Employed full-time</i>	793	800	-6		286	284
<i>Educational attainment</i>						
<i>No degree or credential</i>	911	993	-82		210	205
<i>High school degree or GED</i>	858	873	-15		263	233
<i>Some college</i>	883	908	-25		381	393
<i>2-year college degree or higher</i>	893	901	-8		186	161
<i>Total household income</i>						
<i>No income</i>	882	883	-1		93	84
<i>\$1–\$10,000</i>	943	979	-36		366	330
<i>\$10,001–\$20,000</i>	901	904	-3		293	292
<i>More than \$20,000</i>	827	831	-4		288	286
<i>Reported barrier to employment</i>						
<i>Yes</i>	914	906	8		450	413
<i>No</i>	868	917	-50		590	579
<i>Disability status</i>						
<i>Received SSI/SSDI</i>	800	810	-9		144	159
<i>Did not receive SSI/SSDI</i>	909	924	-15		896	833
<i>Percentage of rent and utilities expenses paid by household</i>						
<i>0–25</i>	1,024	1,059	-35		452	427
<i>25.01–50</i>	865	841	25		326	309
<i>More than 50</i>	630	712	-82		229	241
<i>Rent burden^a</i>						
<i>Lower</i>	870	882	-13		481	486
<i>Higher</i>	911	939	-28		481	453
Sample size (total = 2,548)	1,281	1,267				

(continued)

Appendix Exhibit E.3. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Baseline Characteristics, Family Self-Sufficiency Impact Sample continued

FSS = Family Self-Sufficiency. GED = General Educational Development. HCV = Housing Choice Voucher. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance.

*Based on HUD Housing Choice Voucher program regulations, households described as having a “lower rent burden” did not have to pay more than required out-of-pocket expenses for rent and utilities in month 1 (the month of random assignment) because their gross rent was less than or equal to the area payment standard (representing the maximum housing subsidy allowed) and because the household was paying less than or equal to 30 percent of their adjusted monthly income for rent and utilities (representing the expected percentage of household income to be paid for rent and utilities). In contrast, households described as having a “higher rent burden” paid more than required out-of-pocket expenses for rent and utilities because their gross rent was higher than the area payment standard and because the household was paying more than 30 percent of their adjusted monthly income for rent and utilities. Not shown in exhibit: Results for 160 respondents (6 percent) who had a combination of “lower” and “higher” rent burden in month 1.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent. Results displayed in italics are non-experimental. No tests of statistical significance were performed on differences between research groups in means or proportions.

SOURCES: MDRC calculations using baseline data and U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data.

Appendix Exhibit E.4. Confirmatory Comparisons (Impacts) of Employment and Earnings Outcomes in Years 1 to 3, by Program Approach, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Average quarterly employment rate (%)						
Emphasis on job search and post-employment services						
Low	65.0	63.4	1.7	0.445	286	289
Medium	61.4	61.0	0.4	0.860	351	352
High	64.0	63.9	0.1	0.938	645	625
Emphasis on education and training						
Low	63.8	61.6	2.2	0.299†	386	392
Medium	62.9	65.4	-2.5	0.138†	578	568
High	64.0	60.5	3.5	0.141†	318	306
Emphasis on financial services						
Low	57.7	58.3	-0.6	0.831	239	235
Medium	62.8	64.0	-1.2	0.561	420	419
High	66.3	64.0	2.2	0.175	623	612
Program emphasis on monitoring and engagement						
Low	62.3	60.8	1.5	0.446	469	468
Medium	65.8	64.5	1.3	0.434	551	547
High	60.4	64.2	-3.8	0.140	262	251
Total earnings (\$)						
Emphasis on job search and post-employment services						
Low	39,713	40,352	-639	0.776	286	289
Medium	42,647	39,295	3,352	0.128	351	352
High	41,797	43,435	-1,638	0.316	645	625
Emphasis on education and training						
Low	40,189	38,363	1,826	0.356	386	392
Medium	40,954	42,922	-1,968	0.232	578	568
High	44,315	43,244	1,071	0.670	318	306
Emphasis on financial services						
Low	33,145	32,933	212	0.924	239	235
Medium	41,452	43,739	-2,287	0.261	420	419
High	45,089	43,201	1,889	0.261	623	612

(continued)

Appendix Exhibit E.4. Confirmatory Comparisons (Impacts) of Employment and Earnings Outcomes in Years 1 to 3, by Program Approach, Family Self-Sufficiency Impact
Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Program emphasis on monitoring and engagement						
Low	41,128	39,388	1,740	0.345†††	469	468
Medium	42,195	40,374	1,821	0.279†††	551	547
High	40,664	48,671	-8,006***	0.003†††	262	251
Average annual earnings greater than \$25,000 (%)						
Emphasis on job search and post-employment services						
Low	17.2	20.0	-2.8	0.336	286	289
Medium	21.8	18.6	3.1	0.218	351	352
High	20.5	21.6	-1.1	0.558	645	625
Emphasis on education and training						
Low	20.1	16.2	3.9*	0.098	386	392
Medium	18.9	21.1	-2.2	0.253	578	568
High	23.6	23.2	0.4	0.889	318	306
Emphasis on financial services						
Low	14.2	14.1	0.1	0.977	239	235
Medium	19.3	22.4	-3.1	0.180	420	419
High	23.2	21.1	2.1	0.286	623	612
Program emphasis on monitoring and engagement						
Low	20.4	19.6	0.8	0.706†	469	468
Medium	19.9	18.0	1.8	0.375†	551	547
High	20.3	27.1	-6.8**	0.026†	262	251
Sample size (total = 2,548)	1,282	1,266				

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent. “Confirmatory comparisons” use qualitative and quantitative data collected at the time of random assignment or data collected for FSS program participants who enrolled in FSS before the start of the evaluation and are not included in the outcomes.

SOURCES: MDRC calculations using baseline data, data collected from Individual Training and Services Plan forms, information provided by FSS administrators and case managers, and quarterly wage data from the National Directory of New Hires.

Appendix Exhibit E.5. Impacts on Selected Survey Outcomes by Selected Program Implementation Features, Family Self-Sufficiency 36-Month Survey Respondent Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Currently employed with full-time hours (%)						
Emphasis on job search and post-employment services						
Low	39.0	34.1	4.8	0.267	223	217
Medium	48.3	34.5	13.8***	0.001	260	256
High	39.6	39.9	-0.3	0.913	503	470
Emphasis on education and training						
Low	40.1	32.6	7.6**	0.050	285	297
Medium	43.8	43.9	-0.1	0.982	456	429
High	38.2	32.0	6.3	0.149	245	217
Emphasis on financial services						
Low	32.6	31.1	1.5	0.752	184	177
Medium	41.1	38.6	2.5	0.502	317	320
High	44.2	40.1	4.1	0.171	485	446
Emphasis on monitoring and engagement						
Low	41.9	34.4	7.5**	0.033†	358	343
Medium	44.8	38.2	6.6**	0.038†	425	410
High	34.6	40.4	-5.7	0.228†	203	190
Average total household income in prior month (\$)						
Emphasis on job search and post-employment services						
Low	1,629	1,413	216**	0.033	214	209
Medium	1,710	1,635	75	0.466	252	246
High	1,724	1,706	18	0.804	483	449
Emphasis on education and training						
Low	1,565	1,531	34	0.699	278	290
Medium	1,711	1,719	-8	0.916	440	406
High	1,773	1,619	154	0.170	231	208
Emphasis on financial services						
Low	1,641	1,521	119	0.313	178	175
Medium	1,649	1,740	-91	0.304	302	306
High	1,712	1,618	94	0.202	469	423

(continued)

Appendix Exhibit E.5. Impacts on Selected Survey Outcomes by Selected Program Implementation Features, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Emphasis on monitoring and engagement						
Low	1,579	1,648	-68	0.405††	345	334
Medium	1,753	1,558	195***	0.009††	412	391
High	1,701	1,805	-104	0.414††	192	179
Has bank account (%)						
Emphasis on job search and post-employment services						
Low	62.9	53.6	9.3**	0.026	218	216
Medium	71.0	63.0	8.0**	0.043	258	252
High	67.7	63.9	3.8	0.163	498	462
Emphasis on education and training						
Low	65.9	57.6	8.3**	0.027	283	291
Medium	65.8	59.6	6.2**	0.036	448	425
High	72.7	69.3	3.4	0.401	243	214
Emphasis on financial services						
Low	65.9	59.4	6.4	0.162	181	178
Medium	63.0	54.7	8.3**	0.021	309	315
High	71.0	66.6	4.4	0.119	484	437
Emphasis on monitoring and engagement						
Low	65.5	59.2	6.3*	0.060	353	336
Medium	67.1	61.6	5.4*	0.072	421	405
High	72.5	63.5	8.9**	0.043	200	189
Average savings (\$)						
Emphasis on job search and post-employment services						
Low	96	142	-47	0.283	207	210
Medium	210	189	21	0.735	248	249
High	142	162	-20	0.614	480	442
Emphasis on education and training						
Low	132	129	3	0.946	272	287
Medium	132	197	-65	0.104	432	411
High	198	159	39	0.555	231	203

(continued)

Appendix Exhibit E.5. Impacts on Selected Survey Outcomes by Selected Program Implementation Features, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Emphasis on financial services						
Low	50	113	-63	0.146	177	171
Medium	149	154	-5	0.908	296	308
High	180	204	-24	0.595	462	422
Emphasis on monitoring and engagement						
Low	117	134	-17	0.694	341	325
Medium	136	208	-72	0.104	402	393
High	216	150	65	0.310	192	183
Average debt (\$)						
Emphasis on job search and post-employment services						
Low	16,397	14,633	1,764	0.329	213	208
Medium	14,223	12,761	1,462	0.340	254	242
High	15,694	13,814	1,880	0.107	479	456
Emphasis on education and training						
Low	17,411	15,335	2,076	0.191	272	289
Medium	15,015	13,462	1,553	0.204	438	411
High	12,883	13,287	-404	0.808	236	206
Emphasis on financial services						
Low	16,912	14,204	2,708	0.177	179	176
Medium	15,010	13,721	1,289	0.374	302	309
High	15,075	13,644	1,431	0.223	465	421
Emphasis on monitoring and engagement						
Low	12,432	11,820	612	0.637	339	330
Medium	16,531	15,160	1,370	0.287	411	391
High	17,597	14,963	2,634	0.194	196	185
Financial situation better than last year (%)						
Emphasis on job search and post-employment services						
Low	54.6	45.3	9.2*	0.069	221	217
Medium	55.3	45.6	9.8**	0.036	257	254
High	55.1	47.7	7.4**	0.024	497	464

(continued)

Appendix Exhibit E.5. Impacts on Selected Survey Outcomes by Selected Program Implementation Features, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Emphasis on education and training						
Low	53.2	46.4	6.9	0.120	285	294
Medium	55.9	52.5	3.4	0.319	449	425
High	54.8	36.1	18.7***	0.000	241	216
Emphasis on financial services						
Low	58.2	43.3	14.8***	0.007	183	179
Medium	53.5	50.5	3.0	0.459	313	314
High	53.6	46.4	7.2**	0.033	479	442
Emphasis on monitoring and engagement						
Low	51.3	41.3	9.9**	0.012	353	339
Medium	56.9	51.4	5.5	0.122	421	408
High	55.7	47.9	7.7	0.146	201	188
In good, very good, or excellent health (%)						
Emphasis on job search and post-employment services						
Low	68.8	61.4	7.4	0.114	222	217
Medium	67.2	65.9	1.3	0.771	259	255
High	62.2	61.1	1.1	0.735	499	466
Emphasis on education and training						
Low	65.9	67.1	-1.3	0.759	285	294
Medium	63.3	60.4	2.9	0.362	453	429
High	66.5	61.0	5.5	0.254	242	215
Emphasis on financial services						
Low	52.9	61.6	-8.7*	0.099	182	178
Medium	71.2	64.4	6.8*	0.072	317	319
High	65.0	62.0	3.0	0.360	481	441
Emphasis on monitoring and engagement						
Low	63.0	60.1	2.9	0.438	357	341
Medium	67.2	62.9	4.3	0.199	421	406
High	66.0	63.7	2.3	0.638	202	191
Sample size (total = 1,936)	988	948				

(continued)

Appendix Exhibit E.5. Impacts on Selected Survey Outcomes by Selected Program Implementation Features, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

FSS = Family Self-Sufficiency.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data, data collected from Individual Training and Services Plan forms, information provided by FSS administrators and case managers, and responses to the FSS 36-Month Survey.

Appendix Exhibit E.6. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Program Implementation Features, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
Enrolled in HCV program in Month 36 (%)						
Emphasis on job search and post-employment services						
Low	79.4	78.8	0.5	0.883	282	287
Medium	87.9	86.8	1.1	0.666	351	352
High	77.9	73.8	4.1*	0.086	648	628
Emphasis on education and training						
Low	82.2	79.7	2.5	0.378	385	392
Medium	79.1	75.8	3.2	0.189	577	567
High	81.7	83.3	-1.6	0.616	319	308
Emphasis on financial services						
Low	73.0	69.9	3.2	0.450	238	235
Medium	85.5	83.7	1.7	0.486	419	418
High	80.4	78.9	1.6	0.495	624	614
Emphasis on monitoring and engagement						
Low	83.5	80.7	2.7	0.289	472	472
Medium	78.3	75.2	3.2	0.217	547	545
High	82.2	81.4	0.8	0.827	262	250
Average gross rent in Month 36, if received HCV (\$)						
<i>Emphasis on job search and post-employment services</i>						
<i>Low</i>	<i>1,164</i>	<i>1,143</i>	<i>21</i>		<i>224</i>	<i>226</i>
<i>Medium</i>	<i>1,504</i>	<i>1,496</i>	<i>9</i>		<i>308</i>	<i>306</i>
<i>High</i>	<i>1,442</i>	<i>1,472</i>	<i>-30</i>		<i>508</i>	<i>460</i>
<i>Emphasis on education and training</i>						
<i>Low</i>	<i>1,198</i>	<i>1,208</i>	<i>-10</i>		<i>319</i>	<i>310</i>
<i>Medium</i>	<i>1,381</i>	<i>1,403</i>	<i>-22</i>		<i>460</i>	<i>426</i>
<i>High</i>	<i>1,679</i>	<i>1,647</i>	<i>32</i>		<i>261</i>	<i>256</i>
<i>Emphasis on financial services</i>						
<i>Low</i>	<i>1,096</i>	<i>1,090</i>	<i>7</i>		<i>174</i>	<i>164</i>
<i>Medium</i>	<i>1,484</i>	<i>1,509</i>	<i>-25</i>		<i>360</i>	<i>348</i>
<i>High</i>	<i>1,432</i>	<i>1,450</i>	<i>-17</i>		<i>506</i>	<i>480</i>

(continued)

Appendix Exhibit E.6. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Program Implementation Features, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
<i>Emphasis on monitoring and engagement</i>						
Low	1,427	1,459	-32		395	380
Medium	1,206	1,214	-7		430	408
High	1,742	1,682	61		215	204
Average family share in Month 36, if received HCV (\$)						
<i>Emphasis on job search and post-employment services</i>						
Low	438	397	41		224	226
Medium	584	525	59		308	306
High	508	536	-29		508	460
<i>Emphasis on education and training</i>						
Low	469	434	35		319	310
Medium	492	512	-20		460	426
High	625	552	73		261	256
<i>Emphasis on financial services</i>						
Low	436	419	17		174	164
Medium	517	525	-8		360	348
High	542	511	31		506	480
<i>Emphasis on monitoring and engagement</i>						
Low	528	514	14		395	380
Medium	483	436	47		430	408
High	567	595	-28		215	204
Average housing subsidy in Month 36, if received HCV (\$)						
<i>Emphasis on job search and post-employment services</i>						
Low	729	746	-17		224	226
Medium	935	976	-41		308	306
High	944	935	8		508	460
<i>Emphasis on education and training</i>						
Low	740	775	-34		319	310
Medium	898	896	1		460	426
High	1,062	1,094	-32		261	256

(continued)

Appendix Exhibit E.6. Impacts on Selected Indicators of Rent and Subsidies in Month 36, by Selected Program Implementation Features, Family Self-Sufficiency Impact Sample continued

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Size	
					FSS Group	Control Group
<i>Emphasis on financial services</i>						
<i>Low</i>	666	670	-4		174	164
<i>Medium</i>	967	984	-17		360	348
<i>High</i>	909	942	-34		506	480
<i>Emphasis on monitoring and engagement</i>						
<i>Low</i>	899	945	-46		395	380
<i>Medium</i>	746	781	-35		430	408
<i>High</i>	1,175	1,086	89		215	204
Sample size (total = 2,548)	1,281	1,267				

FSS = Family Self-Sufficiency. HCV = Housing Choice Voucher.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific outcomes may vary because of missing values. Estimates were regression-adjusted using ordinary least squares, controlling for differences in sample member characteristics recorded at the time of random assignment. No special weights were applied to responses to adjust for differences in sample size by housing authority. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between the FSS group and the control group for continuous variables and selected outcomes expressed as proportions. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent. Results displayed in italics are non-experimental. No tests of statistical significance were performed on differences between research groups in means or proportions.

SOURCES: MDRC calculations using baseline data, data collected from Individual Training and Services Plan forms, information provided by FSS administrators and case managers, and U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data.

Appendix Exhibit E.7. Exploratory Comparisons of Employment and Earnings Outcomes in Years 1 to 3 for Sites with Similar Escrow Accrual and Service Use Outcomes, Family Self-Sufficiency Impact Sample

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value	Sample Sizes	
					FSS Group	Control Group
Average quarterly employment rate (%)						
<i>Composite indicator of escrow balance in Month 36</i>						
<i>Low</i>	64.3	65.4	-1.1	0.544	452	446
<i>Medium</i>	65.8	65.8	0.0	0.995	345	342
<i>High</i>	61.0	58.9	2.1	0.301	485	478
<i>Composite indicator of FSS service use in Year 3^a</i>						
<i>Low</i>	61.6	64.0	-2.4	0.317	287	287
<i>Medium</i>	63.7	63.6	0.0	0.994	325	320
<i>High</i>	61.2	61.6	-0.4	0.868	349	336
Total earnings (\$)						
<i>Composite indicator of escrow balance in Month 36</i>						
<i>Low</i>	41,159	44,326	-3,167*	0.097††	452	446
<i>Medium</i>	43,076	43,800	-724	0.744††	345	342
<i>High</i>	41,021	37,278	3,743**	0.041††	485	478
<i>Composite indicator of FSS service use in Year 3^a</i>						
<i>Low</i>	39,697	39,586	110	0.958	287	287
<i>Medium</i>	38,474	39,094	-621	0.777	325	320
<i>High</i>	43,212	47,341	-4,129*	0.084	349	336
Average annual earnings greater than \$25,000 (%)						
<i>Composite indicator of escrow balance in Month 36</i>						
<i>Low</i>	20.1	21.5	-1.4	0.532	452	446
<i>Medium</i>	20.7	22.7	-2.0	0.471	345	342
<i>High</i>	20.3	17.1	3.2	0.114	485	478
<i>Composite indicator of FSS service use in Year 3^a</i>						
<i>Low</i>	19.8	19.6	0.2	0.930	287	287
<i>Medium</i>	16.3	18.8	-2.5	0.351	325	320
<i>High</i>	22.6	26.3	-3.7	0.159	349	336
Sample size (total = 2,548)	1,282	1,266				

(continued)

Appendix Exhibit E.7. Exploratory Comparisons of Employment and Earnings Outcomes in Years 1 to 3 for Sites with Similar Escrow Accrual and Service Use Outcomes, Family Self-Sufficiency Impact Sample continued

FSS = Family Self-Sufficiency.

*Estimates include impact sample members randomly assigned in the 12 PHAs in the FSS service-use sample.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent. For escrow and service use categories, composite scores of -1.0 or lower were considered to be “low;” scores between -1.0 and +1.0 were considered to be “medium;” and scores of +1.0 or higher were considered to be “high.” See exhibit 7.2 and exhibit E.9. Results are displayed in italics to emphasize their exploratory nature.

SOURCES: MDRC calculations from baseline data, housing authority administrative data, and quarterly wage data from the National Directory of New Hires.

Appendix Exhibit E.8. Impacts on Employment and Earnings, Years 1 to 3, by Self-Reported Employment Status at Random Assignment, Family Self-Sufficiency Impact Sample

Outcomes	FSS Group	Control Group	Difference (Impact)	p-Value
Not employed				
Ever employed (%)	68.6	66.5	2.1	0.378
Average quarterly employment rate (%)	42.0	41.2	0.8	0.667
Employed in all quarters (%)	8.9	11.2	-2.3	0.178
Total earnings (\$)	20,923	20,109	814	0.572
Sample size (total = 1,126)	575	551		
Employed				
Ever employed (%)	95.2	93.7	1.5	0.164
Average quarterly employment rate (%)	80.5	80.3	0.2	0.898
Employed in all quarters (%)	51.6	54.7	-3.1	0.209
Total earnings (\$)	58,060	58,403	-343	0.835
Sample size (total = 1,422)	707	715		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Average quarterly employment rate is calculated as total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. The H-statistic test was used to test for statistically significant differences in impact estimates across different subgroups. Statistical significance levels are indicated as: † = 10 percent; †† = 5 percent; and ††† = 1 percent.

SOURCES: MDRC calculations using baseline data and quarterly wage data from the National Directory of New Hires.

Appendix Exhibit E.9. Methodology for Creating Site Clusters

Site clusters were created from a variety of source data, described in exhibit 7.2. Some site clusters were created from a single measure, whereas others were created from two or three measures. Measures were created using the following procedure:

- Calculate site-level mean values for each source measure.
- Calculate a cross-site mean (“mean of means”) for each source measure.
- Calculate the cross-site standard deviation for each source measure.
- Calculate site-level *z-scores* for each source measure. For each site (PHA), subtract the site-level mean from the cross-site mean. Then, divide the difference by the cross-site standard deviation.
- For site clusters created from two or three source measures, sum the *z-scores* and then divide by the number of component measures to create an average composite score.
- Group sites with similar scores into high, medium, or low categories. Sites with an average *z-score* value above 0.5 were grouped in the high category, whereas sites with an average *z-score* below -0.5 were grouped in the low category. The remaining sites with average *z-scores* of between -0.5 and +0.5 were grouped in the medium sites.

Appendix F. Family Self-Sufficiency 36-Month Survey Response Analysis

Many of the estimates of FSS's effects on use of services and on financial and material well-being outcomes were calculated using responses to the FSS 36-Month Survey. When only a subset of the sample completes a survey, potential issues can arise about the reliability of results estimated for survey respondents and whether results for respondents can be generalized to all study participants.

This appendix summarizes the results of tests of the reliability and generalizability of impact estimates calculated with survey responses. First, the appendix assesses whether research group differences in the 36-month survey-based outcome measures are unbiased (and therefore reliable) indicators of FSS's effects. Survey results are considered to be unbiased if a large proportion of each research group responded to the survey and if respondents in both research groups closely resemble each other in baseline characteristics, such as employment status and educational attainment, that would be likely to affect study participants' employment, earnings, and financial well-being after study entry.

Second, this appendix considers whether impact results estimated for survey respondents may be generalized to all study participants. Survey results are considered to be generalizable if it can be inferred with confidence that the analysis would have reached similar conclusions about FSS's effects on financial outcomes had every study participant completed a 36-month survey interview.

Overall, the results show that the survey is reliable and that results for the 36-month survey respondent sample can be generalized to the report sample.

Main Findings

- A high response rate (77 percent) was achieved: more than three-fourths of sample members of each research group responded to the 36-month survey.
- Among 36-month survey respondents, characteristics at baseline were similar for the two research groups. No systematic differences between the groups were found.
- Some caution about the generalizability of survey findings is warranted because a comparison of survey respondents and non-respondents shows statistically significant differences in pre-random-assignment characteristics. Most of these differences are small (less than 5 percentage points), which limits concerns about the generalizability of the findings.
- FSS's impacts on employment and earnings among respondents are similar to the impacts for the larger impact sample. This finding provides additional evidence that findings from the survey are generalizable to the larger impact sample.

Survey Sample Selection and Administration

As noted in chapter 1, the *impact sample* includes 2,556 sample members who were enrolled in October 2013 through December 2014 in the 18 public housing agencies participating in the national evaluation. Nearly all impact sample members were eligible to respond to the FSS 36-Month Survey. Thirty-eight study participants (or 1 percent of impact sample) were excluded because of death, incarceration, or lack of fluency in English or Spanish. The remaining study participants are referred to as the *fielded sample*, which totaled 2,518 sample members. From February 25, 2017, through August 20, 2017, the survey firm for the study, M. Davis and Company (MDAC), attempted to conduct 40-minute phone interviews with everyone in the fielded sample.

Survey Response Rates

Sample members who were interviewed for the 36-month survey are referred to as “survey respondents,” or the *respondent sample*, while sample members who were not interviewed are known as “non-respondents” or the *non-respondent sample*. As exhibit F.1 shows, a total of 1,936 sample members, or about 77 percent of the fielded sample, completed the survey.¹²² The majority of the non-respondent sample either refused to be interviewed or could not be located. The response rates by research group were also similar: About 78 percent of the FSS group and 76 percent of the control group completed the 36-month survey.

Although the overall response rates are high, whenever the response rate is lower than 100 percent, *nonresponse bias* may occur. Differences may exist between the respondent sample and the larger impact and fielded samples, owing to differences between the sample members who completed a survey and those who did not. Furthermore, the estimates may be biased if background characteristics differ between the research groups in the respondent sample.

Comparison of Respondents and Non-Respondents Within the Fielded Survey Sample

In order to examine whether there are systematic differences between those who responded to the survey and those who did not, a (0/1) indicator of survey respondent status was created (in which survey respondents receive a 1 and non-respondents receive a 0), and then logistic regression analysis was used to identify whether any pre-random-assignment characteristics were significantly related to the indicator.

Exhibit F.2 shows the estimated regression coefficients for the probability of being a respondent. As can be noted from this exhibit, besides background characteristics such as race, age, and number of children, a (0/1) indicator of membership in the FSS group was included in the model. This procedure tests for differences in characteristics likely to affect service-use and financial outcomes. The second column of the exhibit provides the parameter estimates that indicate the effect of each variable on the probability of completing the survey. The p-values show the level of statistical significance of this relationship.

The results show that there were a few characteristics that were statistically significant in predicting whether someone would complete a 36-month interview. Older adults were more likely to respond to the survey.¹²³ Fielded sample members who are African American, female, attained a high school degree or equivalent or

¹²² One respondent did not complete the survey but answered most questions and was included in the respondent sample.

¹²³ Adults age 45 to 61 are the reference group for comparisons by age. The negative coefficients for the two younger age groups, shown in exhibit F.2, imply that response rates were highest for the oldest group.

higher,¹²⁴ had a checking or savings account, or had a small amount of savings also had a greater likelihood of responding to the survey. Finally, fielded sample members randomly assigned in two housing agencies (Montgomery County, Maryland, and Houston, Texas) were less likely to respond.

The p-values for the entire model displayed at the bottom of exhibit F.2 show that the differences in sample member characteristics between the survey respondents and the survey non-respondents are statistically significant. Nonetheless, the R-squared value (a summary indicator of the predictive power of the effects) of 0.049 is low, which suggests that sample member characteristics have a very small effect on the likelihood of responding to the 36-month survey. Furthermore, results from this test show that membership in the FSS group did not predict whether someone would complete the survey. This finding implies that the survey results are unbiased.

Appendix exhibits F.3 (for households) and F.4 (for study participants) display demographic characteristics of survey respondents and non-respondents. For these comparisons, differences in proportions of 5 percentage points or more (if statistically significant) and differences in means of 0.3 of a standard deviation or more (if statistically significant) are sufficiently large to be of concern. Across the two exhibits, only small differences were found, except for country of origin (survey respondents include a larger proportion of U.S.-born study participants) and educational attainment (survey respondents include a larger proportion of study participants with a 2-year college degree or higher). These results lend support for generalizing survey findings to the larger impact sample.

Comparison of the Research Groups in the Survey Respondent Sample

Random assignment designs minimize the possibility of potential biases in the results. Although the response rates were similarly high in both research groups, there is still the possibility that different types of sample members within each research group responded to the survey. If so, the impact estimates for the respondent sample may be biased.

Appendix F shows the results of two tests for variation between research groups within the survey respondent sample. First, these differences are estimated in a logistic regression framework, in which the likelihood of being a member of the FSS group is regressed on a range of baseline characteristics (shown in exhibit F.5). The p-values for the entire model displayed at the bottom of exhibit F.5 show that the differences in sample member characteristics between research groups are not statistically significant. Furthermore, the R-squared value (a summary indicator of the predictive power of the effects) of 0.029 is very low, which suggests that sample member characteristics have a very small effect on the likelihood of being an FSS or control group member. Similarly, a comparison of baseline characteristics of survey respondents shows only scattered and small differences between the research groups (see exhibits F.6 and F.7). These findings strongly imply that the survey results are unbiased.

¹²⁴ Study participants with no educational credential are the reference group for comparisons by highest credential earned. The positive coefficients for three educational attainment groups, shown in Exhibit F.2, imply that response rates were lowest for the no-credential group.

Consistency of Impacts

Using quarterly wage data from the National Directory of New Hires, this section continues the discussion of whether the survey respondents' impacts can be generalized to the report sample. Exhibit F.8 shows 3-year impacts on employment and earnings outcomes among survey respondents and among the larger impact sample. As exhibit F.8 shows, impact estimates are similar for both samples, including mean values for each research group, the magnitude of research group differences, and the absence of statistical significance for any of the comparisons. These results further support generalizing the findings from survey responses to the entire impact sample.

Appendix Exhibit F.1. Family Self-Sufficiency 36-Month Survey Samples and Response Rates

Outcome	FSS Group	Control Group	Total
Impact sample	1,285	1,271	2,556
Fielded sample	1,265	1,253	2,518
Survey respondents	988	948	1,936
Survey response rate (% of Fielded)	78.1	75.7	76.9

FSS = Family Self-Sufficiency.

SOURCES: Baseline data and FSS 36-Month Survey responses.

Appendix Exhibit F.2. Estimated Regression Coefficients of the Probability of Being a Respondent to the Family Self-Sufficiency 36-Month Survey, Family Self-Sufficiency Impact Sample

Variable	Parameter Estimate	p-Value
Intercept	0.339	0.425
Assigned to FSS Group (impact)	0.108	0.273
Sample member characteristics		
Female	0.658	0.000
Age 18–34	-0.476	0.002
Age 35–44	-0.275	0.049
Married or cohabitating	0.180	0.355
Black	0.224	0.084
1 child	-0.196	0.207
2 children	-0.043	0.795
3 or more children	-0.007	0.967
Has a child age 5 or younger	0.120	0.341
Education		
High school diploma or GED	0.396	0.008
Some college	0.325	0.021
2-year college degree or higher	0.833	<.0001
Has trade license or training certificate	-0.097	0.347
Public assistance		
Received SNAP/food stamps	0.229	0.082
Received SSI or SSDI	-0.001	0.995
Received TANF	-0.163	0.308
Housing assistance		
Received Housing Choice Voucher less than 4 years	0.101	0.405
Received Housing Choice Voucher 4–7 years	0.107	0.416
Hardship and barriers to employment		
Has any barrier to employment	0.020	0.854
Reported 1 hardship in the year before random assignment	0.059	0.670
Reported 2 hardships in the year before random assignment	0.021	0.889
Reported 3 or more hardships in year before random assignment	-0.030	0.823

(continued)

Appendix Exhibit F.2. Estimated Regression Coefficients of the Probability of Being a Respondent to the Family Self-Sufficiency 36-Month Survey, Family Self-Sufficiency Impact Sample continued

Variable	Parameter Estimate	p-Value
Employment		
Currently employed	-0.222	0.198
Currently employed full-time	-0.036	0.814
Employed 1–6 months in the year before random assignment	0.170	0.305
Employed 7–11 months in the year before random assignment	-0.175	0.362
Employed 12 months in the year before random assignment	-0.044	0.828
Head-of-household earnings		
\$1–\$5,000	-0.003	0.991
\$5,001–\$7,500	0.194	0.486
\$7,501–\$10,000	0.120	0.671
\$10,001–\$12,500	0.335	0.238
\$12,501–\$15,000	0.101	0.719
\$15,001–\$17,500	-0.100	0.694
\$17,501–\$20,000	0.801	0.008
\$20,001–\$22,500	0.279	0.335
\$22,501–\$25,000	0.251	0.385
\$25,001–\$30,000	0.029	0.907
\$30,001–\$35,000	-0.009	0.977
\$35,001–\$70,000	-0.278	0.345
Enrollment		
Randomly assigned in quarter 4, 2013	-0.408	0.164
Randomly assigned in quarter 1, 2014	0.332	0.025
Randomly assigned in quarter 2, 2014	0.070	0.592
Housing Authority of the City of Alameda	-0.216	0.520
Orange County Housing Authority	-0.224	0.519
Housing Authority of the City of Riverside	-0.452	0.163
Housing Authority of the City of Deerfield Beach	0.146	0.789
Housing Authority of the City of Ft. Lauderdale	-0.417	0.275
Baltimore County Housing Office	-0.562	0.129
Housing Opportunities Commission of Montgomery County	-0.840	0.018

(continued)

Appendix Exhibit F.2. Estimated Regression Coefficients of the Probability of Being a Respondent to the Family Self-Sufficiency 36-Month Survey, Family Self-Sufficiency Impact Sample continued

Variable	Parameter Estimate	p-Value
Housing Authority of Kansas City	-0.176	0.642
Jersey City Housing Authority	-0.329	0.429
Akron Metropolitan Housing Authority	0.549	0.308
Columbus Metropolitan Housing Authority	-0.656	0.124
Lucas Metropolitan Housing Authority	-0.286	0.540
Youngstown Metropolitan Housing Authority	0.571	0.291
Dallas Housing Authority	-0.249	0.487
Fort Worth Housing Authority	-0.350	0.407
Houston Housing Authority	-0.624	0.068
Tarrant County Housing Assistance Office	-0.478	0.205
Enrolled in FSS for help with employment	0.089	0.451
Had checking or savings account	0.223	0.059
Had savings between \$1–\$500	0.210	0.081
Had savings greater than \$500	0.105	0.567
Debt		
\$1–\$1,000	0.059	0.748
\$1,001–\$5,000	0.129	0.439
\$5,001–\$10,000	-0.002	0.993
\$10,001–\$20,000	0.102	0.544
\$20,001 or greater	-0.142	0.407
Likelihood ratio	125.3	<.0001
Wald statistic	113.3	0.001
R-squared (.0486)		
Sample size		2,518

FSS = Family Self-Sufficiency. GED = General Educational Development. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance. SNAP = Supplemental Nutrition Assistance Program. TANF = Temporary Assistance for Needy Families.

SOURCES: Baseline data, U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data, and responses to the FSS 36-Month Survey.

Appendix Exhibit F.3. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample by Family Self-Sufficiency 36-Month Survey Respondent Status

Characteristic	Respondent	Non-Respondent	Total
Average number of household members ^a	3.2	3.2	3.2
Average number of adults in household ^a	1.4	1.5	1.5
Households with more than one adult (%)	33.4	34.4	33.7
Average number of children in household	1.8	1.7	1.8
Number of children in household (%)			
0	24.0	23.2	23.8
1	21.9	24.7	22.6
2	24.7	24.8	24.8
3 or more	29.3	27.3	28.8
For households with children, age of youngest child (%)			
0–2 years	21.0	20.1	20.8
3–5 years	20.9	18.8	20.4
6–12 years	41.8	40.0	41.3
13–17 years	16.3	21.1	17.5
Primary language spoken at home is English (%)	93.1	89.3	92.2***
Receives TANF (%)	15.4	17.0	15.8
Receives food stamps/SNAP (%)	70.6	66.3	69.6**
Length of time receiving Section 8 Housing Choice Voucher (%)			
Less than 1 year	5.5	3.4	5.0
1–3 years	27.7	27.4	27.6
4–6 years	21.2	23.1	21.6
7–9 years	15.4	14.6	15.2
10 years or more	30.3	31.5	30.6
Total household income (%)			
\$0	4.5	4.6	4.5
\$1–\$4,999	16.9	17.4	17.0
\$5,000–\$9,999	18.6	19.1	18.7
\$10,000–\$14,999	18.3	15.5	17.6
\$15,000–\$19,999	14.7	12.9	14.3
\$20,000–\$24,999	11.2	11.1	11.2
\$25,000–\$29,999	8.1	8.3	8.2
\$30,000 or more	7.7	11.2	8.5

(continued)

Appendix Exhibit F.3. Baseline Characteristics of Households in the Family Self-Sufficiency Impact Sample by Family Self-Sufficiency 36-Month Survey Respondent Status continued

Characteristic	Respondent	Non-Respondent	Total
Payment for rent and utilities (%)			
\$0	2.0	1.6	1.9
\$1–\$99	5.2	6.3	5.5
\$100–\$199	9.8	8.6	9.5
\$200–\$299	12.0	8.9	11.2
\$300–\$399	12.8	13.8	13.0
\$400–\$499	11.0	9.1	10.5
\$500–\$599	11.0	9.9	10.8
\$600–\$699	7.4	9.1	7.8
\$700–\$799	7.2	7.5	7.3
\$800–\$899	5.2	6.5	5.5
\$900–\$999	3.0	4.1	3.3
\$1,000 or more	13.2	14.6	13.6
During the past 12 months, household experienced at least one financial hardship (%)	59.2	58.5	59.0
Not able to buy prescription drug	13.7	12.1	13.3
Not able to buy food	29.1	28.2	28.9
Not able to pay telephone bill	28.8	26.5	28.2
Not able to pay rent	17.9	20.6	18.5
Not able to pay utility bill	42.8	45.1	43.4
Sample size	1,936	620	2,556

FSS = Family Self-Sufficiency; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families. *Maximum response option for number of adults in a household is four.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by respondent status. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100.0 percent for questions that allow more than one response.

SOURCES: MDRC calculations from Baseline Information Form data and responses to the FSS 36-Month Survey.

Appendix Exhibit F.4. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Family Self-Sufficiency 36-Month Survey Respondent Status

Characteristic	Respondent	Non-Respondent	Total
Sample member characteristics			
Female (%)	91.6	87.3	90.6***
Age (%)			
19–24 years	2.3	1.9	2.2
25–34 years	33.5	35.0	33.9
35–44 years	35.3	36.3	35.6
45–59 years	27.6	26.1	27.3
60–61 years	1.2	0.6	1.1
Average age (years)	39	39	39
Marital status (%)			*
Married, living with spouse	7.5	8.4	7.7
Married, not living with spouse	7.6	4.5	6.8
Cohabiting	1.3	1.6	1.4
Single, widowed, or divorced	83.5	85.5	84.0
Citizenship status (%)			***
U.S.-born	89.2	83.1	87.7
Naturalized	7.2	10.9	8.1
Non-citizen	3.6	6.0	4.2
Race/ethnicity (%) ^a			***
Black, non-Hispanic/Latino	74.3	70.2	73.3
Hispanic/Latino	15.5	16.8	15.8
White, non-Hispanic/Latino	6.7	6.6	6.7
Native American	0.3	0.3	0.3
Asian	1.3	4.2	2.0
Other	0.2	0.8	0.4
Multi-racial	1.7	1.1	1.6
Education			
Highest degree or diploma earned (%)			***
GED certificate	3.2	2.6	3.0
High school diploma	10.5	11.0	10.6
Some college or received technical/trade license	54.4	57.0	55.0

(continued)

Appendix Exhibit F.4. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Family Self-Sufficiency 36-Month Survey Respondent Status continued

Characteristic	Respondent	Non-Respondent	Total
Associate's or 2-year college degree	11.9	7.3	10.8
4-year college or graduate degree	7.0	5.0	6.5
None of the above	13.0	17.0	14.0
Has trade license or training certificate (%)	46.8	47.6	47.0
Employment status			
Currently employed (%)	55.5	58.6	56.2
Regular job	47.5	51.3	48.4
Self-employed	4.2	4.4	4.2
Temporary or seasonal job	3.7	2.9	3.5
Currently working 35 hours or more per week (%)	29.6	33.4	30.5*
Average hours worked per week	18.0	19.4	18.3*
Average weekly earnings (\$)	209	227	213
Barriers to employment			
Has any problem that limits work (%)	41.3	40.6	41.2
Physical health	19.1	17.9	18.8
Emotional or mental health	7.6	7.8	7.6
Childcare access or cost	17.9	17.7	17.8
Need to care for disabled household member	7.4	7.0	7.3
Previously convicted of a felony	6.1	7.0	6.3
Limited English-speaking ability (%)	3.2	5.8	3.8***
Does not have access to transportation for employment (%)			
No public transportation access	17.6	18.5	17.8
No automobile access	17.5	20.5	18.2*
FSS program			
Heard of escrow before random assignment (%)	44.6	42.2	44.0
Interest in FSS services related to (%)			
Job-related services	70.7	69.8	70.5
Social services	32.4	32.5	32.4
Financial services	95.1	96.4	95.5
Sample size	1,936	620	2,556

(continued)

Appendix Exhibit F.4. Baseline Characteristics of Heads of Households in the Family Self-Sufficiency Impact Sample by Family Self-Sufficiency 36-Month Survey Respondent Status continued

FSS = Family Self-Sufficiency. GED = General Educational Development.

*Chi-square test may not be valid due to small cell sizes.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by respondent status. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100.0 percent for questions that allow more than one response.

SOURCE: MDRC calculations from Baseline Information Form data and responses to the FSS 36-Month Survey.

Appendix Exhibit F.5. Estimated Regression Coefficients of the Probability of Being a Family Self-Sufficiency Group Member, Family Self-Sufficiency 36-Month Survey Respondents

Variable	Parameter Estimate	p-Value
Intercept	-0.452	0.299
Sample member characteristics		
Female	0.434	0.018
Age 18–34	0.100	0.496
Age 35–44	0.087	0.513
Married or cohabitating	0.100	0.581
Black	-0.088	0.488
1 child	0.080	0.593
2 children	-0.141	0.371
3 or more children	-0.059	0.727
Has a child age 5 or younger	-0.066	0.582
Education		
High school diploma or GED	0.071	0.630
Some college	0.003	0.985
2-year college degree or higher	0.302	0.075
Has trade license or training certificate	0.008	0.933
Public assistance		
Received SNAP/food stamps	0.061	0.630
Received SSI or SSDI	-0.526	0.001
Received TANF	-0.203	0.198
Housing assistance		
Received Housing Choice Voucher less than 4 years	-0.014	0.902
Received Housing Choice Voucher 4–7 years	0.054	0.667
Hardship and barriers to employment		
Has any barrier to employment	0.037	0.728
Reported 1 hardship in the year before random assignment	-0.093	0.472
Reported 2 hardships in the year before random assignment	-0.131	0.359
Reported 3 or more hardships in year before random assignment	-0.021	0.872

(continued)

Appendix Exhibit F.5. Estimated Regression Coefficients of the Probability of Being a Family Self-Sufficiency Group Member, Family Self-Sufficiency 36-Month Survey Respondents continued

Variable	Parameter Estimate	p-Value
Employment		
Currently employed	0.119	0.466
Currently employed full-time	-0.010	0.948
Employed 1–6 months in the year before random assignment	-0.232	0.128
Employed 7–11 months in the year before random assignment	-0.589	0.001
Employed 12 months in the year before random assignment	-0.405	0.032
Head-of-household earnings		
\$1–\$5,000	0.487	0.050
\$5,001–\$7,500	0.241	0.353
\$7,501–\$10,000	-0.102	0.700
\$10,001–\$12,500	-0.094	0.712
\$12,501–\$15,000	-0.099	0.709
\$15,001–\$17,500	-0.019	0.940
\$17,501–\$20,000	-0.050	0.838
\$20,001–\$22,500	-0.293	0.281
\$22,501–\$25,000	-0.209	0.447
\$25,001–\$30,000	-0.160	0.518
\$30,001–\$35,000	-0.422	0.156
\$35,001–\$70,000	-0.056	0.858
Enrollment		
Randomly assigned in quarter 4, 2013	0.104	0.734
Randomly assigned in quarter 1, 2014	-0.001	0.997
Randomly assigned in quarter 2, 2014	-0.068	0.586
Housing Authority of the City of Alameda	0.202	0.549
Orange County Housing Authority	0.233	0.508
Housing Authority of the City of Riverside	0.248	0.457
Housing Authority of the City of Deerfield Beach	0.269	0.553
Housing Authority of the City of Ft. Lauderdale	0.337	0.368
Baltimore County Housing Office	0.483	0.202
Housing Opportunities Commission of Montgomery County	0.288	0.434

(continued)

Appendix Exhibit F.5. Estimated Regression Coefficients of the Probability of Being a Family Self-Sufficiency Group Member, Family Self-Sufficiency 36-Month Survey Respondents continued

Variable	Parameter Estimate	p-Value
Housing Authority of Kansas City	0.233	0.531
Jersey City Housing Authority	0.127	0.758
Akron Metropolitan Housing Authority	0.138	0.746
Columbus Metropolitan Housing Authority	0.191	0.657
Lucas Metropolitan Housing Authority	0.273	0.553
Youngstown Metropolitan Housing Authority	0.116	0.787
Dallas Housing Authority	0.365	0.307
Fort Worth Housing Authority	0.400	0.334
Houston Housing Authority	0.213	0.543
Tarrant County Housing Assistance Office	0.321	0.401
Enrolled in FSS for help with employment	-0.002	0.985
Had checking or savings account	-0.011	0.920
Had savings between \$1-\$500	0.158	0.162
Had savings greater than \$500	0.174	0.325
Debt		
\$1-\$1,000	0.199	0.262
\$1,001-\$5,000	0.039	0.808
\$5,001-\$10,000	-0.061	0.722
\$10,001-\$20,000	-0.064	0.689
\$20,001 or greater	-0.088	0.596
Likelihood ratio	57.0	0.869
Wald statistic	54.4	0.915
R-squared (.0290)		
Sample size		1,936

FSS = Family Self-Sufficiency. GED = General Educational Development. SNAP = Supplemental Nutrition Assistance Program. SSI-SSDI = Supplemental Security Income-Social Security Disability Insurance. TANF = Temporary Assistance for Needy Families.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey.

SOURCES: Baseline data, U.S. Department of Housing and Urban Development Inventory Management System (IMS)/PIH Information Center (PIC) data, and responses to the FSS 36-Month Survey.

Appendix Exhibit F.6. Baseline Characteristics of Households by Research Group, Family Self-Sufficiency 36-Month Survey Respondent Sample

Characteristic	FSS Group	Control Group	Total
Average number of household members ^a	3.2	3.2	3.2
Average number of adults in household ^a	1.5	1.4	1.4
Households with more than one adult (%)	34.5	32.3	33.4
Average number of children in household	1.8	1.8	1.8
Number of children in household (%)			
0	23.7	24.4	24.0
1	23.1	20.7	21.9
2	24.0	25.5	24.7
3 or more	29.3	29.4	29.3
For households with children, age of youngest child (%)			
0–2 years	21.5	20.5	21.0
3–5 years	19.9	21.9	20.9
6–12 years	42.9	40.6	41.8
13–17 years	15.8	16.9	16.3
Primary language spoken at home is English (%)	93.3	92.9	93.1
Receives TANF (%)	15.4	15.4	15.4
Receives food stamps/SNAP (%)	71.6	69.6	70.6
Length of time receiving Section 8 Housing Choice Voucher (%)			
Less than 1 year	5.4	5.5	5.5
1–3 years	28.0	27.3	27.7
4–6 years	20.3	22.0	21.2
7–9 years	15.6	15.2	15.4
10 years or more	30.6	30.0	30.3
Total household income (%)			
\$0	4.8	4.3	4.5
\$1–\$4,999	17.7	16.1	16.9
\$5,000–\$9,999	18.3	18.9	18.6
\$10,000–\$14,999	18.8	17.8	18.3
\$15,000–\$19,999	14.5	14.9	14.7
\$20,000–\$24,999	10.5	11.8	11.2
\$25,000–\$29,999	7.6	8.6	8.1

(continued)

Appendix Exhibit F.6. Baseline Characteristics of Households by Research Group, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Characteristic	FSS Group	Control Group	Total
\$30,000 or more	7.9	7.5	7.7
Payment for rent and utilities (%)			
\$0	2.2	1.8	2.0
\$1–\$99	5.6	4.8	5.2
\$100–\$199	10.4	9.2	9.8
\$200–\$299	12.2	11.8	12.0
\$300–\$399	12.8	12.7	12.8
\$400–\$499	11.5	10.5	11.0
\$500–\$599	10.8	11.3	11.0
\$600–\$699	7.0	8.0	7.4
\$700–\$799	6.6	7.9	7.2
\$800–\$899	4.8	5.6	5.2
\$900–\$999	2.9	3.2	3.0
\$1,000 or more	13.2	13.3	13.2
During the past 12 months, household experienced at least one financial hardship (%)	58.1	60.3	59.2
Not able to buy prescription drug	13.7	13.7	13.7
Not able to buy food	26.3	32.1	29.1***
Not able to pay telephone bill	28.7	28.8	28.8
Not able to pay rent	17.5	18.3	17.9
Not able to pay utility bill	43.7	41.9	42.8
Sample size	988	948	1,936

FSS = Family Self-Sufficiency; SNAP = Supplemental Nutrition Assistance Program; TANF = Temporary Assistance for Needy Families. *Maximum response option for number of adults in a household is four.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100.0 percent for questions that allow more than one response.

SOURCES: MDRC calculations from Baseline Information Form data and responses to the FSS 36-Month Survey.

Appendix Exhibit F.7. Baseline Characteristics of Heads of Households by Research Group, Family Self-Sufficiency 36-Month Survey Respondent Sample

Characteristic	FSS Group	Control Group	Total
Sample member characteristics			
Female (%)	92.9	90.3	91.6**
Age (%)			
19–24 years	2.0	2.5	2.3
25–34 years	33.9	33.1	33.5
35–44 years	35.8	34.8	35.3
45–59 years	27.0	28.3	27.6
60–61 years	1.2	1.3	1.2
Average age (years)	39	39	39
Marital status (%)			
Married, living with spouse	7.8	7.3	7.5
Married, not living with spouse	8.0	7.2	7.6
Cohabiting	1.2	1.5	1.3
Single, widowed, or divorced	83.0	84.1	83.5
Citizenship status (%)			
U.S.-born	88.9	89.5	89.2
Naturalized	7.3	7.0	7.2
Non-citizen	3.8	3.5	3.6
Race/ethnicity (%) ^a			
Black, non-Hispanic/Latino	73.7	74.9	74.3
Hispanic/Latino	15.2	15.9	15.5
White, non-Hispanic/Latino	7.2	6.1	6.7
Native American	0.3	0.3	0.3
Asian	1.5	1.1	1.3
Other	0.1	0.3	0.2
Multi-racial	2.0	1.4	1.7

(continued)

Appendix Exhibit F.7. Baseline Characteristics of Heads of Households by Research Group, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Characteristic	FSS Group	Control Group	Total
Education			
Highest degree or diploma earned (%)			
GED certificate	3.6	2.8	3.2
High school diploma	10.3	10.8	10.5
Some college or received technical/trade license	52.8	56.1	54.4
Associate's or 2-year college degree	12.6	11.1	11.9
4-year college or graduate degree	8.1	5.8	7.0
None of the above	12.7	13.3	13.0
Has trade license or training certificate (%)	46.7	47.0	46.8
Employment status			
Currently employed (%)	54.9	56.0	55.5
Regular job	47.2	47.9	47.5**
Self-employed	3.3	5.2	4.2**
Temporary or seasonal job	4.5	2.9	3.7**
Currently working 35 hours or more per week (%)	28.9	30.4	29.6
Average hours worked per week	18.0	19.4	18.3*
Average weekly earnings (\$)	209	227	213
Barriers to employment			
Has any problem that limits work (%)	41.6	41.0	41.3
Physical health	17.7	20.7	19.1*
Emotional or mental health	7.3	7.9	7.6
Childcare access or cost	19.1	16.7	17.9
Need to care for disabled household member	7.7	7.1	7.4
Previously convicted of a felony	6.3	5.8	6.1
Limited English-speaking ability (%)	2.7	3.7	3.2
Does not have access to transportation for employment (%)			
No public transportation access	16.4	18.7	17.6
No automobile access	17.6	17.3	17.5

(continued)

Appendix Exhibit F.7. Baseline Characteristics of Heads of Households by Research Group, Family Self-Sufficiency 36-Month Survey Respondent Sample continued

Characteristic	FSS Group	Control Group	Total
FSS program			
Heard of escrow before random assignment (%)	45.1	44.1	44.6
Interest in FSS services related to (%)			
Job-related services	70.9	70.6	70.7
Social services	32.1	32.7	32.4
Financial services	95.2	95.0	95.1
Sample size	988	948	1,936

FSS = Family Self-Sufficiency. GED = General Educational Development.

*Chi-square test may not be valid due to small cell sizes.

NOTES: The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Sample sizes for specific measures may vary because of missing values. A chi-square test for categorical variables and a t-test for continuous variables were run to determine whether there is a difference in the distribution of the characteristics by research group. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent. Rounding may cause slight discrepancies in calculating sums and differences. Detail may sum to more than 100.0 percent for questions that allow more than one response.

SOURCES: MDRC calculations from Baseline Information Form data and responses to the FSS 36-Month Survey.

Appendix Exhibit F.8. Comparison of Impacts on Employment and Earnings in Years 1 to 3, Family Self-Sufficiency Impact and 36-Month Survey Respondent Samples

Outcome	FSS Group	Control Group	Difference (Impact)	p-Value
Ever employed in years 1 to 3 (%)				
Impact sample	83.4	81.7	1.7	0.170
Survey respondents	83.7	81.4	2.3	0.103
Average quarterly employment rate (%)				
Impact sample	63.5	63.0	0.5	0.679
Survey respondents	64.2	62.9	1.3	0.309
Total earnings (\$)				
Impact sample	41,650	41,487	163	0.884
Survey respondents	41,838	40,723	1,115	0.376
Average annual earnings greater than \$25,000 (%)				
Impact sample	20.3	20.1	0.2	0.903
Survey respondents	19.9	19.6	0.2	0.877
Sample sizes				
Impact Sample (total = 2,548)	1,282	1,266		
36-Month Survey Respondents (total = 1,930)	986	944		

FSS = Family Self-Sufficiency.

NOTES: The FSS impact sample includes Housing Choice Voucher households that were randomly assigned between October 18, 2013, and December 22, 2014, and with a head of household age 18 to 61 at the time of random assignment. The FSS 36-Month Survey respondent sample includes Housing Choice Voucher heads of household who were randomly assigned between October 18, 2013, and December 22, 2014, were age 18 to 61 at the time of random assignment, and responded to the FSS 36-Month Survey. Average quarterly employment rate is calculated as: total quarters with employment divided by total quarters of follow-up, expressed as a percentage. Estimates were regression-adjusted using ordinary least squares, controlling for pre-random assignment characteristics of sample members. Rounding may cause slight discrepancies in calculating differences. A two-tailed t-test was applied to differences between research groups. The p-value indicates the likelihood that the difference between the FSS group and control group arose by chance. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; and *** = 1 percent.

SOURCES: MDRC calculations using baseline data, quarterly wage data from the National Directory of New Hires, and responses to the FSS 36-Month Survey.

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U.S. Department of Housing and Urban Development
Office of Policy Development and Research
Washington, DC 20410-6000



July 2021