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Promoting Readiness of Minors in Supplemental Security Income (PROMISE):

Family Service Use and Its Relationship with Youth Outcomes

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Michael Levere, Todd Honeycutt, Gina Livermore, Arif Mamun, and Karen Katz

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Submitted by:

Mathematica
1100 1st Street, NE, 12th Floor
Washington, DC 20002-4221
Telephone: (202) 484-9220
Facsimile: (202) 863-1763
Project Director: Gina Livermore
Reference Number: 40304.5BB

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The opinions and conclusions expressed in this report are solely those of the authors and do not represent the opinions or policy of any state or federal government agency.

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List of acronyms

ASPIRE	Achieving Success by Promoting Readiness for Education and Employment
CaPROMISE	California PROMISE
ED	U.S. Department of Education
FFS	Family-oriented family services
GAO	U.S. Government Accountability Office
GED	General Education Diploma
IEP	Individualized education program
MD	Maryland
NTACT	National Technical Assistance Center on Transition
NYS	New York State
OASDI	Old-Age, Survivors, and Disability Insurance
p.p.	Percentage points
PROMISE	Promoting Readiness of Minors in Supplemental Security Income
S.E.	Standard error
SSA	Social Security Administration
SSI	Supplemental Security Income
VR	Vocational rehabilitation
WI	Wisconsin
YFS	Youth-oriented family services

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I. INTRODUCTION

Postsecondary outcomes for youth with disabilities lag behind those for their peers without disabilities. Youth with disabilities, particularly those with significant health conditions, have lower educational achievement and poorer employment outcomes as young adults (Shandra and Hogan 2009; Butterworth and Migliore 2015), although these outcomes vary for youth in families with different characteristics (Sima et al. 2015). Youth receiving Supplemental Security Income (SSI)—a federal income support program for people with significant health conditions and the elderly who have limited income and assets—might face additional challenges in transitioning from high school to young adulthood related to their disability severity, reliance on public benefits, and lack of knowledge about SSI work incentives, leading to poorer outcomes relative to other youth with disabilities (Hemmeter et al. 2009; Deshpande 2016; U.S. Government Accountability Office [GAO] 2017; Levere forthcoming).

A large body of research identifies evidence-based practices and services that can improve the outcomes of youth with disabilities during their transition to adulthood (National Collaborative on Workforce and Disability for Youth 2009; National Technical Assistance Center on Transition 2019). In addition to various services for youth, one such practice is family involvement, wherein family members (such as parents or guardians, foster parents, siblings, and extended family members) support the youth. This family involvement might occur, for example, through participating in the transition process and getting training and information about the youth's disability. Studies have shown a relationship between family member characteristics, such as employment and education, and family involvement in youth transition activities (Wagner et al. 2012; Lipscomb et al. 2017). Providing employment and education supports to family members, therefore, could plausibly have positive effects on the outcomes of youth with disabilities.

In this study, we seek to provide new information about the relationship between family services and youth outcomes by leveraging data from an evaluation of a federally funded initiative intended to improve the transition outcomes of youth receiving SSI. The Promoting Readiness of Minors in SSI (PROMISE) initiative enrolled about 13,000 youth receiving SSI who were ages 14 to 16, along with their families, in six demonstration programs implemented in 11 states. Through a random assignment process, about half of the youth and their families were offered PROMISE services, including employment, case management, and other services (the treatment group); the other half could access the usual services available in their communities (the control group). Using data collected for the evaluation, we documented service use by family members other than the youth and analyzed its relationship with selected short-term youth outcomes, including employment, earnings, SSI receipt, self-determination, and expectations.

We classified families into two overlapping service use categories based on their use of services targeted to family members other than the PROMISE-enrolled youth (regardless of the youths' service use):

- Families that used services focused on the youth directly (youth-oriented family services, or YFS) such as training and information about a youth's disability or benefits counseling

- Families that used services focused on family members other than the youth (family-oriented family services, or FFS) such as case management or employment-promoting services

The PROMISE programs increased the proportion of families that used YFS and FFS. Families who used one type of family service often used the other type of family service. Additionally, youth in families using YFS and FFS were more likely to use services for themselves than were those in families that did not use family services. Among characteristics of youth and families that were consistently associated with using YFS or FFS were those reflecting youth needs (such as receiving education accommodations), those reflecting parental needs (such as having a work limitation), and parental education.

Our results show that family members' use of PROMISE services, focused on either themselves or their youth, in combination with youth's use of services, was associated with better youth employment and job-related training outcomes relative to youth whose family members did not use family services. However, we found no relationship between use of family services and other youth outcomes, including self-determination and employment expectations. Although the findings do not demonstrate a causal relationship between either type of family services and youth outcomes, they provide evidence of the potential importance of those services in the youth's transition process.

II. BACKGROUND

The important roles that family members play in caregiving, advocacy, guiding, and teaching can be especially difficult during a youth's transition to adulthood, when the youth's physical, mental, and social development, along with their education and employment needs, present challenges. Family members of youth receiving SSI could benefit from additional direct supports, both for their own needs and those of their youth. In this section, we first provide background on families' roles in the transition of youth with disabilities to adulthood, and the services that families can use to increase their involvement in the transition process. We then present how services supporting family members' needs could improve outcomes for youth, particularly for families of youth receiving SSI. We conclude the section by describing the PROMISE model and its focus on family services.

A. Family involvement in youth transition

1. The role of families in youth transition

Families play multiple key roles in the lives of their youth across home, school, and community activities. They set expectations for their youth's future, connect youth with school and community organizations, support relationships, monitor progress toward goals, and help youth take care of personal needs (Hirano and Rowe 2016; Hirano et al. 2016). Thus, family involvement in a youth's transition can be a critical support to help youth achieve their goals. Family involvement is also important because school staff expect families to be a part of the transition planning process while youth are in high school. This process includes developing an individualized education program (IEP) that specifies the youth's goals and associated services, along with the youth and their parents or guardians attending transition-related meetings (U.S. Department of Education [ED] 2017).

Family involvement in youth transition complements other supports for youth that are either documented or hypothesized to promote positive youth outcomes. Examples of these supports include school and career preparation activities, transition planning, and cross-agency collaboration in the provision of youth services. Family involvement is a feature of evidence-based transition frameworks for youth with disabilities, such as *Guideposts for Success* (National Collaborative on Workforce and Disability for Youth 2009), the taxonomy for transition programming (Kohler et al. 2016), and the effective practices and predictors documented by the National Technical Assistance Center on Transition (2019). These frameworks identify several examples of specific practices that comprise family involvement, such as having high expectations for youth, having information about the transition process and disability issues, knowing about and being connected to services for the youth, accessing a network of supports for themselves and their youth, and partnering with school and other staff on transition planning and services (Appendix Table A.1).

The evidence consistently shows a positive association between family involvement and youth outcomes, though this evidence is correlational rather than causal. For example, family involvement in the transition process is associated with youth's postsecondary success (Haber et

al. 2016), and higher parental expectations for youth are positively associated with postschool employment and education outcomes (Carter et al. 2012; Mazzotti et al. 2016). Parental expectations also affect involvement in school transition planning. For example, parents with higher expectations for their youth's postsecondary education success are less likely to attend transition planning meetings, but the youth of such parents are more likely to attend and play an active role in their meetings (Wagner et al. 2012).

2. Prevalence of family involvement in youth transition

Families vary in their level of participation in their youth's transition process. Parents of special education students are highly involved in the education planning process; most (91 percent) attend IEP meetings (Liu et al. 2018). However, family participation in the transition planning process is less prevalent. About 60 percent of parents of special education students discussed transition plans with school staff (Liu et al. 2018), despite such planning being a requirement under the Individuals with Disabilities Education Act. Moreover, 36 percent of these parents reported that they did not have information about postsecondary education or training options for their youth (Lipscomb et al. 2017).

Youth and family characteristics might influence the degree of a family's involvement in supporting the youth's transition to adulthood. Household income, for example, might affect involvement of youth and parents in the school transition process. Wagner and coauthors (2012) found that parents with higher incomes were more likely to attend transition meetings and be satisfied with their involvement, and their youth were more likely to actively participate or lead those meetings. Parents from racial or ethnic minority groups or those who are economically disadvantaged (such as being low income or not employed) have lower rates of participation in IEP and transition planning meetings (Lipscomb et al. 2017). In addition, the practices of transition staff might discourage involvement by families with certain characteristics. For example, school staff being unaware of practices specific to youth and families from culturally and linguistically diverse backgrounds might discourage family participation in the transition planning process (Gothberg et al. 2019).

3. Challenges to involving families in youth transition

Transition staff and families perceive different kinds of challenges to involving families in the transition process. Families of youth receiving SSI also might face additional challenges because of special issues related to their reliance on the SSI program.

Transition staff perspective. Despite seeing the value of families as partners in the transition process, transition staff—such as educators or staff from disability, community, and vocational rehabilitation (VR) agencies—describe many challenges with involving families in the process. Of the 15 most common challenges cited by transition staff in one state, four are related to families: (1) vague or unrealistic expectations of youth and parents, (2) lack of knowledge about available services, (3) lack of knowledge about how to access and navigate services, and (4) lack of knowledge about youth employment and education options after high school (Riesen et al. 2014). Transition staff recognize the importance of family involvement, yet they also believe that families can create obstacles to the transition process. Family members who do not schedule or

keep meetings with providers, offer incomplete information, do not follow through on activities, do not have reliable transportation, or have poor communication skills or language barriers can hamper the process (Cavendish and Connor 2018; Fabian et al. 2018; Gothberg et al. 2019).

Family perspective. Families report multiple challenges with participating in the transition process and accessing services for their youth. Some struggle with attending IEP meetings because they have conflicts with scheduling, misunderstand the purpose of the IEP meeting, or do not feel that school staff hear their voices (Cavendish and Connor 2018; Hirano et al. 2018; Martinez et al. 2012). Others want more information about the transition process, more opportunities for engagement, or more contact with school personnel (Alverson and Yamamoto 2019; Hirano et al. 2018; Martinez et al. 2012). Additional challenges described by families include feeling misunderstood, disrespected, or unwelcome by transition staff; being frustrated by staff turnover; having poor communication with transition staff; having limited resources and being physically or mentally exhausted; and experiencing difficulties in resolving disagreements with transition staff (Francis et al. 2019; Hirano et al. 2018; Martinez et al. 2012).

Challenges for families of youth receiving SSI. Families of youth receiving SSI can face challenges with participating in the transition process in addition to those mentioned above. Children who meet specific medical and financial criteria can receive SSI, which includes a monthly cash payment and (for most) Medicaid health coverage. The Social Security Administration (SSA) reassesses a youth's eligibility for SSI at age 18 using adult criteria. Many families rely on their youth's SSI payments for support; among families with youth receiving SSI, SSI payments comprise almost half of all family income (Rupp et al. 2005/2006; Bailey and Hemmeter 2015). Families that rely on the youth's SSI payments for income might be concerned about the loss of those payments as the youth transition to adulthood. As youth increase their earnings, SSI payments are reduced and will eventually phase out completely. Therefore, families can face a trade-off between supporting youth transition to employment and the potential loss of SSI payments and Medicaid. Confusion and lack of knowledge on the part of youth and their families regarding work-related SSI rules and provisions designed to encourage work might limit successful employment outcomes into adulthood (GAO 2017). Few youth use SSI work incentives, such as Plans to Achieve Self-Support or Impairment-Related Work Expenses (SSA 2019a), though with the right supports, more youth could potentially do so (Camacho and Hemmeter 2013). SSA provides a brochure to families of youth ages 14 to 17 receiving SSI to help them prepare for the transition to adulthood and the process for redetermining a child's eligibility under the adult SSI rules at age 18 (SSA 2019b). Benefits counseling could also be an especially important support to help youth and families understand how working might affect their overall income (Schlegelmilch et al. 2019). Although Work Incentives Planning and Assistance projects provide benefits counseling to youth receiving SSI, few youth access services through these projects (Kregel 2012; GAO 2017).

4. Services to promote family involvement

The positive association between family involvement and youth outcomes and the inconsistent participation of families in the transition planning process suggest that services directed to family members could improve family involvement in youth transition and thereby improve youth

outcomes. Federal agencies encourage families to be a part of youth transition by funding programs specifically for families of youth with disabilities and conducting outreach to inform families about the transition process. ED, for example, funds parent training and information centers and community parent resource centers across the United States for parents of children with disabilities through age 26 (Center for Parent and Information Resources 2019; ED 2019; Rossetti and Burke 2019). These centers focus outreach efforts on underserved families, such as those with low-incomes. Another example is the previously noted brochure distributed by SSA to help youth and families with the transition process (SSA 2019b). A guide developed by the Office of Special Education and Rehabilitative Services to help youth and families navigate the postsecondary transition process (ED 2017) is another example of federal efforts to inform families.

However, family engagement in the transition process at the local level might be inconsistent, even though transition professionals from secondary schools and service agencies engage in practices for families outside of the IEP development and transition planning process. In a study of transition service providers, about half reported that they used evidence-based training modules in their work to involve families in transition (Mazzotti and Plotner 2016). Transition staff of state VR agencies and community rehabilitation providers communicated with education staff more frequently than directly with parents about the youth's transition (Oertle et al. 2013). In a case study of the transition practices of eight state VR agencies, four of the five agencies with better youth transition outcomes conducted outreach to parents and educated them; none of the three agencies with poorer youth transition outcomes did so (Honeycutt et al. 2015).

B. Services to support families with their own goals

Family members of youth receiving SSI have varying needs around disability, education, and employment issues, and so could potentially benefit from targeted supports to address those needs. Half of all youth receiving SSI live with at least one other family member with a disability (Davies et al. 2009), with more than 20 percent living with an adult also receiving SSI (Bailey and Hemmeter 2015). The educational attainment of parents of youth receiving SSI is low: only about 65 percent have completed high school (Rupp and Ressler 2009), whereas among the general population about 90 percent have completed high school (McFarland et al. 2019). Their employment rates are also lower than those in the general population. In two-parent households with a child receiving SSI, 66 percent of fathers and 34 percent of mothers worked, while the rate for single mothers was 44 percent (Rupp and Ressler 2009). Because eligibility for the child SSI program considers parental income, it is not surprising that most youth receiving SSI live in households with low earnings and income; as noted earlier, SSI income on average comprises almost half of a family's income (Rupp et al. 2005/2006). Many families with youth receiving SSI might therefore benefit from additional supports in tandem with the direct supports provided to their youth.

Providing employment and education supports to family members of youth receiving SSI might benefit both the family members themselves and the youth. As noted previously, families with more education and higher income tend to be more involved in youth transition activities (Wagner et al. 2012; Lipscomb et al. 2017). Services that increase family members' educational

attainment and income might heighten family members' involvement in youth transition activities and thus improve youth outcomes. Studies have shown that youth with disabilities have better employment and education outcomes if their parents have higher income and educational attainment (Newman et al. 2011; Wehman et al. 2015). Studies of youth with specific disabling conditions show similar positive relationships between these parental characteristics and youth outcomes (Chiang et al. 2012; Chiang et al. 2013; Emerson 2007; Shattuck et al. 2012). These relationships might be attenuated, however, for youth with severe disabilities (Carter et al. 2012).

To our knowledge, no studies have directly examined the relationship between the provision of family-directed education and employment services and the outcomes of youth with disabilities. However, outside the disability field, research on families participating in welfare programs generally finds no relationship between parent service use and youth outcomes. For example, youth whose parents were subject to employment requirements (that is, were required to work or participate in employment services) to retain income support had outcomes similar to those of youth whose parents were not subject to such requirements (Bloom et al. 2002; Fraker et al. 2002; Freedman et al. 2000; Gennetian and Miller 2000; Hamilton et al. 2001; Michalopoulos et al. 2002; Scrivener et al. 2002; Werner and Kornfeld 1997). Most of these studies measured outcomes related to behavior and school performance rather than employment and postsecondary education. Two that examined how employment requirements for families affected youth high school completion, college attendance, employment, and earnings found no effects on those outcomes (Michalopoulos et al. 2002; Werner and Kornfeld 1997).

However, parent employment requirements and supports in the context of welfare programs do appear to be associated with improved outcomes for younger youth. For example, Bloom and coauthors (2002) found positive effects of parent employment requirements on the behavior of youth who were ages 3 to 9 at study enrollment but found negative effects on school performance for youth ages 10 to 16. Similarly, Gennetian and Miller (2000) found better behavior and school performance for younger youth, but either no effects or negative ones for older youth. Further, the negative effects of parental employment requirements were more pronounced among older youth with younger siblings, suggesting that parental employment may increase these youth's caregiving responsibilities and leave less time for academic pursuits (Gennetian et al. 2002).

The types of services offered to parents might also influence youth outcomes, at least for younger youth. One study of welfare policies examined the effects on youth of interventions that either required parents to engage in employment activities or had the same requirement and also offered earnings supplements. Interventions that only required parents to engage in employment activities increased parent employment but had no effect on the school performance of youth who were ages 3 to 9 at study enrollment (Morris et al. 2001). However, interventions that combined employment activities with earnings supplements increased both parent employment and income and had positive effects for youth in terms of school achievement and social behaviors. One potential extension of this finding is that household income may play a greater role in youth well-being than parent employment.

C. The PROMISE approach offered family services focused on both youth and family members

PROMISE was a joint initiative of ED, SSA, the U.S. Department of Health and Human Services, and the U.S. Department of Labor to address issues and challenges related to supporting youth with disabilities by funding and evaluating projects designed to promote positive change in the lives of youth who were receiving SSI and their families. Under cooperative agreements with ED, six model demonstration programs enrolled youth receiving SSI ages 14 through 16. The federal partners expected that the entities implementing the PROMISE programs would draw on their experiences with the target population and on evidence of best practices to identify innovative ways to provide services to improve the economic self-sufficiency of youth receiving SSI and their families. Based on their review of the literature, input from the public, and consultation with subject matter experts, the federal partners postulated that two features of the PROMISE programs would make them more effective: (1) strong partnerships between the agencies that provide services to youth receiving SSI and their families, and (2) an individual- and family-centered approach to case management and service delivery. The federal partners identified a set of services that could achieve the desired results and thus required the PROMISE programs to include the following components (ED 2013):

- **Formal partnerships between state agencies** that provide VR services, special education and related services, workforce development services, Medicaid, income assistance from Temporary Assistance for Needy Families, and services provided by federally funded state developmental disability and mental health services programs
- **Case management** to ensure that PROMISE services would be appropriately planned and coordinated, help participants navigate the broader service delivery system, and help with transition planning for post-school goals and services
- **Benefits counseling and financial education** for youth and their families on SSA work incentives, eligibility requirements of various programs, rules governing earnings and assets, and topics promoting financial stability
- **Career and work-based learning experiences,** including paid and unpaid work experiences in an integrated setting while youth are in high school
- **Parent training and information** in two areas: (1) the parents' role in supporting and advocating for their youth to help them achieve their education and employment goals, and (2) resources for improving the education and employment outcomes of the parents and the economic self-sufficiency of the family

These required components were intended to address a range of personal barriers faced by youth with disabilities and their family members, such as low expectations regarding education and employment, fear of benefit loss, and limited education and skills. These personal barriers and the mitigating effects of the PROMISE components on them influence the education, employment, and financial security of youth receiving SSI and their families. The PROMISE components were also intended to address some of the environmental factors that are important determinants of the education, employment, and financial outcomes of youth receiving SSI and

their families, including inadequate services, limited service coordination, and societal perceptions of disability. In addition, the required components were intended to affect a variety of short- and long-term outcomes related to service use, education, employment, expectations, health insurance coverage, income, youth self-determination, and participation in SSA and other public assistance programs.

In September 2013, ED announced that it had awarded $211 million over five years to five individual states and one consortium of six states to design and implement PROMISE demonstration programs. ED subsequently increased the support to $230 million over six years after awarding supplemental funding and an extension of the award period. The awards were made to state agencies that were selected through a competitive process. The agencies then partnered with other state and local organizations to implement PROMISE.

Table 1 lists the six PROMISE programs, along with information about their location, enrollment period, service delivery end date, and number of youth and families included in the study. Each program implemented the required partnerships and components in ways they believed would be most effective in addressing the challenges faced by youth receiving SSI and their families. The programs also offered services in addition to those required, such as supporting families at school meetings and providing parents with information about and assistance with guardianship issues.

Table 1. The six PROMISE programs

Program name and lead agency	Location	Enrollment period	End date for services	Number of youth in research sample
Arkansas PROMISE; Arkansas Department of Education	25 of the state's 75 counties, grouped into four administrative regions	9/2014–4/2016	6/2019	1,805
ASPIRE; Utah State Office of Rehabilitation	Statewide in six consortium states: Arizona, Colorado, Montana, North Dakota, South Dakota, and Utah	10/2014–4/2016	3/2019	1,953
CaPROMISE; California Department of Rehabilitation	18 local sites covering 20 local educational agencies	8/2014–4/2016	6/2019	3,097
MD PROMISE; MD Department of Disabilities	Statewide	4/2014–2/2016	9/2018	1,866
NYS PROMISE; NYS Office of Mental Health and Research Foundation for Mental Hygiene	In three regions: the Capital Region, Western New York, and New York City	10/2014–4/2016	8/2019	1,967
WI PROMISE; WI Department of Workforce Development, Division of Vocational Rehabilitation	Statewide	4/2014–4/2016	9/2018	1,896

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; MD = Maryland; NYS = New York State; WI = Wisconsin.

Source: Mamun et al. (2019).

Family services were a critical aspect of PROMISE. Although many programs for youth might offer enhanced case management, employment, or education services, PROMISE required that specific services also be offered to the families of youth receiving SSI. In addition to addressing the economic self-sufficiency and limited means of the families that qualify for SSI, this aspect of the initiative was based on the premise, supported by the literature, that intentionally involving the family in services for the youth and offering services to address family members' own needs would benefit the youth. PROMISE programs succeeded in this activity, to varying degrees (Mamun et al. 2019). They provided case management services to parents and other family members; developed service plans that incorporated the employment and education goals of parents; offered training to parents and family members on issues specific to the youth, such as secondary and postsecondary education, employment, benefits, and information about their disability; and referred family members to needed services.

III. STUDY QUESTIONS, DATA, AND METHODS

In this study, we analyze the use of youth-oriented family services (YFS) and family-oriented family services (FFS) by PROMISE enrollees. The purpose of the study is to assess the relationship between families' use of YFS and FFS and selected youth outcomes. We address two questions:

1. What were the patterns of service use among families involved with PROMISE, and what youth and family characteristics are associated with those patterns? For this question, we considered the use of both YFS and FFS and compared findings between the PROMISE control group (which represents the counterfactual environment) and the PROMISE treatment group.
2. Was the use of YFS and FFS associated with better short-term outcomes for youth relative to their counterparts whose family members did not use such services? With this question, we explored the relationships between use of YFS and FFS, and youth employment, earnings, self-determination, expectations, and reliance on SSI, after controlling for family characteristics and services that youth used directly.

Our analyses used survey and administrative data collected for the national PROMISE evaluation. Because the primary measures of service use and outcomes came from survey data, we excluded from the analyses families that did not respond to either the parent or the youth survey. We conducted several types of analyses to assess the relationships between family service use and youth outcomes. We describe the data and methods below.

A. Data, sample, and measures

1. Data and sample

We used data from three sources: (1) surveys of youth and parents conducted for the national PROMISE evaluation, (2) SSA administrative data, and (3) the PROMISE random assignment system. We surveyed youth and their parents (using separate instruments) 18 months after they enrolled in PROMISE to gather information about use of services, outcomes, and youth and family characteristics (discussed in more detail below). SSA administrative data provided information on SSI and Old-Age, Survivors, and Disability Insurance (OASDI) payments and youth demographic characteristics, such as age, sex, and primary impairment. In addition to assigning enrolled youth to either the PROMISE treatment or control group, the web-based random assignment system captured some additional data, such as the enrolling parent's relationship to the youth. Mamun and coauthors (2019) provide more information about these data sources.

The sample for this study includes 9,081 PROMISE families that responded to both the parent and youth surveys and provided the necessary information to identify families' use of YFS and FFS. The study sample represents 79 percent of the PROMISE enrollees who were eligible for the surveys; about 19 percent did not respond to both of the surveys, and another 2 percent did not respond to the service use questions that would allow us to identify YFS and FFS use or to

determine whether the youth used any of the PROMISE-required services, information that was necessary for conducting the analyses.

2. Measures

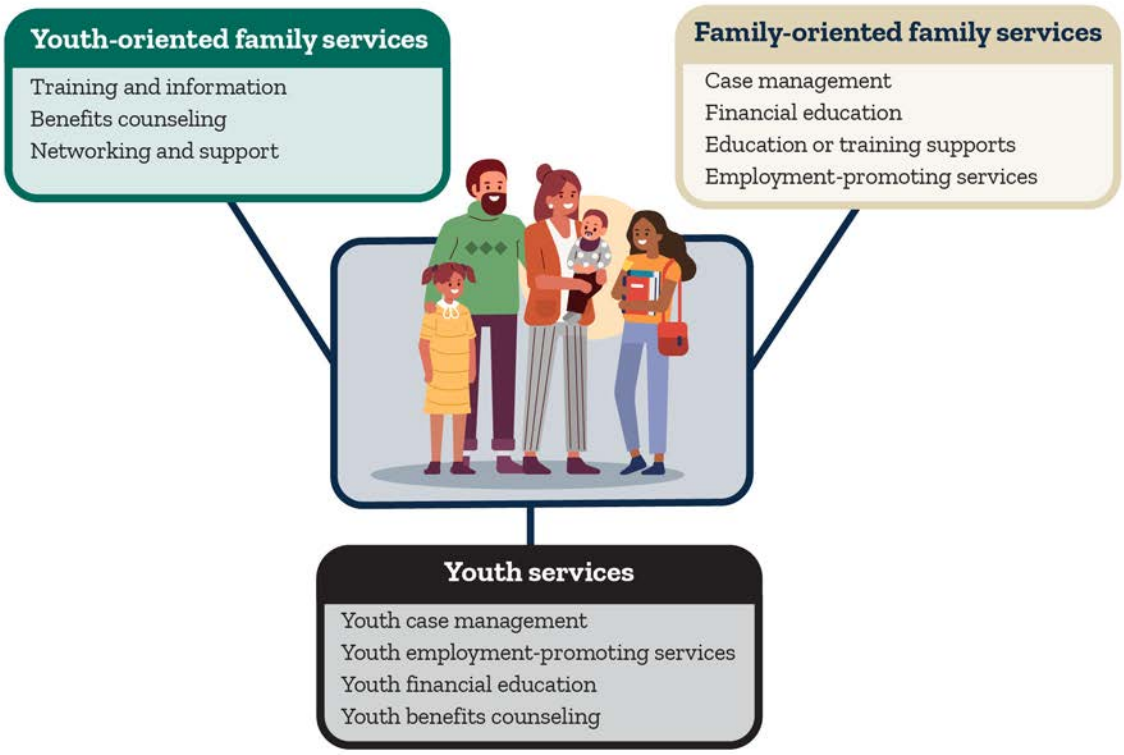
We constructed three types of measures: (1) family and youth service use, (2) youth outcomes, and (3) youth and family characteristics. We describe these in turn below.

Family and youth service use. We constructed two types of family service measures to represent services provided to family members other than the youth receiving SSI (Figure 1). We define youth-oriented family services, or YFS, to include benefits counseling, networking and support, and parent training and information on their youth's disability provided to family members other than the youth receiving SSI. We defined family-oriented family services, or FFS, to include case management, education or training supports, employment-promoting services, and financial education services provided to family members other than the youth receiving SSI. Appendix Table A.2 lists the survey questions used to capture the use of YFS and FFS. We classified families into three subgroups based on YFS and FFS use by family members other than the SSI youth: (1) families that did not use any YFS or FFS, (2) families that used any YFS, and (3) families that used any FFS. The second and third categories are not mutually exclusive—many families used both types of family services. Among those using YFS, just under half also used FFS. Among those using FFS, about three-quarters also used YFS.

We also measured whether the youth used any services for themselves. For the purposes of this study, we define youth services as those required by the PROMISE programs, namely, case management, benefits counseling, financial education, and employment-promoting services. Although this study focuses on family services, we also assess youth's use of services to provide context for the associations between family services and youth outcomes, to demonstrate how youth and family services often are used in tandem, and to control for use of these services in estimating the relationships between the use of family services and youth outcomes.

All service use measures are self-reported from the parent survey and reflect any use of a given type of service during the first 18 months after PROMISE enrollment. Importantly, the service use measures capture only whether a family used the service, but not the intensity of service use, such as the frequency or time period over which services were used.

Figure 1. Family and youth services



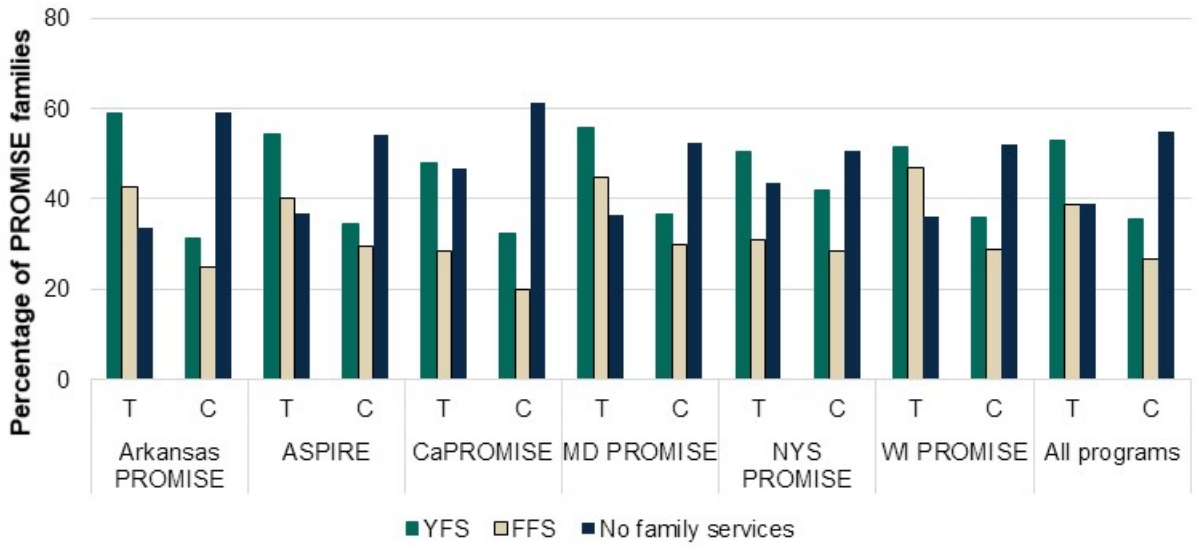
Across the six PROMISE programs, families in the treatment group obtained more YFS and FFS than families in the control group (Figure 2). On average, about 60 percent of families in the treatment group reported using any family services, while only about 45 percent of their control group counterparts did so. About 50 percent of those in the treatment group reported using YFS compared with about 35 percent of those in the control group. Use of FFS was lower than use of YFS for families in both the treatment and control groups (39 percent and 27 percent, respectively), with the rates for the treatment group higher than for the control group. These differences mirror the PROMISE impact evaluation findings that show that each of the PROMISE programs increased the use of family services (Mamun et al. 2019).[1]

Although all six programs increased the proportion of family members using both YFS and FFS, the magnitude of the increases differed across them, a feature that we leverage in our analysis. For example, the difference across the treatment and control groups in the shares of families using YFS ranged from 9 percentage points (NYS PROMISE) to 28 percentage points (Arkansas PROMISE). For FFS, the difference ranged from 2 percentage points (NYS PROMISE) to 18 percentage points (WI PROMISE and Arkansas PROMISE). The 18-month impacts of PROMISE on youth employment were also largest in Arkansas PROMISE and smallest in NYS PROMISE (Mamun et al. 2019). Thus, the greater use of family services could have contributed

[1] The results in this paper are not directly comparable with those found in Mamun and coauthors (2019). That impact study used the PROMISE random assignment design to estimate the impacts of PROMISE by comparing all youth in the treatment group to all youth in the control group. In this study, we focus on the subset of youth in families that used YFS and FFS. Because PROMISE itself affected use of YFS and FFS, we cannot use the same design, and thus the results are not directly comparable.

to the greater impacts on youth outcomes. As discussed below, we exploit this variation in family service use for our analysis by comparing local-level impacts on the use of YFS and FFS with local-level impacts on youth outcomes.

Figure 2. PROMISE family service use, by program



Note: Data are from the PROMISE 18-month parent survey and PROMISE random assignment system.

ASPIRE = Achieving Success by Promoting Readiness for Education and Employment; C = control; FFS = family-oriented family services; MD = Maryland; NYS = New York State; T = treatment; WI = Wisconsin; YFS = youth-oriented family services.

Youth outcome measures. We constructed and analyzed seven measures across four types of youth outcomes that could be particularly affected by greater family service use (Table 2). These types include employment-related outcomes, SSI payments, self-determination, and employment expectations.

Youth and family characteristics. We constructed measures of youth and family characteristics to assess their relationships with service use, and to control for these characteristics in regression models that estimate the relationship between the type of family service use and outcomes (discussed below). We included youth demographic characteristics, youth disability characteristics, youth SSA program participation, family demographic and disability characteristics, and family socioeconomic characteristics (Table 3). Many of the characteristics come from SSA administrative records, though some also originate from the parent and youth surveys or the random assignment system. Because the surveys capture information 18 months after PROMISE enrollment, we included only those survey characteristics that were unlikely to change over time or be affected by participation in PROMISE shortly after enrollment, such as race and ethnicity, the parent's highest educational attainment, and whether the parent had a disability that prevented work.

Table 2. Youth outcome measures

Measure	Description
Annual employment	This binary measure indicates whether the youth held a paid job in the year before the 18-month survey. Based on youth survey data.
Annual earnings	This continuous measure shows the youth's total earnings from all paid jobs in the year before the 18-month survey. Based on youth survey data.
Job-related training	This binary measure indicates whether the youth used job-related training during the 18 months after enrolling in PROMISE. Based on parent survey data.
Self-determination score	This composite score is based on the youth's responses to 20 questions designed to capture the extent to which the youth acted autonomously, initiated and responded to events in a "psychologically empowered" manner, and acted in a self-realizing manner at the time of the 18-month survey. We based the questions on the ARC Self-Determination Scale (Wehmeyer 1996). To receive a score, the youth had to answer at least five of the seven questions on autonomy, four of the six questions on psychological empowerment, and five of the seven questions on self-realization. Based on youth survey data.
Youth employment expectations	This binary measure indicates whether the youth probably or definitely expected, at the time of the 18-month survey, to be employed in a paid job at the age of 25. Based on youth survey data.
Parent employment expectations for youth	This binary measure indicates whether the parent probably or definitely expected, at the time of the 18-month survey, that the youth would be employed in a paid job at the age of 25. Based on parent survey data.
SSI payment amounts	This continuous measure shows the amount of SSI payments that the youth received during the year before the 18-month survey. Based on SSA administrative data.

SSA = Social Security Administration; SSI = Supplemental Security Income.

Table 3. Youth and family characteristics

Measure	Source
Youth characteristics	
Youth is female	SSA administrative data
Age at PROMISE enrollment (14, 15, 16)	SSA administrative data
English is language preference at SSI application	SSA administrative data
Living arrangements at time of SSI application (in parents' household, own household or alone, another household and receiving support)	SSA administrative data
Race and ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic; non-Hispanic American Indian, non-Hispanic other or mixed race, missing)	Youth survey
Primary impairment that qualified the youth for SSI (intellectual or developmental disability; speech, hearing, or visual impairment; physical disability; other mental impairment; other or unknown disability)	SSA administrative data
Youth has an IEP	Parent survey
Youth has a 504 plan	Parent survey
Youth receives educational accommodations	Youth survey
SSA payment status (received SSI, received OASDI)	SSA administrative data
Years since youth's earliest SSI eligibility at time of PROMISE enrollment	SSA administrative data
Age at most recent SSI application	SSA administrative data
SSI payments during the year before PROMISE enrollment	SSA administrative data
OASDI payments during the year before PROMISE enrollment	SSA administrative data

Measure	Source
Family characteristics	
Enrolling parent or guardian's age at PROMISE enrollment	Random assignment system
Enrolling parent or guardian's relationship to youth at PROMISE enrollment (mother, father, other)	Random assignment system
Parent or guardian's race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, non-Hispanic American Indian, non-Hispanic other or mixed race, missing)	Parent survey
Parent or guardian has a spouse	Parent survey
Parent or guardian has a disability that prevents work	Parent survey
Multiple SSI-eligible children in household at PROMISE enrollment	SSA administrative data
Parents' SSA payment status at enrollment (any parent received SSI only, any parent received OASDI only, any parent received both SSI and OASDI, no parent received SSA payments, no parent was included in SSA data analyses)	SSA administrative data
A household member received non-SSA public assistance	Parent survey
Parent educational attainment (not a high school graduate, high school diploma or GED, some postsecondary education, college degree, some post-graduate degree, missing)	Parent survey
Parent has health insurance	Parent survey

GED = General Education Diploma; IEP = individualized education program; OASDI = Old-Age, Survivors, and Disability Insurance; SSA = Social Security Administration; SSI = Supplemental Security Income.

B. Methods

We conducted four analyses to better understand the relationship between family service use and youth outcomes. All analyses pooled data from youth and families across the six PROMISE programs, providing a larger sample than if we analyzed each program separately. This approach allowed us to conduct the analyses with greater precision, particularly in analyzing how family service use was related to youth outcomes. By pooling, we focused less on the nuances of each program in the services offered so that we could take advantage of the gains in precision from a larger sample to better understand the relationship between family services and youth outcomes. In contrast, the national PROMISE evaluation assessed the impact of PROMISE on youth outcomes separately by program (Mamun et al. 2019). That analysis was designed to identify the effectiveness of each program's PROMISE model, rather than assess the relationship between the use of specific types of services and youth outcomes. The goals and nature of the four analyses are as follows.

Describe how PROMISE affected family and youth service use. We first assessed how the PROMISE programs affected family service use through descriptive comparisons. We tabulated the shares of families that used each type of family service and compared these statistics by the family service use category and PROMISE assignment group (treatment or control). This analysis describes the existing service environment for families and demonstrates which family services the PROMISE programs particularly affected. It also describes the specific types of services families used that led to the categorization of YFS or FFS and indicates the extent to which the two categories overlap. These factors are important to understand when considering how service use by family members relates to youth outcomes.

Additionally, we conducted similar analyses of the youths' use of services by whether the family members used YFS, FFS, or no family services. The results of this analysis show how engaging families could influence the youth's use of services. Such influence would be another key factor to consider because of the greater evidence underlying the relationship between youth services and outcomes.

For the analyses of service use, we performed tests to assess whether differences across service use categories and differences between PROMISE assignment groups were statistically significant. The statistical tests compare means for single variables (such as use of youth case management services) and distributions for categorical variables (such as number of youth services).

Describe how youth and family characteristics vary by family service use. We assessed whether youth and families with specific characteristics were more or less likely to use YFS and FFS. We conducted these assessments separately by PROMISE assignment group. Any differences in characteristics across family service use categories for the control group members likely indicate self-selection into the service use categories along observed and unobserved characteristics.

For the analyses of youth and family characteristics, we used separate logistic regressions on indicators for use of YFS or use of FFS based on the characteristics listed in Table 3. We report characteristics that are associated with a higher use of YFS or FFS. The statistical tests compare whether youth or families with the characteristic are more or less likely to use YFS or FFS relative to a comparison group without that characteristic. For binary variables (such as youth being female), the comparison group is all other people (such as youth who are male), while for categorical variables (such as youth race and ethnicity or educational level), we specify the omitted comparison group.

Assess the relationship between family service use and youth outcomes, controlling for youth and family characteristics. We compared youth outcomes across family service use categories by PROMISE assignment group, using regression models to account for differences in family characteristics. Equation 1 estimates how outcomes y_i (listed in Table 2) differed for those who used YFS and FFS relative to those who did not use those services. Additionally, we also included a control variable for an indicator of whether the youth used services (YS_i), which both provides context and controls for the fact that youth in families using YFS and FFS were more likely to use services for themselves (as discussed in the results below). A positive coefficient for β_1 or β_2 would indicate that outcomes are higher for youth whose families used YFS or FFS, respectively, than for youth whose families did not. The control variables in X_i include the youth and family characteristics listed in Table 3.

(1) $$y_i = \alpha + \beta_1 * YFS_i + \beta_2 * FFS_i + \theta * YS_i + \gamma * X_i + \varepsilon_i$$

The results from this analysis show how youth outcomes differed by family service use, but they do not represent the causal impacts of YFS and FFS. Because families have choices regarding service use, the types of people who choose to use either YFS or FFS (or both) likely differ in

their observed and unobserved characteristics from those who choose not to use them. The possibility of self-selection into family service use categories means that we cannot definitively attribute differences in outcomes between those who did or did not use YFS or FFS to the use of family services. Although we account for differences in some observed characteristics, we cannot account for unobserved differences, such as need, motivation, or initiative. Nonetheless, this analysis provides suggestive evidence of the role of family services in improving youth outcomes.

Assess how the impacts of PROMISE on family service use vary with the impacts on youth outcomes. We leveraged the random assignment design and the variation in the outcomes observed across local geographic areas of the six programs to compare the impacts of PROMISE on the use of YFS and FFS with the impacts of PROMISE on youths' use of services and other selected youth outcomes. To estimate the causal impacts of PROMISE on use of YFS and FFS and on youth outcomes, we followed the methods described in Mamun and coauthors (2019) and compared family service use and youth outcomes between the treatment and control groups, controlling for several youth and family characteristics. The goal of this analysis was to assess whether greater impacts on youth outcomes tended to occur in geographic locations where there were also greater impacts on the likelihood of families using either YFS or FFS. If so, the results provide evidence that family service use is positively associated with improvements in youth outcomes.

For this analysis, we estimated the impacts of PROMISE at the local level (that is, for regions within a PROMISE program) on the likelihood of using YFS (FFS) by comparing the share of families with YFS (FFS) in the treatment group to the share of families with YFS (FFS) in the control group. We compared these family service use impacts to impacts on youth outcomes, which we estimated using a similar framework. All the PROMISE programs except for MD PROMISE were organized into service delivery regions, which we use to estimate the local-level impacts. For example, Arkansas was organized into four regions (central, eastern, northwest, and southern) and the ASPIRE consortium had six regions corresponding to its six member states. To estimate impacts on the likelihood of YFS or FFS use and youth outcomes with reasonable precision, where necessary we combined regions within programs to ensure that each had at least 150 youth.[2] Through this process, we subdivided the six PROMISE programs into 25 separate regions for use in the analysis.

After estimating the local-level impacts on the likelihood of using YFS or FFS and youth outcomes, we estimated the correlation between these impacts. These correlations show whether larger impacts on YFS or FFS were associated with larger impacts on youth outcomes. If the given type of family service use positively affects youth outcomes, it should follow that regions where PROMISE more substantially increased the share of families using that type of service

[2] The regional samples for the programs in Arkansas and New York State were large enough to not require regrouping. For ASPIRE and CaPROMISE, we used the region definitions from Mamun and coauthors (2019) as fixed effect control variables to account for stratified random assignment. In Wisconsin, we collapsed the program's 11 regions into 5 based on geographic proximity so that each new region had at least 150 youth.

would also experience larger improvements in youth outcomes.[3] We consider the evidence to be qualitative because we lack a large enough sample to be confident of the statistical precision of the findings. Although we tested whether the estimated correlation was statistically significant, we are more interested in the direction and magnitude of the correlation. Because of the small sample size (N = 25), readers should interpret the results of this analysis cautiously.

[3] We also estimated a version of this correlation controlling for the local-level impact on the use of youth services. However, including this control did not meaningfully affect the results in terms of the magnitude of the estimated correlation or its statistical significance.

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IV. RESULTS

The findings from the analyses offer four perspectives on the role of YFS and FFS in the youth transition process. They demonstrate:

1. How the use of specific YFS and FFS varies by the PROMISE assignment group
2. How the use of YFS and FFS varies by youth and family characteristics
3. The extent to which use of YFS and FFS is associated with youth outcomes
4. The extent to which PROMISE *impacts* on YFS and FFS use are associated with the *impacts* on youth outcomes

In the rest of this section, we present the findings from each of the four analyses.

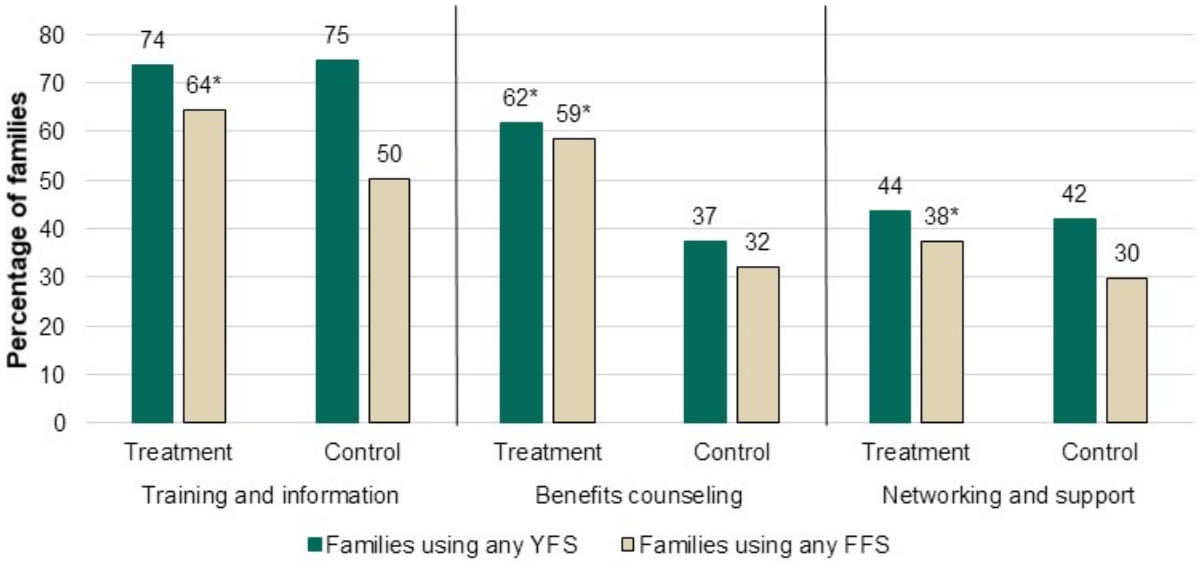
A. Families often used both YFS and FFS, and youth used services at higher rates when families used services

Our first set of analyses presents the counterfactual environment for family services, or what occurs normally for families of youth receiving SSI who volunteered for PROMISE, and how PROMISE programs affected service use. This descriptive analysis of families' use of YFS and FFS found that use of both services was more common under PROMISE, and that when families used these services, their youth received services for themselves at higher rates. In what follows, we provide more detail about these findings, beginning first with YFS use and then FFS use, before presenting information about youths' use of services.

1. YFS use

PROMISE increased the proportion of families using YFS, particularly through benefits counseling services (Figure 3). A larger proportion of YFS families in the treatment group (62 percent) used benefits counseling than did their control group counterparts (37 percent). Among families using any YFS, use of training and information services and networking services was similar between the treatment and control groups, with the training and information services being more common than the networking services (Figure 3). Families that used FFS also frequently used YFS, indicating the substantial overlap between those using these two types of family services. Overlap was greater in the treatment group, as rates of service use for each type of YFS among families that used FFS was higher in the treatment group than in the control group.

Figure 3. Use of specific types of YFS, by family service use category and PROMISE assignment group



Source: PROMISE 18-month follow-up survey.

Note: See Appendix Table A.3 for the statistics supporting this figure.

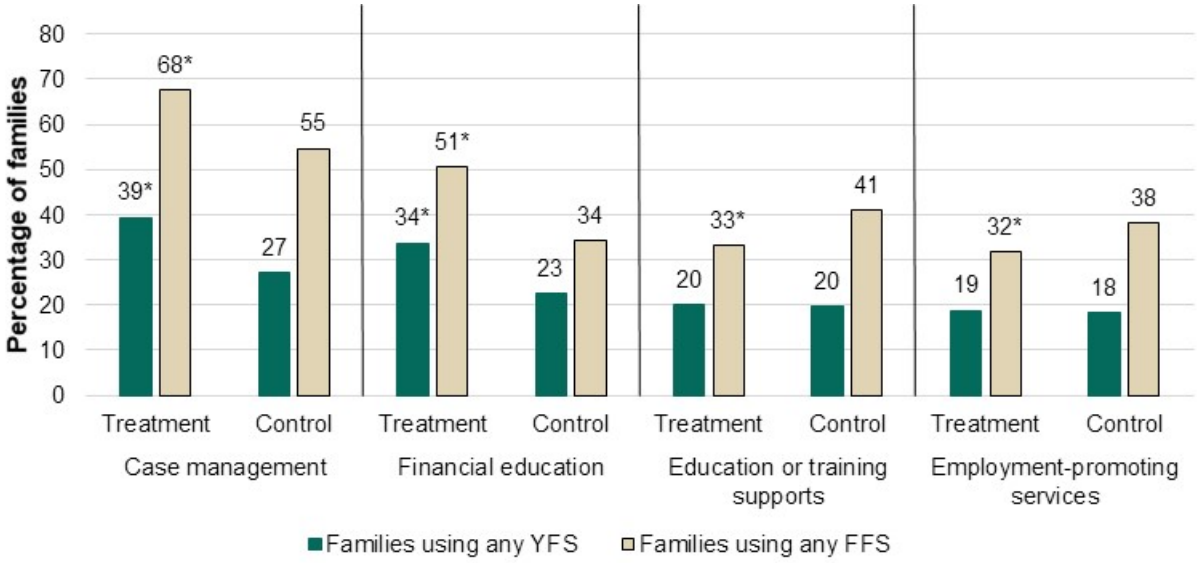
* Significantly different from the value for the corresponding control group service use category at the 5 percent level.

FFS = family-oriented family services; YFS = youth-oriented family services.

2. FFS use

The pattern of FFS use differed for FFS families by treatment and control group status (Figure 4). FFS families in both the treatment and control groups more frequently used case management services than other services, and the use of case management and financial education services was higher for FFS families in the treatment group than for those in the control group. However, conditional on using FFS, families in the control group used education or training supports and employment-promoting services at higher rates than those in the treatment group. Though PROMISE increased the absolute number of families using family-oriented family services (Figure 2), this pattern suggests that either (1) the PROMISE programs did not emphasize education or training supports and employment-promoting services as much as other services or (2) PROMISE families were less interested in those services. Finally, a substantial proportion of treatment and control group families that used YFS also used FFS, although the rates were not as high as for FFS use observed among YFS families. Among those using FFS, YFS families in the treatment group used case management and financial education for families at higher rates than their counterparts in the control group, and they used other types of FFS at similar rates.

Figure 4. Use of specific types of FFS, by family service use category and PROMISE assignment group



Source: PROMISE 18-month follow-up survey.

Note: See Appendix Table A.3 for the statistics supporting this figure.

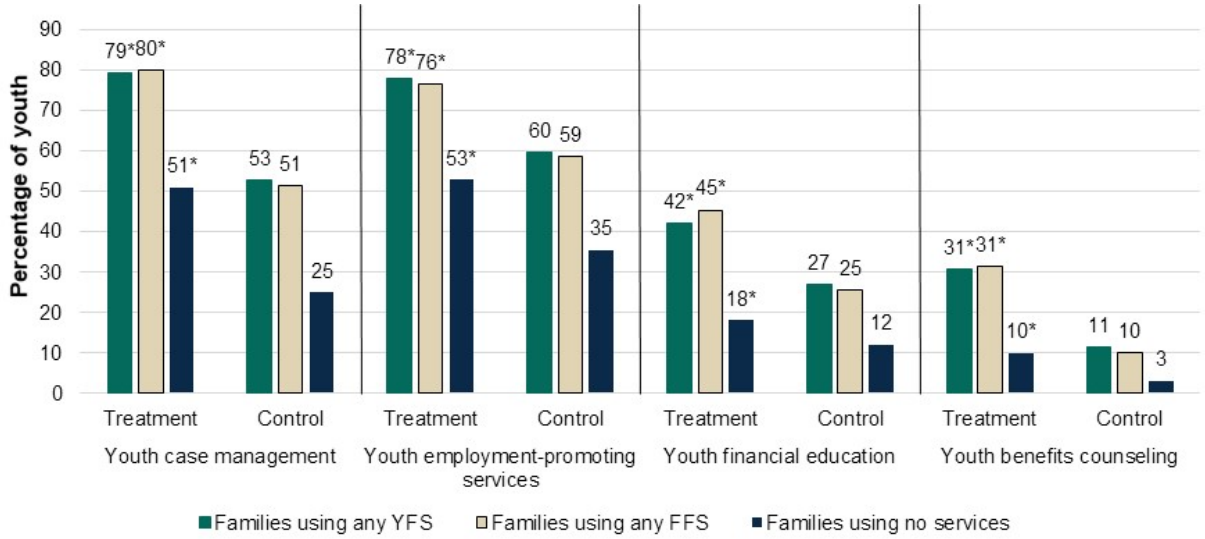
* Significantly different from the value for the corresponding control group service use category at the 5 percent level.

FFS = family-oriented family services; YFS = youth-oriented family services.

3. Youth service use by YFS and FFS status

Youth were more likely to use the required PROMISE services when their families also used services. Among treatment group youth, the most commonly used services were case management and employment-promoting services (Figure 5). For youth whose families used YFS or FFS, at least three-quarters of them used each of these services, with no sizable differences between YFS and FFS families. In addition, about one in five youth in the treatment group whose families used services also used all four youth services; the rate for their counterparts whose families did not use services was 5 percent (Appendix Table A.3). Among youth whose families did not use services, about half used case management and employment-promoting services for themselves. Smaller shares of youth in the treatment group whose families used services (about one-third to one-half) used financial education and benefits counseling services. For youth whose families did not use services, the rates of service use were substantially lower than their peers whose families used services. We observe similar patterns in the relationships between YFS and FFS and youth services for youth in the control group. The figure also illustrates that youth service use for all youth services was significantly greater in the treatment group than the control group.

Figure 5. Use of specific types of youth services, by family service use category and PROMISE assignment group



Source: PROMISE 18-month follow-up survey.

Note: See Appendix Table A.3 for the statistics supporting this figure.

* Significantly different from the value for the corresponding control group service use category at the 5 percent level.

FFS = family-oriented family services; YFS = youth-oriented family services.

B. The characteristics of youth and families vary by family service use category

Because PROMISE increased the use of family services, the programs might have affected the composition of youth and families who used those services. Here, we describe the characteristics of youth and families by family service use category and PROMISE assignment group. Our findings suggest that there is self-selection into use of family services given the differences in use by need and education level, even for families who participated in PROMISE.

For treatment group members, YFS use was associated with characteristics that reflect a youth's need for services and parents' education level (Figure 6). For both treatment and control group families, those with a youth who received educational accommodations or had a 504 plan were more likely to use YFS, as were families in which the parent or guardian was older, and no characteristics related to youth SSA program participation were a factor. However, the two groups of families differed on some important characteristics. Among treatment group families, parents who had some level of postsecondary education were more likely to use YFS, relative to parents who did not have a high school diploma or equivalent. In contrast, the education level of parents in the control group was not associated with YFS use. Other characteristics were, however. Families in the control group were more likely to use YFS if they had the following characteristics: (1) the youth being white (relative to youth being black; (2) youth with IEPs, and (3) parental receipt of SSI-only benefits.

More youth and family characteristics were associated with FFS use than with YFS use, with many characteristics reflecting the potential for greater service need or the ability to navigate the

service environment. Treatment and control group families were both more likely to use FFS if their youth received educational accommodations, there was a parent or guardian in the family with a disability that prevented work, and they had another household member receiving non-SSA benefits. They also were more likely to use FFS if the parent or guardian had more education. For those in the treatment group, additional characteristics associated with FFS use included the youth being male, the enrolling parent being the mother, and having multiple children eligible for SSI. In the treatment group, the families of youth who were Hispanic were less likely to use FFS (relative to youth who were non-Hispanic black). Families in the control group had additional characteristics associated with FFS use, most of which reflected the youth's characteristics (such as race, disability, and IEP status) rather than the family's.

Collectively, the findings suggest that families select into service use along multiple dimensions, which makes it challenging to interpret basic comparisons of average outcomes across groups. Families of youth receiving SSI will choose to use YFS or FFS based on the needs of their youth and the needs of family members, and not all families offered services will want or need to take up those services. Some characteristics reflecting need (youth receipt of accommodations in school, parents or guardian having a disability that prevented work) were associated with use of family services. In addition, the education level of parents or guardians was associated with family service use for all subgroups except YFS use by the control group. Although PROMISE programs offered services to all families in the treatment group, families with a parent or guardian who was more educated were more likely to take up that offer of services. This pattern could reflect those families being better able to obtain information about and navigate the transition service system, having more willingness to use services, and having more trust in the transition system.

Figure 6. Characteristics of youth and families associated with YFS and FFS use, by service use category and PROMISE assignment group

Type of characteristics	Characteristics associated with YFS use (positive correlation unless otherwise indicated)		Characteristics associated with FFS use (positive correlation unless otherwise indicated)	
	Treatment	Control	Treatment	Control
Youth demographic characteristics	• None	• Youth is non-Hispanic white	• Male • Youth is Hispanic (negative correlation)	• Youth is non-Hispanic American Indian (negative correlation)
Youth disability characteristics	• Youth receives educational accommodations • Youth has a 504 plan	• Youth receives educational accommodations • Youth has a 504 plan • Youth has an IEP	Youth receives educational accommodations	• Youth has other or unknown disability • Youth receives educational accommodations • Youth has a 504 plan
Youth SSA program participation	• None	• None	• None	• None
Family demographic and disability characteristics	• Parent/guardian is older	• Parent/guardian is older	• Parent/guardian has a disability that prevents work • Enrolling parent/guardian is the youth's mother	• Parent/guardian has a disability that prevents work
Family socioeconomic characteristics	• Parent/guardian with some postsecondary education, college degree, or postgraduate degree	• Parent/guardian received SSI only	• Another household member participated in non-SSA public assistance programs • Household has multiple SSI-eligible children • Parent/guardian with high school diploma or GED, some postsecondary education, college degree, or postgraduate degree	• Another household member participated in non-SSA public assistance programs • Parent/guardian has health insurance • Parent/guardian with some postsecondary education or college degree

Source: SSA administrative records and PROMISE 18-month follow-up survey.

Note: The figure shows the characteristics that are significantly associated with use of each type of family service based on logistic regression models estimated separately by PROMISE random assignment status. See Appendix Table A.4 for complete results for each model as well as the omitted category for relevant characteristics.

FFS = family-oriented family services; GED = General Educational Diploma; IEP = individualized education program; SSA = Social Security Administration; SSDI = Social Security Disability Insurance; SSI = Supplemental Security Income; YFS = youth-oriented family services.

C. The correlations between family service use and youth outcomes are modest

Family service use, particularly YFS, is associated to some extent with improved youth outcomes, although the results are not consistently positive and significant. In contrast, youths' use of services has a strong positive correlation with youth outcomes. In this section, we present the relationships between family service use and youth outcomes. The analysis controls for differences in the characteristics of families who use YFS and FFS, as well as differences in the youth's use of services. We assess the relationship between family service use and the seven youth outcomes listed in Table 2: (1) annual employment, (2) annual earnings, (3) job-related training, (4) self-determination score, (5) youth employment expectations, (6) parent employment expectations for the youth, and (7) SSI payment amounts. In addition to comparing average outcomes for those who use each type of family services to the group that does not, we also compare outcomes for youth who used youth services to those who did not. This additional comparison is not directly related to family service use, but it provides a benchmark to help in interpreting the family service use findings. We first discuss the findings for youth in the treatment group, and then contrast them with the findings for the control group. This contrast allows us to further tease out the role of family service use in youth outcomes because PROMISE led to large increases in the use of those services.

1. YFS use and youth outcomes in the treatment group

Treatment group families' use of services oriented to their youth is associated with better youth employment-related outcomes (Figure 7). Youth employment outcomes were slightly better for those whose families used YFS than those whose families who did not use YFS. Such youth were 4 percentage points more likely to be employed and 6 percentage points more likely to use job-related training than youth in families who did not use YFS, controlling for youth and family characteristics and youth use of services. However, use of YFS was not correlated with youth's earnings: annual earnings for youth in families in the treatment group who did and did not use YFS were similar.

Use of YFS was not associated with additional improvements in other outcomes unrelated to employment (Appendix Table A.5). Youth self-determination scores and youth and parental expectations about youth employment did not differ by families' use of YFS, nor did SSI payment amounts.

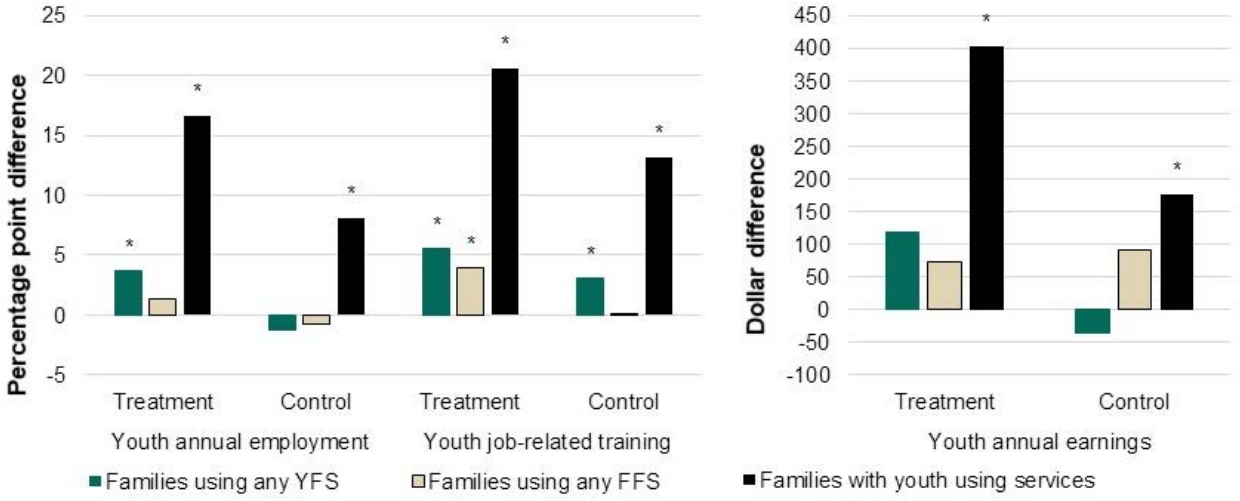
2. FFS use and youth outcomes in the treatment group

Treatment group families' use of FFS was not associated with most youth outcomes. With the exception of job-related training, average employment-related outcomes were not statistically different for those youth in families that did and did not use FFS (Figure 7). Additionally, parental expectations of youth employment were slightly higher in families that used FFS relative to families that did not use (Appendix Table A.5). No other outcomes differed by use of FFS.

3. Youth service use and youth outcomes in the treatment group

The association between use of youth services and youth outcomes in the treatment group was substantially larger than the associations between family service use and youth outcomes. To provide context on findings related to family service use and youth outcomes, we also estimated the association between use of youth services and youth outcomes. Typically, youth who used services had significantly better outcomes than youth who did not (the exception being SSI payments). For example, in the treatment group, the annual employment rate for youth who used services was about 17 percentage points higher than for youth who did not, a rate that was more than four times larger than the gap between those who used either type of family service and those who did not (Figure 7).

Figure 7. Youth employment-related outcomes, by service use category and PROMISE assignment group



Source: PROMISE 18-month follow-up survey.

Note: The values shown are the estimated differences between the youth in families that used that type of service and the youth in families that did not. The estimated differences are coefficients from the linear regression model defined by equation (1), which controls for the youth and family characteristics listed in Table 3. We estimated each model separately by PROMISE assignment group.

* Significantly different from zero at the 5 percent level.

FFS = family-oriented family services; YFS = youth-oriented family services.

Because youth in families that used YFS and FFS also were significantly more likely to have used services for themselves (Figure 5), an important way that family services could have improved youth outcomes is through the channel of increasing the youth's use of services. The estimates shown in Figure 7 are independent of the use of youth services. Consistent with findings in the literature discussed earlier, we find substantial differences in the outcomes of youth who used services for themselves compared with the outcomes of youth who did not. However, the additional contribution of family service use to these differences in employment outcomes is small (YFS) or not significantly different from zero (FFS).

4. Family and youth service use and youth outcomes in the control group

In the control group, outcomes were similar for youth regardless of family service use. The only exception is that youth whose families used YFS were slightly more likely to use job-related training than youth whose families did not use YFS. All other differences by family service use for employment-related (Figure 7) and other (Appendix Table A.5) outcomes are small and not statistically significant. Similar to patterns in the treatment group, youth who used youth services had substantially better outcomes than youth who did not use those services. However, the differences between groups of youth that did and did not use youth services were often smaller in the control group than in the treatment group.

Selection bias likely plays an important role in these estimates; we cannot, however, pinpoint the direction of the bias. Although the analytic model controls for youth and family characteristics and use of youth services, it cannot account for unobserved factors, such as attitude toward services, that may lead some to seek them out and others to avoid them. As discussed in Section IV.B, families that used YFS and FFS differed in meaningful ways from those that did not. For example, treatment group families that used FFS were more likely to have a parent with a disability that prevents work, which might be associated with poorer youth employment outcomes (Dahl and Gielen forthcoming). This type of selection bias induces those who would otherwise have poorer outcomes to use YFS and FFS, so finding no difference in outcomes could mean that the services actually have a meaningful positive impact. However, such families also had higher parental education, which is associated with better youth employment outcomes (Black et al. 2005). Because this type of selection bias induces those who would otherwise have better outcomes to use services, finding no difference in outcomes could mean that the services have a negative impact. Thus, the direction of selection bias is unclear, which muddles the interpretation of the associations we observe between family service use and youth outcomes.

D. Family service use impacts are positively correlated with some impacts on youth outcomes

Local areas where PROMISE had big impacts on family service use also tend to have bigger impacts on youth outcomes, lending further support as to the value of family services. By impact, we mean the estimated difference between an outcome achieved by youth in the PROMISE treatment group and that achieved by youth in the control group. In this section, we examine the correspondence between local-level PROMISE impacts on family service use and impacts on youth outcomes. Because of the small number of regions involved in these local-level estimates, these analyses are primarily qualitative in nature. We therefore focus on the magnitude and direction of the association between impacts and not on statistical significance alone.

The regions with greater impacts on the use of YFS also had greater impacts on youth employment. To depict the relationship between impacts on YFS and impacts on youth outcomes, Figure 8 plots the pairs of estimated impacts for each region on a graph, along with a linear trend line that shows the direction of the relationship. Positive relationships between YFS and outcome impacts are indicated by upward sloping trend lines, as in panel (b) of Figure 8. On average, a 1 percentage-point larger impact on the use of YFS was associated with a 0.3

percentage-point larger increase in the youth annual employment rate (the slope of the line in panel [b] of Figure 8), although the result was not statistically significant (Appendix Table A.6). A likely reason for the lack of statistical significance of this finding and others is the small number of data points; as noted previously, only 25 regions are used in the regression correlating the YFS and FFS impacts with the impacts on annual employment.[4] However, the goodness of fit, as measured by the R^2 from the regression, is only 0.069, indicating that the data are only somewhat related.

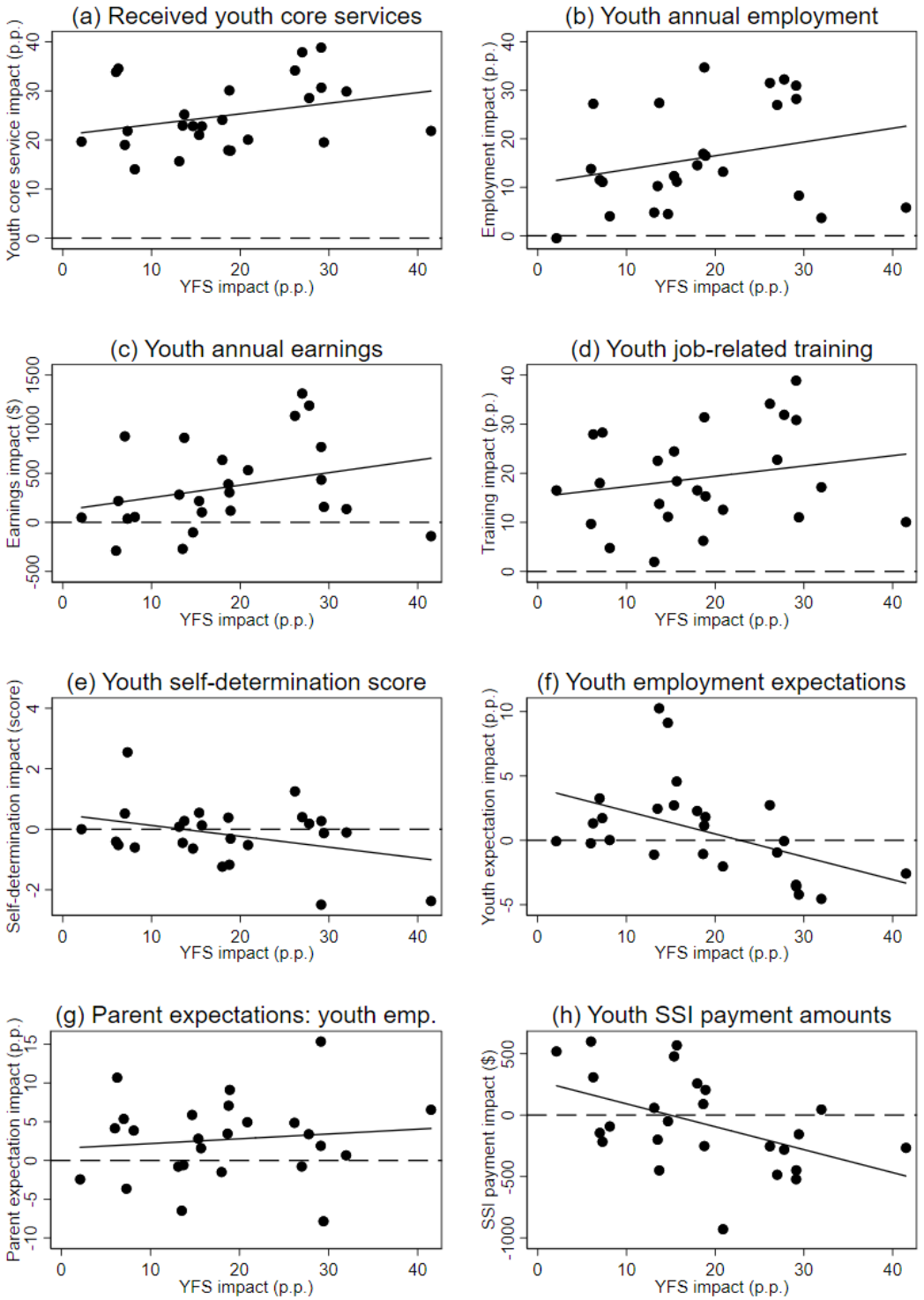
YFS impacts also had favorable relationships with impacts on the youth's use of services,[5] annual earnings, job-related training, and SSI payments, but not with the other outcomes we examined (Figure 8). The estimates indicate that a 1 percentage-point larger impact on the likelihood of YFS was associated with a $13 increased impact on earnings and a $19 decreased impact on SSI payments. The two findings are likely related because after a small earnings disregard and other exclusions, SSA reduces SSI payments by $1 for every $2 of earnings. Similarly, a 1 percentage-point greater impact on YFS was associated with a 0.2 percentage-point greater impact on the use of job-related training. For other outcomes, such as youth self-determination scores and parental expectations of youth employment, the correlation between impacts on YFS and impacts on outcomes was small (and essentially zero). Though the impacts on YFS were negatively related to impacts on youth employment expectations, the magnitude of the effect on that outcome was small.

The patterns for the connection between impacts on FFS and impacts on youth outcomes (Figure 9) were mostly similar to those shown for YFS. One exception is that the FFS impacts had a stronger relationship with the impacts on youth earnings than did the YFS impacts. The estimated slope is larger (a 1 percentage point larger impact on FFS was associated with a $33 increased impact on earnings, whereas the same impact on YFS was associated with a $13 increased impact on earnings). The estimated fit of the data also is substantially stronger (the R^2 for the FFS correlation is 0.273; for the YFS correlation, it is 0.080).

[4] Although we estimated the regression model with only 25 data points, the underlying sample includes all youth in the study sample. We estimated the impacts of PROMISE in the 25 regions using the full sample of 9,081 youth. The linear trend line and its slope in each panel of Figure 8 are based on the 25 pairs of impact estimates on the likelihood of YFS and the corresponding youth outcome.

[5] To test for the possibility that the connection between impacts on family service use and impacts on youth outcomes is mediated by the impact on youths' use of services, we performed a robustness check controlling for the impacts on youth service use in each local area. The results are mostly similar (results available upon request).

Figure 8. Relationship between impacts on YFS and impacts on youth outcomes

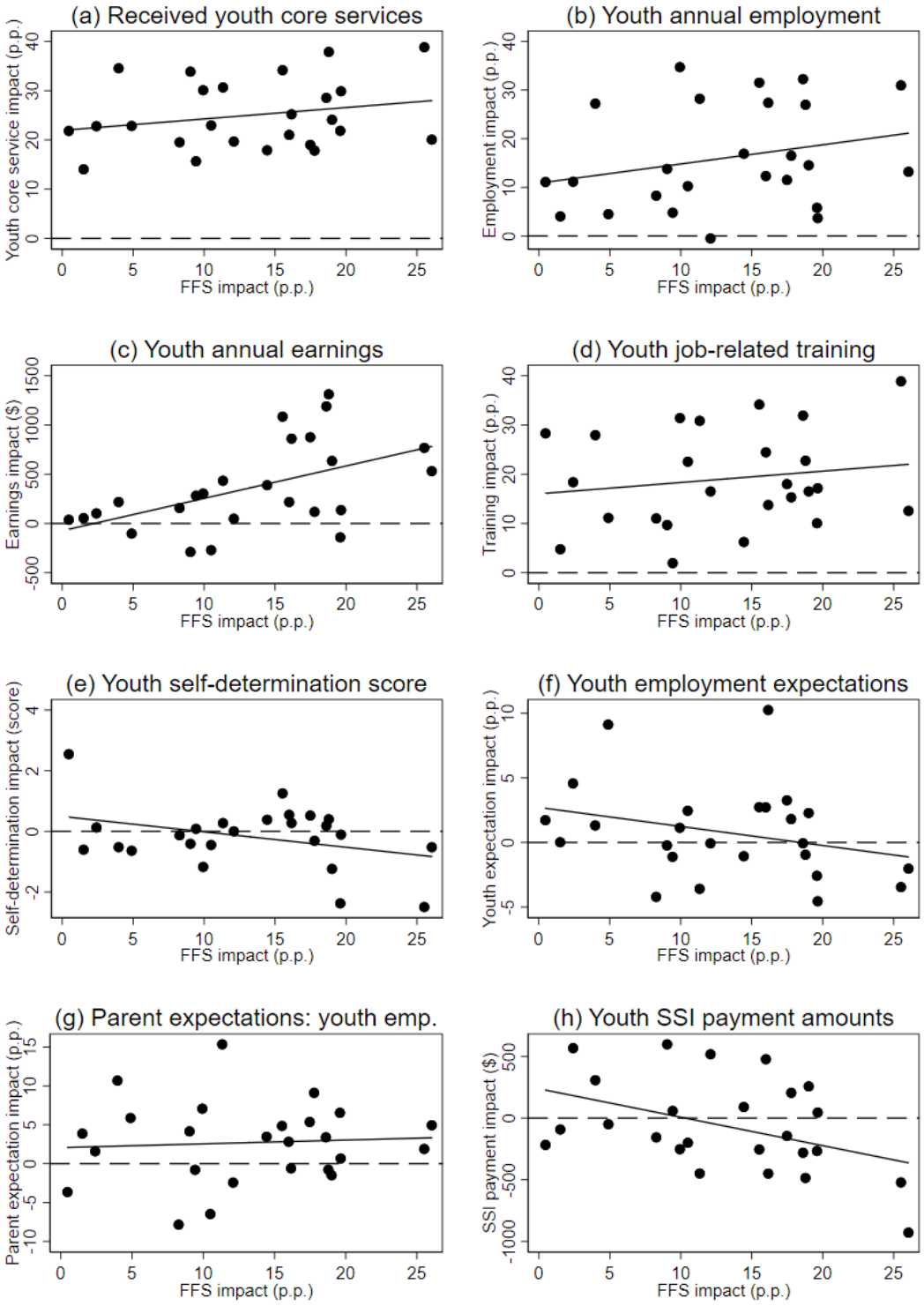


Source: PROMISE 18-month follow-up survey.

Note: Each point represents one of 25 regions within the six PROMISE programs. Within each region, we estimated the impact of assignment to PROMISE services on the likelihood of YFS use and the impact on the youth outcomes shown, controlling for key demographic and program characteristics, as described in Mamun et al. (2019). The grey solid line fits a linear trend across these points.

p.p. = percentage points; SSI = Supplemental Security Income; YFS = youth-oriented family services.

Figure 9. Relationship between impacts on FFS and impacts on youth outcomes



Source: PROMISE 18-month follow-up survey.

Note: Each point represents one of 25 regions within the six PROMISE programs. Within each region, we estimated the impact of assignment to PROMISE services on the likelihood of FFS use and the impact on the youth outcomes shown, controlling for key demographic and program characteristics, as described in Mamun et al. (2019). The grey solid line fits a linear trend across these points.

FFS = family-oriented family services; p.p. = percentage points; SSI = Supplemental Security Income.

V. CONCLUSION

PROMISE increased the use of family services among treatment group families, which was associated with an increase in youth's use of services and moderately better youth employment outcomes 18 months after program enrollment. The findings of this study suggest that services that help family members better understand the needs of their youth, and help family members address their own needs, can have positive effects on the youth. Because most families who used one type of family service also used the other, it is not possible to disentangle the effects of YFS and FFS, especially because the PROMISE programs likely delivered both types of family services concurrently, along with youth services. By design, the PROMISE model entailed staff meeting with youth and families to set goals, plan for services, and make referrals for or directly deliver those services.

However, the relationships between family service use and youth outcomes were weak, which might diminish the perceived value of offering family services in programs designed to improve the employment and education outcomes of youth receiving SSI. Although PROMISE services were intended to improve outcomes for both youth and families, most existing transition service providers focus solely on the youth. For these providers, offering family services in addition to youth services might be unattractive because it requires different resources and staff skills, is infeasible because of the regulations governing how the programs receive state or federal funding, or falls outside a program's mission. Although we found the relationship between family service use and youth outcomes to be weak, youth in families that used family services were more likely to use services themselves. This finding underscores the potential importance of family services as an indirect channel because youth services were associated with substantial improvements in outcomes. Nonetheless, the challenges to offering family services might outweigh the potential benefits for programs that focus only on improving youth outcomes and do not seek to improve the economic self-sufficiency of families, which was a goal of PROMISE.

The findings suggest that there is a demand for YFS and FFS among families of youth receiving SSI—which is especially important to consider given the families' low assets and resources. The PROMISE programs offered families assigned to the treatment group services to help them with their youth's needs and with their own needs. That more than 60 percent of families took that offer and used some type of family services—compared with about 40 percent of families in the control group—could reflect a combination of the value that families place on such services and the general lack of awareness of the availability of similar existing services among families. When staff of programs serving youth are unable to offer families direct services, they might be able to collaborate with and refer families to other programs—such as parent information and training centers and workforce centers—so that families could use services similar to those offered through PROMISE.

This study has important limitations to consider in interpreting and extending its findings. First, we cannot establish a causal relationship between family services and youth outcomes. Families could choose whether to use the various services available to them, either through PROMISE (for treatment group members) or the community (for both treatment and control group

members). Because the characteristics of those who used family services differed from those who did not (reflecting factors such as self-selection or awareness of services), we cannot causally attribute differences in youth outcomes to either YFS or FFS. Second, we did not consider the quality or intensity of YFS and FFS in our assessment. The available data only allowed us to assess relatively broad measures of whether the family used any YFS or FFS. A more nuanced approach to assessing family services—such as through the number of service episodes, the duration of service use, or specific services—could provide more insight into the relationships between family services and youth outcomes. Third, we examined youth outcomes within 18 months of their enrollment in PROMISE. Effects of family services might take longer to manifest, particularly if the relationship is indirect, and could also have beneficial effects on family members (which this study did not examine). Despite the limitations of the study, the findings are consistent with a conceptual model suggesting that family services can have a favorable influence in promoting the transition of youth with disabilities to adulthood.

PROMISE programs offered a package of comprehensive services intentionally designed to address the needs of youth and their families with the ultimate goal of improving youth and families' long-term economic self-sufficiency. Youth with disabilities and their families encounter multiple challenges with the transition process, challenges that can be exacerbated for youth receiving SSI. Few programs for youth and their families are similar to PROMISE in offering both youth and family services. This study has shown the potential value of offering family services, whether oriented to youth or to family members. Policymakers and practitioners involved in youth transition might consider ways to increase family connections in the provision of services to youth with disabilities. PROMISE offered family members education about their youth's health needs, assistance with the transition process, benefits counseling in relation to the youth's or their own employment, referrals to a wide array of services, and formal and informal collaborations between youth and adult service providers. Such connections, provided in tandem with specific services for youth, might benefit both the youth and their families.

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APPENDIX

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Table A.1. Family involvement practices in evidence-based transition resources

Transition resource/ practice	Description
Guideposts for Success	
Family involvement and supports	For all youth, families do the following: (1) have high expectations; (2) remain involved in their lives and assist them toward adulthood; (3) have access to information about employment, further education, and community resources; (4) take an active role in transition planning with schools and community partners; and (5) have access to medical, professional, and peer support networks.
	For youth with disabilities, families have (1) an understanding of the youth's disability and how it may affect youth's education, employment, and daily living options; (2) knowledge of rights and responsibilities under various disability-related legislation; (3) knowledge of and access to programs, services, supports, and accommodations available for young people with disabilities; and (4) an understanding of how individualized planning tools can assist youth in achieving transition goals and objectives.
Taxonomy for transition programming	
Family engagement	Family involvement (such as input and participation in IEP and transition planning, participation in service delivery, involvement in support networks)
	Family empowerment (obtaining information about the transition process, linkages to adult service providers, and supports to engage youth in community experiences)
	Family preparation (knowledge about the transition-related planning process, empowerment, advocacy, and agencies and services)
NTACT effective practices and predictors	
Parent expectations	Parents' expectations that their child to attend a postsecondary education institution and to be employed in the community were correlated with those outcomes in recent research
Parent involvement (in transition planning)	Parents/families/guardians are active and knowledgeable participants in all aspects of transition planning (for example, decision making, providing support, attending meetings, and advocating for their child)
Student support	A network of people (for example, family, friends, educators, and adult service providers) provide services and resources in multiple environments to prepare students to obtain their annual transition and postsecondary goals aligned with their preferences, interests, and needs.

Source: National Collaboration on Workforce and Disability for Youth (2005); Kohler et al. (2016); National Technical Assistance Center on Transition (2019).

IEP = individualized education program; NTACT = National Technical Assistance Center on Transition.

Table A.2. Family services description

Service type	Survey question
Youth-oriented family services	
Benefits counseling	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had help in understanding Social Security, SSI, or other government program benefits and rules? This is sometimes called benefits counseling or benefits planning.
Networking and support	Since [random assignment], have you [or your spouse/partner] had help getting to know other parents in the community who have children with disabilities?
Parent training and information on their youth's disability	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had help learning about [YOUTH]'s disability and how to get the services or supports [he/she] needs, or had training on how to support [YOUTH]'s independence?
Family-oriented family services	
Case management	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] worked with anyone to determine your needs and help get education, employment, health, housing or other services? This person is sometimes called a case manager [or program-specific name for a case manager].
Education or training supports	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had help with getting into a school or training program, including help with an application, entrance exam, or interview? This could include a place where someone told you [or your spouse/partner or other youth in the household ages 14–21] about training programs or schools that are available and how to apply for them. Or if someone helped you complete an application for college or vocational school.
Employment-promoting services	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had any training to help learn new job skills? Please do not include any training provided on-the-job by an employer. Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had help in finding or applying for a job, such as help finding jobs available, filling out an application, writing a resume, or going for an interview?
Financial education	Since [random assignment] have you [and your spouse/partner or other youth in the household ages 14–21] had help learning about how to save and manage money?

Table A.3. Use of services, by family service use category and PROMISE assignment group

	Treatment group			Control group		
	Families using any YFS	Families using any FFS	Families using no services	Families using any YFS	Families using any FFS	Families using no services
Sample size	2,465	1,793	1,813	1,608	1,211	2,474
Youth-oriented family services						
Benefits counseling	61.8*	58.6*	0.0	37.4	32.1	0.0
Training and information	73.7	64.4*	0.0	74.7	50.3	0.0
Networking and support	43.6	37.5*	0.0	42.1	29.7	0.0
Number of youth-oriented family services used						
Zero	0.0	20.4*	100.0	0.0	35.5	100.0
One	42.4	23.1	0.0	58.3	30.0	0.0
Two	36.7	32.6	0.0	29.5	21.6	0.0
Three	20.9	23.9	0.0	12.2	12.9	0.0
Family-oriented family services						
Case management	39.4*	67.5*	0.0	27.1	54.7	0.0
Education or training supports	20.0	33.2*	0.0	19.7	40.9	0.0
Employment-promoting services	18.8	31.8*	0.0	18.3	38.2	0.0
Financial education	33.7*	50.5*	0.0	22.6	34.3	0.0
Number of family-oriented family services used						
Zero	42.1*	0.0	100.0	51.4	0.0	100.0
One	26.7	50.5	0.0	26.1	58.3	0.0
Two	15.7	26.3	0.0	10.3	22.0	0.0
Three	8.7	13.6	0.0	7.6	13.5	0.0
Four	6.9	9.6	0.0	4.5	6.3	0.0
Youth services						
Case management	79.2*	79.7*	50.8*	52.5	51.3	24.8
Employment-promoting services	77.7*	76.3*	52.7*	59.6	58.5	35.4
Benefits counseling	30.5*	31.3*	9.9*	11.4	10.0	2.9
Financial education	41.9*	45.2*	17.9*	26.9	25.4	11.9
Number of youth services used						
Zero	8.8*	9.6*	32.3*	24.8	26.2	53.3
One	17.6*	16.7*	26.9	26.4	28.2	25.9
Two	29.5	27.9	24.9*	29.2	27.0	15.4
Three	25.9*	25.1*	10.9*	14.7	13.4	4.6
Four	18.2*	20.6*	5.1*	4.9	5.2	0.9

Source: PROMISE 18-month follow-up survey.

Note: All table entries except for the sample size are percentages (means). The table reports the percentage of those in each service use category that uses the type or amount of services, by PROMISE assignment group. Means for individual services are calculated among those with non-missing data for that type of service. The number of services treats those with missing data for a given service as not using it. Because people are only categorized in a given service use category if there is sufficient information to assess whether they used both youth services and any family services, the prevalence of missing data for these categories is very low. However, it is possible to use one service while having missing information for another service—for the purposes of assessing the number of services, the missing services are counted as not being used. Statistical tests are based on a *t*-test for individual categories and a chi-squared test of the distribution for categorical variables. Categorical variables are identified as those indented immediately following a blank row, and flags for significance are placed in the first row of the category only (if the applicable differences are significant).

* Significantly different from the value for the corresponding control group service use category at the 5 percent level.

FFS = family-oriented family services; YFS = youth-oriented family services.

Table A.4. Estimated relationship between family service use and youth and family characteristics, by PROMISE assignment group

	Treatment group				Control group			
	YFS		FFS		YFS		FFS	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Youth demographic characteristics								
Sex is female	–2.6	1.6	–3.3*	1.5	–2.3	1.5	–0.5	1.4
Age at random assignment (omitted category: 14 years)								
15 years	–0.1	1.9	0.2	1.8	–1.1	1.8	–1.1	1.7
16 years	1.2	1.9	0.7	1.9	1.8	1.9	–0.3	1.7
English is the preferred written language at SSI application	–1.8	10.0	–4.9	10.1	7.5	8.9	–1.0	9.5
English is the preferred spoken language at SSI application	0.4	9.9	3.0	10.0	–5.4	8.7	2.6	9.4
Living arrangement at SSI application (omitted category: own household or alone)								
In parents' household	–4.1	5.6	0.6	5.5	2.6	5.2	4.9	5.1
Another household and receiving support	0.3	5.7	1.7	5.5	6.1	5.2	2.8	5.0
Race/ethnicity (survey; omitted category: non-Hispanic Black)								
Non-Hispanic White	–4.0	3.8	0.3	3.6	7.4*	3.6	2.3	3.3
Hispanic	–4.0	3.5	–7.0*	3.4	4.3	3.3	3.6	3.0
Non-Hispanic American Indian	3.9	6.4	–0.2	6.0	–8.7	6.0	–13.5*	5.9
Non-Hispanic other or mixed race	–1.4	3.5	–1.0	3.3	2.4	3.4	1.0	3.0
Missing	–2.9	5.2	0.1	4.9	–3.8	5.0	–8.2	4.7
Youth disability								
Primary impairment (omitted category: physical disability)								
Intellectual or developmental disability	0.8	2.3	2.5	2.3	1.4	2.3	0.5	2.1
Speech, hearing, or visual impairment	–1.7	5.9	–4.4	6.0	–0.3	5.6	–2.6	5.5
Other mental impairment	1.7	2.5	4.4	2.5	–3.1	2.5	2.3	2.3
Other or unknown disability	–3.8	3.9	1.1	3.8	3.7	3.9	8.9*	3.5
Has an IEP (survey)	2.2	2.3	–3.3	2.3	5.7*	2.4	1.3	2.2
Has a 504 plan (survey)	6.3*	1.6	2.9	1.6	4.7*	1.6	5.5*	1.4
Receives educational accommodations (survey)	11.1*	2.1	7.6*	2.1	10.1*	2.2	5.9*	2.1
Youth SSA program participation								
Received SSI at random assignment	2.2	3.4	0.2	3.3	4.2	3.5	–1.6	3.2
Received OASDI at random assignment	3.9	4.2	4.5	4.0	3.6	4.1	–2.0	3.7
Years since youth's earliest SSI eligibility	0.000	0.004	–0.002	0.004	–0.004	0.004	0.005	0.003
Youth age at most recent SSI application	0.003	0.004	–0.004	0.004	–0.002	0.003	0.006	0.003
SSI payments in year before random assignment ($)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OASDI payments in year before random assignment ($)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Family demographic and disability characteristics								
Parent age (from the random assignment system)	0.002*	0.001	0.001	0.001	0.003*	0.001	0.000	0.001
Parent race/ethnicity (survey; omitted category: non-Hispanic Black)								
Non-Hispanic White	6.7	3.6	0.1	3.4	–6.4	3.4	–6.0	3.1
Hispanic	2.1	3.7	1.8	3.6	–5.4	3.5	–5.6	3.2
Non-Hispanic American Indian	–1.2	6.9	–1.2	6.6	1.3	6.2	0.6	5.7
Non-Hispanic other or mixed race	–1.7	3.7	–0.5	3.5	–0.7	3.5	1.6	3.1

	Treatment group				Control group			
	YFS		FFS		YFS		FFS	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Missing	8.5	6.3	–0.8	6.2	4.6	6.1	7.9	5.4
Parent relationship to youth (from the random assignment system; omitted category: other)								
Mother	1.3	3.3	9.2*	3.2	2.9	3.2	2.3	3.0
Father	–0.4	4.1	1.2	4.1	–6.6	4.2	–0.7	3.9
Parent has a spouse (survey)	–0.9	1.7	2.4	1.6	2.6	1.6	1.1	1.5
Parent has a disability that prevents work (survey)	2.4	1.8	4.0*	1.7	1.8	1.7	5.6*	1.5
Family socioeconomic characteristics								
Household has multiple SSI-eligible children	–0.8	1.9	6.5*	1.8	–1.9	1.9	1.2	1.7
Any household member participated in non-SSA public assistance programs (survey)	1.0	1.7	3.4*	1.6	2.1	1.6	5.6*	1.5
Parents' SSA payment status at random assignment (omitted category: no parent received any SSA payments)								
Any parent received SSI only	2.2	2.7	1.6	2.6	6.8*	2.5	2.6	2.3
Any parent received OASDI only	–1.6	3.3	–3.2	3.1	0.9	3.1	–0.8	2.8
Any parent received both SSI and OASDI	–1.0	3.4	2.0	3.2	0.4	3.3	0.6	3.0
No parent was included in the SSA data analyses	0.3	3.8	4.1	3.7	–0.9	3.5	3.9	3.4
Highest educational attainment by either parent (survey; omitted category: not a high school graduate)								
High school diploma or GED	1.2	2.0	4.7*	1.9	0.1	1.9	2.3	1.8
Some postsecondary education	5.8*	2.3	5.0*	2.3	1.9	2.3	6.4*	2.1
College degree	6.5*	2.4	8.3*	2.3	2.2	2.3	9.8*	2.1
Some postgraduate degree	12.4*	5.7	19.0*	5.2	4.4	4.9	5.5	4.6
Missing	–2.0	6.4	–0.5	6.7	4.4	7.1	–6.8	8.1
Parent has health insurance (survey)	1.0	2.9	3.6	2.9	0.8	2.8	6.1*	2.8
PROMISE program (omitted category: Wisconsin)								
Arkansas	8.5*	2.6	–3.7	2.5	–3.3	2.6	–3.1	2.3
ASPIRE	3.6	2.6	–3.2	2.5	–0.3	2.6	3.9	2.3
California	–0.2	2.8	–13.4*	2.7	–1.6	2.7	–5.3*	2.6
Maryland	4.7	2.6	–1.3	2.5	1.0	2.5	1.3	2.3
New York State	0.8	2.6	–13.7*	2.5	4.8	2.5	0.0	2.3

Source: SSA administrative records, except where specified as from the PROMISE 18-month follow-up survey or from the random assignment system.

Note: Unless otherwise noted, all table entries are percentages. The table reports the estimated marginal difference in the use of YFS or FFS for the characteristic relative to the omitted category, by PROMISE assignment group. For categorical variables, identified as those indented immediately following a blank row, the omitted category is explicitly stated. Otherwise, the omitted category is the group that is the opposite (for example, sex is male is the omitted category for the sex is female group). Items from SSA administrative records and the random assignment system contain no missing data. For items from the 18-month follow-up survey, variables are mean imputed to ensure that no data are missing so that all people are included in the regression model. Statistical tests are based on a *t*-test.

* Significantly different from zero at the 5 percent level.

FFS = family-oriented family services; GED = General Education Diploma; IEP = individualized education program; OASDI = Old-Age, Survivors, and Disability Insurance; S.E. = standard error; SSA = Social Security Administration; SSI = Supplemental Security Income; YFS = youth-oriented family services.

Table A.5. Differences in selected youth outcomes, by type of family service use

	Youth annual employment	Youth annual earnings	Youth job-related training	Youth self-determination score	Youth employment expectations	Parent employment expectations for youth	Youth SSI payment amounts
Treatment group							
Families using any YFS	3.7*+	118	5.5*	0.2	0.3	0.5	32
	[1.5]	[87]	[1.5]	[0.4]	[1.0]	[1.1]	[72]
Families using any FFS	1.3	73	3.9*	0.4	0.1	2.2*	33
	[1.5]	[93]	[1.5]	[0.3]	[0.9]	[1.1]	[74]
Families with youth using services	16.6*+	404*	20.6*+	1.6*+	2.6*	8.7*	7
	[1.5]	[109]	[1.4]	[0.5]	[1.3]	[1.5]	[86]
Families using no services mean	24.8	715	23.4	48.7	93.2	85.3	6499
Control group							
Families using any YFS	–1.3	–35	3.1*	–0.3	–1.8	–2.4	60
	[1.3]	[67]	[1.3]	[0.3]	[1.1]	[1.3]	[71]
Families using any FFS	–0.7	91	0.1	0.1	0.3	0.6	–79
	[1.4]	[83]	[1.4]	[0.3]	[1.1]	[1.3]	[80]
Families with youth using services	8.1*	176*	13.2*	0.5	2.7*	7.2*	39
	[1.1]	[67]	[1.0]	[0.3]	[1.0]	[1.2]	[70]
Families using no services mean	16.3	518	12.2	49.2	93.8	84.7	6563

Source: PROMISE 18-month survey.

Note: The unbracketed statistics shown are coefficients from the regression models and represent the difference in the mean between those who used that type of service and those who did not, controlling for the characteristics listed in Table 3. We estimated the mean differences using linear regression models estimated separately by PROMISE assignment group. Statistical significance is based on a *p*-value for a test that the coefficient is different from zero, using standard errors that are robust to heteroscedasticity (shown in brackets).

* Significantly different from zero at the 5 percent level.

+ Significantly different from the coefficient for the corresponding control group service use category.

FFS = family-oriented family services; SSI = Supplemental Security Income; YFS = youth-oriented family services.

Table A.6. Correlation between service use impacts and youth outcome impacts

Outcome	Correlation with impact on YFS	Correlation with impact on FFS
Use of youth services	0.2 [0.2] (0.092)	0.2 [0.2] (0.055)
Youth annual employment	0.3 [0.3] (0.069)	0.4 [0.3] (0.069)
Youth annual earnings	12.8 [11.2] (0.080)	32.9*** [8.5] (0.273)
Youth job-related training	0.2 [0.2] (0.044)	0.2 [0.3] (0.027)
Youth self-determination score	–0.0 [0.0] (0.121)	–0.1 [0.0] (0.124)
Youth employment expectations	–0.2*** [0.1] (0.231)	–0.1* [0.1] (0.082)
Parent employment expectations for youth	0.1 [0.1] (0.014)	0.0 [0.1] (0.004)
Youth SSI payment amounts	–18.7*** [5.8] (0.233)	–23.1** [10.7] (0.184)

Note: Data are from the PROMISE 18-month follow-up survey and SSA administrative records. The table shows the coefficients and standard errors associated with a regression of the impact on the outcome with the impact on the type of service use across the 25 regions. The coefficient is analogous to estimating the slope of the lines shown in Figures 8 and 9. Statistical significance is based on a *p*-value for a test that the coefficient is different from zero, using standard errors that are robust to heteroscedasticity (shown in brackets). Values in parentheses indicate the R^2 from the regression.

***/**/* Estimate is statistically significant at the 1/5/10 percent level.

FFS = family-oriented family services; SSI = Supplemental Security Income; YFS = youth-oriented family services.

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