

# Focusing on Girls' Futures

RESULTS FROM  
THE EVALUATION  
OF PACE CENTER  
FOR GIRLS



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January 2019

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BUILDING KNOWLEDGE  
TO IMPROVE SOCIAL POLICY



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# Overview

PACE Center for Girls is a Florida-based organization that provides academic and social services to girls of middle school and high school age. Girls who attend PACE have a specific set of characteristics that put them at risk of involvement with the juvenile justice system and other negative outcomes. PACE seeks to reduce the likelihood of negative outcomes tied to this profile and instead foster academic engagement, positive youth development, and healthy relationships. Such factors can help improve girls' academic outcomes, prevent their future involvement with the justice system, and lead to long-term well-being and success.

PACE operates daily, year-round; on a typical day, girls attend academic classes and receive additional support such as individual counseling, academic advising, and referrals to other services. Throughout its delivery of these services, PACE uses principles of gender-responsive programming — that is, treatment approaches designed for girls and women.

The current report focuses mainly on the impact and cost analyses for the PACE evaluation. (Implementation research findings, released in an earlier report, found that PACE consistently implemented its program model and incorporated gender-responsive programming across its centers.) The impact analysis employed a random assignment design: Girls who applied to and were deemed eligible for PACE (using the program's existing screening processes) enrolled in the study and were assigned at random either to a program group, whose members were offered PACE services, or to a control group, whose members received appropriate referrals to other services in the community. From August 2013 to November 2015, 1,125 girls enrolled in the study across 14 PACE centers. Using survey and administrative data, the research team measured differences between the program and control groups on short-term outcomes. Differences that emerge between the two groups on these outcomes can be attributed to the PACE program.

## Key Findings

- The program group received more academic and social services — and received them more often from a professional source — than the control group.
- Over a one-year period, PACE increased school enrollment and attendance for the girls it served, compared with the control group. Girls in the program group were also more likely to be “on track” academically than those in the control group.
- Girls in both the program and control groups appeared goal-oriented and hopeful about their futures and reported relatively low levels of risky behavior one year after study enrollment. Rates of formal involvement in the juvenile justice system during the 18 months after study enrollment were similar for the program and control groups.
- The cost of PACE's holistic package of services is, on average, \$10,400 more than the cost of the services received by control group members through academic and social services provided in the community. The additional cost is largely driven by PACE's extensive social services; the cost of academic services is similar to those of Florida public schools.

The findings on academic outcomes are promising. Further follow-up research would be necessary to see whether PACE affects longer-term academic and delinquency outcomes and to complete a full benefit-cost analysis.



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## Preface

Practitioners and policymakers constantly look for ways to better support young people who are at risk of involvement with the justice system. Young women who fit this profile often face challenges and have histories distinct from those of their male counterparts. Yet most programs and services targeting at-risk young people are not designed to address issues uniquely experienced by girls. Gender-responsive programming was developed in recognition of this fact. There is interest at the local, state, and national levels in understanding how these types of programs are implemented and obtaining more robust evidence on their effectiveness. Preventing future justice system involvement and engaging girls in their academic future, or other positive outcomes, can have meaningful benefits for an individual girl's future, her family, and her community.

MDRC's evaluation of the PACE Center for Girls offers an opportunity to understand the effectiveness of a well-known gender-responsive program. PACE serves girls ages 11 to 18 at 21 locations across the state of Florida. Girls attend PACE during school hours, year-round, and receive academic and social services. Through its program model, PACE aims to increase the presence of protective factors for the girls it serves — that is, characteristics or conditions that may moderate risk for negative outcomes. Its gender-responsive programming specifically seeks to cultivate girls' strengths, positive interpersonal relationships, and relevant life skills and to encourage other protective factors, such as being connected to and engaged in school.

An earlier report, focused on the evaluation's implementation study, detailed PACE's gender-responsive program model and found that PACE implemented the model consistently across its many locations. The current report presents short-term impact findings and a cost analysis. The impact study, which employed a random assignment design with two research groups, found that PACE positively affected girls' academic engagement and progress. In other domains — youth development, risky behavior, and delinquency — girls in both the program and control groups had similar outcomes. The cost analysis found that the additional cost of attending PACE, compared with the academic and social services the control group received, is principally driven by the extensive social services PACE provides.

The short-term findings are positive and encouraging and will contribute to the growing literature on the effectiveness of gender-responsive programming. A longer period of research could reveal whether the impacts on short-term academic outcomes lead to long-term outcomes such as on-time grade promotion, high school graduation, and preventing justice system involvement — results that could make PACE truly cost effective.

Gordon L. Berlin  
President, MDRC



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We are grateful to the leadership and staff members of the PACE centers that participated in the evaluation. They work tirelessly to provide services to girls in their communities and played a critical role in helping to recruit and enroll participants into the evaluation, as well as making time in their busy schedules to participate in interviews. We also worked closely with staff members at PACE headquarters and greatly appreciated their openness and dedication to the research process. They spoke with us about the history and structure of PACE and provided us with essential data about the programs. In particular, we are grateful to Mary Marx, Shana Brodnax, Lymari Benitez, Thresa Giles, Yessica Cancel, Janie Smalley, James Kindelsperger, Debbie Moroney, and Jill Guffey. We also thank Vicki Burke, the founder of PACE, for meeting with us to share information about PACE's early years.

This research would not have been possible without the work of many individuals at MDRC. Rob Ivry, Dan Bloom, and Jean Grossman were key to getting the project off the ground and continued to provide counsel throughout the process. Alison Black also provided project leadership in the initial stages. Carolyn Hill and John Hutchins provided valuable feedback on report drafts. Johanna Walter advised on the cost analysis. Galina Farberova and her team managed the random assignment system. Melissa Cummings coordinated the production of the report, and Jennifer Hausler assisted with fact-checking. Jennie Kaufman edited the report, and Carolyn Thomas prepared it for publication. We also thank the other current and past staff members at MDRC not already mentioned who contributed greatly to the research effort, including Ada Tso, Emily Terwelp, Melanie Skemer, Sara Muller-Ravett, Julianna Alson, Hannah Siegelberg, Hannah Wagner, Brit Henderson, Noemi Altman, Nicole Alexander, Lauren Cates, and Janae Bonsu.

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Finally, we are deeply appreciative of all the girls and their parents and guardians who agreed to participate in the research. An extra thanks to those who answered our questions about their lives one year after study enrollment. Without them, this research would not have been possible.

The Authors

## Executive Summary

PACE Center for Girls is a Florida-based nonprofit organization that serves girls of middle school and high school age who are at risk of involvement with the justice system. These girls are often struggling academically, and some have been involved with the juvenile justice system already. They may have mental health issues, often stemming from experiences of trauma, or may engage in behavior that negatively affects their physical health. Using a “gender-responsive” framework for its academic and social services, PACE aims to reduce the likelihood of negative outcomes tied to this set of risk factors and instead foster academic engagement, positive youth development, and healthy relationships. Increasing these protective factors can improve girls’ academic outcomes, prevent their future involvement with the justice system, and lead to long-term well-being and success. This report presents findings from a rigorous evaluation of PACE.

Improving academic outcomes in the short term may help girls get back on track and graduate on time. Preventing involvement in the juvenile justice system is also crucial, for several reasons. Juvenile justice involvement can damage a young person’s relationships with friends and family, negatively affect mental health, and interrupt the academic progress and work experience that should accumulate during adolescence.<sup>1</sup>

Investing in the well-being of girls promises economic benefits as well. Compared with dropouts, high school graduates have been shown to make larger economic contributions to society through lower unemployment rates, higher earnings, more taxes paid, and less reliance on public assistance. One estimate found that high school graduates make nearly \$300,000 more than those who do not complete high school over the course of their lifetimes.<sup>2</sup> And from a societal perspective, the court and detainment costs associated with juvenile justice involvement are high. Therefore, effective prevention or early intervention programs can offer a significant return on investment.<sup>3</sup>

PACE uses principles of gender-responsive programming throughout its services for girls. The term “gender-responsive” describes treatment approaches designed for girls and women, specifically those involved with or at risk of involvement with the juvenile and criminal justice systems. Historically, services for those involved with the justice system were designed for boys and men.<sup>4</sup> Gender-responsive services bring an awareness of girls’ distinctive development patterns and gender-specific issues into the program. While there has been national interest

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<sup>1</sup>Anna Aizer and Joseph J. Doyle Jr., “Juvenile Incarceration, Human Capital, and Future Crime: Evidence from Randomly Assigned Judges,” *Quarterly Journal of Economics* 130, no. 2 (2015): 759-803.

<sup>2</sup>Christopher R. Tamborini, ChangHwan Kim, and Arthur Sakamoto, “Education and Lifetime Earnings in the United States,” *Demography* 52, no. 4 (2015): 1383-1407. This calculation compares lifetime earnings for high school dropouts with earnings for high school graduates with no further education.

<sup>3</sup>Steve Aos, Roxanne Lieb, Jim Mayfield, Marna Miller, and Annie Pennucci, *Benefits and Costs of Prevention and Early Intervention Programs for Youth* (Olympia: Washington State Institute for Public Policy, 2004).

<sup>4</sup>Stephanie Covington and Barbara Bloom, “Center for Gender and Justice” (2017), <http://centerforgenderandjustice.org>; Margaret A. Zahn, Stephanie R. Hawkins, Janet Chiancone, and Ariel Whitworth, *The Girls Study*

in understanding gender-responsive programs more broadly,<sup>5</sup> the current literature is more robust in its description of concepts and principles than in its evaluation of program performance.<sup>6</sup> Until recently, it was largely unknown how such services are implemented, how similar they are to one another, or how effective they are.<sup>7</sup>

The evaluation of PACE Center for Girls — among the largest and most well-established programs of its kind — provides an opportunity to answer questions about the implementation and effectiveness of a gender-responsive program. The research aims to help practitioners, including PACE, and policymakers better understand, improve, and possibly replicate services for at-risk girls. The implementation research findings, released in an earlier report, found that PACE consistently implemented its program model and incorporated gender-responsive programming across its statewide network of centers.<sup>8</sup> The model was defined through both general program principles and a detailed program manual.

The current report shows that PACE helped girls stay more engaged in school and on track toward high school graduation during a one-year follow-up period. Across the study sample, girls seemed relatively stable one year after enrollment, and hopeful for the future. PACE did not affect formal involvement in the justice system over the 18 months following random assignment.

The evaluation was conducted by MDRC and has been funded mainly through the Edna McConnell Clark Foundation’s Social Innovation Fund, a program of the Corporation for National and Community Service, with additional funding provided by the Jessie Ball duPont Fund and the Healy Foundation.

## About PACE Center for Girls

PACE Center for Girls currently operates 21 nonresidential, year-round centers across the state of Florida. PACE serves girls between the ages of 11 and 18 who exhibit risk factors across multiple domains that are correlated with delinquency in girls. Girls in this voluntary program attend PACE daily during normal school hours and receive academic and social services: comprehensive assessment and care planning, academic instruction and advising, a life skills curriculum,

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*Group: Charting the Way to Delinquency Prevention for Girls* (Washington, DC: Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice, 2008).

<sup>5</sup>Juvenile Justice and Delinquency Prevention Act, 42 U.S.C. 5633 § 242 (1992).

<sup>6</sup>Dana Jones Hubbard and Betsy Matthews, “Reconciling the Differences Between the ‘Gender-Responsive’ and ‘What Works’ Literatures to Improve Services for Girls,” *Crime and Delinquency* 54, no. 2 (2008): 225-258.

<sup>7</sup>Meda Chesney-Lind, Merry Morash, and Tia Stevens, “Girls’ Troubles, Girls’ Delinquency, and Gender Responsive Programming: A Review,” *Australian and New Zealand Journal of Criminology* 4, no. 1 (2008): 162-189; Patricia K. Kerig and Sheryl R. Schindler, “Engendering the Evidence Base: A Critical Review of the Conceptual and Empirical Foundations of Gender-Responsive Interventions for Girls’ Delinquency,” *Laws* 2, no. 3 (2013): 244-282.

<sup>8</sup>Louisa Treskon, Megan Millenky, and Lily Freedman, *Helping Girls Get Back on Track* (New York: MDRC, 2017).



individual and group counseling, volunteer service and work readiness opportunities, and transition and follow-up services. Girls typically plan to attend PACE for about one year and often return to other schools in their communities to complete their education.<sup>9</sup>

As a gender-responsive program, PACE centers strive to create inclusive environments in which the support services “wrap around” each girl, and they rely on a strengths-based approach — emphasizing a girl’s assets rather than deficits — and an understanding of trauma and its effects when dealing with girls’ risky or challenging behaviors. A low staff-to-girl ratio allows for individual attention and opportunities to build relationships, contributing to the girls’ sense of safety and belonging while they are in attendance. Staff members hold regular reviews to discuss each girl’s care plan and progress and emphasize parental engagement, contacting a parent or guardian monthly.

During a typical day at PACE, girls attend classes, usually language arts, math, social studies, life skills, and science. Every other week, girls attend counseling sessions that focus on fostering positive behavioral change and separate academic advising sessions where staff members monitor their progress. Counselors are available more frequently, if needed, and can provide referrals for additional supportive or therapeutic services. Once a girl makes the transition to a different school, PACE staff members follow up periodically and can continue to connect her to services.

Figure ES.1 illustrates the basics of the PACE program model and the expected short-term outcomes. Participation in PACE’s holistic program is intended to increase a girl’s academic engagement and progress and bolster her confidence and interpersonal skills, reducing risky behavior and providing the means for a more positive future outlook.

## **The PACE Evaluation**

The evaluation of PACE’s program model presents an opportunity to test the effectiveness of a gender-responsive program and provide rigorous evidence on services for girls at risk of negative outcomes. The evaluation has three main components: an impact study, an implementation study, and a cost analysis. This report focuses mainly on the impact and cost analyses.

The impact study employs a random assignment design. With this design, girls eligible for PACE were enrolled in the study and assigned at random either to a program group, whose members were offered PACE services, or to a control group, whose members were referred to other academic and social services in the community. Because random assignment resulted in two groups with similar observed and unobserved characteristics, any differences in outcomes between the two groups can be attributed to the PACE program.

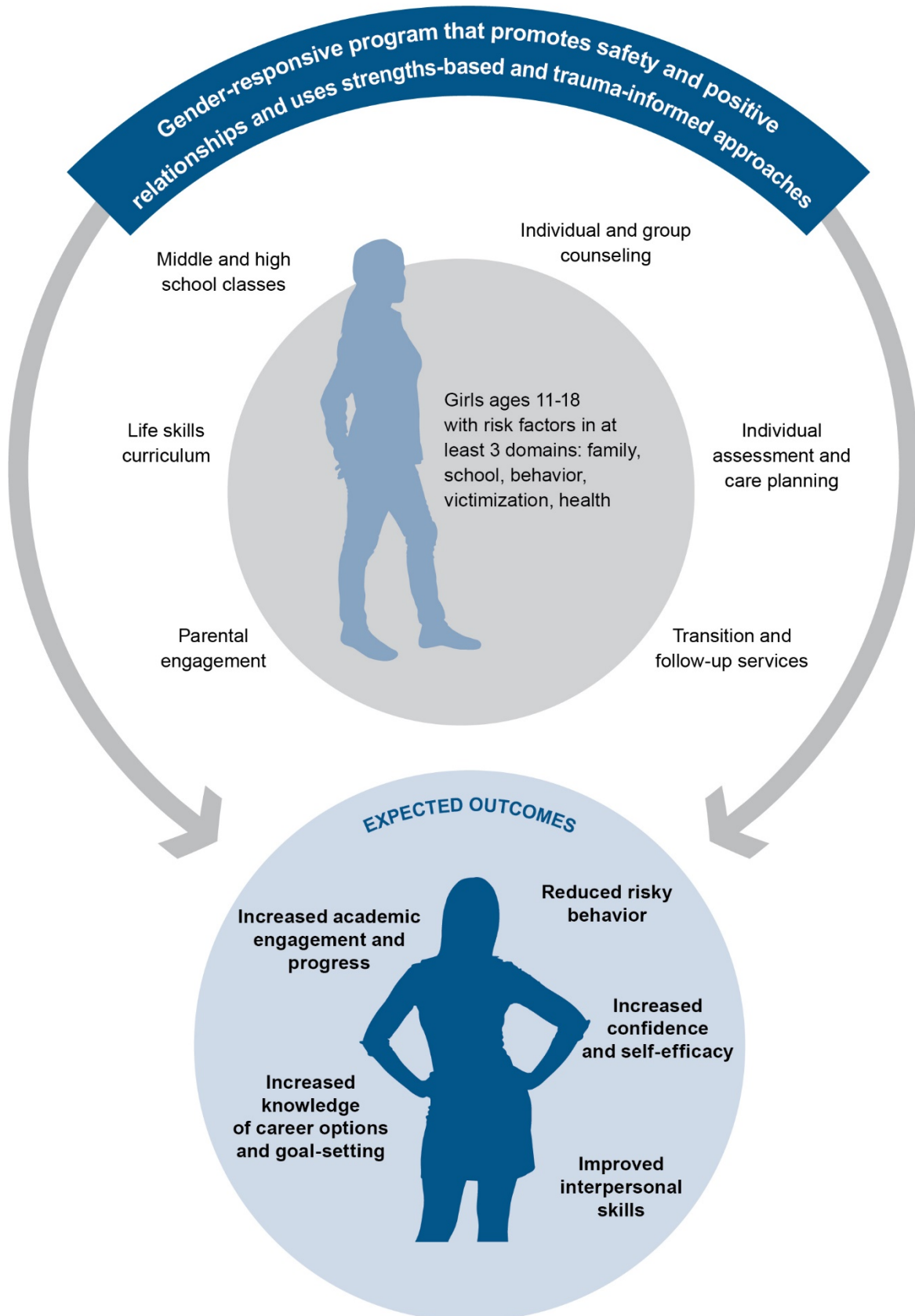
Fourteen PACE centers participated in the evaluation. Between August 2013 and November 2015, 1,125 girls were enrolled in the study (673 in the program group and 452 in the control

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<sup>9</sup>In some cases, girls seek options other than returning to the public school they attended previously or another school in the district; for example, earning a high school equivalency diploma and gaining employment. In some cases, PACE centers provide a high school diploma through the local school district.

Figure ES.1

PACE Program Model



group). Most girls were low-income, most were ages 13 to 16 at the time of study enrollment, and just over half the sample came from single-parent households. Many sample members struggled with school before coming to PACE. At the time of study enrollment, 40 percent had been recently expelled or suspended from school, and just over half had been held back at least once. Approximately 30 percent of girls had been arrested at some point, and two-thirds of the study sample had a family member with a criminal history. Nearly 40 percent of girls in the study reported having been abused or neglected. Many of the risk factors the study participants exhibited are among those cited in the literature on adverse childhood experiences (ACEs). Research links these experiences to future risky behavior, health problems, and early death, as well as other negative outcomes.<sup>10</sup>

After examining the difference between the services both groups participated in during this follow-up period, the impact analysis measures effects on short-term outcomes, including academic engagement and progress, juvenile justice involvement, risky behaviors, and interpersonal relationships.

While the evaluation uses a rigorous design and draws on a range of quantitative and qualitative data sources, it has some limitations.<sup>11</sup> The evaluation’s funding allowed for data collection for only 12 to 18 months following the girls’ application to PACE and enrollment in the study. While this time period provides information on PACE’s short-term outcomes, it was not enough time for most girls in the study sample to reach key milestones such as high school graduation. Therefore, the evaluation does not include a full benefit-cost analysis at this time. Additionally, the follow-up survey asked sample members questions that assess risky behavior and interpersonal relationships, but these are difficult constructs to measure, especially in a short survey usually administered by phone. Among other things, girls may be hesitant to provide honest or complete answers to a survey interview about ongoing issues or risky behaviors. Finally, this study also benefited from access to Florida’s Department of Education records, but the study team had access only to deidentified data, which limited the analyses that could be performed.

## Key Findings

- **The program group received more academic and social services — and received them more often from a professional source — than the control group.**

With PACE’s comprehensive model, girls in the program group received more services than girls in the control group in the year following study enrollment. As Figure ES.2 indicates, the program group was slightly more likely (98 percent versus 93 percent) than the control group to have been enrolled in an educational program. Almost two-thirds of girls in the program group

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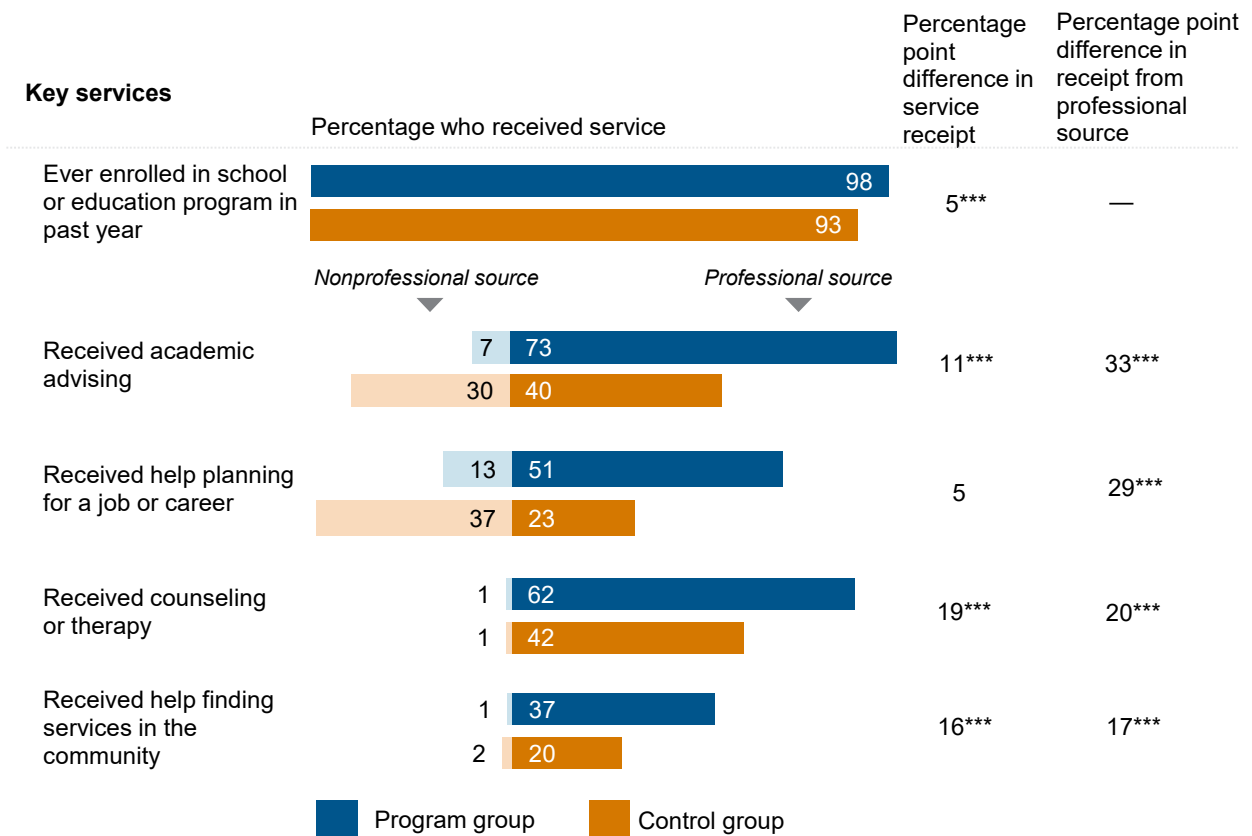
<sup>10</sup>Centers for Disease Control and Prevention, “About Adverse Childhood Experiences” (2016), [https://www.cdc.gov/violenceprevention/acestudy/about\\_ace.html](https://www.cdc.gov/violenceprevention/acestudy/about_ace.html).

<sup>11</sup>Quantitative data sources include PACE’s management information system, administrative records from the Florida Department of Juvenile Justice and the Florida Department of Education, and a follow-up survey fielded to the full study sample 12 months after study enrollment. Qualitative data include in-depth, follow-up phone interviews with a nonrandom subset of study participants and parents. The cost analysis draws on information from PACE’s central management office about revenue and expenditures at both the center and organization levels.

reported received counseling or therapy, compared with 43 percent of those in the control group, and they received the service more frequently (not shown).

Figure ES.2 also shows that the program group was more likely than the control group to have received these services from a professional source (usually PACE). In the absence of PACE, the control group may have had to piece together academic and social services from different sources. A service provided by a staff member at an organization or school is probably closer in content to the services received by girls at PACE than a service that is provided by a parent, family member, or friend.

**Figure ES.2**  
**One-Year Differences in Receipt of Key Services, Since Random Assignment**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Results in this figure are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

Girls in the control group were usually enrolled in school and moderately engaged in receiving other academic and social services.<sup>12</sup> Overall, however, a smaller portion of the control group received services that included key aspects of PACE’s model, such as family engagement and supportive relationships between staff members and girls.

- **Over a one-year period, PACE increased school enrollment and attendance for the girls it served, compared with the control group. Girls in the program group were also more likely to be “on track” academically than those in the control group.**

As shown in Table ES.1, program group members were, on average, present in school for about 10 more days than control group members over the full calendar year following study enrollment — two full weeks of additional academic instruction.<sup>13</sup> The impact appears to be due to girls in the program group being enrolled for more days and less likely to be absent throughout the year — particularly in the summer term, where there was a substantial impact (27 percentage points), which reflects PACE’s year-round program structure. Some research suggests that being out of school during the summer results in learning loss. This loss is usually larger for lower-income students, like many girls at PACE, than for higher-income students, who may have access to additional learning resources over the summer.<sup>14</sup>

Table ES.1 also presents information on academic progress. Many girls who applied to PACE needed help getting back on track academically. These findings indicate that PACE’s suite of services helped them do just that: High school girls in the program group were more likely (by 13 percentage points) than the control group to be on track academically, as measured by a composite that considers a student on track if she has a high attendance rate, has not been expelled or suspended, and has not failed a core course.<sup>15</sup> These components reflect what researchers consider to be predictors of high school graduation — attendance, behavior, and course performance — often referred to in the field as the “ABCs.”<sup>16</sup> Girls across the two groups earned a similar number of credits during the academic year.

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<sup>12</sup>Florida law requires all children under the age of 16 to be enrolled in school.

<sup>13</sup>The full calendar year includes both the academic year and the summer term. The academic year refers to the traditional school term in Florida, which runs from about mid-August through the end of May.

<sup>14</sup>David M. Quinn and Morgan Polikoff, “Summer Learning Loss: What Is It, and What Can We Do About It?” (Washington, DC: Brookings Institution, 2017), <https://www.brookings.edu/research/summer-learning-loss-what-is-it-and-what-can-we-do-about-it/>.

<sup>15</sup>Core courses include English language arts, math, science, and social studies. Being absent for less than 10 percent of days enrolled is considered high attendance. The composite measure and credits earned are available for high school students only.

<sup>16</sup>Elaine M. Allensworth, Jenny Nagaoka, and David W. Johnson, *High School Graduation and College Readiness Indicator Systems: What We Know, What We Need to Know* (Chicago: University of Chicago Consortium on School Research, 2018). There is no single set of thresholds across these predictors that the field widely uses to measure the likelihood of high school graduation.

**Table ES.1**  
**Impacts on Key Outcomes**  
**During the 12- to 18-Month Follow-Up Period**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
<b><u>Academic engagement and progress<sup>a</sup></u></b>				
Number of days present	119.6	109.8	9.8 **	0.013
Ever enrolled in summer term (%)	39.4	12.6	26.8 ***	0.000
On track, based on composite measure <sup>b,c</sup> (%)	27.6	14.2	13.4 ***	0.000
Credits earned in academic year <sup>c</sup>	3.8	3.7	0.1	0.696
<b><u>Youth development and risky behavior<sup>d</sup></u></b>				
Has supportive adult in her life <sup>e</sup> (%)	60.9	61.1	-0.2	0.945
Sexually active and did not use pregnancy protection method during last sexual encounter <sup>f</sup>	8.8	8.6	0.3	0.889
Incurred a charge since random assignment <sup>g</sup>	22.0	21.2	0.8	0.739
Thinks she will meet or exceed education goals	74.9	72.8	2.0	0.510
Sample size	673	452		

SOURCE: MDRC calculations based on data from the Florida Department of Education (FL DOE), responses to the PACE evaluation 12-month follow-up survey, and data from the Florida Department of Juvenile Justice (FL DJJ).

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>Outcomes draw on data from FL DOE and refer only to involvement in the Florida school system. The measures cover the full calendar year, which includes the academic and summer term, except where noted.

<sup>b</sup>The composite includes the following criteria: absent less than 10 percent of days; never failed a core course; never expelled or suspended. Core classes include English language arts, math, science, and social studies.

<sup>c</sup>Sample includes high school students only.

<sup>d</sup>Outcomes are from self-reported survey data, unless otherwise indicated.

<sup>e</sup>Other than parent or guardian.

<sup>f</sup>Measure includes only voluntary sexual encounters.

<sup>g</sup>In the juvenile justice system, people are not technically "arrested"; the terminology used is either "incurred a charge" or "referred." This measure uses the FL DJJ data and covers involvement in the 18-month period following random assignment.

The differences in academic outcomes are promising. Engagement in school is a protective factor against involvement in the justice system. Longer-term follow-up on the study sample would provide answers about whether these short-term differences lead to higher high school graduation rates or more students graduating on time.

- **Sample members across both the program and control groups appeared to be goal-oriented and hopeful about their futures and reported relatively low levels of risky behavior one year after study enrollment. Rates of formal involvement in the juvenile justice system were similar for the program and control groups.**

There were a few differences between groups on self-reported measures of youth development and risky behavior, but no clear pattern or trend. The positive outlook expressed by sample members across both groups stands in contrast to the crisis state or tipping point that many sample members were experiencing at the time they applied to PACE. One hypothesis is that the girls' lives stabilized somewhat as the crisis passed or as girls found resources to address their needs. Levels were relatively low for risky behaviors involving substance use, similar to those of the broader population of girls in Florida and nationwide.<sup>17</sup>

Sample members' involvement in the juvenile justice system was measured across several outcomes, including whether they ever incurred a charge and the type of adjudication finding after a charge was incurred. Incurring a charge is comparable to an arrest in the adult criminal justice system, and being "adjudicated delinquent" is similar to a conviction. As shown in Table ES.1, program and control group girls incurred one or more charges at nearly identical rates (22 percent of the program group and 21 percent of the control group) during an 18-month follow-up period.

The rates of justice system involvement for both groups are higher than that of the broader population,<sup>18</sup> reflecting the segment of girls PACE aims to serve. Yet sample members were just reaching the age where criminal behavior starts to emerge,<sup>19</sup> so it may be too early to expect impacts on these measures. Further follow-up with the study sample would be necessary to see whether differences emerge between the two groups.

Notably, practices in the juvenile justice system are shifting. Recently, there has been a nationwide movement to confine fewer delinquent youth.<sup>20</sup> In Florida, arrests of young people overall have fallen dramatically in the last few years, and females are making up a smaller

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<sup>17</sup>Laura Kann, Tim McManus, William A. Harris, Shari L. Shanklin, Katherine H. Flint, Joseph Hawkins, Barbara Queen, Richard Lowry, Emily O'Malley Olsen, David Chyen, Lisa Whittle, Jemekia Thornton, Connie Lim, Yoshimi Yamakawa, Nancy Brener, and Stephanie Zaza, "Youth Risk Behavior Surveillance — United States, 2015," *Morbidity and Mortality Weekly Report: Surveillance Summaries* 65, no. 6 (2016): 1-174.

<sup>18</sup>Across the state of Florida, approximately 1 percent of girls were arrested in 2014.

<sup>19</sup>National Institute of Justice, "From Juvenile Delinquency to Young Adult Offending" (2014), <https://www.nij.gov/topics/crime/Pages/delinquency-to-adult-offending.aspx>.

<sup>20</sup>Child Trends Data Bank, *Juvenile Detention: Indicators on Children and Youth* (2015), [https://www.childtrends.org/wp-content/uploads/2012/05/88\\_Juvenile\\_Detention.pdf](https://www.childtrends.org/wp-content/uploads/2012/05/88_Juvenile_Detention.pdf). In 2006, 289 per 100,000 young people resided in a juvenile detention center, correctional facility, or residential facility. By 2013, the rate had dropped to 173 per 100,000 young people.

percentage of juvenile arrests.<sup>21</sup> PACE works closely with the Florida Department of Juvenile Justice, the state legislature, and other entities to advocate for these types of policy shifts.

- **The cost of PACE’s holistic package of services is, on average, \$10,400 more than the cost of the services received by the control group. The analysis finds that the cost of providing academic services at PACE is comparable to the cost of public school; PACE’s wrap-around services account for the difference in costs.**

During the years the program group members were receiving PACE services, the PACE program cost about \$23,500 per girl served. (All costs are expressed in 2017 dollars.) This figure is based on the average length of stay for girls in the study (eight months). When compared with the estimated cost of services used by the control group during the same period, the net cost of the program group services is about \$10,400. Though academic costs were similar overall for the two groups, social services (provided mainly by PACE) accounted for most of the differences in costs. Such intensive social service support is rare in the public schools. PACE serves a population that, on average, needs more services than traditional schools provide, so its costs are unsurprisingly higher.

While there are few similar programs for at-risk children, it is useful to consider PACE’s costs in the spectrum of services for young people: PACE is less costly than a residential program, similar in cost to other comprehensive youth programs, and more expensive than public schools. The small size of PACE centers (serving about 50 girls, on average) and a staffing ratio much lower than that typically found in traditional schools contribute to its costs.

Ultimately, the aim of PACE is to change the long-term trajectory of its participants by getting them back on track academically and promoting more prosocial behavior. If this occurs, the benefits PACE produces would accrue over a much longer time horizon than the eight-month period when society is making its investment in the girls at PACE. For example, if PACE were able to improve girls’ graduation rates by at least 8 percentage points, the program would pay for itself in the long term.

## **PACE’s Ongoing Improvements**

This evaluation and the promising academic outcomes reflect the services girls received during the evaluation period, from 2013 to 2015. PACE, which has a strong central office to support program implementation, has opened more centers across the state since the evaluation began, and PACE’s leaders continue to assess their services and how they are implemented. Over the course of the evaluation period, PACE instituted a new management structure at its central office, revised policies on program eligibility, and began revamping the life skills curriculum, among other changes made.

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<sup>21</sup>Florida Department of Juvenile Justice, “Delinquency Profile 2017: Statewide Intake — Arrests” (2017), <http://www.djj.state.fl.us>. In fiscal year 2015-2016, 38,267 young people (ages 10 to 17) were arrested in Florida, down from 57,597 arrests in fiscal year 2011-2012.



The leadership team at PACE also worked actively with the study team to understand and address specific findings from the implementation research. For example, the study team found that there was no standard set of approaches recommended for counselors to use in sessions with girls; as a result, PACE developed a more defined toolbox for counseling. PACE has also strengthened teacher training on instructional methods and shifted away from independent work in the classroom. In addition, PACE rolled out new in-person staff training on its key pillars as a gender-responsive, strengths-based, and trauma-informed program — terminology that staff members did not necessarily recognize, even as they uniformly implemented such practices.

Other initiatives are under way as well. As one executive director noted recently, there is an increase in support for service delivery and a move to standardize delivery while allowing for local, center-level differences. In addition, PACE is focusing on enhancing its use of the data it collects, including implementing a new management information system.

## **Implications of the Evaluation**

The evaluation concludes that PACE employs a unique, well-implemented, theory-based model, as discussed at length in the previous report.<sup>22</sup> While girls in the control group did receive other services, the model's gender-responsive approach and combination of academic and social services are not commonly found.

Based on the random assignment study design, the evaluation also concludes that the PACE program had a positive effect on girls at risk of juvenile justice involvement in the short term, leading them to be more engaged and on track academically. Girls in both research groups seemed to have stabilized a year after applying to PACE, and effects on other outcomes, including risky behavior and youth development, were not seen in the short term, 12 to 18 months after enrollment. Overall, the girls in the study sample had positive relationships with friends, family, and adults outside their families, and rates of substance use were no higher than those of the broader population of girls.

These encouraging outcomes may in part be due to PACE's eligibility requirements: Girls had to have a parent or guardian present during the intake assessment and to show a willingness to change things in their lives. This combination applied equally to all girls in the study. The girls in the control group, who were referred to other services by PACE, also may have been motivated and supported in finding services they needed in the absence of access to PACE.

The services PACE offers girls are more expensive than the less holistic alternatives available in the girls' communities. The study's short follow-up period does not permit a full cost-benefit analysis that would indicate how this investment pays off in the long run. It is plausible that increased engagement and being on track academically would lead to both higher graduation rates and lower justice system involvement; a substantial increase in the graduation rate alone would make the program cost effective. It will be four to five years, however, before the vast

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<sup>22</sup>Treskon, Millenky, and Freedman, *Helping Girls Get Back on Track*.

majority of the study sample reaches the timing for high school graduation. Possible differences on juvenile justice outcomes may emerge before then.

The evaluation of the PACE Center for Girls adds to the growing literature regarding programs serving girls at risk of justice system involvement and other unfavorable outcomes. It also sheds new light on the implementation of gender-responsive services tailored to girls' common experiences and individual strengths. The evaluation finds that PACE reengages girls in academics in a way that could make a lasting difference, especially if it leads to higher rates of high school graduation and enrollment in postsecondary education.

## Chapter 1

# Introduction

PACE Center for Girls is a Florida-based nonprofit organization that targets girls of middle school and high school age who are at risk of involvement with the justice system. These girls are often struggling academically; some have histories of juvenile justice involvement; some have mental health issues, often stemming from experiences of trauma; and some engage in behavior that negatively affects their physical health. Using a “gender-responsive” framework for its academic and social services, PACE seeks to reduce the likelihood of negative outcomes tied to this set of characteristics and backgrounds and instead foster academic engagement, positive youth development, and healthy relationships. Increasing these protective factors can improve girls’ academic outcomes, prevent their future involvement with the justice system, and lead to long-term well-being and success. This report presents findings from a rigorous evaluation of PACE.

Improving academic outcomes in the short term may help girls get back on track and graduate on time. Preventing involvement in the juvenile justice system is also crucial, for several reasons. Juvenile justice involvement can damage a young person’s relationships with friends and family, negatively affect mental health, and interrupt the academic progress and work experience that should accumulate during adolescence.<sup>1</sup>

Investing in the well-being of girls promises economic benefits as well. Compared with dropouts, high school graduates have been shown to make larger economic contributions to society through lower unemployment rates, higher earnings, more taxes paid, and less reliance on public assistance. One estimate found that high school graduates make nearly \$300,000 more than those who do not complete high school over the course of their lifetimes.<sup>2</sup> And from a societal perspective, the court and detainment costs associated with juvenile justice involvement are high. Therefore, effective prevention or early intervention programs that help young people avoid involvement with the juvenile justice system can offer a significant return on investment.<sup>3</sup>

PACE uses principles of gender-responsive programming throughout its services for girls. The term “gender-responsive” describes treatment approaches designed for girls and women, specifically those involved with or at risk of involvement with the juvenile and criminal justice systems. Historically, services for those involved with the justice system were designed for boys and men.<sup>4</sup> Gender-responsive services bring an awareness of girls’ distinctive development patterns and gender-specific issues into the program.

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<sup>1</sup>Aizer and Doyle (2015).

<sup>2</sup>This calculation compares lifetime earnings for high school dropouts with earnings for high school graduates with no further education (Tamborini, Kim, and Sakamoto 2015).

<sup>3</sup>Aos et al. (2004).

<sup>4</sup>Treskon, Millenky, and Freedman (2017); Zahn, Hawkins, Chiancone, and Whitworth (2008).

Some girls' risk factors for delinquency are similar to those of boys, but they may manifest themselves differently in girls. Girls involved in the juvenile justice system are more likely than boys to have a history of maltreatment and other trauma, running away, family conflicts, exposure to crime in the neighborhood or at school, chronic mental and physical health disorders, substance abuse, and academic disruptions. Their experience of abuse is striking, with reported prevalence as high as 92 percent in one study of female delinquents.<sup>5</sup> Some risk factors, such as dating much older partners and self-harm, are almost never seen in male offenders.

Although there is some variability, many descriptions of gender-responsive programming are markedly consistent. The Center for Gender and Justice defines gender-responsive services as those that “creat[e] an environment through site selection, staff selection, program development, content, and material that reflects an understanding of the realities of the lives of women and girls and that addresses and responds to their strengths and challenges.”<sup>6</sup> Among the common principles are special attention to relationships, including those between staff members and girls; an emphasis on safety; an awareness of and response to sexism; a strengths-based approach, which builds on girls' individual strengths rather than focusing on their deficits; a holistic approach, addressing the well-being of the whole person rather than focusing on problems individually; and family involvement, including the development of positive family connections. Services often included in a gender-responsive program are treatment for abuse and trauma, life skills education, educational and vocational opportunities, and community and volunteer experiences.<sup>7</sup>

These types of services have been promoted at the state and national levels.<sup>8</sup> Yet the current literature on gender-responsive programming is more robust in its description of concepts and principles than in its evaluation of program performance.<sup>9</sup> Until recently, it was largely unknown how gender-responsive services are implemented, how similar they are to one another, or how effective they are.<sup>10</sup> Recent research suggests that, as with many other social services, gender-responsive program models may not always be implemented as planned, and the programs themselves are believed to be insufficient in number and not necessarily targeting greatest

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<sup>5</sup>Treskon and Bright (2017).

<sup>6</sup>Covington and Bloom (2017).

<sup>7</sup>See Treskon and Bright (2017) for more information on the gender-responsive approach and Treskon, Millenky, and Freedman (2017) for how this approach translates to a real-world setting at PACE Center for Girls.

<sup>8</sup>At the federal level, support for a gender-responsive approach crystallized with the 1992 amendment to the Juvenile Justice Delinquency Prevention Act, which remains in effect to this day (Juvenile Justice and Delinquency Prevention Act, 42 U.S.C. 5633 § 242 [1992]). Currently, the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention partners with a national organization on the National Girls Initiative, which provides training, technical assistance, and other resources to programs serving this population (Treskon and Bright 2017).

<sup>9</sup>Hubbard and Matthews (2008).

<sup>10</sup>Chesney-Lind, Morash, and Stevens (2008); Kerig and Schindler (2013).

need.<sup>11</sup> A clearer picture of program operations, populations served, and outcomes would aid in determining how to implement gender-responsive services effectively.<sup>12</sup>

This report describes the results of a rigorous evaluation of PACE that began in 2013.<sup>13</sup> The evaluation was an opportunity to test the effectiveness of the program and provide evidence on gender-responsive programming. The evaluation was conducted by MDRC and has been funded mainly through the Edna McConnell Clark Foundation’s Social Innovation Fund (SIF), a program of the Corporation for National and Community Service (CNCS), with additional funding provided by the Jessie Ball duPont Fund and the Healy Foundation.

This final report focuses mainly on measuring the extent to which PACE positively affects the girls that it serves in the short term. In brief, the program group received more services and received them more often from a professional source than the control group did. The evaluation found that PACE had promising academic outcomes for the girls it served, compared with the control group. It did not affect rates of risky behavior, including formal juvenile justice involvement, over the follow-up period. The average program cost per girl was \$23,499; compared with the cost of the services used by the comparison group, the net cost was approximately \$10,400. Given the age of the girls PACE serves, it is too soon to tell how PACE may affect girls’ longer-term outcomes in the areas of education and delinquency, or in other areas, and whether it is cost effective in the long run.

## **PACE Center for Girls**

PACE Center for Girls, established in 1985, currently operates 21 nonresidential program locations (known as “centers”) throughout the state of Florida. PACE is a voluntary program that serves girls ages 11 to 18 whose experiences, often shortly before coming to PACE, include abuse or violence, poor academic performance, or truancy — risk factors for delinquency. Some PACE applicants have already been involved with the juvenile justice system, and all are at risk of future involvement. Girls and their parents or guardians often come to PACE through referrals by the school district or a local organization; others learn about PACE through word of mouth.

Before enrollment, PACE applicants must undergo a thorough application process to determine eligibility. Parents or guardians are also involved during this process, as they must be physically present and agree to the girl’s participation in PACE. One of the initial requirements for program eligibility is having risk factors in multiple domains; the likelihood of involvement with the justice system increases with the presence of multiple risk factors.<sup>14</sup> Other major considerations are PACE’s ability to serve a girl’s academic and social service

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<sup>11</sup>Chesney-Lind, Morash, and Stevens (2008).

<sup>12</sup>Treskon and Bright (2017).

<sup>13</sup>Previous publications from the evaluation introduced the project and the PACE program model, presented findings on how PACE implements that model, and focused specifically on the gender-responsive programming. See Millenky and Mage (2016), Treskon, Millenky, and Freedman (2017), and Treskon and Bright (2017).

<sup>14</sup>Wasserman et al. (2003).

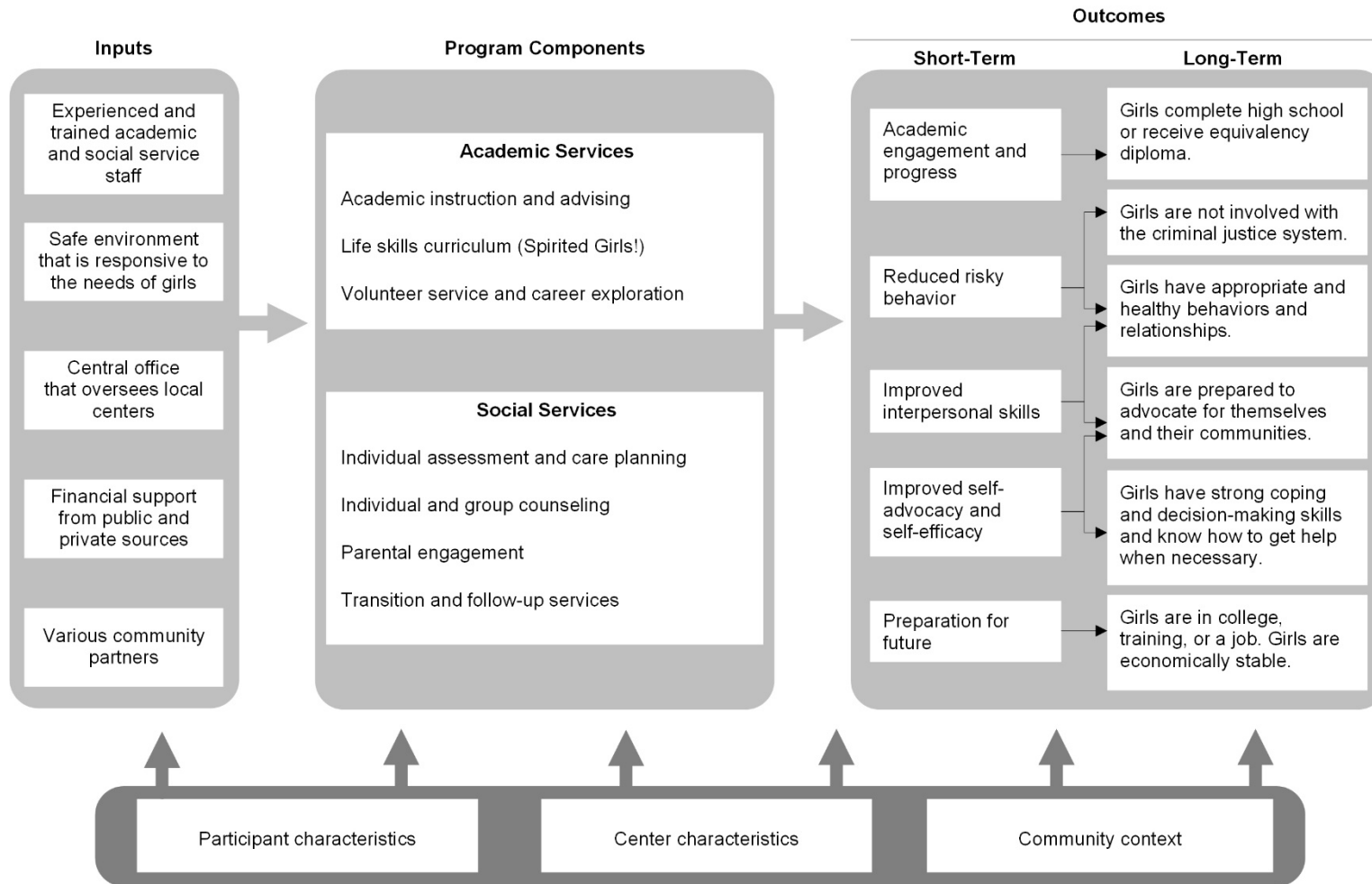
needs and the girl's motivation to attend the program and acknowledgment that change is needed in her life.

As shown in Figure 1.1, PACE provides daily academic services along with a significant set of social services; as discussed above, the program uses a gender-responsive approach. Girls attend PACE during normal school hours and stay enrolled for about a year. Enrollments in PACE occur throughout the full calendar year, including over the summer. Most girls then make the transition to another school in the community to complete their education. Through these services, PACE aims to increase protective factors for the girls it serves. More specifically, the PACE program model includes the following components:

- **Academic instruction and advising.** Girls receive daily instruction at the middle school or high school level in a small class setting. Individual academic plans guide progress, which is monitored through biweekly advising sessions.
- **Individual assessment and care planning.** Assessments of each girl's needs are used to create tailored plans for the girl's time at PACE. Staff members meet regularly to share information and review progress. Staff members refer girls to services outside PACE as needed.
- **Individual and group counseling.** Girls attend individual sessions with counselors at least every other week and have access to psychoeducational group sessions. The individual sessions are guided by a review of the girl's care plan goals. Examples of goals are building healthy relationships, decreasing substance abuse, improving anger management skills, and increasing positive self-esteem.
- **Life skills curriculum.** Girls regularly attend a Spirited Girls! class that covers six domains believed to be essential for girls' healthy development: physical, emotional, intellectual, relational, sexual, and spiritual domains.
- **Parental engagement.** Program staff members work to engage parents through initial home visits, monthly progress reports, office sessions, and phone contact.
- **Volunteer service and career exploration.** Girls engage in volunteer opportunities in their communities; career exploration activities are often offered as well.
- **Transition and follow-up services.** Additional support is available for girls as they make the transition out of PACE and back to their home schools or other appropriate placements. Staff members also check in with girls at regular intervals for one year after they leave the program to provide services or referrals, if needed.

Figure 1.1

PACE Center for Girls Logic Model



As shown in Figure 1.1, participation by girls in this suite of services — designed to work holistically — is expected to lead to some positive short-term outcomes. Academically, these short-term outcomes include improved engagement, such as increased attendance at school, and progress as measured by grade promotion and earning credits. In the longer term, this engagement and progress could result in more girls graduating from high school or earning a high school equivalency credential. PACE may also help girls in the short term reduce their risky behavior, such as delinquency or high-risk sexual activity, and improve their interpersonal skills, their self-efficacy, and their knowledge of career options.

In addition to high school completion, involvement in PACE may lead to other positive, longer-term outcomes for participants. As noted in Figure 1.1, these include lower rates of involvement with the criminal justice system, better coping and advocacy skills, healthier relationships and behaviors, and a positive transition to adulthood. This transition to adulthood may be reflected in participation in postsecondary education, job training, or employment.

PACE is primarily government funded, receiving more than two-thirds of its funding through the state’s educational system and the Florida Department of Juvenile Justice (DJJ). For academic services, the centers contract with the local school districts to receive per pupil funding. The funding from DJJ supports a large part of the social services as well as facility expenses. Additional support comes from federal, state, and local grants as well as donations from individuals, corporations, and foundations.

## **PACE Evaluation**

The evaluation of PACE’s program model presents an opportunity to test the effectiveness of a gender-responsive program and provide rigorous evidence on services for girls at risk of negative outcomes. The evaluation had three main components: an implementation study, an impact study, and a cost analysis. Fourteen PACE centers participated in the evaluation.

The implementation study assessed how well PACE implements its program model and incorporates gender-responsive principles into services. Findings from the implementation study were published in a 2017 interim report titled *Helping Girls Get Back on Track*.<sup>15</sup> The report also included information on the recruitment and application process for the evaluation and preliminary impacts on service receipt. A research brief that focused on gender-responsive programming served as a companion to that report and used PACE as a case study of how the principles of that approach are put into action.<sup>16</sup>

The key findings of the implementation study included the following:

- The PACE program model was consistently implemented across multiple locations, with a core set of similar services.

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<sup>15</sup>Treskon, Millenky, and Freedman (2017).

<sup>16</sup>Treskon and Bright (2017).



- PACE incorporated gender-responsive programming into its services by creating a safe, relationship-focused environment and by using tools and approaches that fit within the gender-responsive principles.
- Although the content of academic classes was similar to what girls would learn in regular public schools, academics at PACE differed in student-teacher ratio, availability of academic advising, and a focus on individual, self-paced work. Classes were provided in the context of a gender-responsive program environment.

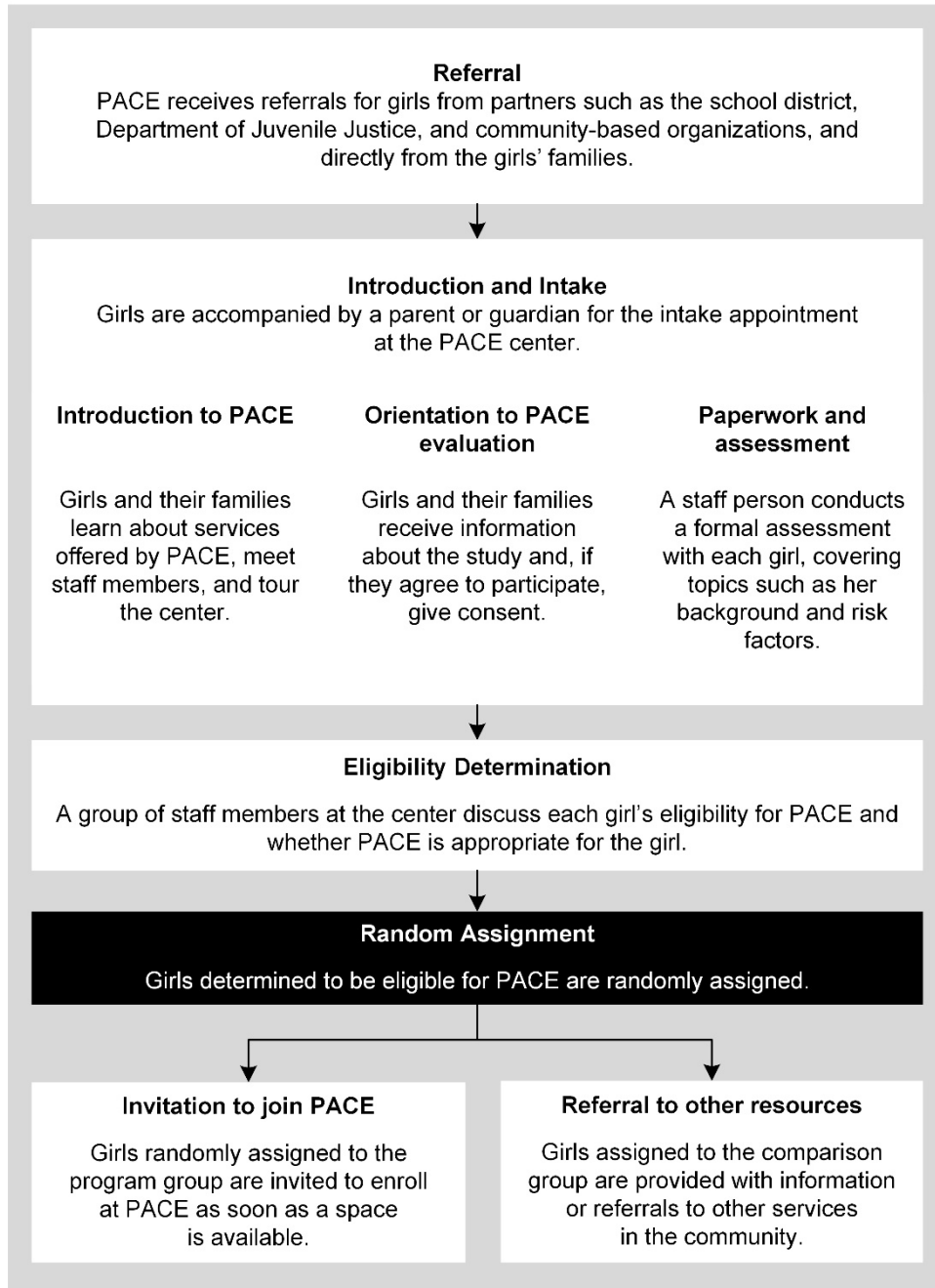
The current report focuses mainly on the impact and cost analyses. The impact analysis measures effects on short-term outcomes, including academic engagement and progress, juvenile justice involvement, risky behaviors, and interpersonal relationships. An extended follow-up period would be necessary to measure the longer-term outcomes discussed earlier, given the age range of the girls served by PACE. The impact findings are placed in context through information about the services both groups participated in during this follow-up period. The cost analysis presents the costs of providing PACE services and compares these costs with those of alternative services. Since a year is too short a time frame to expect to fully recoup the costs of such an intensive program, the report then discusses the types of longer-term impacts that PACE would need to have in order to be cost neutral.

The impact analysis employs a random assignment design: Girls who applied to and were deemed eligible for PACE (using the program’s existing screening processes) enrolled in the study and were assigned at random either to a program group, whose members were offered PACE services, or to a control group, whose members received appropriate referrals to other services in the community. Figure 1.2 shows the place of random assignment in relation to the other steps in the eligibility and enrollment process. The “intent-to-treat” design employed in the impact analyses shown throughout the report includes *all* girls assigned to each group in the calculations, regardless of their participation in PACE or other services.

Over a period of more than two years (from August 2013 to November 2015), 1,125 girls enrolled in the study (673 in the program group, 452 in the control group). Random assignment was stratified at the center level; among each center’s study enrollees, 60 percent were assigned to the program group and 40 percent to the control group. Some girls, such as those in foster care or those who had previously attended PACE, were not eligible for the study but were still invited to enroll in PACE. (See Appendix A for further information about site selection and random assignment procedures.) Data were collected on both program and control group outcomes for least 12 months following random assignment, to measure any differences that emerged across the two groups.

**Figure 1.2**

**PACE Evaluation Eligibility and Enrollment Process**



## Data Sources

The analyses in this report draw on the following data sources:

- **PACE management information system (MIS).** PACE centers collect extensive data about girls in a centrally managed MIS. These data include baseline demographic and risk factor information — collected during the program application process and before study enrollment — and extensive records on participation in program services.
- **12-month follow-up survey.** A follow-up survey was administered to study participants by phone or in person approximately one year after study enrollment. The information collected in this survey is used to measure impacts on service receipt, academic progress and engagement, risky behavior, and youth development, as well as to understand specific details about services and help received by the control group. The response rate among program group members was 79 percent, slightly higher than the rate among the control group (76 percent). Appendix B includes more details on fielding of the survey and findings from a survey response bias analysis.
- **Administrative records from the Florida Department of Juvenile Justice.** The research team obtained records from the Florida Department of Juvenile Justice to measure impacts on study participants' involvement in the juvenile justice system. These data include information from 2008 to 2017, allowing the research team to estimate impacts for the full study sample at 18 months after study enrollment and measure any involvement before study enrollment.
- **Administrative records from the Florida Department of Education.** Using records from the Florida Department of Education, the research team measured impacts on academic progress, academic engagement, and disciplinary actions. The data come from the 14 (county-level) school districts where PACE centers are located and cover the 2013-2014, 2014-2015, and 2015-2016 school years, allowing the research team to estimate impacts for a one-year period for the entire study sample.
- **Program cost data.** PACE headquarters provided data about each participating center's revenue and expenditures in fiscal year 2015 (July 2014 to June 2015). Financial information for the headquarters is included as well.
- **Semistructured phone interviews conducted with sample members and parents.** Girls who completed the 12-month follow-up survey and their parents or guardians were asked to participate in an additional in-depth, semistructured interview about their experiences with PACE and other schooling or services. A subset of those who expressed interest were contacted. A total

of 52 girls and 40 parents who agreed to participate were contacted and interviewed by phone between July 2015 and March 2016. See Appendix D for more details.

While the evaluation uses a rigorous design and draws on a range of data sources, it has some limitations. The evaluation's funding allowed for data collection for only 12 to 18 months following the girls' application to PACE and enrollment in the study. While this time period provides information on PACE's short-term outcomes, it was not enough time for most girls in the study sample to reach key milestones such as high school graduation. Therefore, the evaluation does not include a full benefit-cost analysis at this time. Additionally, aspects of youth development can be hard to measure. As is the case in many studies of youth programs, the follow-up survey asked sample members questions that assess risky behavior and interpersonal relationships; yet these constructs remain difficult to measure, especially in a short survey that was usually administered by phone. Among other things, girls may be hesitant to provide honest or complete answers to a survey interviewer about ongoing issues or risky behaviors. Finally, this study benefited from access to Florida's Department of Education records, but the study team had access only to deidentified data, which limited the analyses that could be performed.

### **Characteristics of the Study Sample**

Figures 1.3, 1.4, and 1.5 present the study sample members' demographic characteristics and risk factors. This information was collected from girls and parents by PACE program staff members at the time of their application to PACE and study enrollment. Most girls were between 13 and 16 at the time of study enrollment; the average age across the whole sample is 14.7. Just over half the sample came from single-parent households. Appendix Tables C.1 and C.2 include additional measures and a breakdown of the study sample by research group. Overall, there are very few differences between the two research groups.

Consistent with the characteristics of PACE's target population, a range of risk factors were prevalent across the study sample. Many sample members struggled with school before coming to PACE, as shown in Figure 1.4. At the time of study enrollment, 40 percent had been recently expelled or suspended from school, and just over half the sample had been held back at least once. These rates are considerably higher than those among all students in the counties where PACE centers are located; in the 2013-2014 school year, only 15 percent of all students were expelled or suspended, and just 5 percent were held back.<sup>17</sup>

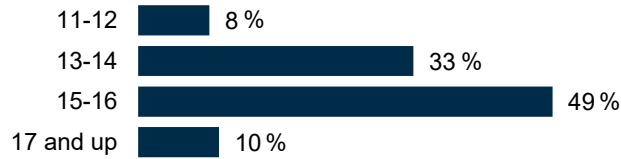
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<sup>17</sup>These measures were calculated from Florida Department of Education data for the counties where participating PACE centers are located. The "held back" measure represents the rate for students in grades 6 through 12. Expulsion and suspension data were not available by grade level.

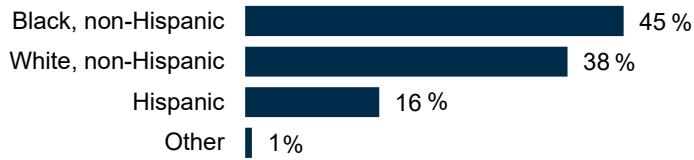
**Figure 1.3**

**Sample Members' Characteristics at Study Enrollment**

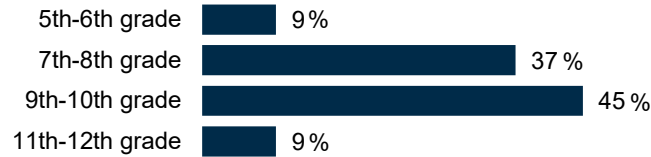
**Age**



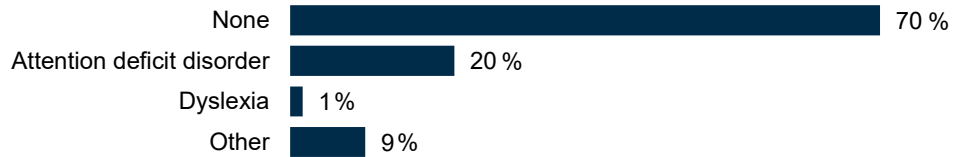
**Race/ethnicity<sup>a</sup>**



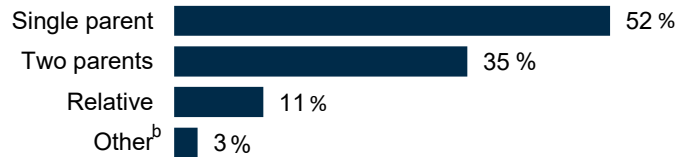
**Grade**



**Learning disability**



**People participant lives with**



**Family income**



SOURCE: MDRC calculations based on data from the PACE management information system.

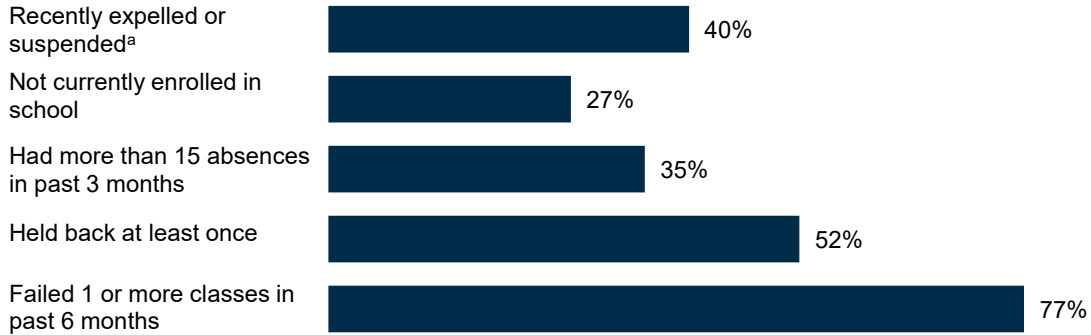
NOTES: Sample size is 1,125.

<sup>a</sup>Sample members are coded as Hispanic if they answered "yes" to Hispanic ethnicity.

<sup>b</sup>"Other" includes nonrelative or foster care.

**Figure 1.4**

**Sample Members' Academic Risk Factors at Study Enrollment**



SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: Sample size is 1,125.

<sup>a</sup>This measure was captured in two different ways during the random assignment period. It was defined as being currently expelled or suspended for approximately half of the sample and as one or more expulsions or suspensions in the most recent school term for the other half.

As Figure 1.5 indicates, risk factors for delinquency were also very common among sample members. Just over a quarter of the study sample reported a prior arrest.<sup>18</sup> Unsurprisingly, given PACE’s target population, this is far higher than the arrest rate for the broader Florida female youth population, which was only about 1 percent in 2014.<sup>19</sup> Additionally, sample members often had people in their lives with a criminal or delinquent history. Almost two-thirds of the research sample had a family member with a criminal history. A growing body of research indicates that children with incarcerated parents often experience trauma, family disruption, and the loss of their primary caregiver, which can lead to financial hardship, residential instability, and an array of emotional and behavioral problems.<sup>20</sup> Furthermore, half of the sample reportedly had friends with prior juvenile justice involvement or who engaged in delinquent behavior.

Girls in the study also reported many health and safety risk factors, such as sexual activity, a history of abuse, and substance use. At the time of random assignment, almost half the sample members (44 percent) had ever been sexually active. Thirty-eight percent of the research sample reported having been abused or neglected.<sup>21</sup> Smaller portions of the sample were using

<sup>18</sup>Technically, these are not arrests; in the juvenile justice system, the corresponding term for an arrest is “incur a charge.” This statistic from PACE data aligns with the girls’ prior rate of incurring charges as calculated from state-level administrative records.

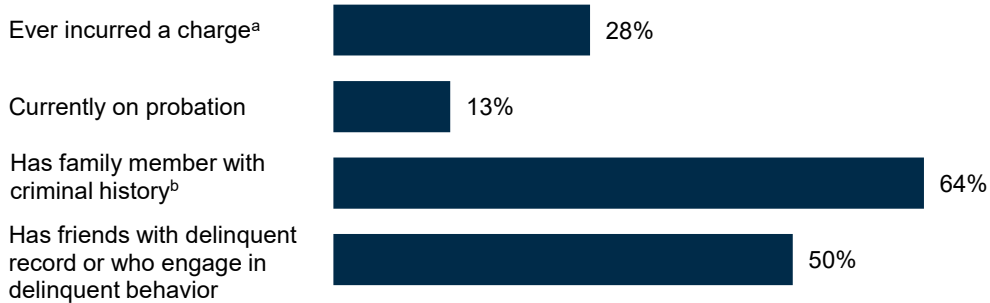
<sup>19</sup>Florida Department of Juvenile Justice (2017).

<sup>20</sup>Parke and Clarke-Stewart (2001).

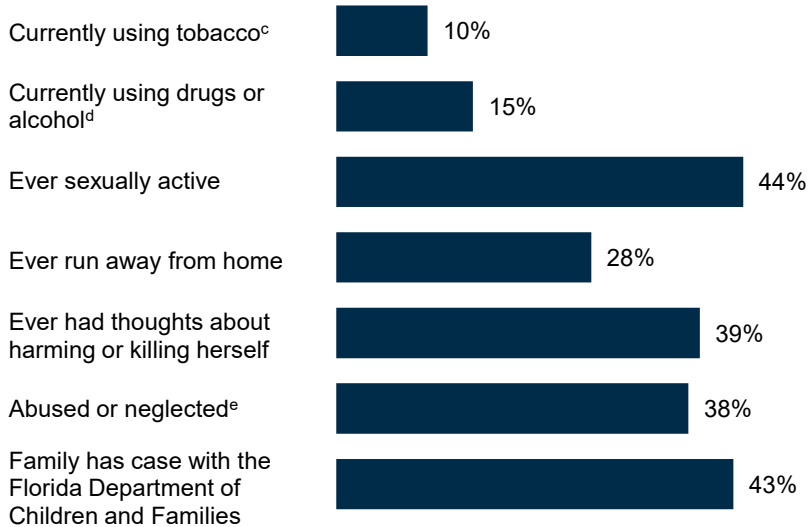
<sup>21</sup>Similarly, 43 percent of sample members had a family case with the Florida Department of Children and Families, which handles abuse and neglect cases.

**Figure 1.5**  
**Sample Members' Delinquency and Health and Safety Risk Factors**  
**at Study Enrollment**

**Delinquency**



**Health and safety**



SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: Sample size is 1,125. Certain characteristics listed here were captured in two different ways during the random assignment period, as noted below.

<sup>a</sup>In the juvenile justice system, people are not technically "arrested"; the terminology used is either "incurred a charge" or "referred."

<sup>b</sup>For approximately half of the sample, this refers to a criminal record (including imprisonment, probation, parole, and house arrest) for a parent, guardian, or sibling of the sample member; for the other half of the sample, "family" includes other members of the household as well.

<sup>c</sup>Measure was defined as having used tobacco three or more times in the past 30 days for approximately half of the sample and defined as currently using tobacco for the other half.

<sup>d</sup>Measure was defined as having used drugs or alcohol three or more times in past 30 days for approximately half of the sample and defined as current drug or alcohol use for the other half.

<sup>e</sup>Measure refers only to documented instances of abuse or neglect for approximately half of the sample but includes suspected incidents of abuse for the other half.

drugs, alcohol, or tobacco at the time study enrollment: 15 percent of sample members were using drugs or alcohol, and 10 percent were using tobacco.

To put this into context, the rate of sexual activity among high school girls in the study sample (59 percent) is higher than the percentage of Florida high school girls who had ever been sexually active in 2013 (40 percent).<sup>22</sup> However, the rates of drug, alcohol, and tobacco use among the study sample are comparable to, if not lower than, those for the broader Florida female youth population. On average, among Florida high school girls in 2013, 34 percent were currently drinking alcohol and 20 percent were using marijuana, compared with 19 percent of high school girls in the study sample who said they were using drugs or alcohol. And 9 percent of Florida high school girls were smoking cigarettes compared with 12 percent of the study sample.<sup>23</sup>

Many of the risk factors shown in these figures and the appendix tables overlap with those in the adverse childhood experiences (ACEs) literature. For example, ACEs include abuse or neglect, parental separation or divorce, and an incarcerated household member. ACEs research emphasizes prevention of these experiences as much as possible and links these experiences to future risky behavior, health problems, and early death, as well as other negative outcomes.<sup>24</sup>

While many sample members had risk factors stemming from events or circumstances that occurred long before study enrollment or that had continued for some time, a significant portion of the study sample were experiencing recent changes or new situations in their lives shortly before their application to PACE and study enrollment. According to information collected by the PACE staff for a randomly selected sample of about 100 girls, about 35 percent of sample members applied to PACE because of recent experiences. Girls also talked about such experiences in interviews with the research team; some examples of tipping points that brought girls to PACE are detailed in Box 1.1. Many girls discussed a recent death of a family member or friend, getting poor grades or failing in school, recent expulsions or suspensions, or a recent altercation or fight.

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<sup>22</sup>Kann et al. (2014).

<sup>23</sup>Kann et al. (2014).

<sup>24</sup>Centers for Disease Control and Prevention (2016).



## Box 1.1

### Examples of Why Girls Came to PACE

#### Academic issues

- The girl was enrolled at a public high school but rarely attended. Her grades were very bad. After she got into a fight, the school encouraged her to “consider other options.”
- She was enrolled at a public high school but behind in her credits and wanted to catch up. Additionally, she was getting in trouble (not specified).
- She was in eighth grade for the third time and failing. She alluded to an “incident” that occurred the previous year but did not elaborate.
- She was very far behind in credits. The principal at her public high school told her that she would need three additional years to finish unless she went to another type of school.

#### Behavioral issues and juvenile justice involvement

- The girl is a current DJJ client with six misdemeanors. She was recently suspended from school and had been suspended the previous semester for fighting. She often doesn’t go to school if she doesn’t feel like it.
- She fell in with the “wrong crowd” at her high school and started smoking marijuana; as she smoked more, her grades dropped further. She was also struggling with grief after the deaths of two of her friends in the past year.
- She was getting in trouble at school because she frequently skipped class. She was also disrespectful to teachers.
- She had been expelled from her previous school and hadn’t been attending for three months before that. She committed a misdemeanor and had to go to court. While at court, she learned about PACE from a friend who was also there.
- She was in tenth grade at a public high school for about three weeks before she got into a fight and was expelled.

#### Bullying

- She was attending a new school after leaving her public middle school for various reasons. However, she did not like the new school because one of her classmates there had previously bullied her at the public school.
- Though she was doing well in school academically, she was getting bullied. She learned about PACE from her older relative, who had attended and was now in college. The principal and assistant principal wanted her to stay in school; her mom had to get involved to withdraw her so she could enroll at PACE.

(continued)

### **Box 1.1 (continued)**

#### **Other**

- She was out of school for the first few weeks of ninth grade because of her sibling's death. It was a difficult time for her family. She had not enjoyed her previous year at school; it had been a "bad year." Her mom found PACE online.
- She had several incidents over two years that overwhelmed her. These included unexpected deaths of close relatives, including a parent, and a move to Florida.

SOURCES: PACE management information system and MDRC site visit interviews with study participants.

## **Overview of the Report**

As the remainder of the report lays out, the evaluation found that PACE is a well-implemented, theory-based program model that positively affects girls at risk of juvenile justice involvement in the short term, leading them to be more engaged and on track academically. Chapter 2 describes the contrast between the services received by the program and control groups. Chapter 3 presents impacts on academic, youth development, risky behavior, and delinquency outcomes for the 12- to 18-month period following random assignment; information from semistructured interviews supplies context for these findings. Chapter 4 presents the cost analysis. The final chapter provides information on PACE today, summarizes the key findings, and discusses the implications.

## Chapter 2

# PACE and Alternative Services

This chapter describes the services the program group and control group reported receiving during the year following random assignment and compares differences in service receipt between the two groups. Understanding the extent to which each group received services, and the characteristics of those services, can help with the interpretation of observed impacts, or the lack thereof, that will be presented in the next chapter. First, the chapter briefly describes PACE services. The next section presents impacts on service receipt across the two research groups, followed by an in-depth discussion about the characteristics of control group services that draws on data from the follow-up survey of girls and in-depth interviews with girls and parents. (See Appendix B for an analysis of survey response bias and Appendix D for information about the interview data collection.)

The findings in this chapter indicate that, in general, the program group received more services and received them more often from a professional source, such as a counselor or academic adviser, rather than a friend or family member. Nonetheless, the control group was likely to be enrolled in school, as expected given compulsory education requirements, and moderately engaged in receiving other academic and social services. Overall, the girls in the control group were unlikely to receive the full suite of PACE’s core services, and they were unlikely to receive services that had certain characteristics of high-quality programs for young people — an emphasis on family engagement, the presence of supportive adults, and follow-up services. However, among the minority of control group girls who did receive services similar to those provided by PACE, many of those services did have those characteristics.

## PACE Services

Girls enrolled at PACE attend daily, during normal school hours. They receive a combination of academic and social services during the day. PACE, a year-round program, is designed holistically, intending to provide “wrap-around” support for academic and social needs in one location. The program’s integration of academic and social services, embedded in a gender-responsive program culture, distinguish it among other programs for at-risk girls in Florida. An earlier report, *Helping Girls Get Back on Track*, goes into depth about the PACE model and the services it provides.<sup>1</sup>

The primary goal of academic services at PACE is to provide girls with the opportunity to earn credits and progress toward completion of middle school and high school. The academic curriculum at PACE follows state standards and mirrors that of public schools in Florida. When a girl enters PACE, the staff reviews her school transcripts and test scores to determine her academic level and credit needs. Since girls enter the program at different points in their education

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<sup>1</sup>Treskon, Millenky, and Freedman (2017).

and need to complete different courses, girls in the same classroom are often working on different subjects. For example, half of a social studies class may be working on world history while the other half is focusing on U.S. history. PACE classes, capped at 12 students, are typically smaller than classes in the public schools.<sup>2</sup> The implementation study found that the quality of classroom instruction at PACE was similar to that of public school classrooms.<sup>3</sup>

Girls at PACE receive academic advising every other week from an assigned teacher or guidance counselor. Advising meetings cover grades, progress toward earning credits, and test results.

To promote their well-being and transition to adulthood, PACE offers girls life skills education, including health topics such as physical and reproductive health, substance abuse prevention, avoiding delinquent behavior, and managing stress. At most PACE centers, girls attend life skills class, which is called Spirited Girls!, on a regular basis. PACE also provides opportunities for career exploration and volunteer service. Girls take a career assessment and learn about possible career options, and the program works to strengthen girls' academic and "soft" skills (interpersonal skills and good work habits) to support work readiness. Girls also participate in a volunteer service project each semester to promote self-esteem, build work readiness skills, and contribute to the community.

Through social services, PACE strives to address the nonacademic issues that may hinder a girl's success in the program and beyond. Upon enrollment, social service staff members conduct a comprehensive assessment and develop an individual care plan for each girl. Throughout her stay at PACE, social service staff members meet with each girl at least every other week to assess her progress and connect her or her family with appropriate support. All PACE centers have partnerships with outside providers to connect girls and families to other services, such as health services. For many girls, reviewing progress with their counselors was a jumping-off point for discussions about other issues, such as behavior, family concerns, or academic engagement. Many sessions covered multiple topics, and counselors often worked on strategies for girls to use to address the challenges they faced.

Parental engagement is also a key feature of social services at PACE. Staff members conduct a home visit upon a girl's enrollment in PACE and have monthly meetings with parents to update them on her progress. Once a girl is ready to leave PACE, social service staff members engage her and her family in planning for the transition, including helping to identify an appropriate placement. After the girl leaves PACE, she receives 12 months of follow-up services, typically phone calls from a designated staff person to check on how she is doing and, if needed, to connect her with additional services.

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<sup>2</sup>The Florida average is 16 students per teacher, though this estimate includes elementary schools, which typically have smaller class sizes than middle and high schools. The average is calculated by dividing student membership by teachers for traditional schools (Florida Department of Education 2015a).

<sup>3</sup>PACE classrooms were evaluated using the CLASS-S scoring tool. Additional information about the findings is available in the implementation report (Treskon, Millenky, and Freedman 2017).

PACE’s gender-responsive culture underpins the academic and social services it provides. As discussed in Chapter 1, such a culture incorporates a focus on safety and high-quality relationships, a strengths-based approach, and an understanding of trauma in all aspects of program delivery. At PACE, staff relationships with girls are seen as central to implementing a gender-responsive approach and also to maintaining safety. Staff training and low staff-to-participant ratios help promote nurturing relationships between staff members and girls, and social service staff members work with girls on strategies to promote healthy relationships with their families and their romantic partners. Staff members also focus on developing girls’ self-confidence by identifying and building on their individual strengths. This focus on strengths is formalized through a rewards system, in which girls are granted tangible rewards or privileges for completing specified milestones. And finally, PACE staff members are trained to understand the impact of trauma on a person’s life, recognize the symptoms of trauma, and interact with girls in a way that avoids further traumatizing them and supports their healing. Illustrating the model in practice, Box 2.1 shares an example of one girl’s experience at PACE.

## Impacts on Service Receipt

As a result of random assignment, girls assigned to the control group were not able to enroll in PACE and had to find other services in the community.<sup>4</sup> Many PACE centers referred control group girls to other services based on what they determined would be a good fit for the girl based on her intake assessment.

Figure 2.1 presents impacts on service receipt for the 12 months following study enrollment, using the survey data. For some services, girls who reported receiving a service were asked from whom they received the service, and throughout this section we distinguish between services that are provided by a professional source and those that are not — for example, those received from a parent, other family member, or friend. This distinction was made to assess the extent to which the control group received services like those offered by the staff at PACE. A service provided by a staff member at an organization or school is probably closer in content to the services received by girls at PACE than a service provided by a parent, family member, or friend. Appendix Table E.1 provides more details on the frequency of services received and the primary source reported by girls for many of these services. For some social services, only the control group was asked about the source; those measures are presented in Appendix Table E.2.

### Academic Services

As shown in Figure 2.1, most members of the research sample reported that they attended a school or other academic program at some point during the follow-up period; the program group

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<sup>4</sup>As discussed in Appendix A, random assignment took place only when a center generally had more eligible applicants than slots available.

## Box 2.1

### One Girl's Experience at PACE

Although there is no typical PACE girl, the following vignette is one example of a girl's experience at a PACE center. J, a 16-year-old expelled from her public high school for fighting with other students, learned about PACE from the school's vice principal. It was the only program she considered once she was expelled. Every day, her brother drives her to PACE and she takes two buses home in the afternoon; the return commute takes about an hour and a half.

J has found that the teachers provide a lot of assistance, and the classes are smaller than those at her prior school. She explains,

These teachers, they help you out more than regular teachers at other schools . . . the teachers are nicer. They ask you if you need help, instead of you asking them. It's just better than regular schools. . . [The teachers] give me the work, and it's hard, but they literally will help me find the answers . . . they will lead me to the answers and help me out.

On the social services side, J estimates that she meets with her counselor five times every week.

Whenever I have problems with other students, that's when I go straight to [my counselor] and I talk to her about it. . . She helps me with all my problems. If I need help with work she'll find me a tutor, if I'm having trouble at home she'll talk to me about it.

One day, J had a conflict with another girl at the center, leading to a mediation session. Both girls and two counselors participated in the mediation, and each girl had a chance to tell her side of the story. This approach allowed the girls to resolve their conflict.

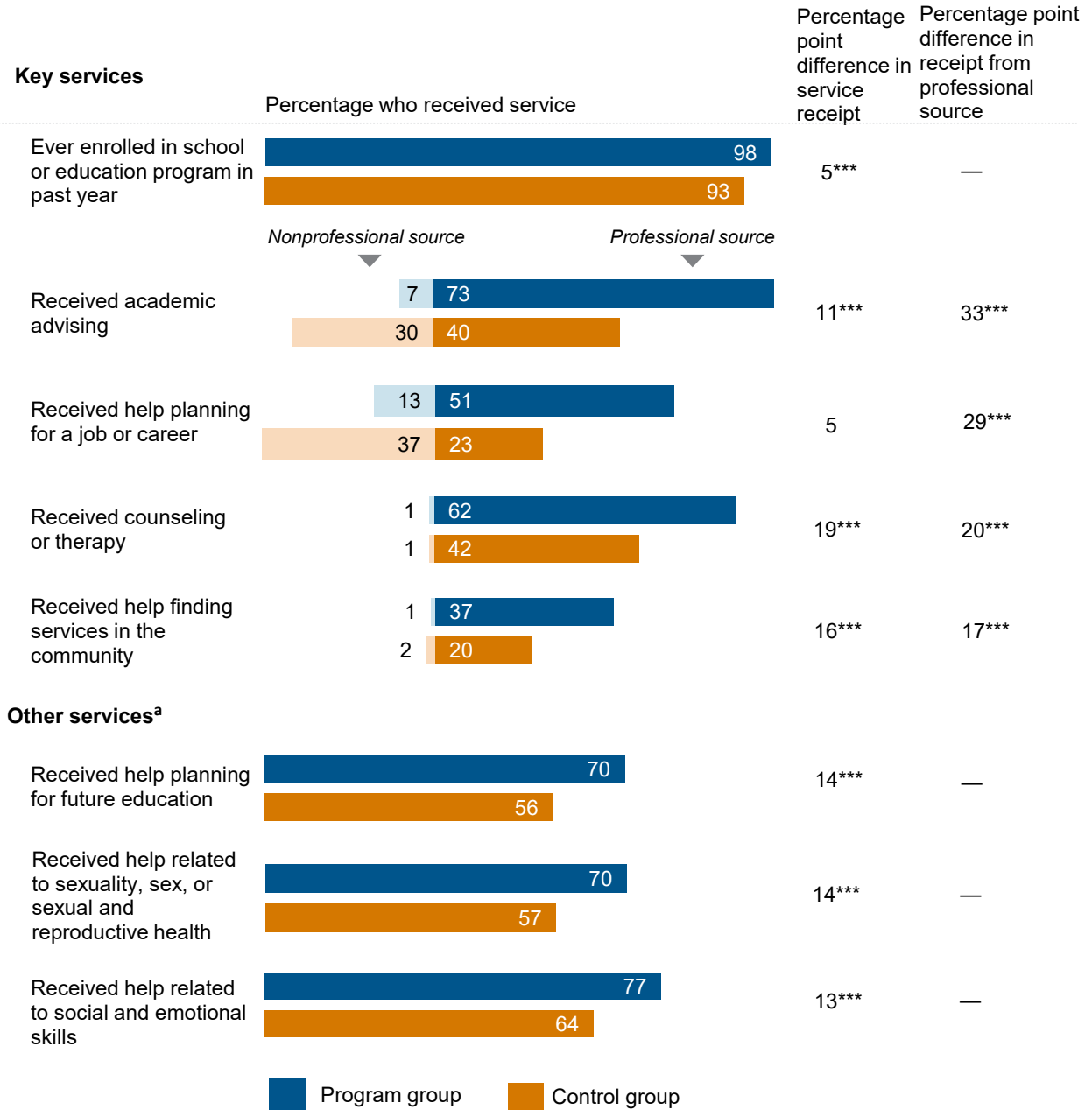
Although initially J was worried about going to an all-girls program, she has found the other girls supportive. The absence of boys has prevented conflict and allows for more focus during classes. When she overdosed due to her struggle with depression, her friends at PACE let her know how much she was missed while absent from the center.

I didn't come for three weeks because of something that was going on, because I OD'd. I was really depressed, and that's when my friend was like "we're here to talk. We're mad at you because you didn't talk to us, we're here for you, we want you to be successful in life and come to school every day. We don't want you to miss out on anything."

J says things are better for her since she came to PACE. She doesn't get into fights as much, and she no longer feels like the "bad child." She is closer to her family and makes an effort to have real conversations with her family members. J plans to go to a different public high school when she leaves PACE and aspires to attend college.

**Figure 2.1**

**One-Year Differences in Service Receipt**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Results in this figure are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>It was not possible to tell whether the respondent received these services from a professional or nonprofessional source.

was slightly more likely (98 percent versus 93 percent) than the control group to have been enrolled in an educational program.<sup>5</sup> The high enrollment rates are not surprising given the age of participants — in Florida, children under 16 must be enrolled in school.<sup>6</sup> Most program group members reported that they received academic services from PACE. Control group members received services primarily from a local public or charter school. A small number of control group girls (estimated at about 15 percent) attended an alternative school. Such schools, operated either by the district or a contracted provider, serve students who have not been successful in the traditional school setting; some offer additional supportive services to help students be successful.

Academic advising includes activities that relate to short-term academic goals, like building a class schedule that includes credits needed for grade promotion. At PACE, as noted above, an assigned teacher or guidance counselor provides academic advising twice a month. Program group girls were more likely to report having received academic advising than girls in the control group. As shown in the top panel of Figure 2.1, the program group was also more likely to have received advising from a professional source (usually PACE), and they received the service more frequently. Similarly, as shown in Appendix Table E.1, program group girls were more likely to have received career planning assistance from a professional source (again, mostly from PACE). About half the control group respondents who received academic advising reported that they received it from someone at school, but a parent, guardian, or other relative was the source of support more than 40 percent of the time (among those who received academic advising). In career planning, the control group reported that a parent or guardian was the most common source of support.

### **Social Services**

The girls' risk factors at the time of study enrollment indicated that many of them could benefit from social services to address their behavioral health and basic needs. As shown in the bottom panel of Figure 2.1, the program group was more likely to report that they received social services than the control group. The program group reported that they received these services most often from PACE, which is not surprising given that counseling, case management, reproductive health education, and social-emotional skill development are provided to all girls who attend PACE.

The largest difference in service receipt between the two groups was for counseling or therapy. The program group was much more likely to receive this service, and they received the service more frequently. Though the majority of program group girls reported receiving this service from PACE, more than one-third reported receiving services elsewhere, most commonly at a center, clinic, or private practice (Appendix Table E.1). Girls sometimes came to PACE already having an outside counselor or therapist, and in other cases, PACE determined that the staff could not meet the girls' needs and provided referrals, so this finding is not unexpected. Most of the

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<sup>5</sup>The administrative data from the Florida Department of Education told a similar story, though participation rates were slightly lower for both groups: 94 percent of the program group and 90 percent of the control group were ever enrolled in school.

<sup>6</sup>Florida Department of Education (2018a).



control group members who received counseling or therapy reported receiving it from a health care center or independent clinician, while a much smaller share reported receiving the service at school. Like the program group, control group girls may have already been connected to these services before they applied to PACE.

There was a similar difference in whether and how girls received help finding other services in the community, such as services to meet basic needs like housing, health care, or transportation. About one-third of the program group received such referrals, while about one-fifth of the control group did. As shown in Appendix Table E.1, the majority of program group girls received help with referrals from PACE; the control group received it most commonly from someone at school or through someone connected to the Department of Juvenile Justice.

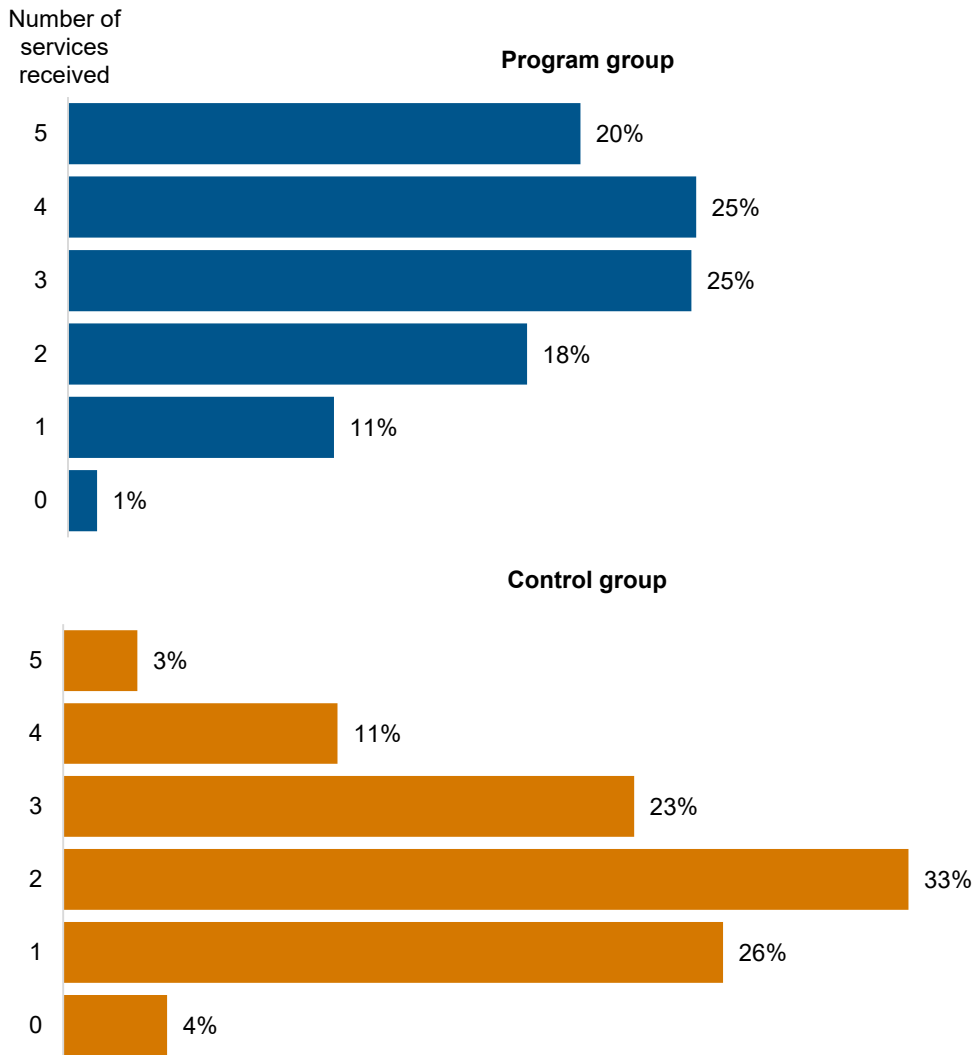
The survey also measured the difference in service receipt related to the type of reproductive health and social-emotional competence education that is part of the PACE Spirited Girls! curriculum. Program group girls reported high rates of receiving these services, but control group rates were also high (Figure 2.1). The survey did not collect information on the source of these services for the program group, but given that these services are a core component of PACE's model and the program group attended PACE at high rates, it is assumed that the program group for the large part received these services from PACE. The control group, who did not have access to services provided by PACE, reported most often that they received help with reproductive health or social-emotional skills from a parent, guardian, or other relative. About one-quarter of control group girls surveyed reported that they received such services at school (see Appendix Table E.2).

### **Combination of Services**

For PACE, and other programs that provide comprehensive services in one location designed to meet the holistic needs of participants, providing those services together is a core aspect of the model. This approach promotes communication between service providers; for example, teachers and counselors can share information about emerging issues in the classroom or in a girl's life. Integrating services may improve participation by reducing the burden on girls and families to travel to multiple service providers.

Data from the survey reveal the extent to which the program group and the control group received a package of core services like that provided by PACE. To analyze the combination of services the girls received, five "key services" that PACE provides were selected from the survey measures: academic classes, academic advising, job or career planning, counseling or therapy, and case management. This analysis counts a key service only if the sample member reported receiving it from a professional source. As Figure 2.2 shows, the program group reported receiving all five key services more frequently than the control group. Twenty percent of the program group received all five services, compared with just 3 percent of the control group. Two-thirds of the control group reported that they received two or fewer services, compared with one-third of the program group.

**Figure 2.2**  
**Receipt of Key Services, by Research Group**



SOURCE: MDRC calculations based on data from the PACE evaluation 12-month follow-up survey.

Still, even though PACE provides all services in one place, about half the program group members reported that they received three or fewer services. This may have to do with the girls’ perceptions; for example, they may not consider their PACE counselor to be a counselor or therapist.<sup>7</sup> Also, some program group girls attended PACE for a short time and did not receive all its

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<sup>7</sup>As described in the implementation report, PACE counselors varied in their approach to working with the girls, with some taking on a more therapeutic role and others focused more on care planning. Counselors would also vary their approach based on the needs of the girls, so girls who did not have active mental health needs

services. PACE's management information system data indicates that those who participated in PACE for at least 30 days did receive most of the components of the model.<sup>8</sup>

## Qualities of Alternative Services

The findings presented above focus on the rates at which girls participated in services and the source of some of those services, but they provide limited information about the content or quality of those services. The in-depth implementation study included in this evaluation provided information about the content of PACE services and some aspects of program quality. Since control group members attended a vast array of different schools and services, their content and quality could not be assessed individually. Yet content and quality are key to interpreting impacts. To provide insight into some aspects of those services, this section presents findings from an extra survey module administered to the control group that asked about services provided by a professional source. This section also draws on phone interviews that MDRC conducted with a subset of control group girls and parents a little more than a year after study enrollment.<sup>9</sup>

### Academic Services

As Figure 2.3 shows, the survey asked girls in the control group about aspects of the schools or educational programs they attended that might be comparable to key features of PACE's program. Unsurprisingly, given the small number of all-girls education providers in Florida, few members of the control group attended an all-girls school. But close to half the girls reported that their school offered incentives or rewards for reaching academic or behavior goals. More than one-third of girls surveyed said that someone at their school had connected them to support programs outside of school when needed, and nearly three-quarters of girls surveyed said that there was someone at the school to whom they could turn for advice about personal problems.

Girls who participated in the phone interviews described a variety of educational pathways after they were assigned to the control group, with many noting that they had attended a few different schools or programs since random assignment. Most girls were at a public middle school or high school at some point, but some control group girls reported that they attended an alternative or specialized school. Girls interviewed expressed a wide variety of experiences in

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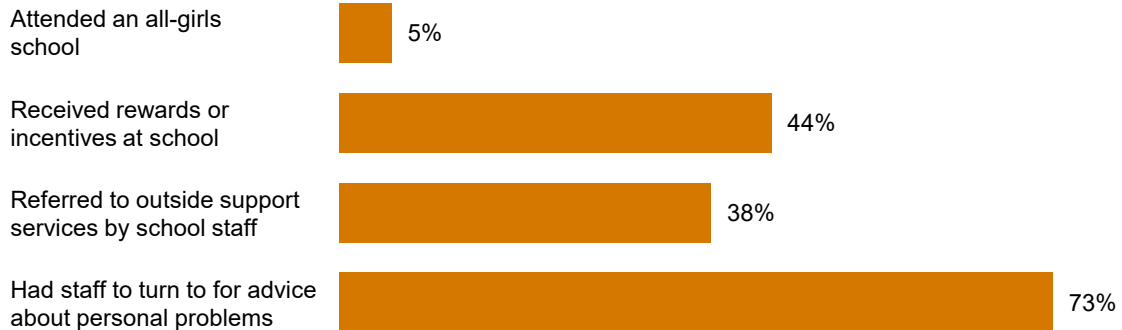
probably would not have covered counseling or therapy topics in their meetings with PACE counselors (Treskon, Millenky, and Freedman 2017).

<sup>8</sup>As reported in Treskon, Millenky, and Freedman (2017), 93.5 percent of PACE girls received academic advising, and 97 percent received counseling, which would have also included case management. All girls enrolled in PACE attend Spirited Girls!, which includes job and career planning, topics which may also be covered in counseling. Girls who stayed at PACE for more than 30 days participated in an average of about 3.7 key services, compared with 3.2 services for those who had a shorter stay.

<sup>9</sup>See Appendix D for details about how the girl and parent interviews were conducted. For the control group, 25 girls and 18 parents were interviewed. Program group girls were also interviewed and asked similar questions; their responses were included in the earlier implementation report (Treskon, Millenky, and Freedman 2017).

**Figure 2.3**

**Aspects of Academic Services Received by the Control Group**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

these schools, ranging from very positive reflections on the school’s support for them and their needs to very negative descriptions of their experience with school staff members or other students. Girls interviewed were also split on whether they felt safe at their schools, with some feeling safe and some describing fights or other unsafe situations.<sup>10</sup> Many of the control group parents interviewed had concerns about safety at their daughters’ schools. This is in contrast to program group parents, who, as reported in the implementation report, emphasized the safety of PACE as a draw of the program.<sup>11</sup>

Control group girls who were interviewed often described participating in credit-recovery or virtual-school programs at some point during the follow-up period. These included stand-alone programs offered by charter or alternative schools, as well as programs within traditional schools designed for students who were behind on credits. Girls interviewed reported mixed experiences with online learning. With self-paced learning, some girls found it challenging to stay motivated and get support when they needed it. Others found that the approach worked for them to catch up on credits.

Control group parents who were interviewed generally reported regular communications with the schools about their daughters’ progress. Communication tended to be either at structured times (monthly meetings, for example) or when there was a problem with grades or behavior, and these communications were often initiated by the school. Some parents reported that the school offered an online portal where they could monitor the child’s progress.

The control group module asked girls whether they received information about other topics that would be covered in PACE’s Spirited Girls! curriculum (in addition to the social-

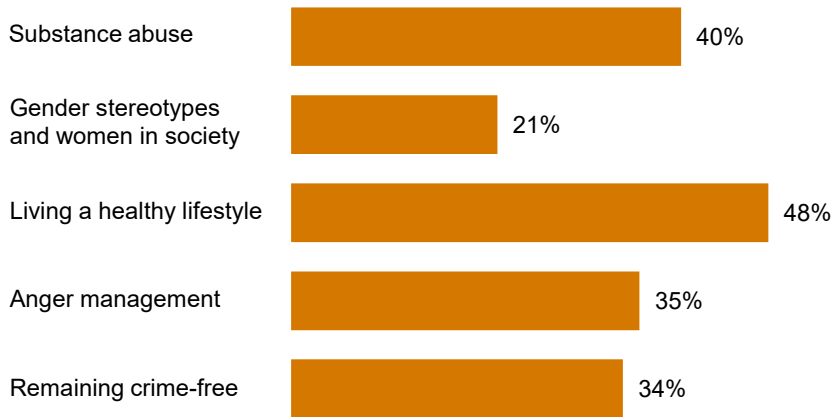
<sup>10</sup>About a quarter of control group girls surveyed reported that they felt unsafe at times at school.

<sup>11</sup>Treskon, Millenky, and Freedman (2017).

emotional and reproductive health services discussed above): healthy lifestyles, anger management, substance abuse, avoiding delinquent behavior, and women’s issues. Figure 2.4 shows that one-fifth to half of the control group girls received education in these areas. In the interviews, girls said that these topics were sometimes covered in health classes at school, but they did not seem to be a key feature of the schools the girls attended.

**Figure 2.4**

**Topics Covered in Services Received by the Control Group**

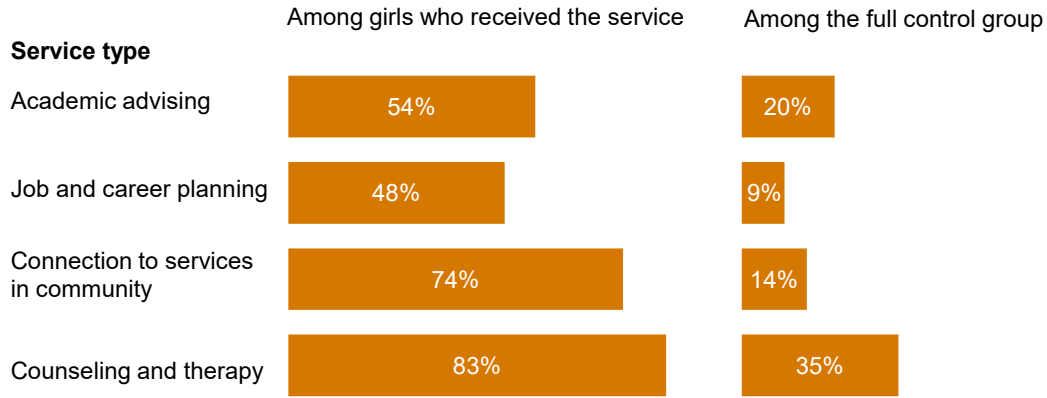


SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

**Engagement of Parents**

To be able to draw comparisons to the parental engagement component of PACE, control group girls surveyed were asked whether parents or guardians attended meetings with them at the places where they received services. Although this measure does not offer a direct comparison to the monthly parental engagement that PACE strives for, it does provide information about whether the service provider tried to engage parents. The left side of Figure 2.5 shows that for most services, the majority of girls who received a service reported that a parent or guardian attended a meeting about it. Parents were most likely to be engaged by a counselor or therapy provider and least likely to be engaged for job and career planning. The differing levels of engagement by service type make sense in the context of the specific services — counseling and case management services often have a parental consent component that serves as a lever for parental engagement. However, when the measures are viewed over the full sample, as shown on the right side, only a small portion of the sample received professional services with parental or

**Figure 2.5**  
**Parental Engagement in Control Group Services**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTE: Measures refer to services provided by a professional source, which includes someone other than a parent, guardian, other relative, or friend.

guardian involvement. In contrast, it is expected that most girls who attended PACE experienced such involvement.<sup>12</sup>

### Presence of a Supportive Adult

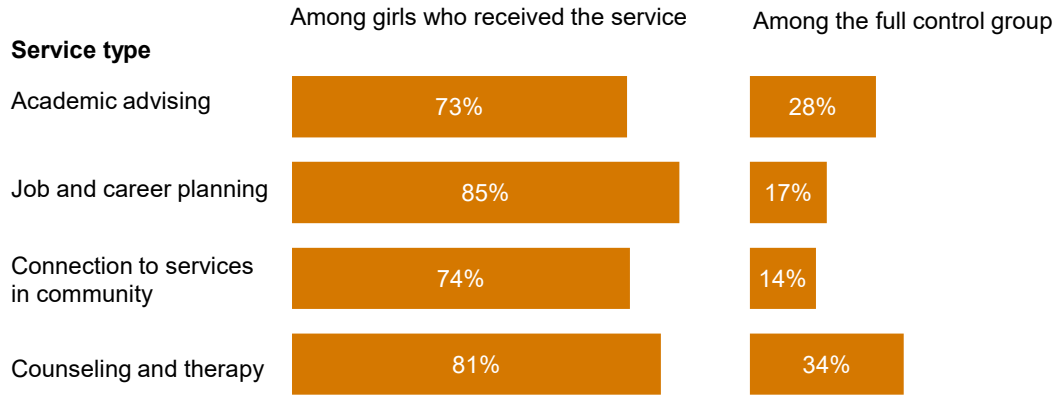
Building healthy and trusting relationships between girls and PACE staff members is a part of the PACE model, and research on youth programs has emphasized the important role of supportive adults in a young person’s life.<sup>13</sup> Nearly three-quarters of control group girls reported in the follow-up survey that they had someone at their schools they could turn to for advice about personal problems (see Figure 2.3). Additionally, the majority of girls who reported receiving the academic and social services shown in Figure 2.6 reported having an adult who cared about them at the place where they received services. This probably reflects the expected qualities of organizations that serve young people. Still, not all girls felt that they had an adult to talk with. One control group girl interviewed described her feeling about the counselors this way: “She was assigned to me because of my last name. . . . They’re there to get paid and I’m not going to waste my time on people who don’t care.” But other girls described having a caring teacher or counselor

<sup>12</sup>Treskon, Millenky, and Freedman (2017). On average, PACE staff members attempted to contact parents or guardians two and a half times per month. Not all contact attempts were successful.

<sup>13</sup>Murphey, Bandy, Schmitz, and Moore (2013).

**Figure 2.6**

**Presence of a Supportive Adult in Control Group Services**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTE: Measures refer to services provided by a professional source, which includes someone other than a parent, guardian, other relative, or friend.

that they could rely on for support, and some girls reportedly were still in contact with that person. As with parent or guardian engagement, the right side of Figure 2.6 shows that a minority of the full control group sample received services with a supportive adult available.

**Follow-Up Services**

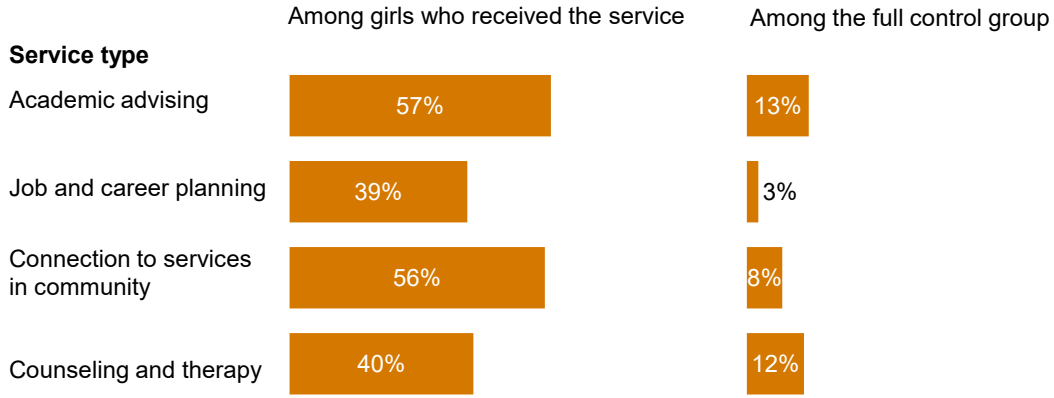
Girls who have been at PACE for longer than 30 days are eligible for follow-up services for up to a year after they leave the program. Follow-up services are a way to support girls as they make the transition to a new program by providing continuity of care and helping to identify emergent needs or additional services that the girl might need.<sup>14</sup> Many successful youth programs provide some type of follow-up services.<sup>15</sup> Control group girls were asked whether the places they received services called to check up on them after they stopped receiving services. As shown in Figure 2.7, follow-up services were reported by about 40 percent of girls who had received counseling and job and career planning services, and by more than half the girls who had received academic advising and case management (connection to services in the community). As with the

<sup>14</sup>Follow-up services were an area where implementation was more uneven across the PACE centers. Although a few centers described robust services, most did the minimum — calling girls at the required intervals and connecting girls who sought help with supportive services (Treskon, Millenky, and Freedman 2017).

<sup>15</sup>Miller et al. (2016); Fein and Hamadyk (2018); Millenky, Bloom, Muller-Ravett, and Broadus (2011).

**Figure 2.7**

**Receipt of Follow-Up Services in Control Group Services**



SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Measures refer to services provided by a professional source, which includes someone other than a parent, guardian, other relative, or friend. Measures do not include girls who were still receiving the service at the time of the survey.

other measures, the portion of girls across the control group who received both the service and follow-up services was small.

**Conclusion**

The girls in PACE received more services than the girls in the control group, but the control group did attend school, and they took part in other academic and social services to a lesser extent. Notably, however, the control group received many of these services from nonprofessional sources, such as family members. They were less likely to receive the full suite of services that PACE provides, and few of the girls received professional services that included parental engagement, the presence of a supportive adult, or follow-up attention.

The next chapter provides findings on academic and juvenile justice impacts in the 12- to 18-month period following random assignment; the findings on service contrast presented in this chapter provide a context with which to interpret those findings.



## Chapter 3

# Impacts on Girls' Outcomes

The previous chapter presented findings that girls in both groups received academic and other services in the 12-month period following their application to PACE. In the absence of PACE, the control group received many of these services from nonprofessional sources, such as a family member. Control group members were also less likely to receive the full suite of services that PACE provides and, for the most part, did not receive professional services that included parental engagement, a supportive adult, or follow-up services.

This service contrast is important for the impact findings presented in this chapter. The evaluation's key domains are academics, interpersonal relationships, risky behavior and juvenile justice involvement, and attitudes toward the future. (While the findings are presented by domains, the research design tests the effects of the holistic PACE model rather than individual components of the model.) Given the random assignment design of the study, statistically significant differences — estimated effects that would be very unlikely to occur if the program truly had no effect — that emerge between the two research groups on these outcomes can be attributed to the PACE program. The differences discussed in this chapter are statistically significant. The analysis uses an “intent-to-treat” design, which includes all girls assigned to each research group in the analysis, regardless of whether they received PACE or other services, and compares outcomes between the two groups.

The findings in this chapter provide information on the 12- to 18-month period following a girl's application to PACE and enrollment in the study. For the girls in the program group, this follow-up period includes the months a girl attended a PACE center (an average of eight for those in the study) and could also include the months spent at another school or educational program. On average, the girls are between the ages of 15 and 16 during this period, but they range in age from 12 to 18. The impacts presented in this chapter draw on administrative records data and responses from the 12-month follow-up survey. About one-third of the girls in the program group indicated at the time of the survey that they were still enrolled at a PACE center. The chapter also presents select sample member and parent perspectives related to some key outcomes, based on telephone interviews with girls and their parents.<sup>1</sup>

In sum, PACE led to some positive impacts on academic engagement, which includes measures of enrollment and attendance. No clear pattern of impacts emerged for youth development, risky behavior, or juvenile justice outcomes. As noted in Chapter 1, many youth development constructs are difficult to measure, and any impacts on formal juvenile justice involvement may take longer to occur.

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<sup>1</sup>Semistructured interviews were conducted with a smaller, nonrandom sample of girls and their parents about one year after random assignment. See Appendix D for more about the interview structure and sample.

Overall, survey findings illustrate that sample members across both groups remain hopeful about their futures one year after study enrollment. These findings suggest that girls' lives have stabilized somewhat since the crisis state or tipping point that many sample members were experiencing at the time they applied to PACE. The control group outcomes can be seen as what would have happened to girls *in the absence of PACE*: Most enrolled in school during the academic year but not over the summer, some were on track academically, few engaged in risky behavior, and the majority were focused on their futures.

## Educational Outcomes

This section presents one-year impacts on educational outcomes, including the following highlights:

- PACE increased school attendance. Girls in the program group were more likely to be enrolled for more days and have fewer absences than those in the control group.
- Because of PACE, program group girls in high school were more likely to be “on track” academically than peers in the control group.
- There were no statistically significant differences between the rates at which the program and control groups were promoted to the next grade level or the average number of credits earned.

Academic instruction in a small class setting is an important component of the PACE program model. Many girls struggled academically before enrolling in PACE and came to PACE with the goal of catching up on credits.<sup>2</sup> As shown in the logic model in Chapter 1, PACE's holistic program model is structured to keep girls engaged — attending class and completing course work — and to further school progress. Research shows that outcomes such as attendance and course completion are key indicators of high school graduation. There is some evidence that behavior, as measured by disciplinary actions and behavior marks, is also predictive of high school graduation.<sup>3</sup>

One-year impacts on educational outcomes from the Florida state-level administrative records are presented in Table 3.1. All outcomes reflect only activity that occurred within the Florida public school system. For program group girls, outcomes could reflect activity that occurred both at PACE and at another school or educational program. There are some additional limitations on how these outcomes can be presented, discussed further in Appendix F.

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<sup>2</sup>Treskon, Millenky, and Freedman (2017).

<sup>3</sup>Allensworth, Nagaoka, and Johnson (2018).

**Table 3.1**

**One-Year Impacts on Education Outcomes, from Administrative Data**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
<b><u>Academic engagement</u></b>				
Ever enrolled (%)	93.9	89.6	4.4 ***	0.010
Number of days enrolled	136.7	123.3	13.4 ***	0.002
Number of days present	119.6	109.8	9.8 **	0.013
Number of days absent	24.3	27.9	-3.6 **	0.031
Percentage of days absent	18.8	22.7	-3.9 ***	0.004
Ever enrolled in postsecondary classes (%)	2.4	1.4	1.1	0.236
Ever enrolled in summer term (%)	39.4	12.6	26.8 ***	0.000
<b><u>Academic progress</u></b>				
On track, based on composite measure (high school students) <sup>a</sup> (%)	27.6	14.2	13.4 ***	0.000
Promoted to a higher grade <sup>b</sup> (%)	68.9	65.5	3.4	0.334
Academic year (high school students)				
Total credits earned	3.8	3.7	0.1	0.696
Credits earned (as % of credits attempted)	77.5	66.9	10.6 ***	0.001
Summer (high school students)				
Total credits earned	0.3	0.0	0.2 ***	0.000
Credits earned (as % of credits attempted)	18.9	2.9	16.1 ***	0.000
<b><u>Disciplinary actions (%)</u></b>				
Ever expelled	0.5	0.6	-0.1	0.898
Ever suspended	29.6	46.4	-16.7 ***	0.000
Sample size	630	410		

SOURCE: MDRC calculations based on data from the Florida Department of Education.

NOTES: All measures refer to outcomes only in the Florida public school system.

Unless otherwise noted, measures refer to the full calendar year, which includes both the academic year and the summer term. The academic year refers to the traditional school term in Florida, which runs from about mid-August through the end of May.

Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>The composite includes the following criteria: absent less than 10 percent of days; never failed a core course; never expelled or suspended. Core classes include English language arts, math, science, or social studies.

<sup>b</sup>For those in the last year of high school, graduation substitutes for promotion.

As shown in Chapter 2, girls in the program group were more likely to be enrolled in a school or educational program than control group girls. These findings are consistent with administrative records: 94 percent of the program group and 90 percent of the control group were enrolled within the Florida public school system in the first follow-up year. Florida law requires students to be enrolled until they reach the age of 16.<sup>4</sup> Among the sample members who were not enrolled in the first follow-up year, about one-third were under the age of 16.

In contrast, at the time of study enrollment, a considerably larger portion — 27 percent — of the study sample was not currently enrolled in school. This is a clear example of how girls applied to PACE at a time of crisis and then stabilized, even in the absence of PACE.

PACE increased academic engagement by a statistically significant amount, as shown in Table 3.1. The program group was, on average, enrolled for about 13 more days than the control group and had fewer absences (19 percent of enrolled school days) than the control group (23 percent). This translates to being present in school for two full additional weeks. There was also a substantial impact on enrollment in the summer (27 percentage points), which reflects PACE’s year-round program structure. This difference in summer enrollment is probably driving the impact on number of days enrolled, a calendar year measure.<sup>5</sup> Some research suggests that being out of school during the summer results in a learning loss for students, and that this loss is larger for lower-income students compared with higher-income students who may have access to additional learning resources over the summer.<sup>6</sup>

The administrative data also provide information on academic progress, including credits earned, grade promotions, and being on track to graduate.<sup>7</sup> During the academic year, high school girls in the program group succeeded in earning a higher percentage of credits attempted than their peers in the control group — about 78 percent, compared with 67 percent for the control group, an impact of 11 percentage points — but did not appear to earn more credits overall.<sup>8</sup> PACE girls usually take fewer classes than girls at a traditional school.<sup>9</sup>

High school girls in the program group were also more likely to be on track academically in this follow-up year, as measured by a composite that defines a student as “on track” if she meets the following criteria: a high attendance rate, no expulsions or suspensions, and no core

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<sup>4</sup>Students age 16 and older who wish to stop attending school must file a formal declaration of intent to terminate school enrollment, which needs to be signed by a parent (Florida Department of Education 2018a).

<sup>5</sup>The full calendar year includes both the academic year and the summer term. The academic year refers to the traditional school term in Florida, which runs from about mid-August through the end of May.

<sup>6</sup>Quinn and Polikoff (2017).

<sup>7</sup>Data on credits and course grades were available only for high school students, which is about half of the study sample.

<sup>8</sup>As a point of reference, students in Florida need 24 credits to receive a standard diploma. A student completing high school in four years, on average, completes 6 credits per year. The credits data presented in Table 3.1 show the average credits earned for each group (3.7-3.8 credits). This includes 0 credits in the calculation for girls not enrolled, which brings down the overall average (Florida Department of Education 2016).

<sup>9</sup>All core classes and a life skills class are offered to girls at PACE. PACE does not offer the electives found at traditional schools.

course failures.<sup>10</sup> Across the full research sample, about half of the girls who were not on track did not meet at least two of these benchmarks. Most commonly, girls who were not on track had a low attendance rate. The on-track components reflect what researchers consider to be indicators of future high school graduation — attendance, behavior, and course performance — often referred to in the field as the “ABCs.”<sup>11</sup> There is no single set of thresholds across these indicators that is widely used in the field to measure the likelihood of high school graduation.

There was no significant difference between the program and control groups in grade-level promotion. However, data on this outcome were more likely to be missing for the program group than the control group. This may be due somewhat to the relay of a girl’s school records from PACE to the school district. Specifically, PACE indicates to the school district whether a girl is eligible for promotion, but it is usually up to the school district — or an intermediary — to enter all the information about credits and course work and make an ultimate determination about promotion eligibility. This last step may not always occur in a timely fashion, resulting in the missing data. The 14 centers in the study are all located in different school districts with distinct processes for these data exchanges. Given these data limitations, the promotion measure presented in this report is conservative and does not make any assumptions about promotions where the data are missing.

The third panel of Table 3.1 presents school-based disciplinary actions. As noted at the beginning of the chapter, these disciplinary actions could have occurred either at PACE or at another school, during the follow-up period. Rates of expulsion were low across the study sample (less than 1 percent). For suspensions, the control group was more likely (with an impact of approximately 17 percentage points) to have been suspended during the follow-up year than the program group. This could be due to PACE’s approach to working with girls; while PACE centers have policies governing behavior, girls are rarely suspended or expelled. Instead, a girl who does not comply with a center’s policies may be asked to take one or more “days of reflection” in or out of the PACE center. These days of reflection are usually not recorded on a girl’s record as a suspension.<sup>12</sup>

Table 3.2 presents one-year impacts on academic engagement based on responses to the 12-month follow-up survey. Overall, the impacts based on the follow-up survey align with those from administrative records, though the follow-up periods for these outcomes differ slightly (see Appendix F for more information). Suspensions are one outcome where the information reported in the two data sources did not line up. In the survey, girls in the two research groups reported similarly on whether they had been suspended in the year since study enrollment (28 percent to 30 percent). One possible explanation for the discrepancy between the control group self-reported measure and the one based on administrative records is that control group girls did not report

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<sup>10</sup>Core courses include English language arts, math, science, or social studies. High attendance is considered being absent less than 10 percent of days enrolled.

<sup>11</sup>Allensworth, Nagaoka, and Johnson (2018).

<sup>12</sup>Reporting requirements regarding suspensions and expulsions differ by school district.

**Table 3.2**

**One-Year Impacts on Academic Progress and Engagement, from Survey**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Months enrolled in a school or educational program	9.7	8.9	0.8 ***	0.003
Currently enrolled in a school or educational program (%)	82.1	79.6	2.5	0.356
Number of unexcused absences in past month	2.2	3.0	-0.8 **	0.039
Ever suspended from school (%)	30.0	27.8	2.2	0.474
Number of suspensions	0.7	0.8	-0.1	0.441
Sample size	529	341		

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

in-school suspensions in the survey, while the measure based on administrative records includes such suspensions.

## Interpersonal Relationships

This section presents impacts related to interpersonal relationships based on data from the 12-month follow-up survey. Overall, girls in the study sample — across both groups — appeared to have positive relationships and found a level of support in the home and beyond. No clear pattern of differences emerged between the program and control groups. Box 3.1 provides some sample members’ perspectives on interpersonal relationships, based on information collected in a set of separate, semistructured telephone interviews.

As discussed in Chapter 1, PACE focuses on improving girls’ interpersonal skills and encouraging healthy relationships. Attachment, or the persistent bond between parent and child, can serve as a protective factor for children and adolescents, contributing to more positive social-emotional outcomes.<sup>13</sup> In addition, parental engagement is a central component of the PACE model (and gender-responsive programming, more broadly).

<sup>13</sup>Bowlby (1983); Moretti and Peled (2004).

### Box 3.1

## Girls' Perspectives on Interpersonal Relationships

### On family members

Most girls interviewed indicated a close attachment to their mothers, though relationships had both positive and negative emotional undercurrents. One girl noted that “mothers and daughters always bump heads” while another shared the fact that she talks to her mother about “anything and everything you can think of.”

### On PACE staff members

In interviews, girls who attended PACE overwhelmingly indicated that they felt comfortable talking to PACE staff members about their problems. One girl, who was pregnant during her time at PACE, said that a PACE staff person was “there throughout my whole pregnancy. . . . She was helpful because I didn’t have anybody. My family, they didn’t very much approve of that [the pregnancy].”

### On friends

Girls in both groups tended to have a moderate number of friendships. In interviews, program group girls expressed having one or a few friends at PACE, though very few PACE girls described close relationships or a multitude of friendships at PACE or at other schools. A few girls noted that they preferred to avoid bad influences. One control group girl said, “I realized I have bigger things to worry about than petty people who are just going to show me the wrong things.” Fewer than a dozen girls in both groups indicated that they had no close friendships at all.

SOURCE: MDRC telephone interviews with study participants.

Table 3.3 indicates that, at the time of the 12-month survey, the vast majority of girls in both research groups reported living in their parents’ homes, as they did when they applied to PACE (see Figure 1.3). To assess more specific characteristics of girls’ relationships with their mothers, such as trust and feelings of alienation, the survey asked girls questions from the Inventory of Parent and Peer Attachment.<sup>14</sup> Across both research groups, responses indicated that the girls had general feelings of attachment to their mothers and felt accepted by them.<sup>15</sup>

Table 3.3 presents similar rates of girls having a supportive adult (other than a parent or guardian) in their lives since study enrollment. Supportive nonparenting adults provide adolescents the opportunity to share information they may not be comfortable telling their parents and to seek additional resources or advice that might otherwise be unavailable. These adults may fall

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<sup>14</sup>Armsden and Greenberg (2009).

<sup>15</sup>Table 3.3 presents average scores and effect sizes based on girls’ responses to these questions. The effect size indicates PACE’s effect as a proportion of the standard deviation of the outcome. This metric allows for comparisons of impacts across studies and provides some indication of the magnitude of the impact.

**Table 3.3**  
**One-Year Impacts on Youth Development,  
Social Support, and Interpersonal Relationships**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
<b><u>Social support and interpersonal relationships</u></b>				
Currently living in parent's home (%)	83.8	84.4	-0.6	0.821
Has supportive adult in her life <sup>a</sup> (%)	60.9	61.1	-0.2	0.945
Mother relationship score <sup>b</sup> (average)	3.7	3.7	0.1	0.417
Relationships with friends (%)				
Feels understood by friends	88.4	90.2	-1.9	0.394
Friends help her understand herself better	82.4	83.6	-1.2	0.643
Friends care about her feelings	92.4	94.8	-2.5	0.159
Confides in her friends	86.0	89.9	-3.9 *	0.094
Friends show her concern	92.1	93.0	-0.8	0.647
Been in a violent or abusive romantic relationship (%)	6.4	5.0	1.4	0.383
<b><u>Youth development</u></b>				
Social competence score <sup>c</sup> (average)	2.9	2.9	0.0	0.692
Reaction to problems or arguments with others (%)				
Reflects and thinks about what went wrong	79.4	79.9	-0.5	0.853
Talks to other person to straighten it out	66.6	69.0	-2.4	0.453
Sample size	529	342		

SOURCE: MDRC calculations based on responses to the PACE Evaluation 12-Month Survey.

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Other than parent or guardian.

<sup>b</sup>Score is calculated as an average of responses to a subset of items on the Mother subscale of the Inventory of Parent and Peer Attachment. The possible score range is 1 to 5. The standard error is 0.063 and the effect size is 0.057.

<sup>c</sup>Score is calculated as an average of responses to a subset of items on the Social Competence subscale of the Harter Self-Perception Profile for Adolescents. The possible score range is 1 to 4. The standard error is 0.053 and the effect size is 0.027.

in a variety of categories, some professional and some not, and these relationships are associated with such favorable outcomes as higher academic achievement, more positive attitudes about school, higher self-esteem, and a decrease in behavior problems, such as substance abuse.<sup>16</sup>

<sup>16</sup>Sterrett, Jones, McKee, and Kincaid (2011).



Among the program group, 45 percent of girls identified a staff member from PACE as a supportive adult in their lives. A professional may be better equipped to provide sound advice and have knowledge of other resources.

As shown in Table 3.3, at the time of the survey girls in both groups appeared to have solid friendships with one or more peers. Across the full sample, girls reported that their friends cared about them and they confided in their friends, though few statistically significant differences emerged between the program and control groups. Another set of questions in the survey used a scale to measure social competence at the time of the survey; that is, the ability to make friends and successfully interact with peers in social settings.<sup>17</sup> The average scores for the sample on the social competence scale are presented with the corresponding effect size. As shown, the program and control groups had similar scores on this measure of social competence.

## **Risky Behavior and Juvenile Justice**

This section presents impacts on risky sexual and delinquent behaviors, including formal involvement with the juvenile justice system in Florida. Both groups exhibited relatively low levels of risky behavior, given the higher risk at the time of enrollment. There were few statistically significant differences between the program and control groups on these self-reported measures of risky behavior or on formal juvenile justice involvement based on data from the Florida Department of Juvenile Justice.

Girls come to PACE with backgrounds and characteristics that put them at risk for future involvement in the juvenile or criminal justice systems, as discussed in Chapter 1. These characteristics include low school engagement, a history of delinquency, a history of abuse or neglect, and behavior such as drug, alcohol, and tobacco use. The PACE program model is designed to address these risk factors and reduce such behavior among girls. As shown in the logic model (Figure 1.1), on average, PACE could help lower delinquent behavior in the short term and lower involvement in the justice system in the longer term.

### **Risky Behavior**

As shown in Table 3.4, PACE had no significant impacts on binge drinking. Sample members' reports of this behavior (8 percent of the program group and 6 percent of control group) were lower than among a broader population of girls: Outside surveys report that 13 percent of girls in Florida and 17 percent of girls nationally engage in binge drinking.<sup>18</sup> Girls in the program group were more likely (by 3 percentage points) than those in the control group to report any illegal drug use over the past year.<sup>19</sup>

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<sup>17</sup>Harter (2012).

<sup>18</sup>Kann et al. (2016). The study survey measure covers the past two weeks, and Florida and national citations refer to the past 30 days.

<sup>19</sup>Girls were specifically asked about the use of cocaine, inhalants, and pills without a doctor's prescription.

**Table 3.4**  
**One-Year Impacts on Risky Behavior**

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
<b><u>Substance use and delinquency</u></b>				
Binge drank in the past two weeks <sup>a</sup>	7.7	6.2	1.5	0.415
Used illegal drugs <sup>b</sup>	10.4	7.1	3.3 *	0.093
Drinking or drug use interfered with responsibilities	9.1	6.4	2.8	0.141
Involved in any delinquent incidents in past 3 months				
Any violent incidents	22.7	25.4	-2.7	0.345
Any property incidents	40.0	49.8	-9.8 ***	0.004
<b><u>Sexual activity<sup>c</sup></u></b>				
Sexually active and did not use pregnancy protection method during last sexual encounter	8.8	8.6	0.3	0.889
Sexually active and had more than one partner	8.7	6.1	2.6	0.166
Sample size	529	342		

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Outcomes refer to the period from study enrollment to survey interview date, unless otherwise noted.

Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Binge drinking is defined as having five or more drinks within a couple of hours.

<sup>b</sup>Girls were asked about use of cocaine, inhalants (such as glue or solvents), and pills without a doctor's prescription.

<sup>c</sup>Measures refer only to voluntary sexual activity in the past three months.

In the 12-month follow-up survey, sample members were also asked about their involvement in delinquent property and violent incidents in the past three months. These findings are self-reported and do not necessarily reflect any formal involvement in the juvenile justice system, which is discussed in the next section. Some research suggests that self-reported delinquency is predictive of future juvenile justice involvement.<sup>20</sup>

Types of self-reported property delinquency in the survey included shoplifting, using someone's car without permission, stealing, breaking something on purpose, driving a car without its owner's permission, and using someone else's credit card or bank card without the person's permission or knowledge. Self-reported violent incidents referred to physical fights or using or threatening to use a weapon to get something from someone. As shown in

<sup>20</sup>Farrington et al. (2003).

Table 3.4, the program group was less likely to have reported involvement in a property incident (40 percent) than the control group (50 percent), a statistically significant impact of nearly 10 percentage points. Among those who reported a property incident, the type of incident most commonly reported was very general: “breaking something on purpose.” However, a sensitivity analysis (not shown) indicates that a statistically significant impact remains even when this type of property incident is excluded. Rates of involvement in violent incidents were much lower than for property incidents, and no statistically significant difference emerged between the two research groups.

Table 3.4 also presents outcomes on risky sexual activity. Reported rates were low overall, and no differences are seen in these outcomes across the two research groups. One year after random assignment, 9 percent of girls in the study were sexually active and did not use pregnancy prevention the last time they had a sexual encounter. Among high school girls in the study, 10 percent reported this type of risky activity (not shown). By comparison, this rate was 4 percent among high school girls in Florida and 5 percent nationally.<sup>21</sup> Additional details on sexual activity and other outcomes are included in Appendix Table G.1.

### **Juvenile Justice System Involvement**

Sample members’ involvement in the juvenile justice system was measured across several outcomes, including whether they ever incurred a charge and the type of adjudication finding after a charge was incurred. Figure 3.1 shows select juvenile justice outcomes from the Florida Department of Juvenile Justice data for the 18-month period following study enrollment. Program and control group girls incurred one or more charges at nearly identical rates (22 percent of the program group and 21 percent of the control group) during the 18-month follow-up period. Incurring a charge is comparable to an arrest in the adult criminal justice system, and being “adjudicated delinquent” is similar to a conviction.

These rates are unsurprisingly higher than the rate for the broader Florida female youth population.<sup>22</sup> This finding speaks to the target population that PACE serves and their particular set of risk factors, including prior justice system involvement for some (28 percent of the study sample). Notably, the portion of the research sample involved in the juvenile justice system in the 18 months after study enrollment is similar to the percentage of those who had ever been involved before study enrollment. Over half the sample members who incurred a charge within the 18-month follow-up period had prior juvenile justice involvement at the time of study enrollment.

Looking at the pattern of charges more closely, most girls who incurred a charge during the follow-up period did so for the first time shortly after random assignment. These findings

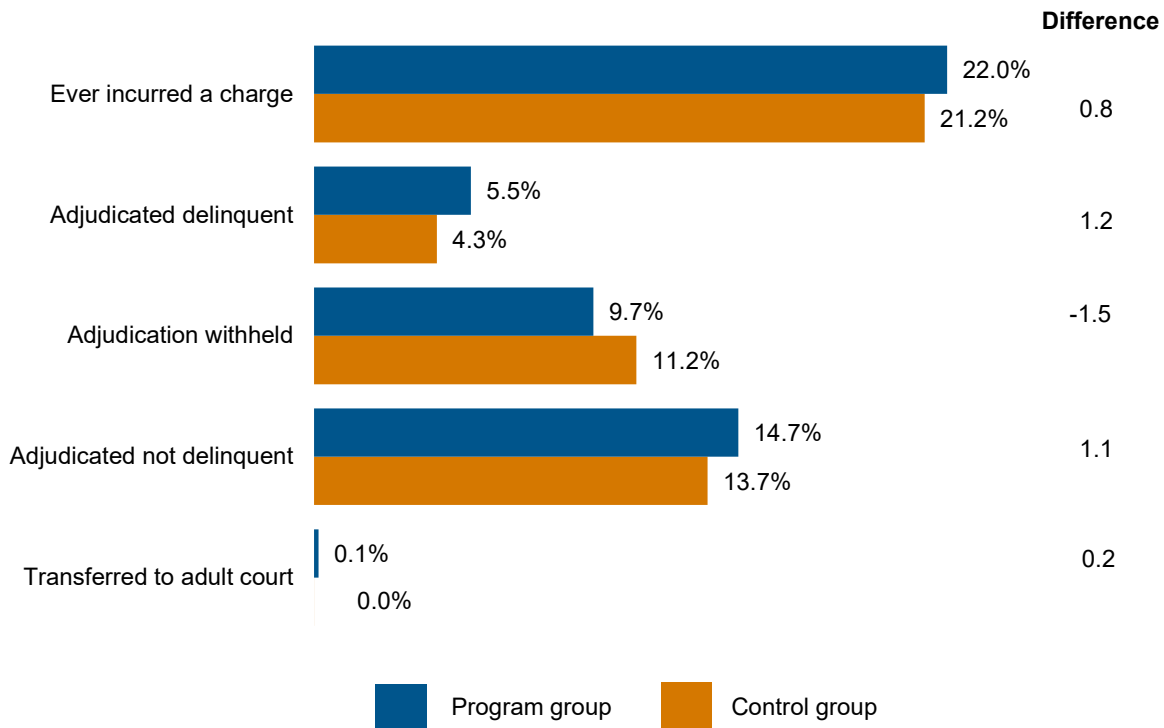
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<sup>21</sup>Kann et al. (2016). The question applied to a girl’s last sexual encounter. This information was not available for middle school girls.

<sup>22</sup>One percent of all girls in Florida were arrested in 2014 (Florida Department of Juvenile Justice 2017).

**Figure 3.1**

**Impacts on Juvenile Justice Outcomes**



SOURCE: MDRC calculations based on data provided by the Florida Department of Juvenile Justice.

NOTES: Sample size is 673 for the program group and 452 for the control group.

Results in this figure are regression-adjusted, controlling for pre-random assignment characteristics. No statistically significant differences were found between the program and control groups on any of these outcomes.

Rounding may cause slight discrepancies in sums and differences.

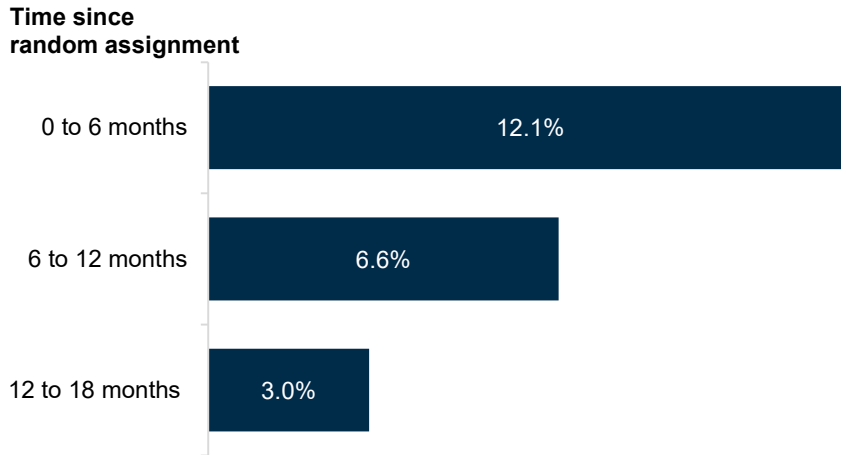
One sample member included in the adjudicated not delinquent category did not have any resolved cases.

support the idea that many girls applied to PACE in a moment of crisis, and that they stabilized shortly after. This analysis does not consider whether sample members continued to incur charges after their first charge, post-random assignment. As shown in Figure 3.2, about 12 percent of girls (across the full study sample in both research groups) incurred a charge in the first six months following study enrollment. In the 6- to 12-month period following study enrollment, the portion of girls who incurred their first charge since enrollment drops to 6 to 7 percent; in the 12- to 18-month period following study enrollment, the rate drops further (about 3 percent for both research groups).

Several other impacts on outcomes related to delinquent adjudications, charge types, and civil citations are shown in Appendix Table G.2. The rates of these outcomes were very low for both the program and control groups, and there was no pattern of statistically significant differences between groups on these outcomes.

**Figure 3.2**

**Timing of First Charge Incurred Since Random Assignment, Full Sample**



SOURCE: MDRC calculations based on data provided by the Florida Department of Juvenile Justice.

Further follow-up with the study sample might be necessary to see whether differences emerge between the two groups with respect to justice system involvement. The sample members are still relatively young and just reaching the age when criminal behavior may start to emerge.<sup>23</sup>

## Positive Outlook and Future Orientation

Through its holistic programming, PACE aims to help girls advocate for themselves and prepare for their futures. This section presents impacts on outcomes related to hope and future outlook, based on responses to the 12-month follow-up survey. Overall, girls felt positive about their futures and meeting their goals. On most measures presented in Table 3.5, girls in the two research groups look fairly similar.

The 12-month follow-up survey included a six-question scale to assess girls' agency and perceived ability to work toward goals.<sup>24</sup> The statistically significant effect on positive outlook, which amounts to an effect size of 0.20 standard deviations, indicates that PACE caused an improvement in girls' positive outlook, as measured by this scale. Positive outlook, or feelings of hope, may lead to self-esteem.<sup>25</sup> Hope can be defined through the lens of goal setting: identifying goals and believing in one's ability to take the steps to reach them.<sup>26</sup>

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<sup>23</sup>National Institute of Justice (2014).

<sup>24</sup>Snyder et al. (1997)

<sup>25</sup>Snyder et al. (1997).

<sup>26</sup>Snyder et al. (1997).

**Table 3.5**  
**One-Year Impacts on Hope and Future Orientation**

Outcome	Program Group	Control Group	Difference (Impact)	P-Value
Positive outlook score <sup>a</sup> (average)	3.4	3.3	0.1 ***	0.003
Positive coping score <sup>b</sup> (average)	3.5	3.5	0.0	0.893
<i>On track to get high school diploma or GED certificate<sup>c</sup> (%)</i>	93.4	91.1	2.3	0.207
Perception of meeting education goal (%)				
Thinks she will reach goal	64.5	64.7	-0.3	0.940
Thinks she will exceed goal	10.4	8.1	2.3	0.268
Does not think she will meet goal	25.1	27.2	-2.0	0.510
Has strong idea of career she wants to pursue (%)	64.0	62.6	1.4	0.681
Sample size	526	341		

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Score is calculated as an average of responses to six items on the Children's Hope Scale. The possible score range is 1 to 4. The standard error is 0.036 and the effect size is 0.202.

<sup>b</sup>Score is calculated as an average of responses to a subset of items from the Youth Survey in the Urban Corps Assessment Package. The possible score range is 1 to 4. The standard error is 0.042 and the effect size is 0.009.

<sup>c</sup>Measure is nonexperimental and only includes sample members who did not have a high school diploma or General Educational Development (GED) certificate at the time of survey completion.

As shown in Table 3.5, the majority of girls — more than two-thirds — in both research groups thought they would meet or exceed their education goals at the time of the survey. Similar percentages of girls reported that they had a strong idea of the career they wanted to pursue (64 percent of the program group and 63 percent of the control group). There were no statistically significant differences between the program and control groups on these outcomes. Having a clear vision of one's future self indicates an ability to set goals and undertake the planning necessary to meet them. Females tend to have stronger future orientation, higher instances of planning, and fewer fatalistic beliefs than males.<sup>27</sup>

Box 3.2 provides a more detailed look at the perspectives of sample members and parents or guardians on the girls' futures, based on information collected in semistructured telephone interviews.

<sup>27</sup>Johnson, Blum, and Cheng (2014).

### Box 3.2

#### Girls' and Parents' Perspectives on Future Goals

Interviews with girls in both the program and control groups indicated that they had a hopeful outlook about the future and reaching their goals. They were introspective about themselves and their place in the world and were focused on reaching specific steps in their education and/or careers.

- Most girls indicated a desire to attend college and were motivated to pursue a career. In particular, nursing was of interest to girls interviewed, and girls were for the most part clear-eyed about the educational requirements for that career path.
- Though girls were optimistic about their goals and the steps it would take to achieve them, they were also often realistic about their challenges. As one girl expressed it, “There are some things in life you just have to deal with; my depression and anxiety aren’t going to disappear. I have to learn to cope with it.”

Parents and guardians echoed the sentiments expressed by the girls:

- Most hoped that their daughters would go to college, similarly voicing an interest in the medical field.
- Although some parents clearly noted the obstacles that might prevent their daughters from going to college, such as lack of motivation or inadequate grades, most seemed optimistic that it would remain a possibility. One parent noted, “She’s got a lot of potential; she could do anything she wants if she uses her talents to her advantage.”

SOURCE: MDRC telephone interviews with study participants and their parents or guardians.

## Subgroups

Appendix Tables G.3 through G.6 present exploratory subgroup analyses to assess whether PACE had different impacts among subgroups of the study sample, as defined by certain baseline characteristics. Four subgroups — age, prior juvenile justice involvement, prior school discipline, and a history of being held back in school — were chosen, largely based on conversations with PACE program staff members, who suggested that these characteristics in particular may influence how girls approach or benefit from the program.<sup>28</sup> As shown in the tables, however, there are no differences between impacts on selected key outcomes for any of the subgroups.

Again, it is important to note that these were exploratory analyses, which can inform future research for this population. This evaluation did not have sufficient statistical power to detect differences between subgroups.

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<sup>28</sup>Race/ethnicity was not chosen as a subgroup because it varied significantly by site (see Appendix Figure G.1); therefore, any differences that emerged between impacts could be related to site characteristics and/or race/ethnicity.

## **Conclusion**

PACE led to improvements in academic outcomes in the first year after study enrollment. Specifically, program group girls were more likely to be present in school for more days, and high school girls in the program group were more likely to be on track, according to a composite measure. In the first year after study enrollment, girls in both research groups were hopeful about their futures, expected to meet their goals, maintained positive relationships with family members and friends, and engaged in low levels of risky behavior. These characteristics differ considerably from the crisis state experienced by many girls at the time they enrolled in the study. There were no statistically significant differences on juvenile justice outcomes; any impacts on formal juvenile justice involvement are expected to take longer to emerge.

The following chapter will discuss the cost implications of these findings.



## Chapter 4

# Analysis of PACE Costs and Net Costs

This chapter examines the costs involved in providing PACE services and compares them with the costs of services available to the control group. First, the gross costs of PACE indicate what resources are required to operate a PACE center and the cost of serving the average girl enrolled in PACE. Some of these costs (for example, for academic instruction) would be incurred even in the absence of PACE; therefore, the net cost represents the additional cost of providing PACE beyond the cost of what the control group received. The chapter then compares the cost of PACE with the cost of other youth programs. Finally, because a year is too short a time frame to expect to fully recoup the costs of an intensive program like PACE, the chapter concludes with a discussion of the impacts PACE would need to produce to be cost effective in the long term.

In sum, the average cost of serving a girl at PACE is about \$10,400 more than the cost of serving a girl through the services she would receive in the absence of PACE. The analysis finds that the cost of providing academic services at PACE is comparable to the cost of public school. The greater investment required by PACE is driven primarily by the intensive social service support the program provides, which is rare in the public schools many girls in the control group attended. The analysis found that if PACE were able to improve girls' graduation rates in the long term, the program would ultimately pay for itself.

## Estimating the Cost of PACE

PACE provides a staffing ratio and level of social services not typically found in traditional schools, which many of the girls in the study attended before they entered the study, and where many of the control group girls remained after random assignment. The more intimate and intensive nature of services like those PACE provides, which may be key factors in its positive impacts on academic engagement as presented in Chapter 3, come with higher costs. Table 4.1 presents costs for an average center. (All costs are expressed in 2017 dollars.) It costs about \$1,820,000 annually to run an average size PACE center, a sum which includes a portion of PACE headquarters costs. Based on the average length of stay of girls in the study (eight months), this translates to an average cost per girl served of about \$23,500. Appendix H provides details about how the cost analysis was conducted.

Table 4.1 further breaks down costs into functional service categories, to provide information on the relative costs of each component of PACE. Costs are attributed to the following components:

**Table 4.1****PACE Program Costs, Per Center and Per Girl**

Service Component	Annual Cost Per Center (\$)	Cost Per Girl (\$)	Percentage of Total
Outreach and recruitment	112,116	1,447	6.2
Academics	848,425	10,952	46.6
Social services	806,544	10,411	44.3
Follow-up services	53,321	688	2.9
<b>Total cost</b>	<b>1,820,406</b>	<b>23,499</b>	<b>100</b>

SOURCES: MDRC calculations based on information provided by PACE and the PACE management information system.

NOTES: Annual cost per center assumes sufficient space and staff for 51 girls to be served at one time. Cost per girl assumes an average length of stay at PACE of 7.9 months.

All unit prices have been adjusted for inflation using the rate provided by the Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator (inflation rate = 1.03). It was assumed that the 2015 prices were listed at the June 2015 rate. These prices were converted to May 2017 prices.

- Outreach and recruitment: promoting PACE in the community and screening applicants for eligibility.<sup>1</sup>
- Academics: providing the academic program, including management, instruction, academic advising and assessment, life skills classes, and books.
- Social services: management and delivery of social service programs, including case planning and counseling, individual and group therapy, parental engagement, and an incentive program. The category also includes supportive services such as transportation, lunches for girls, and PACE T-shirts.
- Follow-up services: managing and providing follow-up services to girls, primarily the transition counselor's salary.

Roughly half of PACE's spending is for social services and half for the academic program. This aligns with PACE's service model, which puts a priority on helping girls with relational, health, and other nonacademic issues along with efforts to get her back on track academically. The minimal spending on follow-up services echoes the implementation research finding that this part of the model was not a major program element at most centers.<sup>2</sup>

<sup>1</sup>During the period of study enrollment, PACE increased the staffing for this function in order to manage the increased volume of applicants and study-related paperwork. These study-related staffing costs have been excluded from the cost estimates presented here.

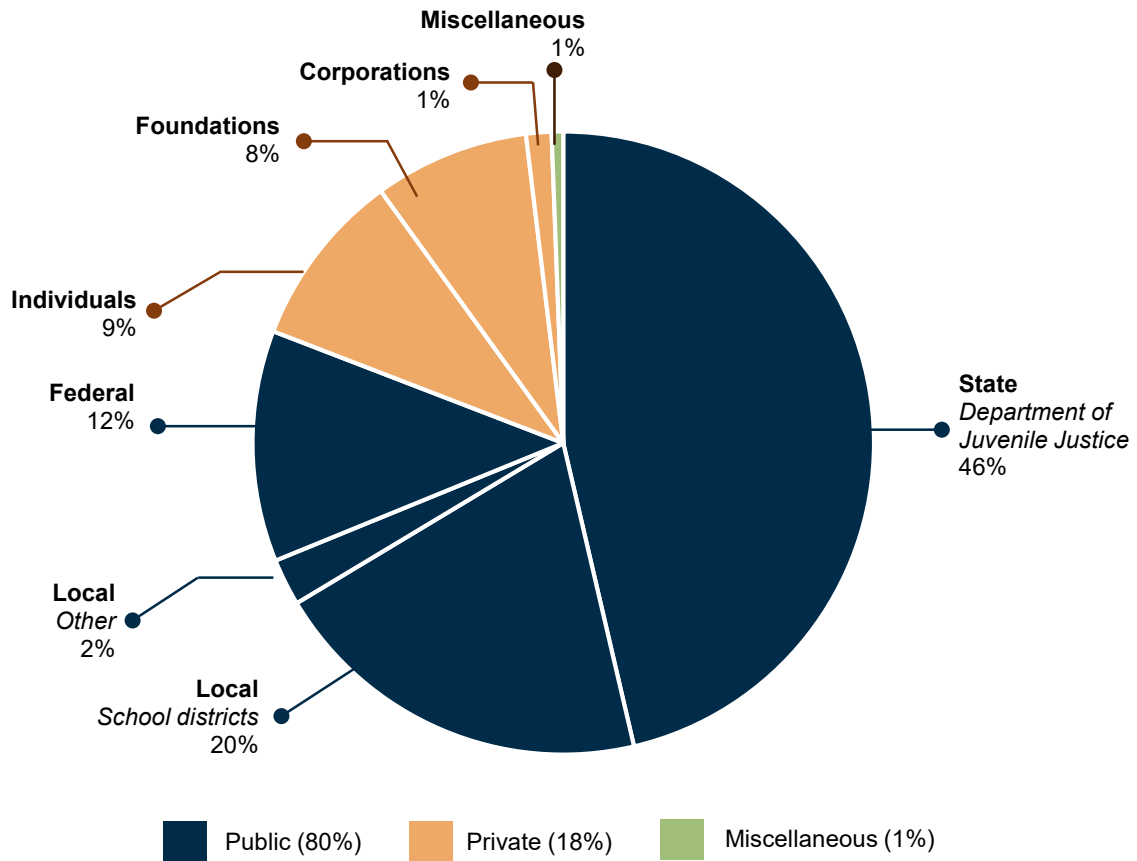
<sup>2</sup>Treskon, Millenky, and Freedman (2017).

## PACE Funding Sources

Figure 4.1 shows that most of PACE’s funding comes from public sources.<sup>3</sup> PACE’s two largest sources of funding are local school districts, which provide funding for academic services, and the Florida Department of Juvenile Justice (DJJ), which supports its social services. The school district provides nearly \$5,000 per girl, which is about half what it costs PACE to provide academic services. DJJ provides about \$11,000 per girl through a funding stream directed toward prevention services. Through local and headquarters-led fundraising efforts, the organization raises about 18 percent of its budget from private sources, including individuals, corporations, and foundations.

Figure 4.1

PACE Revenue by Category



SOURCE: MDRC calculations based on information provided by PACE.

NOTE: Percentages may not sum to 100 because of rounding.

<sup>3</sup>These calculations were done at the organization-wide level.

## Estimating the Net Costs of PACE

While the program group girls were primarily participating in PACE, the girls in the control group were using other resources available in their community. The difference between these two sets of services is what drove the impacts the study found. To determine the cost to society of these impacts,<sup>4</sup> the net cost analysis examines the difference between the cost per average program group girl and the cost per average control group girl. This is called the net cost of the program.

### Unit Costs

The starting point for the net cost analysis is the unit cost — the cost of providing a particular service to a girl. The specific services examined are those the program group and control group girls received during the 12 months following their enrollment in the study — educational services (PACE or public school) and professionally delivered social services (within PACE or in the community).

Table 4.2 presents the unit costs (cost per girl) used in the analysis for two types of services. The top panel shows the unit costs of PACE services, which come from the PACE program component costs presented in Table 4.1.<sup>5</sup> The bottom panel shows unit costs for services provided outside of PACE, which were mainly received by the control group. The largest cost in this section is for public school. This analysis assumes that girls who participated in a school other than PACE did so at a public school for a one-year period.<sup>6</sup> The costs of public school were estimated from Florida Department of Education financial data.<sup>7</sup> Since these prices are averages across all students, they probably reflect a low estimate for control group girls, since given their risk factors,

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<sup>4</sup>This analysis focuses on the societal costs of PACE and control group services. Though it is typical in cost analysis to assume participant opportunity costs (such as the price of missed wages while participating in a training program), this analysis does not assume such costs, because the study participants are mostly of school age. Nor does the analysis include opportunity costs of parents participating in PACE's parental engagement component, because meetings at PACE occur infrequently (typically two times per month), and staff members strive to hold these meetings at a place and time that is convenient for the parents.

<sup>5</sup>PACE's annual costs have been adjusted to 7.9 months to reflect the average length of stay at PACE. Though PACE girls commonly go back to public school after they leave PACE, public school costs for the remaining months of the 12-month period are not included in the program group estimates. The available data do not allow for estimates of what proportion of the remaining four months of the year the program group girls spent in public school. Transfers from PACE to public school could have happened right away, or they could have taken several months, particularly if the girl made the transition during summer break. On the high end, public school costs could add as much as \$3,160 to a program group girl's average costs if she participated in public school the entire four months she was not at PACE, or as low as \$0 if she did not participate in public school at all that year.

<sup>6</sup>Though control group members on average did not attend school year-round, yearlong costs are appropriate since many costs to the school district for a year are fixed.

<sup>7</sup>The unit costs (or costs per student) are calculated from annual expenditures per unweighted full-time equivalent (UFTE) staff member and include general, special revenue, debt service, and capital projects funds. The UFTE was averaged among the six counties that correspond to the six PACE centers selected for the cost analysis (Florida Department of Education 2015a).

**Table 4.2**  
**Unit Cost Per Service Accessed by Sample Members**

Service Component	Cost Per Girl (\$)
<b><u>PACE costs</u></b>	
Outreach and recruitment	1,447
Academics	10,952
Social services	10,411
Follow-up services	688
<b><u>Non-PACE costs</u></b>	
Academics (public school)	10,500
Counseling and therapy	2,640
Case management	815

SOURCES: MDRC calculations based on data from the Florida Department of Education, Florida Medicaid Billing Rates, and PACE.

NOTES: All unit prices have been adjusted for inflation using the rate provided by the Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator (inflation rate = 1.03). It was assumed that the 2015 prices were listed at the June 2015 rate. These prices were converted to May 2017 prices.

they are more likely to need specialized resources that may be offered by the school, such as counseling or academic support. However, the availability and intensity of social services in public schools are typically much less than what PACE offers to its participants.

Girls in both research groups reported that they participated in counseling and case management services outside of PACE or public school. The unit costs for services outside of PACE or public school were taken from Florida Medicaid billing rates for individual and family therapy and targeted case management, and the prices assume participation at the frequencies reported by girls in the survey.<sup>8</sup>

### **Adjusting Unit Costs to Reflect Participation**

Since not all sample members participated in services, applying the full unit cost to every sample member would provide an overestimate of the costs of services for that group. The unit costs are therefore adjusted to reflect actual participation rates in those services for each research group.

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<sup>8</sup>Agency for Health Care Administration (2017a, 2017b). This analysis assumes that girls who received the services outside of PACE participated in counseling for one hour, three times per month, for a year and participated in case management two times a year.

The top panel of Table 4.3 shows the participation rates used for each research group. This information is drawn from the PACE management information system, Florida Department of Education data, and PACE survey data. Since both groups in the sample went through PACE’s outreach and recruitment process before random assignment, all sample members received those services. For participation in PACE services beyond recruitment, the calculations use the percentage of program group girls who enrolled in PACE.<sup>9</sup> A small portion of the program group — about 4 percent — did not enroll in PACE and are therefore allocated public school costs and no PACE costs. Public school costs are allocated to the nearly 90 percent of the control group who were enrolled in an academic program at some point during the school year following random assignment, according to the Florida Department of Education records.<sup>10</sup>

Participation rates for services outside of PACE or public school come from self-reported data from the follow-up survey of girls. Girls were asked whether they had received counseling or therapy since random assignment, and the source and frequency of the service. They were also asked whether they received case management services, such as transportation assistance, meals, or housing. The participation rates in the table reflect only services received from a professional source. For the program group, the participation rates for counseling and therapy and case management reflect the portion of girls who reported receiving the services from a professional source other than PACE.

The bottom panel of Table 4.3 shows the adjusted costs per sample member. This is calculated by multiplying the unit cost by the participation rate for each component.

### **Calculating Net Costs**

Finally, the costs of serving the control group are subtracted from the costs of serving the program group, yielding the net cost estimates. The bottom line in Table 4.3 shows that the cost of serving a girl in the program group was about \$10,400 more than the cost of serving a girl in the control group.

Figure 4.2 illustrates the differences in the costs of the services received by the two research groups. Academic costs were similar overall (\$10,268 for the program group compared with \$9,408 for the control group); social services accounted for most of the difference in costs. The program group received nearly \$9,000 more in social services, mostly from PACE. This is not surprising given PACE’s focus on social services. When only social services outside of PACE are examined, the control group’s costs are about \$500 higher than the program group’s, mainly driven by their higher participation in counseling or therapy. Given the limited availability of

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<sup>9</sup>Participation rates for PACE are drawn from the full study sample, not just the six centers used to generate the cost estimates.

<sup>10</sup>The research team conducted a sensitivity analysis on the types of schools attended by the control group and estimated how that affected the net costs. For example, academic costs comparable to PACE were estimated for the portion of the control group that reported attending alternative schools. Differences in the net costs were small (under \$100).

**Table 4.3****Estimated Gross and Net Costs Per Sample Member**

Service Component	Program Group	Control Group	Difference (Net)
<b><u>Participation rate (%)</u></b>			
Outreach and recruitment (PACE)	100.0	100.0	0.0
Academic services (PACE)	90.3	0.0	90.3
Academic services (public school)	3.6	89.6	(86.0)
Social services (PACE)	90.3	0.0	90.3
Follow-up services (PACE)	90.3	0.0	90.3
Counseling and therapy (non-PACE)	22.0	40.9	(18.8)
Case management (non-PACE)	12.9	12.5	0.4
<b><u>Cost per sample member (\$)</u></b>			
Outreach and recruitment (PACE)	1,447	1,447	0
Academic services (PACE)	9,890	0	9,890
Academic services (public school)	378	9,408	(9,030)
Social services (PACE)	9,401	0	9,401
Follow-up services (PACE)	622	0	622
Counseling and therapy (non-PACE)	582	1,079	(497)
Case management (non-PACE)	105	102	3
<b>Total cost per sample member per year (\$)</b>	<b>22,425</b>	<b>12,037</b>	<b>10,388</b>

SOURCES: MDRC calculations based on data from the Florida Department of Education, the PACE evaluation 12-month follow-up survey, the PACE management information system, and PACE.

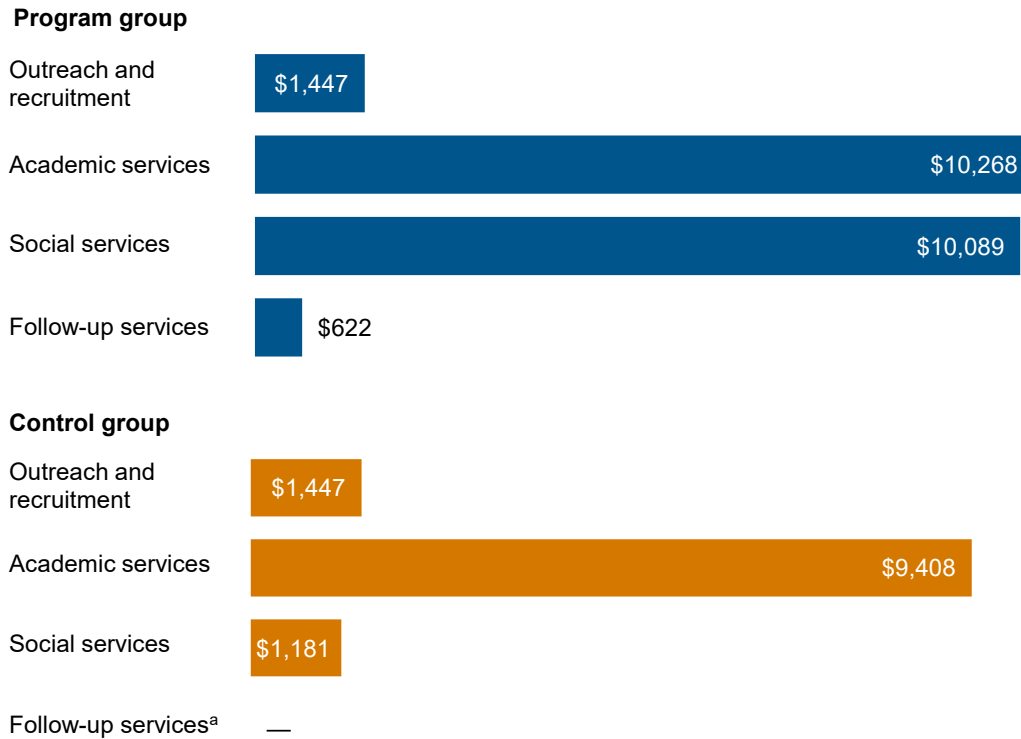
NOTES: All unit prices have been adjusted for inflation using the rate provided by the Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator (inflation rate = 1.03). It was assumed that the 2015 prices were listed at the June 2015 rate. These prices were converted to May 2017 prices.

Rounding may cause slight discrepancies in sums and differences.

counseling and therapy at public schools, it makes sense that control group members used these services in the community at higher rates, whereas the program group was able to receive them from PACE. The cost of follow-up services for the control group could not be estimated because of limited data. However, as discussed in Chapter 2, the control group received follow-up services at low rates, so these services would not be likely to have a large effect on the overall net cost estimate.

**Figure 4.2**

**Estimated Costs Per Sample Member, by Group**



SOURCES: MDRC calculations based on data from the Florida Department of Education, the PACE evaluation 12-month follow-up survey, the PACE management information system, and PACE.

NOTES: All unit prices have been adjusted for inflation using the rate provided by the Bureau of Labor Statistics Consumer Price Index (CPI) inflation calculator (inflation rate = 1.03). It was assumed that the 2015 prices were listed at the June 2015 rate. These prices were converted to prices from May 2017, the most recent date with available data. There may be rounding differences between the CPI inflation calculator output and the prices presented in this figure.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>The cost of follow-up services for the control group could not be estimated because of limited data, but the control group received these services at low rates.

## **PACE Costs Compared with the Costs of Other Programs**

In this section we compare the costs of PACE with other services available to children who are behind academically or at risk of delinquency. PACE costs more than attending regular public school, but as shown in Chapter 2, girls who attended PACE received more services than girls in the control group. Girls served by PACE were often coming from a more traditional school and looking for success in a different environment. Related to the more intense services received by girls who attended PACE, the program’s costs should be examined in the context of the positive impact this evaluation found on some measures of academic engagement.



PACE's program model is unusual, both in Florida and in the United States. There are few nonresidential programs for at-risk children that offer a similar level of social support alongside small academic classes, and there are no comparable gender-responsive programs operating in Florida. Comparing the costs of PACE with those of other alternative schools would be helpful, but there is very little information available about the costs of schools that share many of its main components. This section compares PACE with the costs of public school, residential programs, and programs for disconnected youth.

PACE's small center size contributes to its costs. The average center serves about 50 girls, which is much smaller than the traditional secondary school in Florida. The state has some of the largest high schools in the nation.<sup>11</sup> Girls and parents of girls who attended PACE said PACE's size was part of the attraction of the school. There was the perception that the girls' challenges would get more attention than they might in a large public school, and parents saw PACE as a safer environment for their children. However, PACE centers cannot take advantage of the economies of scale available to larger schools.

Therefore, the difference between PACE costs and those of a regular public school are primarily due to staffing. Compared with public schools in Florida, PACE has smaller class sizes and lower ratios of girls to social service staff. Florida has a statewide ratio of 16 students per teacher.<sup>12</sup> PACE teachers reported a ratio of 11 students per teacher.<sup>13</sup> The state of Florida does not require that schools have counselors, and according to one estimate, Florida schools have one counselor for every 485 students.<sup>14</sup> In comparison, the average-size PACE center had three counselors for 51 girls (for a ratio of one counselor for 17 girls).<sup>15</sup> When all PACE staff members, including administrative support personnel, are included in the calculations, PACE's staff-to-student ratio is considerably smaller than that of Florida's public schools. PACE centers in the study had an average of one staff person for every three girls.<sup>16</sup> Florida Department of Education reports an average of one full-time staff person for every eight students. (Its calculation includes the service staff in the calculation, while PACE's calculation does not, since custodial services are contracted out and are included in overhead costs.)<sup>17</sup>

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<sup>11</sup>Available data from 2009 indicates that the average secondary school size in Florida was around 1,700 students (Florida Department of Education 2009).

<sup>12</sup>Florida Department of Education (2015a). The ratio is calculated by dividing student membership by teachers at traditional schools. This includes elementary schools; separate estimates for middle and high schools were not available.

<sup>13</sup>Treskon, Millenky, and Freedman (2017).

<sup>14</sup>National Association for College Admission Counseling and American School Counselor Association (n.d.).

<sup>15</sup>Caseload size was reported by counselors in the PACE staff survey. School counselors and PACE counselors play different roles. Though school guidance counselors may play a role in tracking student progress and referring students to resources to support their goals, PACE counselors have a much greater focus on the social and emotional needs of girls on their caseload (Treskon, Millenky, and Freedman 2017).

<sup>16</sup>Treskon, Millenky, and Freedman (2017).

<sup>17</sup>Florida Department of Education (2015b). In addition, a small number of staff members at each PACE center work part time, so an exact comparison of PACE's staff-to-girl ratio to the Florida Department of Education's report of full-time equivalent staff is not practicable.

PACE costs less than residential programs or confinement. A Florida estimate of non-secure residential confinement for juveniles was \$47,691 per year (a comparable eight-month period would be \$31,794 compared with PACE’s \$23,701).<sup>18</sup> PACE costs are similar to those of the comprehensive programs for young people who are disconnected from school and work, such as YouthBuild and Job Corps.<sup>19</sup> All these programs have a secondary-education completion component but include other elements that contribute to their costs, such as stipends for participation, vocational training, or a residential component. PACE serves a younger population than these programs do, and, notably, all these programs are focused on high school completion or the equivalent, while PACE is focused more on academic progress. YouthBuild, the most expensive of the three, is delivered through small programs similar in size to PACE, a factor that contributes to its costs.<sup>20</sup>

### **The Potential Economic Benefits of PACE**

The net cost estimate reflects the investment society is making in girls who attend PACE above and beyond what they would have otherwise spent on the girls by serving them in a traditional public school environment. Most of these costs are concentrated in a short period of time — about eight months for the average participant — and many of the impacts presented in Chapter 3 cannot easily be translated into economic benefits in the short term. Ultimately, however, the aim of PACE is to change the long-term trajectory of its participants by getting them back on track academically and promoting prosocial behaviors.

Improving high school graduation rates has the potential to generate large economic benefits. Compared with dropouts, high school graduates have been shown to make larger economic contributions to society by having lower unemployment rates, having higher earnings, paying more taxes, and relying less on public assistance. One estimate found that female high school graduates make nearly \$300,000 more over the course of their lifetimes than those who do not complete high school.<sup>21</sup> Adjusting those earnings to net present value (since future earnings must be discounted to account for the fact that a dollar in the future is worth less today) yields an added lifetime value for a high school diploma of \$140,000.<sup>22</sup> If the sizable difference in the “on track” measure reported in Chapter 3 endures, and PACE increases high school graduation rates by at least 8 percentage points, PACE would be cost effective in the long term.<sup>23</sup>

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<sup>18</sup>Justice Policy Institute (2014).

<sup>19</sup>Estimated costs for YouthBuild are \$24,521 per participant; for JobCorps, just under \$24,500 per participant (Miller et al. 2018).

<sup>20</sup>Wiegand et al. (2015).

<sup>21</sup>Tamborini, Kim, and Sakamoto (2016).

<sup>22</sup>Tamborini, Kim, and Sakamoto (2016). Net present value is calculated based on education level at age 20 and assumes a 4 percent discount rate.

<sup>23</sup>This calculation assumes that the net increase in cost to provide services at PACE versus business as usual is \$10,388 per girl (or \$1,038,800 for 100 girls). Eight additional graduates would result in \$1,120,000 more in benefits over the course of the girls’ lifetimes.

That estimate considers only improved high school graduation rates, but such an impact would probably go hand in hand with other benefits. Girls who are successful at school are less likely to be involved in the juvenile justice system, and high school graduates are less likely to be involved in the criminal justice system as adults. Long-term impacts on these outcomes would generate additional long-term cost savings. Of course, further follow-up with the study sample would be necessary to calculate any longer-term differences in academic or other outcomes.



## Chapter 5

# PACE Today and Study Implications

### PACE Today

This evaluation — and the promising academic outcomes it presents — reflects the services provided from mid-August 2013 through 2015. PACE is a growing and evolving organization, and more centers have opened across the state since the evaluation began in 2013. PACE has a strong central office, or headquarters, to support the centers' implementation of the program services and advocate for the population it serves, and its leaders continue to assess those services as well as their implementation. Over the course of the evaluation period, PACE established a new management structure at its central office, revised its policies on girls' eligibility for the program, and revamped the life skills curriculum, among other changes undertaken.

As preliminary implementation research findings became available, the leadership team at PACE worked actively to understand and address specific findings from the implementation research. As one senior PACE staff person said recently: “The MDRC evaluation has been a catalyst for change and reflection.” For example, the study team found no standard set of recommended approaches for counselors to use in sessions with girls. As a result, PACE developed a more defined toolbox for counselors and therapists to use during sessions. Similarly, a synthesis of the classroom observation data showed room for improvement in the way teachers provided academic support in the classroom. PACE is addressing this by giving teachers more training and support on instructional methods and shifting away from independent work in the classroom. A newly developed tool allows managers to assess teachers monthly and provide coaching.

The terminology around PACE's program culture is being addressed as well. Specifically, the study team found that the program's approach was implemented uniformly, but program staff members did not necessarily recognize that they were using gender-responsive or other specific approaches to their work.<sup>1</sup> Partly to address this, PACE rolled out new in-person training sessions on the key pillars of PACE as a gender-responsive, strengths-based, and trauma-informed program. Role-specific training is also in development, to help program staff members more directly apply these elements to classrooms, counseling sessions, and other aspects of the program model.

At the start of 2019, other initiatives are under way as well. As one executive director noted, there has been an increase in support for service delivery and a move to standardize delivery across centers, while allowing for local differences. This support includes more specific tools and training for program staff members and managers to implement the program model's components. Structurally, a new layer of management was added between the centers' executive directors and PACE's headquarters. Newly appointed regional directors (who are center executive

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<sup>1</sup>Treskon, Millenky, and Freedman (2017).

directors themselves) provide more direct support and accountability for the other center executive directors. In addition, PACE is focusing on enhancing its use of the data it collects, including implementing a new management information system (MIS). One goal of the new MIS is to better integrate data on PACE’s social services and academic services to give a more holistic view of the girls they are serving. The new MIS will also focus more on outcomes, as PACE aims to make its impact on the girls it serves easier to measure.

In addition to opening new centers that offer the day program that is the focus of this evaluation, PACE has also been expanding one of its related programs, known as Reach. The program uses many of the same principles as the main PACE program but is focused on social services. Girls remain in their existing schools for academic services and receive PACE case management, counseling, and life skills class outside of school hours. These services may be offered at a PACE center or at a public school. As of September 2018, Reach operates in seven counties, with further expansion planned.

## Implications of the Study

The evaluation concludes that PACE implements its unique, theory-based model well. This finding is discussed at length in the previous report, *Helping Girls Get Back on Track*.<sup>2</sup> The model’s gender-responsive approach and combination of academic and social services is not commonly found. In the absence of access to PACE, girls in the communities where PACE operates were not able to replicate the unique “PACE experience” through other services.

Based on the random assignment study design, the evaluation also concludes that the PACE program positively affected girls in the short term, helping them to be more engaged and on track academically. Effects on other outcomes, including risky behavior and youth development, were not seen 12 to 18 months after enrollment. Further follow-up of the study sample would be necessary to see whether PACE affects longer-term academic and delinquency outcomes, among others.

Across the full study sample a year later, girls reported some notable protective factors — that is, characteristics or conditions that may moderate the risk for negative outcomes. The girls, overall, had positive relationships with friends, family, and adults outside of the family. After their application to PACE at a time of relative crisis or a tipping point in their lives, things may have steadied for these girls, and they largely remain optimistic about their future. On some measures of risky behavior, such as substance use, one year later, the study sample exhibited lower rates than those of a broader population of girls in Florida and nationally.

To be eligible for PACE, girls were required to have a parent or guardian present during the intake assessment and to show a willingness or a motivation to change things in their lives.

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<sup>2</sup>Treskon, Millenky, and Freedman (2017).

This combination may mean that girls in the study sample were particularly motivated and supported by family, and that those assigned to the control group were thus likely to find other services and support that they needed in the absence of access to PACE.

The services PACE provides for girls are more expensive than the less holistic alternatives available in their communities. However, the follow-up period of the study to date is too short to conduct a full benefit-cost analysis involving key outcomes such as high school graduation and justice system involvement. Girls ranged in age from 12 to 18 at the end of the follow-up period, and the vast majority of the study sample were four to five years from reaching high school graduation. If the positive academic outcomes presented here, such as attendance and being “on track,” lead to more girls advancing through grade levels on schedule and graduating from high school, then the program could be cost effective.

The evaluation of the PACE Center for Girls adds to the growing literature regarding programs serving girls at risk of juvenile justice involvement and other problematic outcomes. It adds richly to the discussion about the implementation of gender-responsive programming, as presented in the 2017 report and companion brief.<sup>3</sup> The evaluation found that PACE reengages girls in academics in a way that could make a lasting difference, especially if it leads to higher rates of high school graduation and enrollment in postsecondary education. Engagement in school is also a protective factor against future justice system involvement. Longer-term follow-up would be necessary to investigate such potential benefits of PACE’s program; a full benefit-cost analysis would be more appropriate at that time.

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<sup>3</sup>Treskon, Millenky, and Freedman (2017); Treskon and Bright (2017).





**Appendix A**

**Site Selection, Random Assignment,  
and the Analysis Model**



## **Site Selection**

At the end of 2018, PACE operates 20 centers across Florida. Fourteen centers were included in the evaluation. Three centers opened after the evaluation began and so were not eligible to be included; two other centers were initially slated to be in the study but were excluded due to low enrollment during the study period; and one other center, located in a rural area, was excluded because of ethical concerns about a lack of other available services in the community for the control group.

## **Random Assignment Process and Procedures**

Study enrollment was divided into two start-up phases, with eight centers starting random assignment in August 2013 and the other six in early 2014. Girls applying to PACE continued to enroll in the study through early November 2015.

The study team customized a manual for PACE staff members outlining random assignment and other research procedures. The manual detailed the research design and the steps required of program staff members at each step from outreach through enrollment. The study team visited each center to train program staff members in these procedures, including the procedures for entering data into the MDRC random assignment system. Once random assignment began, the study team was in regular communication with program staff members to answer any questions and monitor study enrollment.

PACE's standard intake and eligibility determination process was conducted before random assignment. Intake appointments completed at the PACE center were the first step in this process. An appointment included an introduction to PACE, an orientation to the evaluation, completion of study paperwork (consent forms and contact information), and a formal assessment to allow staff members to understand the girl's background and risk factors. After an intake appointment, a group of staff members at the center discussed the assessment's findings and made a final determination of eligibility.

When a girl was deemed eligible for PACE, staff members enrolled the girl in the study by entering her into MDRC's web-based random assignment system. In general, girls applying to the program were asked to take part in the study. However, some girls were not eligible for the study but were nonetheless invited to enroll in the program during the random assignment period. These included girls who had previously attended PACE, girls who had a family member already enrolled in PACE (whether in the study sample or not), and girls who were in state custody through the foster care system. It is difficult to determine exactly how many girls fell into each category, but the numbers did vary by site based on their recruitment strategies and referral partners.

At times throughout the study enrollment period, pauses in random assignment were necessary because centers had difficulty meeting their set enrollment targets. During those times, all

eligible applicants were invited to attend the program, and those girls were not considered part of the study. The timing and length of such pauses depended on each center's circumstances. All centers paused random assignment from mid-May to mid-July 2015, given anticipated low enrollment over the summer months. During this two-month pause, there were 211 new PACE enrollees across all participating sites.

Because of study eligibility criteria and random assignment pauses, the study sample ranged from about 39 percent to 70 percent of all enrollees at participating sites.

## Analysis Model

The basic estimation strategy is to compare average outcomes for the program and control groups. Regression adjustment in a linear regression model increases the power of the statistical tests.

Outcome data were processed according to standard procedures to check for outliers or other irregularities. In the administrative records from the Florida Department of Education, a very small number of records had high values for days enrolled. For these cases, the days enrolled outcome was set to missing. In these cases, the outcomes for number of days present, number of days absent, and percentage of days absent, all of which depended on days enrolled, were also set to missing.

The main impact analysis used the following model:

$$Y_{ij} = \alpha_i + \beta P_i + \delta X_i + \gamma_j + \varepsilon_{ij},$$

where  $Y_{ij}$  is the outcome of interest (such as “suspended from school” or “engaged in delinquent behavior”) for sample member  $i$  in site  $j$ ;

$P_i$  is an indicator for membership in the program group;

$X_i$  is the series of variables representing the baseline covariates for sample member  $i$ , including age, juvenile justice involvement, and race/ethnicity;

$\delta$  is the set of regression coefficients for  $X_i$ ;

$\gamma$  represents site fixed effects;

and  $\varepsilon_{ij}$  is the random error term for sample member  $i$  in site  $j$ .

There were no observations missing any of the baseline covariates in list  $X_i$ . The baseline covariates were limited to those in list  $X_i$  because rates of missing data on other baseline measures of interest differed for program group members compared with control group members.

For the impact analysis using outcome data from the Florida Department of Education,  $X_i$  includes only one baseline covariate, a categorical variable for age. These data were deidentified before they were delivered to the study team and were linked only to this single baseline characteristic.

**Appendix B**

**Survey Response Bias Analysis**



The PACE evaluation 12-month follow-up survey collected information about PACE sample members across a range of domains, including service receipt, academic progress and employment, outlook and youth development, social support and mental health, risky behavior, and satisfaction with the program. While the survey was fielded to the whole research sample, a portion of the sample did not respond. Because the survey results represent only a subset of the PACE sample, it is necessary to assess the reliability of any survey-based impacts in two ways. First, if girls who responded to the survey differ significantly from those who did not to respond to the survey, impacts may not be generalizable to the full research sample. Second, if program group members who responded to the survey differ significantly from control group members who responded to the survey, estimates of the program's effects using the survey could be biased. A third comparison is possible using administrative records. If the respondent and nonrespondent survey samples have similar impacts estimated using administrative data, it gives more credibility to the survey analysis.

This appendix presents a description of the survey fielding efforts, assesses whether the impact estimates from the survey represent the program's effects for the full study sample, and assesses the validity of the survey results for estimating program impacts. Overall, the analysis suggests that the results based on survey responses provide valid estimates of the program's effects and can be generalized to the full research sample with some caution.

## **Survey Administration and Sample Characteristics**

The survey was fielded to the full research sample of 1,125 girls; 872 sample members responded to the survey (78 percent). The program group had a slightly higher response rate (79 percent) than the control group (76 percent). Fielding took place between October 2014 and November 2016. Girls were contacted first via phone to complete the survey; if they could not be reached, a field representative of the survey firm followed up in person.

Appendix Table B.1 shows selected characteristics for survey respondents and nonrespondents, based on data collected by PACE at the time of study enrollment. Overall, there were few significant differences between the respondent sample and the nonrespondent sample. Nonrespondents are expected to be in harder-to-reach groups, such as those with greater mobility, which is illustrated in the differences that emerged. At the time of study enrollment, nonrespondents were more likely to have skipped school, to have been involved with the juvenile justice system, and to have run away from home.

These differences were also tested in a logistic regression model, in which the probability of response was regressed on the baseline characteristics shown in Appendix Table B.1. A test of joint significance indicated that when the baseline characteristics were taken as a whole, there was a statistically significant difference between respondents and nonrespondents.

The differences between the respondent and nonrespondent sample indicate that some caution should be exercised when generalizing the survey findings to the full research sample.

**Appendix Table B.1**  
**Selected Baseline Characteristics of Respondents and Nonrespondents**  
**to the 12-Month Survey**

Characteristic	Respondents	Nonrespondents	Full Sample
Age	14.7	14.7	14.7
Race/ethnicity (%)			
Black, non-Hispanic	46.4	39.9	45.0
Hispanic <sup>a</sup>	15.6	17.0	15.9
White, non-Hispanic	37.3	41.9	38.3
Other	0.7	1.2	0.8
School level at referral to PACE (%)			
Middle school <sup>b</sup>	22.7	19.8	22.0
High school	77.3	80.2	78.0
People participant lives with (%)			
Two parents	35.3	33.3	34.8
Single parent	52.3	50.2	51.8
Relative	10.2	11.9	10.6
Other <sup>c</sup>	2.3	4.5	2.8
Family income (%)			
\$28,050 or below	41.4	42.0	41.5
\$28,051-\$44,900	35.8	34.2	35.5
Above \$44,900	22.8	23.8	23.0
Family has had case with the Florida Department of Children and Families (%)	41.2	46.1	42.3
Skipped school at least 3 times in past 2 months (%)	33.0	40.9	34.8 **
Failed 1 or more classes in past 6 months (%)	76.9	75.2	76.5
Ever involved with the juvenile justice system (%)	24.4	36.8	27.2 ***
Ever sexually active (%)	43.5	46.5	44.2
Ever run away from home (%)	25.3	36.0	27.7 ***
Sample size	872	253	1,125

SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Sample members are coded as Hispanic if they answered "yes" to Hispanic ethnicity.

<sup>b</sup>This category includes sample members who were in fifth grade at the time of referral.

<sup>c</sup>"Other" includes nonrelative or foster care.



## **Comparisons Between Research Groups in the Survey Respondent Sample**

Although random assignment research designs ensure that the program and control groups are similar to each other at the time of study enrollment, there is a possibility that the selective nature of the survey response process could result in differences between the two groups of respondents. If differences emerge, then the impact estimates derived from the respondent sample may be biased.

Overall, program and control group respondents look nearly the same across baseline characteristics. Selected baseline characteristics for program and control group respondents are shown in Appendix Table B.2; there were no statistically significant baseline differences between the two groups.

These differences were also tested in a logistic model, in which the probability of research group assignment was regressed on the baseline characteristics shown in Appendix Table B.2. A test of joint significance indicated that there was no statistically significant difference overall between the baseline characteristics of the program group respondents and the control group respondents.

## **Consistency of Impacts**

While there were some differences in the baseline characteristics of respondents and nonrespondents, ultimately what is relevant is whether impact results for these two groups differ. This section compares impacts estimated from administrative records for the two groups. Impact estimates from administrative records provide the most reliable estimate of the program's effects because they include the full research sample, not a potentially nonrandom subset of survey respondents. If the respondent and nonrespondent samples have similar administrative impact estimates, the survey analysis has more credibility, as there is less chance the survey impacts are biased.

Appendix Table B.3 presents the results from this analysis, showing impacts on juvenile justice outcomes using records from the Florida Department of Juvenile Justice. (It was not possible to conduct a similar test using records from the Florida Department of Education, as these data were deidentified and could not be linked to the survey sample.) Overall, the impacts on juvenile justice outcomes are nearly identical for the respondent and nonrespondent samples. A test of joint statistical significance across all juvenile justice outcomes further confirmed that impacts for the respondent and nonrespondent samples did not differ.

## Appendix Table B.2

### Selected Baseline Characteristics of Program and Control Group Respondents to the 12-Month Survey

Characteristic	Program Group	Control Group
Age	14.6	14.8
Race/ethnicity (%)		
Black, non-Hispanic	47.4	45.0
Hispanic <sup>a</sup>	15.1	16.4
White, non-Hispanic	36.8	38.0
Other	0.8	0.6
School level at referral to PACE (%)		
Middle school <sup>b</sup>	24.2	20.5
High school	75.8	79.5
People participant lives with (%)		
Two parents	35.3	35.2
Single parent	53.5	50.3
Relative	9.5	11.3
Other <sup>c</sup>	1.7	3.1
Family income (%)		
\$28,050 or below	42.1	40.3
\$28,051-\$44,900	36.4	34.8
Above \$44,900	21.5	24.8
Family has had case with the Florida Department of Children and Families (%)	41.5	40.8
Skipped school at least 3 times in past 2 months (%)	31.4	35.7
Failed 1 or more classes in past 6 months (%)	76.0	78.3
Ever involved with the juvenile justice system (%)	25.5	22.8
Ever sexually active (%)	43.9	42.9
Ever run away from home (%)	25.5	24.9
Sample size	530	342

SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: No statistically significant differences were found between the program and control groups on any characteristics.

<sup>a</sup>Sample members are coded as Hispanic if they answered "yes" to Hispanic ethnicity.

<sup>b</sup>This category includes sample members who were in fifth grade at the time of referral.

<sup>c</sup>"Other" includes nonrelative or foster care.

### Appendix Table B.3

#### Impacts on Juvenile Justice Outcomes at 18 Months, Based on Survey Response Status

Outcome (Impact in Percentage Points)	Respondent Sample	Nonrespondent Sample
Ever incurred a charge	0.6	2.4
Adjudication type		
Adjudicated delinquent	1.4	1.9
Adjudication withheld	-2.2	-0.2
Adjudicated not delinquent <sup>a</sup>	1.5	1.9
Transferred to adult court	0.0	1.0
Offense types for delinquent adjudication		
Person/violent	-0.7	0.9
Property	1.1	-0.6
Drugs	0.2	-1.0
Public order	0.3	-1.6
Violation of probation or prior sanction	1.0	1.4
Category for delinquent adjudication		
Felony	0.5	0.2
Misdemeanor	0.7	-1.9
Other <sup>b</sup>	1.0	1.4
Disposition/sanction for delinquent adjudication		
Out-of-home placement	1.7	-0.5
Community-based (including probation)	0.3	-0.6
Other type of sanction <sup>c</sup>	0.5	1.9
Sample size	872	253

SOURCE: MDRC calculations based on data from the Florida Department of Juvenile Justice (DJJ).

NOTES: No statistically significant differences on impacts were found between the respondent and nonrespondent samples.

<sup>a</sup>One sample member included in this category did not have any resolved cases.

<sup>b</sup>"Other" is the DJJ categorization for violations of probation or prior sanction.

<sup>c</sup>Other types of sanction include judicial warning, other judicial disposition, and disposition transferred to another county.



**Appendix C**

**Supplemental Baseline Tables**



**Appendix Table C.1**  
**Characteristics at Baseline, by Research Group**

Characteristic (%)	Full Sample	Program Group	Control Group
<b>Age</b>			
11-12	8.4	8.8	8.0
13-14	32.7	34.0	30.8
15-16	49.2	47.5	51.8
17	9.6	9.7	9.5
<b>Race/ethnicity</b>			
Black, non-Hispanic	45.0	44.4	45.8
Hispanic <sup>a</sup>	15.9	15.8	16.2
White, non-Hispanic	38.3	39.1	37.2
Other	0.8	0.7	0.9
<b>School level at referral to PACE</b>			
5th-6th grade	8.8	9.7	7.3
7th-8th grade	37.2	35.4	40.1
9th-10th grade	45.2	45.9	44.3
11th-12th grade	8.8	9.1	8.3
English is second language	2.0	1.9	2.1
Has a learning disability	29.7	30.7	28.3
Attention deficit disorder	19.5	21.0	17.3
Dyslexia	1.5	1.3	1.7
Other learning disability	8.9	8.8	9.1
<b>People participant lives with</b>			
Two parents	34.8	35.1	34.5
Single parent	51.8	52.7	50.4
Relative	10.6	9.8	11.8
Other <sup>b</sup>	2.8	2.4	3.3
<b>Family income</b>			
\$28,050 or below	41.5	43.3	38.8
\$28,051-\$44,900	35.5	35.0	36.1
Above \$44,900	23.0	21.7	25.1
Family has had case with the Florida Department of Children and Families	42.3	43.1	41.1
Sample size	1,125	673	452

(continued)

### Appendix Table C.1 (continued)

SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: No statistically significant differences were found between the program and control groups on any characteristics.

<sup>a</sup>Sample members are coded as Hispanic if they answered "yes" to Hispanic ethnicity.

<sup>b</sup>"Other" includes nonrelative or foster care.



## Appendix Table C.2

### Risk Factors at Baseline, by Research Group

Characteristic (%)	Full Sample	Program Group	Control Group
<b><u>School engagement</u></b>			
Recently expelled or suspended <sup>a</sup>	39.7	39.4	40.1
Not currently enrolled in school	26.7	27.2	25.9
Skipped school at least 3 times in past 2 months	34.8	32.9	37.7
Had more than 15 absences in past 3 months	41.7	43.0	39.7
Held back at least once	51.8	51.2	52.7
Failed 1 or more classes in past 6 months	76.5	76.2	77.0
<b><u>Delinquency</u></b>			
Ever incurred a charge <sup>b</sup>	27.9	28.4	27.1
Ever charged with domestic violence	6.0	4.8	7.8 *
Ever charged with burglary	4.3	4.5	4.0
Ever charged with a drug crime	3.5	4.2	2.4 *
Ever stolen from family, home, or neighbors	16.9	17.1	16.6
Ever been on probation	12.7	12.4	13.1
Currently on probation	10.2	10.1	10.4
Has family member with criminal history <sup>c</sup>	64.2	64.0	64.3
Has friends with delinquent record or who engage in delinquent behavior	49.9	49.2	51.1

(continued)

**Appendix Table C.2 (continued)**

Characteristic (%)	Full Sample	Program Group	Control Group
<b>Health and safety</b>			
Currently using tobacco <sup>d</sup>	9.9	10.6	8.9
Currently using drugs or alcohol <sup>e</sup>	14.9	15.0	14.6
Ever sexually active	44.2	44.2	44.2
Currently pregnant	1.4	1.9	0.7 *
Ever run away from home	27.7	27.8	27.5
Ever had thoughts about harming/killing herself	39.5	38.6	40.8
Abused/neglected <sup>f</sup>	38.2	38.4	37.9
Neglected	9.0	9.4	8.4
Physically abused	15.8	14.8	17.4
Sexually abused	15.1	14.9	15.4
Emotionally abused	21.8	21.5	22.4
Sample size	1,125	673	452

SOURCE: MDRC calculations based on data from the PACE management information system.

NOTES: Certain characteristics listed here were captured in two different ways during the random assignment period, as noted below.

Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Measure was defined as being currently expelled or suspended for approximately half of the sample and defined as one or more expulsions or suspensions in most recent school term for the other half.

<sup>b</sup>In the juvenile justice system, people are not technically "arrested"; the terminology used is either "incurred a charge" or "referred."

<sup>c</sup>Refers to a criminal record (including imprisonment, probation, parole, and house arrest) for a parent, guardian, or sibling of the sample member for approximately half of the sample; for the other half, "family" includes other members of the household as well.

<sup>d</sup>Measure was defined as having used tobacco three or more times in the past 30 days for approximately half of the sample and defined as currently using tobacco for the other half.

<sup>e</sup>Measure was defined as having used drugs or alcohol three or more times in the past 30 days for approximately half of the sample and defined as current drug or alcohol use for the other half.

<sup>f</sup>Measure includes a mix of documented and suspected instances of abuse or neglect.

**Appendix D**

**Procedures for Interviews with Parents and Girls  
and Qualitative Data Analysis**



## **Interview Process**

Between July 2015 and April 2016, MDRC conducted semistructured telephone interviews with 52 girls and 40 parents of girls who enrolled in the program and control groups the prior year. The primary purpose of the phone interviews was to gain a clearer understanding of PACE services received or other resources available to girls in their communities. These interviews were structured around topics to highlight the control and program group service contrast. The parent interviews explore the extent to which parents participated in services provided to their daughters, either at PACE or elsewhere in the community. This section details the process of conducting these interviews.

### **Interview Participant Recruitment**

Participants for in-depth interviews were recruited in the course of administrating the 12-month follow-up survey that was part of the impact analysis. That survey was fielded to program and control group members in person or by phone. As study participants were usually minors, the survey firm interviewer typically spoke with the parent or guardian first to explain the purpose of the survey and to schedule a time to complete it.

During their contact with both parents and girls, interviewers from the survey firm inquired about their interest in participating in another telephone interview at a later date. The survey firm created a roster of interested girls and parents or guardians, which they sent to MDRC. MDRC then contacted the interested study participants to conduct the in-depth interviews. The parents and daughters who were interviewed did not necessarily match up.

Across both program and control groups, girls who were interviewed were 16 years old on average and primarily lived with a single parent. Ninety percent of the parents interviewed were mothers, and most were employed at the time of the interview. The parents who were interviewed tended to have other children besides the girl in the study.

### **Interview Procedures**

Girls and parents or guardians who expressed interest in participating in an interview were added to a roster on a rolling basis. The roster included relevant participant information, such as random assignment date and the best time to reach the individual. One interviewer was assigned to each participant.

Interviewers contacted the candidates by telephone. All parents on the roster were contacted, and a subset from the roster of girls. If the candidate did not answer the call, the interviewer left a voicemail. In some cases, the participant returned the call to complete the interview, but in other cases the interviewer continued trying to reach the participant by phone.

When the interviewer reached the candidate, the interviewers followed these procedures:

1. *Obtain consent.* For interviews with parents or guardians, interviewers used a consent script to obtain verbal consent from parents. Interviewers reminded the girls of their initial consent to participate in the study and obtained their consent to continue. The interviewer also asked for consent to digitally record the interview.
2. *Conduct interview.* Interviewers used a protocol to guide the conversation. The goal of the interview was to gather information about the topics that felt important to the participants; it was less important to obtain answers to every question. Interviews lasted about 30 to 45 minutes.
3. *Obtain gift card information.* At the end of the interview, the interviewer asked for information to send the participant a gift card in appreciation of his or her time.
4. *Conclude with thanks.* The interviewer thanked the participant for sharing her thoughts.

### **Protocols for Semistructured Interviews with Parents and Girls**

The semistructured interviews with program group girls focused on the girls' experiences at PACE, what happened after their transitions from PACE, and their future plans. The interviewers asked control group members about the services they received instead of PACE and their future plans.

Questions in the parent or guardian interviews were similar in their aim to gain perspective on PACE services received (or in the case of the control group parents, service contrast), the transition from PACE, and the parents' perspectives on their daughters' futures. However, the parent interviews focused more on how parents themselves had been involved in their daughters' service receipt.

### **Data Analysis**

Before the interviews, the study team developed key research questions and a plan for analysis. Upon completion of each interview, the interviewer detailed the participant's responses in a standard interview write-up form. The interview write-ups were exported into Excel workbooks, which organized responses by questions or topics covered within the interview and allowed for comparison across interviews. Exporting the data to Excel also allowed for cross-respondent comparison on questions with discrete responses, such as age of the respondent. The Excel workbooks were uploaded for further analysis in Dedoose, a secure web-based qualitative data coding program.

To understand emergent themes in the qualitative responses, the analyst examined each excerpt in Dedoose, noting key themes. Codes were developed based on the themes that surfaced. These codes were applied to the data in Dedoose so that similar qualitative data extracts could be grouped by theme. This allowed the analyst to compare and contrast the data and draw conclusions to answer the research questions. Data from girls and from parents or guardians were analyzed separately.

**Appendix E**

**Supplemental Tables for Chapter 2**





## Appendix Table E.1

### Information on Source and Frequency of Service Receipt, Among Those Who Received the Service

Outcome (%)	Program Group	Control Group	Difference (Impact)
<b><u>Academic services</u></b>			
<i>Primary source of academic advising</i>			
<i>Parent, guardian, or other relative</i>	7.7	41.2	-33.4
<i>Someone from school</i>	8.5	50.8	-42.3
<i>PACE</i>	81.4	0.9	80.4
<i>Other</i>	2.4	7.1	-4.7
<i>Frequency of academic advising sessions</i>			
<i>More than once per month</i>	39.6	33.1	6.5
<i>Once per month</i>	19.1	11.3	7.9
<i>1-3 times per year</i>	21.9	25.2	-3.3
<i>Never</i>	19.3	30.4	-11.0
<i>Primary source of help planning for a job or career</i>			
<i>Parent, guardian, or other relative</i>	18.5	58.3	-39.8
<i>Someone from school</i>	5.8	29.6	-23.8
<i>PACE</i>	69.7	0.4	69.3
<i>Other</i>	6.0	11.7	-5.7
<b><u>Social services</u></b>			
<i>Primary source of help finding services in the community</i>			
<i>Public or alternative school</i>	7.8	34.8	-27.1
<i>Department of Children and Families</i>	8.0	10.2	-2.2
<i>Juvenile probation officer, Department of Juvenile Justice,         or the court system</i>	8.1	26.9	-18.9
<i>Health or mental health provider</i>	8.3	12.1	-3.8
<i>PACE</i>	57.3	1.7	55.6
<i>Other</i>	10.6	14.3	-3.7
<i>Primary counseling or therapy provider</i>			
<i>Health or mental health center, clinic, or private practice</i>	20.3	53.0	-32.7
<i>Public, alternative, or virtual school</i>	2.8	14.9	-12.1
<i>Department of Children and Families</i>	2.4	5.8	-3.3
<i>Department of Juvenile Justice, parole office, or the court system</i>	5.1	6.2	-1.1
<i>Community organization</i>	2.7	8.7	-6.0
<i>PACE</i>	64.2	2.3	61.8
<i>Other</i>	2.5	9.2	-6.7

(continued)

**Appendix Table E.1 (continued)**

Outcome (%)	Program Group	Control Group	Difference (Impact)
<i>Frequency of counseling or therapy sessions</i>			
<i>Once per week or more</i>	38.4	22.8	15.5
<i>1-3 times per month</i>	19.6	13.4	6.2
<i>Less than once per month</i>	4.2	7.0	-2.8
<i>Never</i>	37.8	56.7	-18.9
Sample size (total = 863)	523	340	

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTE: These measures are shown in italics because the analysis includes only those who reported receiving the service. Therefore, the analysis is not experimental.

## Appendix Table E.2

### Source of Control Group Social Service Receipt

Outcome (%)	Control Group
Source of help related to sexual and reproductive health	
Parent, guardian, or other relative	36.5
Someone from school	27.5
Health or mental health care provider	24.3
Other	11.6
<hr/>	
Sample size	189
<hr/>	
Source of help related to social and emotional skills	
Parent, guardian, or other relative	39.4
Someone from school	24.9
Health or mental health care provider	17.4
Other	18.3
<hr/>	
Sample size	213

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.



**Appendix F**

**Additional Information on Processing Florida  
Department of Education Records**



## **Variations in Time Frames**

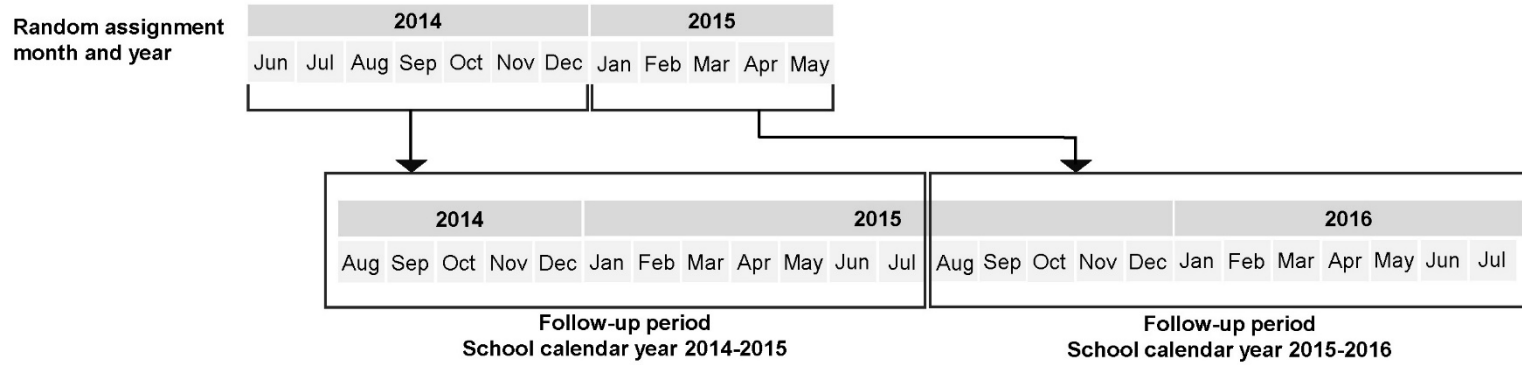
The raw administrative records provided by the Florida Department of Education for the PACE evaluation aggregated data over time for each individual in the sample; however, the time period varied for different types of data. Because of this, outcomes may be presented for the calendar year, the academic year, or the summer term. For example, the raw records provided the total number of days enrolled over a full calendar year for each sample member, without distinguishing between days enrolled during the academic year and days enrolled in the summer. But the records provided the total number of credits earned over each semester for each sample member, making it possible to distinguish between credits earned in the academic year and credits earned in the summer term.

## **Designation of Follow-Up Periods**

Data from the Florida Department of Education was available only by full semesters or full years, but sample members were randomly assigned throughout the school year and summer. Because of this, the 12-month follow-up period always aligns with the full school year, but it varies depending on when the sample members were randomly assigned. For participants randomly assigned in June through December of a given year, the follow-up period is measured from the beginning of the school year (approximately mid-August). For those assigned in January through May, the follow-up period is measured from the beginning of the following school year. Appendix Figure F.1 illustrates this for girls randomly assigned during the 2014-2015 school year.

Appendix Figure F.1

Follow-Up Period for Florida Department of Education Data,  
Based on Random Assignment Date





**Appendix G**

**Supplemental Impact Tables for Chapter 3**



## Appendix Table G.1

### Additional One-Year Impacts on Risky Behavior and Mental Health

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
<b><u>Sexual activity</u></b>				
Used pregnancy protection method during last sexual encounter <sup>a</sup>				
Not sexually active or female partners only	61.2	64.1	-2.9	0.367
Sexually active and used protection	29.9	27.3	2.6	0.394
Sexually active and did not use protection	8.8	8.6	0.3	0.889
Sexual activity in past 3 months				
Never sexually active	41.0	47.0	-6.0 *	0.061
Previously sexually active, no partners in past 3 months	16.8	14.3	2.5	0.329
Had one partner	33.6	32.7	0.9	0.780
Had more than one partner	8.7	6.1	2.6	0.166
<b><u>Substance use</u></b>				
Used marijuana since random assignment	38.2	35.1	3.1	0.348
<b><u>Mental health</u></b>				
Experienced serious psychological distress <sup>b</sup>	14.0	15.3	-1.3	0.605
Sample size	527	341		

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey.

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

<sup>a</sup>Measure includes only voluntary sexual encounters. "Not sexually active" means participant never had sex or had no partners in the past three months.

<sup>b</sup>Measure reflects distress in the previous 30 days, as assessed by the Kessler-6 scale.

## Appendix Table G.2

### Additional 18-Month Impacts on Juvenile Justice Outcomes

Outcome (%)	Program Group	Control Group	Difference (Impact)	P-Value
<b>Charge type</b>				
Person	10.0	11.4	-1.4	0.426
Property	9.8	9.5	0.3	0.884
Drugs	2.1	2.0	0.0	0.984
Public order	3.8	3.9	-0.1	0.919
Violation of probation or prior sanction	9.3	10.2	-0.9	0.583
<b><u>Delinquent adjudication and adjudication withheld</u></b>				
<b>Offense types for delinquent adjudication</b>				
Person/violent	1.3	1.8	-0.5	0.485
Property	2.2	1.6	0.6	0.445
Drugs	0.2	0.2	-0.1	0.814
Public order	0.7	0.9	-0.2	0.715
Violation of probation or prior sanction	3.5	2.7	0.8	0.425
<b>Category for delinquent adjudication</b>				
Felony	1.8	1.4	0.4	0.592
Misdemeanor	2.3	2.5	-0.1	0.890
Other <sup>a</sup>	3.5	2.7	0.8	0.425
<b>Disposition/sanction for delinquent adjudication</b>				
Out-of-home placement	2.6	1.8	0.8	0.371
Community-based (including probation)	2.8	2.7	0.1	0.905
Other type of sanction <sup>b</sup>	1.0	0.2	0.8 *	0.098
<b>Disposition/sanction for adjudication withheld</b>				
Probation	8.3	9.2	-0.9	0.578
Diversion program	0.4	1.1	-0.7	0.157
Other type of sanction <sup>c</sup>	1.5	1.6	-0.1	0.872
<b><u>Civil citations</u></b>				
Ever received a civil citation	3.7	3.8	0.0	0.967
Ever completed a civil citation	3.4	3.6	-0.2	0.836
Sample size	673	452	1,125	

(continued)

## Appendix Table G.2 (continued)

SOURCE: MDRC calculations based on data from the Florida Department of Juvenile Justice (DJJ).

NOTES: Results in this table are regression-adjusted, controlling for pre-random assignment characteristics. Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Rounding may cause slight discrepancies in sums and differences.

<sup>a</sup>"Other" is the DJJ categorization for violations of probation or prior sanction.

<sup>b</sup>Other types of sanction include judicial warning, other judicial disposition, and disposition transferred to another county.

<sup>c</sup>Other types of sanction include judicial warning, other judicial disposition, disposition transferred to another county, teen court, and community arbitration mediation.

**Appendix Table G.3**

**Impacts by Age**

Outcome	Younger (11 to 14 Years Old)				Older (15 to 17 Years Old)				Difference Between Subgroup Impacts
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
<b><u>Academic engagement</u></b>									
Number of unexcused absences in the past month	2.2	2.5	-0.3	0.589	2.1	3.3	-1.1 **	0.034	
Percentage of days absent in full calendar year	17.5	19.7	-2.2	0.260	19.7	24.8	-5.1 ***	0.006	
<b><u>Juvenile justice (%)</u></b>									
Adjudicated delinquent since random assignment	5.3	2.1	3.2 *	0.081	5.5	5.7	-0.2	0.901	
<b><u>Sexual activity (%)</u></b>									
Sexually active and did not use pregnancy protection method during last sexual encounter <sup>a</sup>	3.3	4.7	-1.4	0.511	13.1	11.4	1.6	0.585	
<b><u>Social support and interpersonal relationships</u></b>									
Has supportive adult in her life <sup>b</sup> (%)	60.3	59.1	1.2	0.824	61.5	62.2	-0.7	0.869	
Mother relationship score <sup>c</sup> (average)	3.7	3.6	0.1	0.112	3.7	3.7	0.0	0.863	
Sample size	288	175			385	277			

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey, data from the Florida Department of Juvenile Justice, and data from the Florida Department of Education.

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The H-statistic is used to assess whether the difference between subgroup impacts is statistically significant. Statistically significant differences between subgroups are indicated as follows: ††† = 1 percent, †† = 5 percent, † = 10 percent.

<sup>a</sup>Measure refers only to voluntary sexual activity in the past three months.

<sup>b</sup>Other than a parent or guardian.

<sup>c</sup>Score is calculated as an average of responses to 12 items on the Mother subscale of the Inventory of Parent and Peer Attachment. The possible score range is 1 to 5.

## Appendix Table G.4

### Impacts by Prior Juvenile Justice Involvement

Outcome	No Involvement				Prior Involvement				Difference Between Subgroup Impacts
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
<b><u>Academic engagement</u></b>									
Number of unexcused absences in past month	2.1	2.9	-0.8 *	0.063	2.5	3.0	-0.5	0.497	
<b><u>Juvenile justice and self-reported delinquent behavior (%)</u></b>									
Adjudicated delinquent	1.5	0.6	0.9	0.249	13.6	12.7	0.9	0.804	
Involved in any delinquent property incidents	39.6	48.9	-9.3 **	0.021	41.6	51.2	-9.6	0.144	
Involved in any delinquent violent incidents	20.5	23.8	-3.3	0.330	28.1	29.3	-1.2	0.839	
<b><u>Sexual activity (%)</u></b>									
Sexually active and did not use pregnancy protection method during last sexual encounter <sup>a</sup>	6.6	6.2	0.4	0.838	13.9	15.3	-1.5	0.747	
<b><u>Social support and interpersonal relationships</u></b>									
Has supportive adult in her life <sup>b</sup> (%)	59.9	56.7	3.2	0.432	63.9	72.0	-8.1	0.186	
Mother relationship score <sup>c</sup> (average)	3.7	3.7	0.0	0.567	3.8	3.7	0.1	0.395	
Sample size	459	311			214	141			

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey and data from the Florida Department of Juvenile Justice.

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

No statistically significant differences were found between subgroups on any impacts.

<sup>a</sup>Measure refers only to voluntary sexual activity in the past three months.

<sup>b</sup>Other than parent or guardian.

<sup>c</sup>Score is calculated as an average of responses to 12 items on the Mother subscale of the Inventory of Parent and Peer Attachment. The possible score range is 1 to 5.

## Appendix Table G.5

### Impacts by Suspension and Expulsion History

Outcome	Never Suspended or Expelled				Ever Suspended or Expelled				Difference Between Subgroup Impacts
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
<b>Academic engagement</b>									
Number of unexcused absences in past month	1.9	3.2	-1.3 **	0.014	2.2	2.5	-0.3	0.620	
<b>Juvenile justice (%)</b>									
Adjudicated delinquent	5.1	4.2	1.0	0.583	7.2	7.3	-0.1	0.984	
<b>Sexual activity (%)</b>									
Sexually active and did not use pregnancy protection method during last sexual encounter <sup>a</sup>	7.9	8.9	-1.0	0.712	10.3	8.7	1.6	0.658	
<b>Social support and interpersonal relationships</b>									
Has supportive adult in her life <sup>b</sup> (%)	60.8	65.0	-4.2	0.400	60.8	56.8	4.0	0.512	
Mother relationship score <sup>c</sup> (average)	3.7	3.7	0.0	0.570	3.7	3.7	0.0	0.996	
Sample size	349	217			227	145			

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey and data from the Florida Department of Juvenile Justice.

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

No statistically significant differences were found between subgroups on any impacts.

<sup>a</sup>Measure refers only to voluntary sexual activity in the past three months.

<sup>b</sup>Other than parent or guardian.

<sup>c</sup>Score is calculated as an average of responses to 12 items on the Mother subscale of the Inventory of Parent and Peer Attachment. The possible score range is 1 to 5.



**Appendix Table G.6**

**Impacts by History of Being Held Back a Grade**

Outcome	Never Held Back a Grade				Ever Held Back a Grade				Difference Between Subgroup Impacts
	Program Group	Control Group	Difference (Impact)	P-Value	Program Group	Control Group	Difference (Impact)	P-Value	
<b><u>Academic engagement</u></b>									
Number of unexcused absences in past month	2.1	2.7	-0.6	0.249	2.0	3.0	-0.9 *	0.093	
<b><u>Juvenile justice (%)</u></b>									
Adjudicated delinquent	4.7	2.6	2.1	0.211	6.0	6.6	-0.6	0.764	
<b><u>Sexual activity (%)</u></b>									
Sexually active and did not use pregnancy protection method during last sexual encounter <sup>a</sup>	6.4	8.2	-1.8	0.511	10.6	8.4	2.2	0.456	
<b><u>Social support and interpersonal relationships</u></b>									
Has supportive adult in her life <sup>b</sup> (%)	64.2	59.4	4.8	0.357	57.3	64.0	-6.7	0.170	
Mother relationship score <sup>c</sup> (average)	3.6	3.6	0.0	0.883	3.8	3.8	0.0	0.919	
Sample size	314	196			330	218			

SOURCE: MDRC calculations based on responses to the PACE evaluation 12-month follow-up survey and data from the Florida Department of Juvenile Justice.

NOTES: Statistical significance levels are indicated as follows: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

No statistically significant differences were found between subgroups on any impacts.

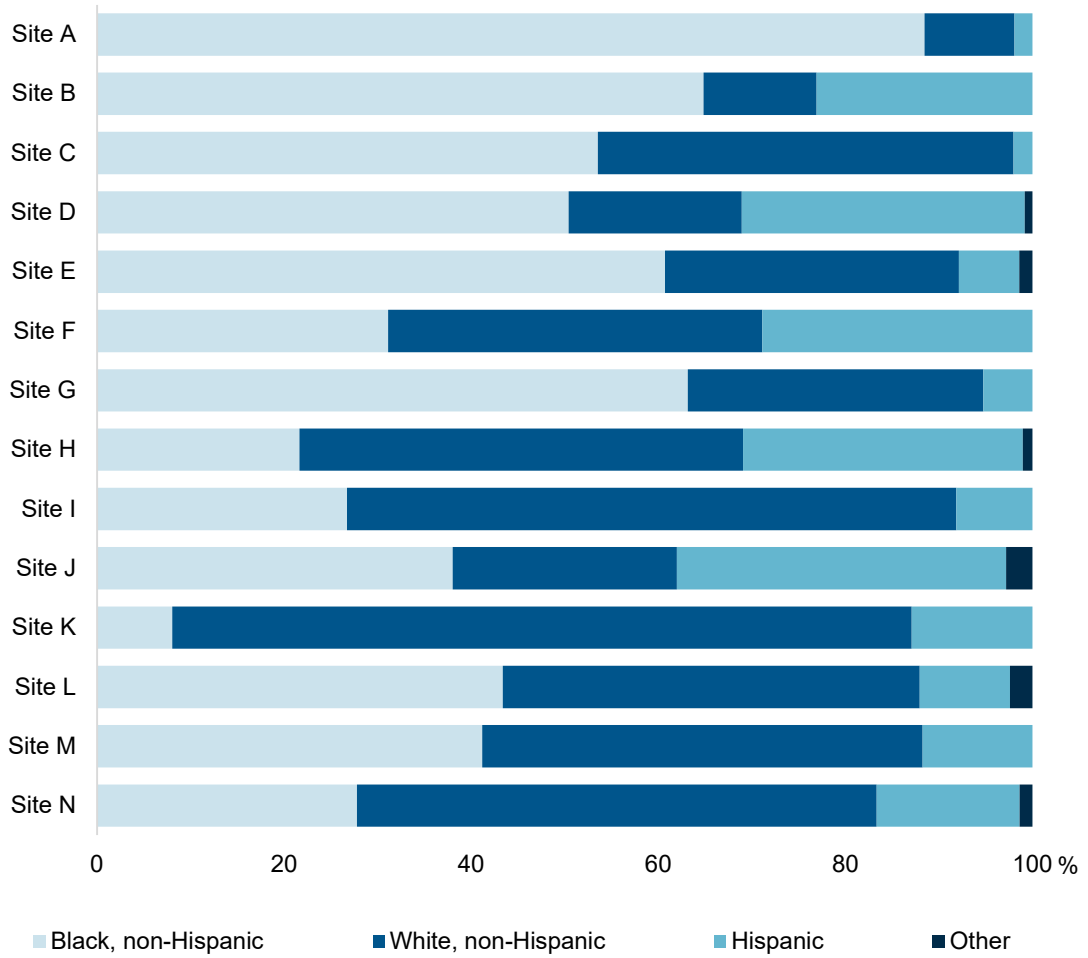
<sup>a</sup>Measure refers only to voluntary sexual activity in the past three months.

<sup>b</sup>Other than parent or guardian.

<sup>c</sup>Score is calculated as an average of responses to 12 items on the Mother subscale of the Inventory of Parent and Peer Attachment. The possible score range is 1 to 5.

### Appendix Figure G.1

**Distribution of Sample Members' Race/Ethnicity by PACE Center**



SOURCE: MDRC calculations based on data from the PACE management information system.

**Appendix H**

**Methodology for Calculating the Cost of PACE**



This appendix describes the process used to determine the costs of providing PACE services. PACE headquarters provided revenue and expenditure data for fiscal year 2015 (July 2014 to June 2015), which reflects a time period when PACE was enrolling girls in the study for the entire fiscal year. Financial data were also available at the local level for each center in the evaluation, but the research team determined that due to the circumstances of some centers, their reported expenses were not a true reflection of their total costs. For example, some centers do not pay rent for their buildings, so facilities costs were not captured in their expenses; other centers offered services beyond the day program that is the subject of the current evaluation.<sup>1</sup>

Therefore, PACE costs were determined using a combination of implementation data gathered for the study and financial information reported by PACE. The research team used a two-step process to estimate center-level costs.<sup>2</sup> First, implementation data were used to specify a comprehensive list of ingredients needed to implement the PACE model each year. The main categories of ingredients include staff and benefits, facilities, program supplies and supports (textbooks, food, student incentives, and so on), transportation, and overhead costs (including maintenance, utilities, and insurance, as well as fundraising costs). The categories of ingredients were further refined using PACE's chart of accounts, which provides descriptions for each revenue and expense category on PACE's balance sheets.

The second step was to assign annual prices to each ingredient. PACE's financial data were used to create the prices. Though the PACE model is very similar across the sites, there are differences in aspects of the locations and the centers' structures that lead to variation in the costs. As indicated above, rent is one area where center costs can vary quite a bit. The 14 centers in the study had an average annual rent of \$64,000, but actual annual rents ranged from \$0 to \$156,000. Centers also vary in size, with most centers serving around 50 girls at a time, but centers in the study ranged from 42 slots up to 82 slots in fiscal year 2015. Capacity drives considerable variation in staffing costs as well, with an average of about \$1,010,000 in staffing and benefits costs (range: \$672,000-\$2,011,000) for the 14 centers in the study. Even centers with similar planned staffing levels had variation in annual staffing costs, depending on whether the center had staff members of longer tenure, who are more expensive, or lengthy staff vacancies, which can reduce costs in the short term. Because of this variation in costs across the centers, the evaluation team elected to use the cost data from a sample of "average" centers to create the annual prices for each ingredient. The evaluation team selected six centers that reflected the average center size and standard staffing arrangement. These centers had an average size of 51 slots and 16.5 full-time-equivalent staff members.

The annual price for each ingredient was calculated by averaging financial data from the six centers for fiscal year 2015. When one of the six centers had unusual circumstances that would

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<sup>1</sup>Simply taking PACE's overall FY 2015 budget of \$29 million for the 14 centers in the study and headquarters and dividing it by the total number of slots and average length of stay yields a cost per girl of \$24,271. This number is slightly higher than our estimate, likely because it includes costs of services beyond the day program at some centers, and headquarters costs associated with running five additional PACE centers that year that were not part of the study.

<sup>2</sup>The approach taken generally follows the ingredients method described by Levin et al. (2017).

artificially lower the cost estimate, such as paying no rent or receiving materials for free, that center was excluded from the average cost calculations for that component. In those cases, the costs for the remaining centers were averaged to calculate the price. The financial data did allow the research team to account for some in-kind services in the calculations. For the most part, in-kind services consisting of donations of goods or services for PACE centers to use as part of the student incentive program or for fundraising activities were tracked on the financial statements. The contribution of volunteer hours was not included in the financial data, but the implementation data found that volunteers did not play a major role in providing program services. Interns did play a significant role in delivery of social services at many centers at the time of the researchers' site visits, but their hours were not tracked in the financial information. The annual value of a half-time graduate-level social work intern is included in the estimates.

The annual prices for overhead costs, which include occupancy, utilities, supplies, equipment, and insurance, were created from average reported expenditures across the six selected centers. The overhead costs were then allocated across the functional categories described in Chapter 4. Allocations of overhead costs by functional category were based primarily on the space required to provide each service. The academic program, which has the largest physical footprint at a PACE center, was allocated 60 percent of overhead costs, social services received 30 percent, and follow-up services and outreach and recruitment received 5 percent each. Costs related to fundraising were allocated to functional categories in the same fashion.

PACE headquarters costs are also included in the average center costs. The implementation research found that the PACE program model was uniformly implemented across sites, in large part due to the support provided by headquarters. PACE headquarters provides many services to the centers, and its costs include headquarters-based staffing costs, staff training and training-related travel, staff recruitment, information technology, human resources and payroll functions, and other insurance and legal costs. To generate a per-center headquarters cost, the total headquarters cost for fiscal year 2015 was divided by 19, the number of PACE centers operating during that time. The headquarters cost was allocated across functional categories using the same proportions as for overhead costs. Headquarters costs add about \$346,000 per center per year.

The annual operating cost per center was determined by applying a cost to each ingredient, then summing across all ingredients. This cost per center serves as the basis for the cost per girl calculation. Though the average center on which these calculations are based can serve 51 girls at a time, the centers serve more girls over the course of a year because girls stay about 7.9 months on average. The estimates presented here assume that the center was operating at full capacity during the entire year, which was true for most of the centers in the evaluation. Though centers occasionally had to suspend random assignment because they did not have excess applicants to fill the control group, most centers were at or near capacity most of the time. The cost per girl is calculated by dividing the annual center-level component cost by 51, the number of slots available at one time, and dividing that by 12 to arrive at a monthly cost per slot, then multiplying that number by 7.9 (the average number of months a girl is active in the program).

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