



## EVIDENCE REVIEW

# THE PROMISES OF SUMMER YOUTH EMPLOYMENT PROGRAMS: LESSONS FROM RANDOMIZED EVALUATIONS

This publication presents a comprehensive overview of the experimental evidence on summer youth employment programs in the United States, drawing on thirteen papers examining the programs of four major US cities.

By Yiping Li and Kalila Jackson-Spieker (J-PAL North America, MIT)

Academic contributors: Alicia Sasser Modestino (Northeastern University), Judd B. Kessler (University of Pennsylvania), Sara B. Heller (University of Michigan)

### OVERVIEW AND POLICY ISSUES

The decade between ages 14 and 24 is marked by critical transitions as youth begin to enter adulthood and make decisions about how to continue their education or enter the workforce. The opportunities and support available to young people during this time can influence their long-term trajectories into adulthood. Early employment represents one experience that is generally associated with better labor and wage outcomes in the future, potentially because it helps youth to develop soft skills, a job history, and connections to employer networks.<sup>1</sup>

Early employment is also an experience that youth and young adults from low-income households have greater difficulty accessing than higher-income peers.<sup>2</sup> Employment data has shown that the likelihood of youth and young adult unemployment typically increases as household income decreases.<sup>3</sup> The average employment rate for individuals ages 16–24 is 61 percent for those from households earning above 200 percent of the federal poverty line, but only 39 percent for those whose household income falls at or below that cutoff.<sup>4</sup> Associated barriers to entering the labor market may include fewer economic opportunities, weaker connections to the workforce, and limited knowledge of career options.<sup>5</sup>

<sup>1</sup> Kahn, Lisa B. 2010. “The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy.” *Labour Economics* 17, no. 2 (April): 303–316. doi: <https://doi.org/10.1016/j.labeco.2009.09.002>; Neumark, David. 2002.

“Youth Labor Markets in the United States: Shopping around vs. Staying Put.” *The Review of Economics and Statistics* 84, no. 3: 462–482. doi: <https://doi.org/10.1162/003465302320259475>.

<sup>2</sup> Sum, Andrew, Ishwar Khatiwada, Mykhaylo Trubskyy, Martha Ross, Walter McHugh, and Sheila Palma. 2014. “The Plummeting Labor Market Fortunes of Teens and Young Adults.” Brookings Institution. [https://www.brookings.edu/wp-content/uploads/2014/03/Youth\\_Workforce\\_Report\\_FINAL-1.pdf](https://www.brookings.edu/wp-content/uploads/2014/03/Youth_Workforce_Report_FINAL-1.pdf).

<sup>3</sup> Congressional Research Service. 2017. “Background and Federal Efforts on Summer Youth Employment.” <https://crsreports.congress.gov/product/pdf/R/R44746/5>.

<sup>4</sup> Spieck, Natalie and Nathan Sick. 2019. “The Youth Workforce: A Detailed Picture.” Urban Institute, July 2019. [https://www.urban.org/sites/default/files/publication/100688/the\\_youth\\_workforce\\_0.pdf](https://www.urban.org/sites/default/files/publication/100688/the_youth_workforce_0.pdf).

<sup>5</sup> Ross, Martha, and Richard Kazis. 2016. “Youth Summer Jobs Programs: Aligning Ends and Means.” Brookings Institution. <https://www.brookings.edu/wp-content/uploads/2016/07/Summer-Jobs-Ross-7-12-16.pdf>.



Photo: Shutterstock.com

These challenges are likely to affect a large portion of the future US workforce and their long-term economic outcomes. Between 2015 and 2019, approximately 40 percent of youth ages 14 to 24—17.4 million people—lived in families whose income was less than 200 percent of the federal poverty level.<sup>6</sup> Black and Hispanic teenagers from low-income households experience even greater challenges in the labor market due to structural barriers to opportunities faced by people of color in the American job market.<sup>7</sup>

In the past decade, federal and local policymakers have increasingly focused on using summer youth employment programs (SYEPs) to help address high unemployment rates among youth, particularly those from low-income backgrounds who face barriers to employment.<sup>8</sup> SYEPs have had appeal as a solution to youth unemployment because of their perceived ability to meet other policy goals simultaneously. Related

policy goals include providing participants with a constructive way to spend free time while out of school that deters them from riskier behavior and overall support for healthy youth development. In 2017, a survey of the 30 largest US cities by population found that 27 of them ran SYEPs.<sup>9</sup>

This review summarizes key findings from randomized evaluations of SYEPs on a diverse set of youth outcomes. It explores four municipal programs that provide qualifying youth and young adults ages 14–24, often from low-income families, with a paid, part-time job during the summer months. Participants may also receive mentorship, life skills training, or other ancillary services.<sup>10</sup> The evidence base shows that SYEPs consistently increase rates of employment and earnings during the program summer and reduce participants' involvement in the criminal justice system across multiple jurisdictions and outcome measures. The same degree of consistency and universality was not found for SYEP's impact on employment outcomes after the summer and for educational and youth development outcomes. However, detailed analyses suggest that some groups of participants may experience benefits in these areas, which can help guide policymakers' decision-making for improving outcomes for specific groups.

---

<sup>6</sup> Kids Count Data Center. 2021. "Youth and Young Adults Ages 14 to 24 Who Live in Low-Income Families by Race and Ethnicity in the United States." <https://datacenter.kidscount.org/data/tables/11181-youth-and-young-adults-ages-14-to-24-who-live-in-low-income-families-by-race-and-ethnicity?loc=1&loct=1#detailed/1/any/false/1983,1692,1691,1607,1572,1485,1376,1201,1074,880/4038,4040,4039,2638,2597,4758,1353/21554,21555>

<sup>7</sup> Spievač. 2019. "For People of Color, Employment Disparities Start Early." Urban Institute. <https://www.urban.org/urban-wire/people-color-employment-disparities-start-early>.

<sup>8</sup> Congressional Research Service 2017.

---

<sup>9</sup> Heller, Sara, and Judd B. Kessler. "How to Allocate Slots: The Market Design of Summer Youth Employment Programs." In *Fair by Design: Economic Design Approaches to Inequality*, ed. by S.D. Kominers and A. Teytelboym. Oxford University Press Oxford: Oxford University Press, forthcoming.

<sup>10</sup> Congressional Research Service 2017.

## KEY LESSONS

**SYEPs provide employment to and boost earnings for youth who may otherwise have difficulty finding a summer job.** SYEPs disproportionately serve youth from low-income households or who identify as Black or Hispanic, groups that typically face higher than average barriers to entering the labor market.

**SYEPs consistently reduce involvement in the criminal justice system for participating youth for the duration of the program and at least a year beyond.** Arrest, arraignment, conviction, and/or incarceration declined across four cities, with evidence pointing to both contemporaneous and postprogram effects.

**For the most part, SYEPs do not increase rates of formal sector employment<sup>11</sup> for the average participant after the program ends.** However, evaluations in Boston and Chicago have shown that some groups of youth may experience small benefits compared to the average participant. Emerging research suggests that adding postprogram job search resources may also improve longer-term employment outcomes.

**The evidence on the role of SYEPs in improving educational outcomes is mixed.** On average, in the studies that showed positive effects on academic outcomes, those who benefited were older youth and youth who had a higher rate of school absences before program participation.

**There is promising evidence that SYEPs have positive effects on a range of youth development outcomes** including socio-emotional skills, academic and career aspirations, and work habits associated with job readiness.

**The full picture of the effects of SYEPs on youth is complex, with different groups experiencing greater benefits in some outcomes as compared to others.** With limited resources, policymakers who wish to target SYEPs to improve outcomes in criminal justice system involvement, labor, or education for certain subgroups can use the research available to guide their decisions.

While results across the four cities examined are consistent in speaking to SYEPs' effectiveness at reducing criminal justice system involvement, **more evidence is needed to understand how the local context affects other outcomes.** Since many major cities across the United States have a summer youth employment program, researchers can partner with policymakers to use existing administrative data to expand the evidence base and advance the conversation.

---

<sup>11</sup> In this review, studies examining labor outcomes use employment and earnings tracked by either the local unemployment benefits system or the Internal Revenue Service. Therefore, "formal sector employment" is defined as jobs eligible for unemployment benefits withholding or jobs where the employers file a W-2.



## METHODOLOGY

This review shares evidence from thirteen papers examining randomized evaluations of SYEPs in four major US cities: Boston, Chicago, New York, and Philadelphia. Randomized evaluations, when properly implemented, are generally considered to be the strongest research design for quantitatively estimating the average effect of a program. Randomly sorting a population into two groups—one that receives a program and one that does not—ensures that the groups are, on average, balanced at the beginning of the study. Consequently, any differences in outcomes between the two groups can be attributed to the program. Because the reviewed studies did not all examine the same outcome measures, the number of contributing papers is listed with each set of findings. For a full list of programs and cohorts examined, see Appendix A.

Most of the results presented below focus on the effect of participating in an SYEP rather than simply being offered a job.<sup>12</sup> This means the participant is randomly selected to receive an SYEP job offer and then accepts and fills the position. The primary comparison group consists of those who were randomly selected to not receive an SYEP job offer. To accurately compare findings across studies, we worked with authors to translate their results into percentage changes based on the same comparison group; as such, some percentage changes presented in this review may vary from published results (see the footnote for more details).<sup>13</sup> The effect of accepting a job is particularly policy relevant because the number of applicants an SYEP actually employs largely determines program cost and slots for applicants who do not ultimately accept the job offer can be given to other applicants.

### CLARIFYING KEY COMPONENTS OF SYEPs

Several key components are consistent across different SYEP models. For a detailed overview of the programs specifically examined in this review, please see Appendix B.



#### Program Management and Scope

Administration for SYEPs is typically overseen at the city or local jurisdiction level, and funding comes from a mix of public and private sources.<sup>14</sup>



#### Employment and Wages

SYEPs offer placement in entry-level positions with employers in the public, nonprofit, and private sectors. The percentage of positions offered in each category varies across programs.<sup>15</sup> Before 2020, jobs were typically in person. However, due to the Covid-19 pandemic, several cities have expanded their programming to include virtual and hybrid placements.<sup>16</sup> Participating youth are typically paid the state minimum wage and work for 20–25 hours per week.<sup>17</sup> Programs usually run five to seven weeks from July to August, depending on the length of summer break of the local school district(s).<sup>18</sup>



#### Eligibility and Service Populations

The requirements for participating in an SYEP are typically centered on age and residency within its service jurisdiction. Youth and young adults ages 14–24 can be eligible, but most participants are between 16 and 19.<sup>19</sup> Typical participants are from low-income families and/or identify as Black and Hispanic, demographic groups that all face greater challenges to finding employment on average

than their higher-income or white peers.<sup>20</sup> Some SYEPs maintain universal eligibility, while others focus on specific populations, such as students attending a school with high rates of violence or “opportunity youth” who are neither attending school nor working.<sup>21</sup>



#### Additional Supports

In addition to providing job placements, most SYEP models include supplementary support services or learning components designed to amplify personal growth opportunities encountered on the job. These supports may be offered to all or to a subset of participants and commonly include one or more of the following:<sup>22</sup>

- **Work-readiness training** offered at the beginning of the summer to help youth prepare for their job placement or as an ongoing curriculum throughout the duration of the program.
- **Financial literacy workshops** to help youth manage their earned wages responsibly and open a formal bank account if they do not currently have one.
- **Socio emotional learning curricula** designed to help youth develop strategies for understanding and managing their emotions and behavior.
- **Mentorship from an adult** to foster access to positive role models and further socio-emotional development. The adult mentor can be a volunteer or program employee, or the youth’s supervisor, and receives training to fulfill the role.



### Boston Summer Youth Employment Program

The Boston Mayor's Office of Workplace Development operates a citywide SYEP designed to serve approximately 10,000 youth.<sup>23</sup> All Boston residents ages 14–24 are eligible to apply to SYEP. During the years of the studies, youth worked for up to 25 hours per week at one of about 900 local employers representing the public, private, and nonprofit sectors. Participants also received an additional twenty hours per week of work-readiness training designed to develop both practical job skills and soft skills such as conflict resolution and communication. The program was estimated to cost approximately \$2,000 per participant in 2015.



### One Summer Chicago Plus (OSC+)

OSC+ is a subset of programming under Chicago's umbrella summer jobs program One Summer Chicago, run by the Department of Family and Support Services.<sup>24</sup> During the years of the studies, OSC+ focused on serving youth attending high schools located in high-violence neighborhoods or who were involved in the criminal justice system. OSC+ grew rapidly and by 2015 was serving 2,000 youth per year. Along with paid positions, OSC+ offered supplemental services such as adult mentorship, socio-emotional learning curricula, and civic leadership training. The program was estimated to cost approximately \$3,000 per participant per summer in 2012.<sup>25</sup>



### New York City's Summer Youth Employment Program

The New York City SYEP is open to youth ages 14–24 and is managed by the city's Department of Youth and Community Development. It is the largest youth employment program in the United States, serving over 75,000 youth in 2019.<sup>26</sup> The program is estimated to cost approximately \$2,200 per participant per summer.<sup>27</sup> During the years of the studies, the New York City SYEP provided educational workshops to participants, covering topics such as job readiness, career exploration, financial literacy, and opportunities to continue their education.<sup>28</sup> A majority of participants had job placements in the nonprofit sector, with summer camps and day care centers being the most common employer types.<sup>29</sup>



### Philadelphia WorkReady

The Philadelphia Youth Network (PYN) administers WorkReady, a summer jobs program for youth ages 14–21.<sup>30</sup> PYN contracts with over fifty summer jobs providers around the City of Philadelphia to offer thousands of job opportunities each year. During the years of the study the WorkReady program offered three job models to meet the needs of different populations: service learning for youth with little or no prior work experience, structured work experience for youth with little or no prior experience, and internship for youth with some prior experience in the workplace.

<sup>12</sup> Point estimates presented in the results section are Local Average Treatment Effect (LATE) calculations. LATE effects are generated by Two-Stage Least Squares regression (2SLS).

<sup>13</sup> Four papers (Heller 2014; Davis and Heller 2020; Kessler et al. 2021; Heller 2022) report results as a percentage change using the Control Complier Mean (CCM) as the baseline comparison group, which is the estimated mean for the group of youth who were not offered a job through the SYEP lottery but would have accepted a job had they been offered one. The control group consists of youth who were not offered a job through the SYEP lottery. To ensure consistency with all other results, this review presents the percentage change with the control group mean as the baseline comparison group, therefore differing from the original publications. For a more in-depth and technical overview of compliance and how it interacts with ITT and LATE, see J-PAL's Research Resource on the topic [here](#).

<sup>14</sup> Congressional Research Service 2017.

<sup>15</sup> Ross and Kazis 2016.

<sup>16</sup> Swigert, Mike. 2021. "Summer Youth Employment Programs 2020: Lessons from the Field." The Center for Law and Social Policy and The Aspen Institute Forum for Community Solutions. <https://www.clasp.org/summer-youth-employment-programs-2020-lessons-field/>.

<sup>17</sup> Congressional Research Service 2017; Juffras, Jason, and Kathleen Patterson. 2016. "Review of Summer Youth Employment Programs in Eight Major Cities and the District of Columbia." Washington, DC: Office of the District of Columbia Auditor.

<sup>18</sup> Congressional Research Service 2017; Miles, Monique, Nancy Martin, and Mike Swigert. 2020. "Digital Summer Youth Employment Toolkit 2.0." Aspen Institute Forum for Community Solutions. <https://aspencommunitysolutions.org/wp-content/uploads/2020/12/AIFCS-Digital-Summer-Youth-Employment-Toolkit-2.0-December-2020.pdf>.

<sup>19</sup> Modestino, Alicia Sasser. 2019. "Do Summer Youth Employment Programs Work?" Econofact. <https://econofact.org/do-summer-youth-employment-programs-work>.

<sup>20</sup> Modestino 2019; Ross and Kazis 2016.

<sup>21</sup> Fein, David, and Jill Hamadyk. 2018. "Bridging the Opportunity Divide for Low-Income Youth: Implementation and Early Impacts of the Year Up Program." Pathways for Advancing Careers and Education (PACE). <https://www.yearup.org/sites/default/files/2019-03/Year-Up-PACE-Full-Report-2018.pdf>; Heller 2022.

<sup>22</sup> Congressional Research Service 2017; Heller 2014.

<sup>23</sup> Modestino and Paulsen 2019.

<sup>24</sup> Heller 2022.

<sup>25</sup> Davis and Heller 2020.

<sup>26</sup> Kessler et al. 2021; New York City Department of Youth and Community Development. N.d. "Summer Youth Employment Program (SYEP)." <https://www1.nyc.gov/site/dycd/services/jobs-internships/summer-youth-employment-program-syep.page>; Valentine et al 2017.

<sup>27</sup> Results for America. N.d. "NYC Summer Youth Employment Program." <https://catalog.results4america.org/program/nyc-summer-youth-employment-program?issueArea=119>.

<sup>28</sup> Gelber, Isen, and Kessler 2016.

<sup>29</sup> Gelber, Isen, and Kessler 2016; Valentine et al 2017.

<sup>30</sup> Heller 2022.

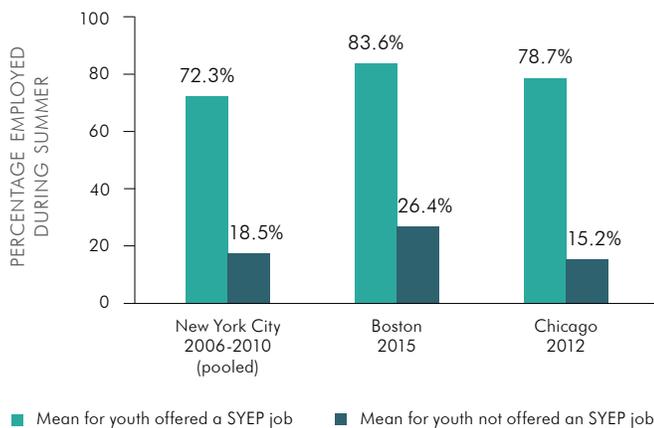
## RESULTS

### Employment and Earnings

**SYEPs have consistently been shown to provide employment and additional income to youth who would otherwise have difficulty finding a job during the program summer.**

On average across study sites measuring comparable employment metrics in Boston, Chicago, and New York City, about 72 to 84 percent of those offered a slot through an SYEP lottery obtained paid employment during the program summer, compared to only about 15 to 26 percent of those not offered a slot (see Figure 1 for city breakdown).

**FIGURE 1. SYEP INCREASED EMPLOYMENT FOR YOUTH WHO WOULD OTHERWISE HAVE DIFFICULTY LOCATING SUMMER EMPLOYMENT.**



In Chicago, SYEP participation in 2012 led to an increase of \$663 in earnings during the program summer, a 510 percent increase from a baseline mean of \$130, and participation in 2013 led to an increase of \$799, a 246 percent increase from a baseline mean of \$325.<sup>31</sup> In New York City, SYEP participation between 2005 and 2008 led to an increase of \$876 in earnings during the program summer, a 76 percent increase from a baseline mean of \$1,152.<sup>32</sup>

**There is little evidence to suggest that SYEPs improve formal sector employment outcomes beyond the summer for the average participant, but they may have positive impacts on subsets of participants.**

In New York City, program participants in the 2005 to 2008 cohorts earned about \$100 less per year for each of the three years after the program than members of the comparison group.<sup>33</sup> This may be because some members of the comparison group were able to secure permanent employment outside of the SYEP, which led to more consistent earnings.<sup>34</sup> In a nine-year follow-up to the 2006 NYC SYEP cohort, there was no impact on total employment rates or earnings.

For Chicago's 2012 and 2013 cohorts, SYEP participation did not significantly increase income within the two years following the program.<sup>35</sup> Further analysis examining participants by their demographics, school performance, and criminal history suggests that for some participants, SYEP had the potential to significantly increase the probability of obtaining formal employment after the program summer by 15 percentage points, a 44 percent increase from baseline. These participants were more likely to be slightly younger than the average participant as well as to be Hispanic and female, and they were less likely to be involved with the criminal justice system. They also tended to be more engaged in school and to live in neighborhoods with lower unemployment rates.

For Boston's 2015 SYEP cohort, the youth of legal dropout age showed a small but statistically significant increase in employment.<sup>36</sup> Across demographic groups, both employment and wages were higher for Black males aged 19 to 24 years in the academic year following the program summer relative to the control group. In the first two quarters after the program, employment rates increased by 3.1 to 7.1 percentage points, an increase of 5.9 to 14.6 percent from a baseline of 52.5 to 48.5 percent. During that time, quarterly incomes increased by \$216 to \$225, a 12 percent increase from a baseline of \$1,732 to \$1,864.

**Adding new components to SYEP may lead to improvements in labor outcomes, though more research is needed to maximize the benefits and minimize undesirable effects on education outcomes.**

In New York City, one study found that providing youth with a letter of recommendation following the summer program improved future employment outcomes.<sup>37</sup> In 2016 and 2017, a subset of participants received a recommendation letter generated from an employer survey about their performance. Youth who received a letter saw a 3.13 percentage point increase in employment the year after participation, a 4.46 percent increase from a baseline of 70.1 percent.

<sup>31</sup> Davis and Heller 2020.

<sup>32</sup> Gelber, Isen, and Kessler 2016.

<sup>33</sup> Gelber, Isen, and Kessler 2016.

<sup>34</sup> Valentine et al. 2017.

<sup>35</sup> Davis and Heller 2020.

<sup>36</sup> Mayor's Office of Workplace Development and Modestino 2017.

<sup>37</sup> Heller and Kessler 2021.

The effects persisted over the two-year follow-up period with youth who received a letter seeing a 1.95 percentage point increase in employment, a 2.3 percent increase from a baseline of 84 percent. There was no evidence of increased job-seeking behaviors relative to the comparison group, suggesting the letters affected employers' perceptions of youth. These results suggest that participation in an SYEP may have a limited impact on postprogram employment because that fact alone does not provide as much information on the youth's job skills as a letter to prospective employers.

Concurrent with the improvements in employment outcomes, researchers observed a significant decrease in on-time (four-year) graduation rates by 1.94 percentage points, a 2.38 percent decrease from a baseline of 81.5 percent among youth in grades 10 to 12 during the program summer. The effect was concentrated among students with a GPA below the median before the program summer. There was no significant difference in overall graduation rates. This suggests that the recommendation letters may delay graduation among youth who struggle to graduate on time by diverting a portion of them toward temporary formal sector employment.

*Evidence base: 5 papers (1 on Boston, 1 on Chicago, 3 on New York City)*



Photo: Shutterstock.com

## Criminal Justice System Involvement

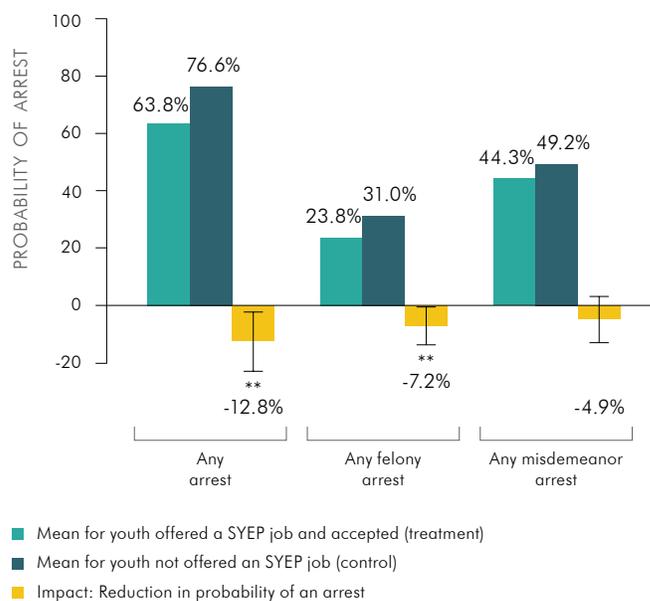
### Arrests

**SYEPs reduced arrest rates during the program summer in all evaluated sites. This reduction also persisted at least one year later in most sites.**

Participation in the New York City SYEP between 2005 and 2008 decreased the chance a youth was arrested at all by 0.128 percentage points from a baseline of 0.766 percentage points, a 17 percent decrease during the program summer.<sup>38</sup> The observed impacts were driven primarily by reductions in arrests among youth who had already been arrested at least once before the program summer. SYEP participation did not significantly reduce arrests one, three, or five years after the program summer. A full breakdown of the reduction in arrests by crime type can be seen in Figure 2.

In Philadelphia, in the year after program slots were offered to applicants, researchers found that participation in Philadelphia WorkReady reduced the number of total arrests by 3 arrests for every 100 youth, a 107 percent reduction from a baseline of 2.8 arrests per 100 youth.<sup>39</sup>

**FIGURE 2. PARTICIPATING IN NYC SYEP DECREASED THE PROBABILITY OF BEING ARRESTED AT ALL AND FOR FELONY CHARGES.**



Note: Error bars represent 95% confidence intervals. Statistically significant difference relative to the comparison group is noted at the 1% (\*\*\*) level, 5% (\*\*), or 10% (\*) level.

<sup>38</sup> Kessler et al. 2021.

<sup>39</sup> Heller 2022. Note: The reduction in arrests implies a negative number in arrests for the treatment group, or youth who were offered and accepted a SYEP job, because of uncertainty around LATE as an estimated mean. However, even with the uncertainty around the exact magnitude of the decrease, the result was still statistically significant, suggesting that participation in WorkReady leads to a nonrandom reduction in arrests.

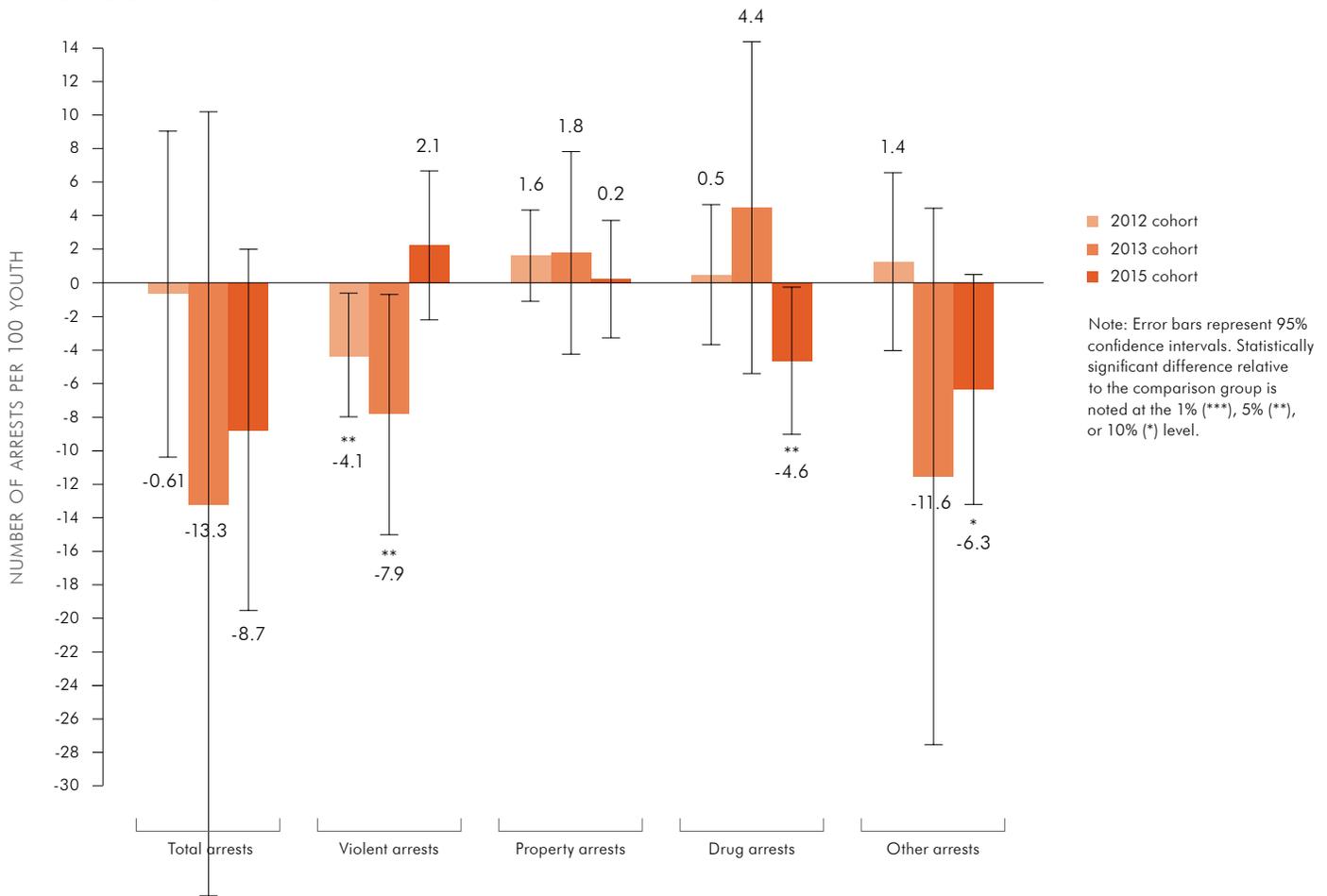
In Chicago, the rapid expansion of One Summer Chicago Plus (OSC+) from 700 slots in 2012 to 2,000 slots in 2015 provided researchers with an opportunity to understand how the program's impact might change as it scaled up. As part of the expansion, OSC+ began working with four times as many providers as it had in 2012, meaning that a key delivery component—who managed the day-to-day experiences of participating youth—changed. Across the study years, there continued to be substantial reductions in arrest rates, suggesting that the basic program structure matters more than the details of delivery for reducing criminal justice system contact.

OSC+ participation in 2012 reduced the number of violent crime arrests by 4.13 arrests per 100 youth, a 55.74 percent reduction from a baseline rate of 7.41 arrests per 100 youth in the first year after the program summer.<sup>40</sup> In 2013, participation reduced the number of violent crime arrests by 7.9 arrests per 100 youth, a 73.08 percent reduction from a baseline of 10.81 arrests per 100 youth in the year after

the program summer. In 2015, there was not a significant reduction in arrests for violent crime.<sup>41</sup> This may be due to the 2015 cohort experiencing a lower average number of violent crime arrests at baseline across the treatment and control groups. However, participation significantly reduced the number of drug arrests by 4.6 per 100 youth, a 135 percent decrease from a baseline of 3.4 per 100 youth. It also reduced the number of all other<sup>42</sup> arrests by 6.3 per 100 youth, a 75 percent decrease from a baseline of 8.4 per 100 youth. A full breakdown comparing arrests by crime type across the three studies can be found in Figure 3. There are also signs of continued decline in the years after program participation. For instance, in the third year after program participation for the 2015 cohort, there was a significant reduction in total number of arrests by 8.2 per 100 youth, a 74.5 percent decrease from a baseline of 11 per 100 youth.

*Evidence base: 4 papers (2 on Chicago, 1 on Chicago and Philadelphia, 1 on New York City)*

**FIGURE 3. OSC+ PARTICIPATION REDUCED THE NUMBER OF ARRESTS PER 100 YOUTH ONE YEAR AFTER RANDOMIZATION FOR DIFFERENT TYPES.**

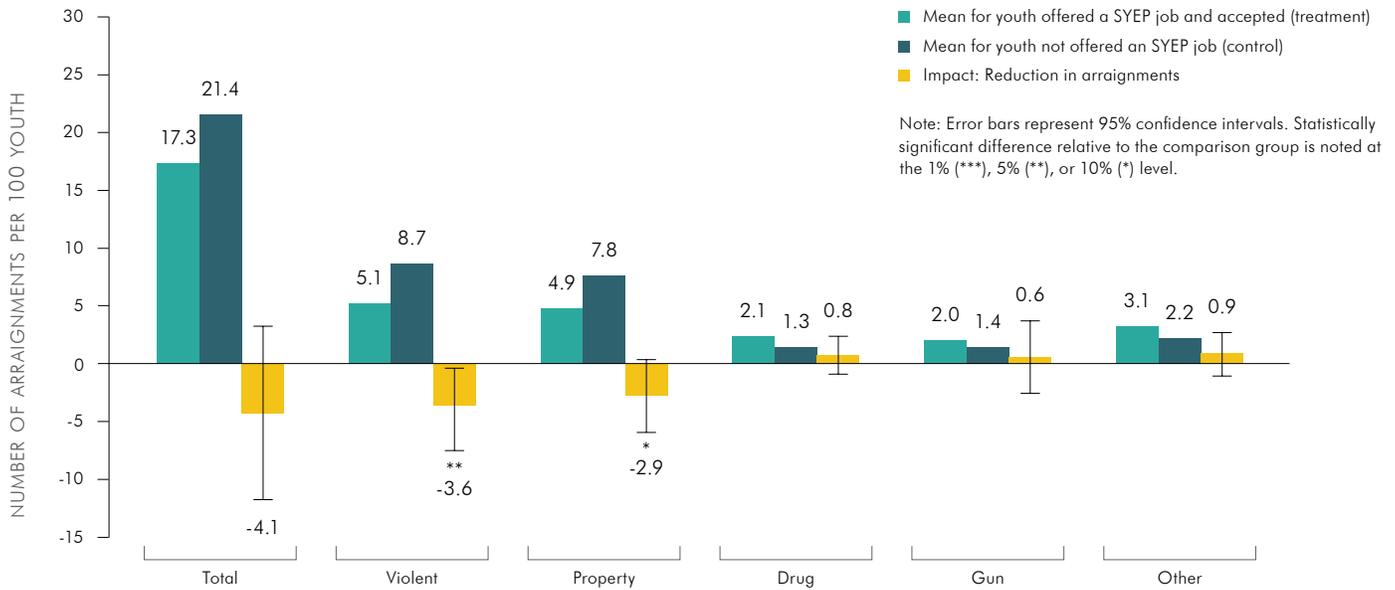


<sup>40</sup> Davis and Heller 2020.

<sup>41</sup> Heller 2022.

<sup>42</sup> "Other arrests" is defined as arrests from all other crimes except violence, property, and drug.

**FIGURE 4. BOSTON SYEP PARTICIPATION REDUCED THE NUMBER OF ARRAIGNMENTS FOR VIOLENT AND PROPERTY CRIMES.**



**Arraignments and convictions**

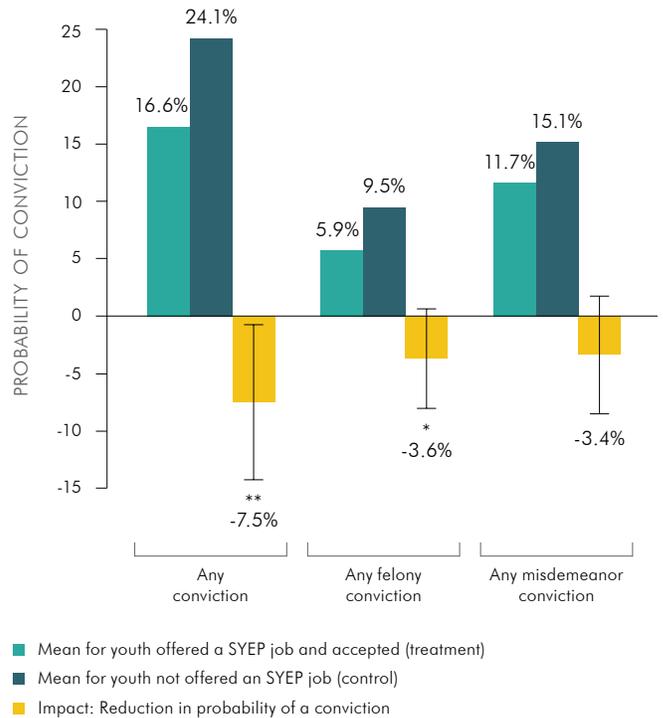
**Participation in SYEPs can lower the number of arraignments in the months after program participation and the probability of being convicted of a crime during the program summer.<sup>43</sup>**

In Boston, SYEP participation reduced the number of arraignments for violent crimes by 3.6 per 100 youth, a 41 percent reduction from a baseline of 8.7 per 100 youth, and by 2.9 arraignments for property crimes per 100 youth, a 37 percent reduction from a baseline of 7.8, during the seventeen months after the program.<sup>44</sup> There was no significant difference in arraignments for drug, gun, and other crimes. For a full breakdown of the results across different crime types, see Figure 4.

In New York City, participation in SYEP during 2005 and 2008 decreased the chance of youth being convicted of a crime during the program summer by 0.075 percentage points, a 31.2 percent decrease from a baseline of 0.241 percentage points (see Figure 5).<sup>45</sup> SYEP participation also decreased the number of convictions by 0.07 per 100 youth, a 27 percent decrease from a baseline of 0.26 convictions per 100 youth. The decrease in the number of convictions was primarily driven by youth who had been arrested before to the SYEP lottery.

*Evidence base: 2 papers (1 on Boston and 1 on New York City)*

**FIGURE 5. NYC SYEP PARTICIPATION REDUCED THE PROBABILITY OF BEING CONVICTED FOR A CRIME.**



Note: Error bars represent 95% confidence intervals. Statistically significant difference relative to the comparison group is noted at the 1% (\*\*\*) , 5% (\*\*), or 10% (\*) level.

<sup>43</sup> Arraignment is the next step in the criminal justice pipeline after arrest where an individual is brought in front of a judge and is formally charged with a crime. Conviction occurs at the trial after arraignment where an individual is found guilty of the crime with which they are charged.

<sup>44</sup> Modestino 2019.

<sup>45</sup> Kessler et al. 2021.

## Incarceration

### Participation in SYEPs can reduce the likelihood of youth being incarcerated during and following the program summer.

In New York City, SYEP participation between 2005 and 2008 reduced the probability that youth would be incarcerated by 2013 for a crime committed at age 19 or above<sup>46</sup> by 0.10 percentage points, a 9.9 percent reduction from the baseline incarceration rate of 0.99 percent.<sup>47</sup> This reduction in incarceration translated into 112 fewer youth imprisoned in a state facility.

In Philadelphia, WorkReady participation between 2017 and 2018 reduced the chance of any juvenile incarceration by 1.5 percentage points, a 107 percent reduction from a baseline of 1.4 percentage points, in the year after randomization.<sup>48</sup> There was no significant decline in the second year after randomization.

*Evidence base: 2 papers (1 on New York City and 1 on Philadelphia)*

#### HOW DO SYEPS IMPROVE CRIMINAL JUSTICE & SAFETY OUTCOMES?

Because the effects of SYEPs on criminal justice involvement and youth safety last beyond the end of the summer, it is unlikely they are solely a function of youth being kept busy while they are out of school. Rather, researchers hypothesize that longer-term changes are occurring. One hypothesis is that youth are developing socio-emotional skills that can be deployed inside and outside the workplace. These skills allow youth to process social information and make decisions, skills that are central to avoiding risky behavior and interpersonal conflict. For example in Boston, by linking arraignment records with survey data, researchers found a correlation between a decrease in arraignments for violent and property crimes and self-reported improvements in social skills such as managing emotions, asking for help, and resolving conflict with a peer.<sup>49</sup> Another hypothesis for why summer jobs decrease criminal justice involvement is that they might also expand youth's social networks and introduce them to new peers who may engage in lower-risk activities. Some researchers have also posited that the tangible increase in household income may also dissuade youth in high-poverty neighborhoods from engaging in crime as a means of economic survival.



Photo: Shutterstock.com

## Public Health and Safety

### SYEPs save lives by reducing deaths from external causes.

As of 2014, the mortality rate for participants in the New York City SYEP between 2005 and 2008 declined 0.073 percentage points, an 18 percent reduction from a baseline mortality rate of 0.41 percent among all applicants who were not offered a slot in the program. This reduction translates into 83 lives of mostly young men saved because of participation in the program. The reduction in mortality was due to a drop in deaths from external causes, including accidents, homicides, and suicides, as opposed to deaths from natural causes.<sup>50</sup>

*Evidence Base: 1 paper (New York City)*

<sup>46</sup> Incarceration data was only available for crimes committed at age 19 or above and not for crimes committed as juvenile.

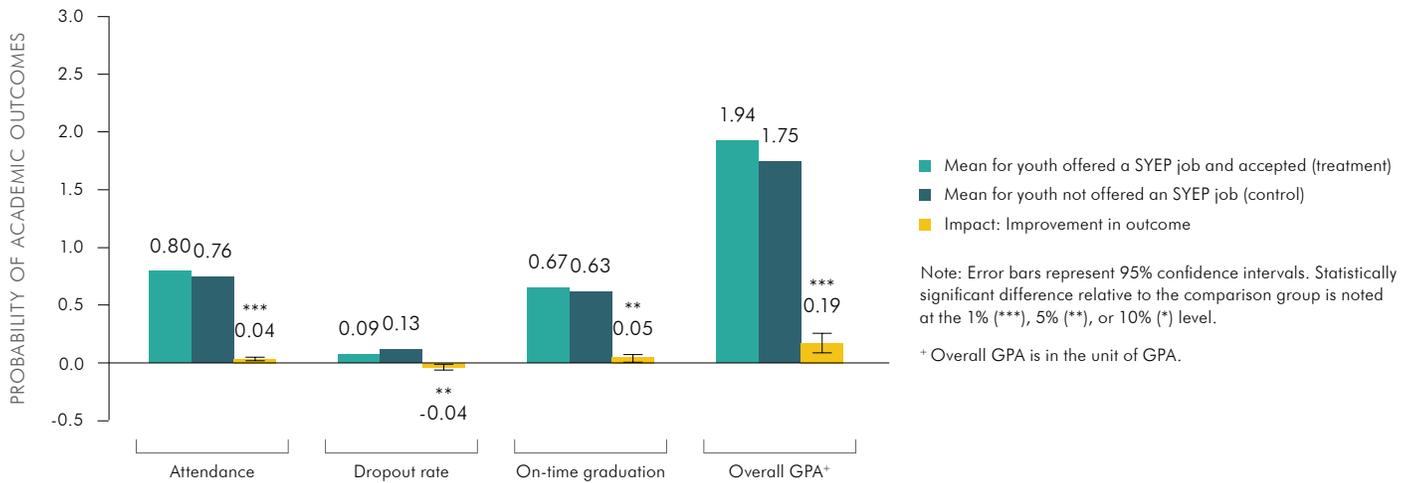
<sup>47</sup> Gelber, Isen, and Kessler 2016.

<sup>48</sup> Heller 2022.

<sup>49</sup> Modestino 2019.

<sup>50</sup> Gelber, Isen, and Kessler 2016.

**FIGURE 6. BOSTON SYEP PARTICIPATION LED TO IMPROVEMENTS IN SEVERAL EDUCATIONAL OUTCOMES.**



### Educational Outcomes

**There is mixed evidence on the potential of SYEPs to improve educational outcomes. On average, those who benefited academically from SYEPs were youth of legal dropout age and those who had a higher rate of school absences prior to program participation.**

In Chicago and Philadelphia, researchers found no evidence to suggest that SYEP participation affected GPAs, attendance rates, or school persistence, defined as a student remaining enrolled in school or having graduated.<sup>51</sup>

In New York City, one evaluation identified a small increase in school attendance (five to seven days per year) among SYEP participants ages 16 and up who also had an attendance rate of less than 95 percent the year before to the program.<sup>52</sup> Across the New York City cohorts, SYEP participants with these characteristics also experienced a small increase in the number of state English exams attempted and passed as a requirement for high school graduation.<sup>53</sup> In particular, one study found that these increases were larger for youth who participated in SYEP more than once.<sup>54</sup>

The strongest evidence to date on the impact of SYEPs on educational outcomes has emerged from Boston (see Figure 6). An examination of the 2015 Boston SYEP cohort found that program participants were more likely to graduate from high school on time and to be absent for fewer days.<sup>55</sup> SYEP participation also led to a small but significant increase in overall GPA. The differences in findings between Boston and the other cities could be the result of differences in both study design and service populations.

Similar to the impact on education outcomes observed in New York City, some of the effects observed in Boston were larger for youth of legal dropout age and those who had been chronically absent in prior years. Many of the improvements in academic outcomes appear to be driven by improvements in work habits (e.g., showing up on time) as well as academic and career aspirations that also translate to engagement and success at school.

*Evidence base: 6 papers (1 on Boston, 1 on Chicago, 3 on New York City, 1 on Chicago and Philadelphia)*

<sup>51</sup> Heller 2014; Heller 2022.

<sup>52</sup> Leos-Urbel 2014.

<sup>53</sup> Leos-Urbel 2014; Schwartz et al. 2021.

<sup>54</sup> Schwartz et al. 2021.

<sup>55</sup> Modestino and Paulsen 2022.



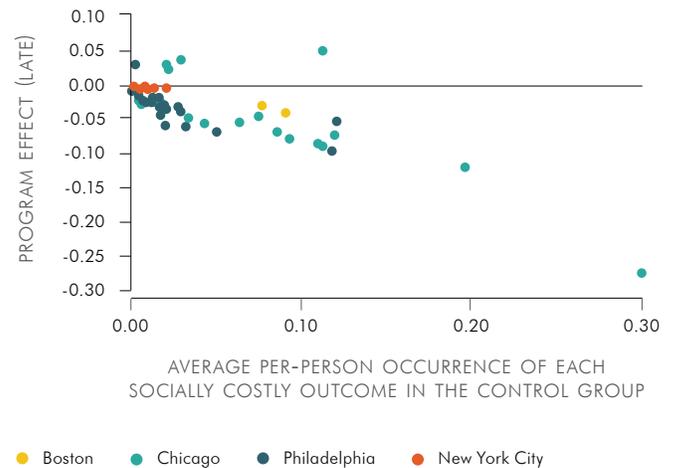
Photo: Shutterstock.com

### Who Responds to the Program

Across all four cities featured in this review, youth at greater risk of experiencing socially costly outcomes, such as involvement with the criminal justice system, experience the greatest benefits from SYEPs.<sup>56</sup> A retrospective analysis demonstrates how risk is related to program impacts across 62 different impact estimates. These impact estimates include outcomes related to criminal justice involvement, family welfare, and health across four different cities as well as within different groups of the study population in each city. Figure 7 shows each group's program effect along with the likelihood of an individual experiencing this outcome in the absence of the program. On average, the higher the risk of experiencing each outcome within a group, the bigger the treatment effects.<sup>57</sup>

*Evidence base: 1 paper (retrospective analysis of studies conducted in all four cities)<sup>58</sup>*

**FIGURE 7. SYEP PARTICIPATION HAD A GREATER IMPACT ON YOUTH AT HIGHER RISK OF EXPERIENCING SOCIALLY COSTLY OUTCOMES.**



Note: Each dot represents a single impact estimate for a given outcome in a study population or subgroup, categorized by city. These include different measures of criminal justice involvement, family welfare, and individual health.

<sup>56</sup> Heller 2022.

<sup>57</sup> This relationship can also be demonstrated by combining estimates of socially costly outcomes available in the data, such as arrests and incarceration, into a “risk index” for study participants. The risk index provided an estimate of the likelihood for future socially costly outcomes based on everything observed in participant records prior to joining the study. In other words, it calculates the risk level of experiencing socially costly outcomes associated with not participating in the program. By examining program effects across different levels of risk, the analysis shows that the effects of the program were the biggest for participants experiencing the highest levels of predicted risk. This risk-responsiveness relationship appears to be linear, meaning that responsiveness did not appear to plateau for especially high-risk index scores. The higher the likelihood a youth had of experiencing socially costly outcomes, the bigger the treatment effects.

<sup>58</sup> Point estimates derived from the following papers: Heller 2022; Davis and Heller 2020; Gelber, Isen, and Kessler 2016; Modestino 2019.

## POLICY IMPLICATIONS

### Increasing Safety and Preventing Involvement in the Criminal Justice System

The evidence in this review shows that SYEPs consistently reduce arrests, arraignments and convictions, and incarcerations for the populations they serve. Few programs have been so successful in reducing not only initial contacts with the criminal justice system but also contacts throughout the entire criminal justice pipeline as the degree of involvement intensifies. This matters because youth who engage with the juvenile and criminal justice systems tend to have poorer outcomes over the span of their lives.<sup>59</sup> By successfully leveraging the existing connections and strengths of community organizations and businesses, SYEPs help youth and young adults stay safe and have positive development experiences, even beyond the program summer. Localities interested in reducing youth contact with the criminal justice system should consider additional investments in SYEPs.

### Boosting Income for Low-Income Families

SYEPs primarily serve low-income youth and represent an opportunity to provide additional resources to their households. The evidence shows that SYEPs significantly boost the earnings of participants, and surveys suggest that they often use these wages to support their families. Approximately 20 percent of Boston summer job participants reported contributing to paying household bills,<sup>60</sup> and survey participants in Chicago reported almost 80 percent of net wages going to their families or to local businesses.<sup>61</sup>

### Targeting Impact through Eligibility and Recruitment

SYEPs are popular programs across many localities in the United States and are supported by funding from federal and local governments. However, the available funding still may not be enough to offer every eligible youth a slot in the program. Thus, policymakers must consider how they can most effectively deploy limited resources to serve communities and meet policy goals.

Across all evaluated versions of the program, participants facing the most challenges, such as previous engagements with the criminal justice system or school disengagement, benefited most. This does not mean that every youth facing difficult circumstances benefited but rather that when the program prevented socially costly outcomes, the biggest changes

were among those experiencing the greatest risk of those outcomes. Developing eligibility and recruitment strategies that target youth who the evidence indicates are likely to be most responsive to the intervention may therefore increase the overall impact of SYEPs.

A caveat is that if peer interactions are important contributors to program impact, focusing solely on youth based on risk factors may change program composition so much that it does not produce the same effects. However, program composition has varied quite a bit across the populations that have been part of randomized evaluations so far, suggesting that there is scope for future programs to target youth experiencing greater risk as a way to generate larger benefits.

### MINIMAL EVIDENCE ON HOW ADDITIONAL SUPPORTS CHANGE SYEP IMPACT

Existing evidence on SYEPs does not indicate whether there is a particular type of supplemental support that can help drive desired program effects. The SYEPs examined in this review provided a diverse assortment of supplemental programming that varied across cities and often within individual SYEPs, including mentorship; curricula focused on civic education or socio-emotional learning; and training on financial literacy, work readiness, or career exploration (see Appendix B). There is not enough current research to examine the effects of supplemental services on education or employment outcomes, although there are some examining criminal justice outcomes.

One study in Chicago found no significant difference in criminal justice outcomes for youth who worked in a job for 25 hours a week when compared to youth who worked in a job for 15 hours a week and engaged in a social emotional learning curriculum for 10 hours a week (both groups were paid for 25 hours of work per week).<sup>62</sup> Both groups experienced significant drops in violent crime that lasted for up to sixteen months after program participation. The consistency with which SYEPs reduce participant criminal justice system involvement despite the range of supplemental program activities across cities also suggests that additional supports as a general category are not the main drivers of impact for criminal justice outcomes. Given the current evidence, jurisdictions lacking the resources to provide additional support may still be able to produce beneficial criminal justice outcomes through SYEPs by focusing on the provision of the jobs as the first-order program priority.

<sup>59</sup> Aizer, Anna and Joseph J. Doyle. (2015). "Juvenile Incarceration, Human Capital and Future Crime: Evidence from Randomly-Assigned Judges." *The Quarterly Journal of Economics* 130, no. 2 (May): 759–804. doi: <https://doi.org/10.1093/qje/qjv003>

<sup>60</sup> Modestino and Paulsen 2019.

<sup>61</sup> One Summer Chicago. 2014. "One Summer Chicago Annual Report 2014." [http://mhalabs.org/wp-content/uploads/2014/04/OneSummerChicago\\_AnnualReport\\_2014.pdf](http://mhalabs.org/wp-content/uploads/2014/04/OneSummerChicago_AnnualReport_2014.pdf).

<sup>62</sup> Heller 2014.

## OPPORTUNITIES FOR FUTURE RESEARCH

SYEPs have been shown to provide employment opportunities and additional earnings to youth who may not have access to employment during the summer of participation, but there is little evidence of their effectiveness in improving longer-term labor outcomes. Future research can investigate whether new or modified program model components can lead to improved long-term labor outcomes. One promising area of inquiry is finding ways to provide credible signals to future employers about job experience gained during the SYEP, such as a letter of recommendation. At the same time, evidence suggests that youth may put off graduation or school due to better employment outcomes, so this is likely to be most successful for those who are far from the margin of graduating on time. More research is needed to examine how to best maximize the valuable signaling from the letters of recommendation while reducing unintended adverse educational impacts on youth.

Emerging evidence also suggests that repeated participation may lead to a larger increase in education and youth development outcomes. For example, Boston SYEP's impact on GPA appears to fade without a second summer of participation. Most SYEPs serve a broad age range where participants may be eligible to participate for multiple summers. More research on the effects of repeated participation can help inform policymakers on how to allocate spots to first-time or repeat applicants.

## CONCLUSIONS

Across the school, labor market, and safety and justice contexts, low-income youth and young adults face a multitude of barriers to achieving their full potential. SYEPs offer an evidence-based option for helping to address those barriers. Randomized evaluations across Boston, Chicago, New York, and Philadelphia provide strong evidence of the effectiveness of SYEPs at reducing contact with the criminal justice system and improving rates of employment and earnings during the summer. The results also point to a variety of other gains in labor, education, and youth development that SYEPs can foster. The consistency in research results across time and despite variations in geography, providers, and service population should give policymakers confidence in the model's strength if they are considering expanding or creating a summer jobs program.



Photo: Shutterstock.com

## ABOUT J-PAL NORTH AMERICA

J-PAL North America is a regional office of the Abdul Latif Jameel Poverty Action Lab (J-PAL), a global network of researchers who use randomized evaluations to answer critical policy questions in the fight against poverty. Our mission is to reduce poverty by ensuring that policy is informed by scientific evidence.

---

**Evidence Review Authors:** Yiping Li and Kalila Jackson-Spicer  
**Editors:** Erin Graeber and Vincent Quan

**Suggested Citation:** J-PAL Evidence Review. 2022. "The Promises of Summer Youth Employment Programs: Lessons from Randomized Evaluations" Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.

APPENDIX A. EVALUATIONS INCLUDED IN REVIEW

One Summer Chicago Plus (OSC+) Program

	Sample	Treatment take-up rate	Study	Outcomes	Length of time	Impact estimate
2012	1,634 (t = 730)	75%	Davis and Heller 2020	Total number of arrests	One year post program	-0.0061
				Number of violent arrests	One year post program	-0.0413**
				Number of property arrests	One year post program	0.0164
				Number of drug arrests	One year post program	0.0052
				Number of other arrests	One year post program	0.0136
				Earnings	During program summer	\$662.59***
				Employment	During program summer	0.91***
2013	5,216 (t = 2,634)	30% <sup>63</sup>	Davis and Heller 2020	Total number of arrests	One year post program	-0.1334
				Number of violent arrests	One year post program	-0.079**
				Number of property arrests	One year post program	0.0176
				Number of drug arrests	One year post program	0.044
				Number of other arrests	One year post program	-0.116
				Average quarterly earnings	During program summer	\$798.58***
				Employment	During program summer	0.86***
2015	5,405 (t = 2,494)	46.5%	Heller 2022	Total number of arrests	One year post program	-0.087
				Number of violent arrests	One year post program	0.021
				Number of property arrests	One year post program	0.002
				Number of drug arrests	One year post program	-0.046**
				Number of other arrests	One year post program	-0.063*

<sup>63</sup> The maximum possible take-up rate was 38 percent by design. Providers were given many more youths than the number of available slots because the population recruited, individuals who are currently involved with the criminal justice system, is harder to locate. This way, if the youth is unavailable upon contact by the provider because they are unreachable or if they have reentered the criminal justice system, providers can move on to the next name on the list to fill the slots up before the summer begins. For more, please refer to Davis and Heller 2020.

\* p < 0.10; \*\* p<0.05; \*\*\* p<0.01

These are indicators of different levels of statistical significance. If there is no \* next to a reported result, this means the impact was not statistically significant.

APPENDIX A. EVALUATIONS INCLUDED IN REVIEW

New York City Summer Youth Employment Program

	Sample	Treatment take-up rate	Study	Outcomes	Length of time	Impact estimate
2005-2008	294,100 (t = 164,641)	73%	Gelber, Isen, and Kessler 2016	Mortality	During program summer	-0.073
				Incarceration for a crime committed at age 19 or above in a state prison	By 2013	-0.098**
				Earnings	During program summer	\$875.89***
				Earnings	One year post program	-\$100.14**
				Earnings	Two years post program	-\$94.04**
				Earnings	Three years post program	-\$111.01**
				Earnings	Four years post program	-\$35.39
	294,100 (t = 164,641)	73%	Kessler et al. 2021	Any arrests	During program summer	-0.128**
				Any felony arrests	During program summer	-0.072**
				Any misdemeanor arrests	During program summer	-0.0487
				Any conviction	During program summer	-0.0752**
				Any felony conviction	During program summer	-0.036*
				Any misdemeanor conviction	During program summer	-0.0338
				Number of convictions	During program summer	-0.000712**
	294,100 (t = 164,641)	73%	Schwartz et al. 2021	Making any attempt of a state exam	School year post program	0.005*
				Passing any state exam at 65 points or higher	School year post program	0.009*
				Number of exams attempted	School year post program	0.026*
				Number of exams passed at 65 points or higher	School year post program	0.023*

APPENDIX A. EVALUATIONS INCLUDED IN REVIEW

New York City Summer Youth Employment Program, continued

	Sample	Treatment take-up rate	Study	Outcomes	Length of time	Impact estimate
2007	47,453 (t = 24,179) <sup>64</sup>	73%	Leos-Urbel 2014	Attendance	Fall semester post program (log model)	0.015***
				Attendance	Spring semester post program (log model)	0.025***
				Attendance for those with less than 95% attendance pre-SYEP and older than 16	Fall semester post program (log model)	0.038***
				Attendance for those with less than 95% attendance pre-SYEP and older than 16	Spring semester post program (log model)	0.048***
2006-2010	264,075 (t = 116,919)	67%	Valentine et al. 2017	Employment	During program summer	0.539***
2016-2017	43,409 (t = 21,714)	40.4%	Heller and Kessler 2021	Employment	Year after program	0.0313***
				Employment	Two years after program (cumulative)	0.0195**
				On-time (four year) high school graduation	Up to two years after program (10th to 12th graders)	-0.0194*

<sup>64</sup> Analysis for the 2007 cohort was limited to students enrolled in a New York City public school the school year before and after 2007 (i.e., enrolled during the 2006–2007 school year and the 2007–2008 school year). For more details, please refer to Leos-Urbel 2014.

APPENDIX A. EVALUATIONS INCLUDED IN REVIEW

**Boston Summer Youth Employment Program**

	Sample	Treatment take-up rate	Study	Outcomes	Length of time	Impact estimate
2015	4,235 (t = 1,186)	83.6%	Modestino 2019	Arraignments for violent crimes	Seventeen months after the program	-0.036**
				Arraignments for property crimes	Seventeen months after the program	-0.029*
	4,235 (t = 1,186)	83.6%	Modestino and Paulsen 2019	Employment	During program summer	0.836***
	4,235 (t = 1,186)	83.6%	Mayor’s Office of Workplace Development and Modestino 2017	Employment	One year post program	0.031*–0.071*
				Earnings for African American Males, 14–19 years old	One year post program	\$216**–\$225**
	4,235 (t = 1,186)	83.6%	Modestino and Paulsen 2022	Attendance rate	One year post program	0.038***
				Dropout rate	One year post program	-0.038**
				Overall GPA	One year post program	0.189***
On-time (4-year) graduation rate				Up to four years post program	0.052**	

**Philadelphia WorkReady Program**

	Sample	Treatment take-up rate	Study	Outcomes	Length of time	Impact estimate
2017	3,392 (t = 1,336)	44.5%	Heller 2022	Total number of arrests	One year post program	-0.030**
				Number of violent arrests	One year post program	-0.006
				Number of property arrests	One year post program	-0.006
				Number of drug arrests	One year post program	-0.007
				Number of other arrests	One year post program	-0.011***
2018	1,105 (t = 450)	67%	Heller 2022	Any juvenile incarceration	One year post program	-0.015*
				Any juvenile incarceration	Two years post program	-0.023

APPENDIX B. COMPARISON OF SYEP PROGRAMS

	Boston 2015	New York City 2005-2008	OSC+ 2012	OSC+ 2013	OSC+ 2015	WorkReady 2017-2018
Approximate slots citywide	10,000	54,000	17,000	20,000	24,000	8,300/9,700
Approximate slots in study	1,186	54,000	700	1,000	2,000	1,100/375
Number of providers in study	1	59	3	7	19	59/45
Length	6 weeks	Up to 7 weeks	8 weeks	6 weeks	7 weeks	6 weeks
Hours per week	25	Up to 25	25	25	25	20
Hourly wage (nominal)	\$9.00	\$6.00 to \$7.15	\$8.25	\$8.25	\$8.25	\$7.25 to \$10.00
Job type	Government, nonprofits, private sector	Government, nonprofits, private sector	Government, nonprofits	Government, nonprofits, private sector	Government, nonprofits, private sector, infrastructure	Government, nonprofits, private sector
Eligible population	14–24 year olds All city residents	14–21 year olds All city residents	14–21 year olds 13 high-violence CPS high school	16–22 year olds Male only Justice agencies and general OSC applicants	16–21 year olds 49 high-violence CPS high schools	14–21 year olds All city residents
Separate adult mentor	No	No	Yes	Yes	Randomly assigned to 50% of participants	No
Training and enrichment	20 hours job readiness and professional development training	17.5 hours job readiness, career exploration, financial literacy	1 day job readiness training 2 hours/day social-emotional curriculum randomly assigned to 50% of participants	1 day job readiness training 2 hours/day social-emotional curriculum Some postsummer activities	1 week job readiness training 5 hours/week civic leadership curriculum randomly assigned to 50% of participants	Professional development sessions throughout the summer

Source: Table 1. Heller, Sara B. 2022. “When Scale and Replication Work: Learning from Summer Youth Employment Experiments.” *Journal of Public Economics* 209 (May): 104617. doi: <https://doi.org/10.1016/j.jpube.2022.104617>.

## APPENDIX C. REFERENCES

Core evaluations of SYEPs referenced in this evidence review are denoted with an \*.

- Aizer, Anna and Joseph J. Doyle. 2015. "Juvenile Incarceration, Human Capital and Future Crime: Evidence from Randomly-Assigned Judges." *The Quarterly Journal of Economics* 130, no. 2 (May): 759–804. doi: <https://doi.org/10.1093/qje/qjv003>.
- Congressional Research Service. 2017. *Background and Federal Efforts on Summer Youth Employment*. <https://crsreports.congress.gov/product/pdf/R/R44746/5>.
- \*Davis, Jonathan M.V., and Sara B. Heller. 2020. "Rethinking the Benefits of Youth Employment Programs: The Heterogeneous Effects of Summer Jobs." *The Review of Economics and Statistics* 102, no. 4 (October): 664–677. doi: [https://doi.org/10.1162/rest\\_a\\_00850](https://doi.org/10.1162/rest_a_00850).
- Fein, David and Jill Hamadyk. 2018. "Bridging the Opportunity Divide for Low-Income Youth: Implementation and Early Impacts of the Year Up Program." Pathways for Advancing Careers and Education. <https://www.yearup.org/sites/default/files/2019-03/Year-Up-PACE-Full-Report-2018.pdf>
- \*Gelber, Alexander, Adam Isen, and Judd B. Kessler. 2016. "The Effects of Youth Employment: Evidence from New York City Lotteries." *Quarterly Journal of Economics* 131, no. 1 (February): 423–460. doi: <https://doi.org/10.1093/qje/qjv034>.
- Juffras, Jason and Kathleen Patterson. 2016. "Review of Summer Youth Employment Programs in Eight Major Cities and the District of Columbia." Washington, DC: Office of the District of Columbia Auditor.
- \*Heller, Sara B. 2014. "Summer Jobs Reduce Violence Among Disadvantaged Youth." *Science* 346, no. 6214 (December): 1219–1223. doi: <https://doi.org/10.1126/science.1257809>.
- \*Heller, Sara B. 2022. "When Scale and Replication Work: Learning from Summer Youth Employment Experiments." *Journal of Public Economics* 209 (May): 104617. doi: <https://doi.org/10.1016/j.jpubeco.2022.104617>.
- Heller, Sara B., and Judd B. Kessler. "How to Allocate Slots: The Market Design of Summer Youth Employment Programs." In *Fair by Design: Economic Design Approaches to Inequality*, ed. by S. D. Kominers and A. Teytelboym. Oxford: Oxford University Press, forthcoming.
- \*Heller, Sara B., and Judd B. Kessler. "The Effects of Letters of Recommendation in the Youth Labor Market." NBER Working Paper #29579, December 2021. doi: <https://doi.org/10.3386/w29579>.
- Kahn, Lisa B. 2010. "The Long-Term Labor Market Consequences of Graduating from College in a Bad Economy." *Labour Economics* 17, no.2 (April): 303–316. doi: <https://doi.org/10.1016/j.labeco.2009.09.002>.
- \*Kessler, Judd B., Sarah Tahamont, Alexander M. Gelber, and Adam Isen. 2021. "The Effects of Youth Employment on Crime: Evidence from New York City Lotteries." NBER Working Paper #28373, January 2021. doi: <https://doi.org/10.3386/w28373>
- Kids Count Data Center. 2021. "Youth and Young Adults Ages 14 to 24 Who Live in Low-Income Families by Race and Ethnicity in the United States." <https://datacenter.kidscount.org/data/tables/11181-youth-and-young-adults-ages-14-to-24-who-live-in-low-income-families-by-race-and-ethnicity?loc=1&loc2=1#datailed/1/any/false/1983,1692,1691,1607,1572,1485,1376,1201,1074,880/4038,4040,4039,2638,2597,4758,1353/21554,21555>.
- \*Leos-Urbel, Jacob. 2014. "What Is a Summer Job Worth? The Impact of Summer Youth Employment on Academic Outcomes." *Journal of Policy Analysis and Management* 33, no. 4 (July): 891–911. doi: <https://doi.org/10.1002/pam.21780>.
- \*Mayor's Office of Workplace Development and Modestino. 2017. "Reducing Inequality Summer by Summer: An Analysis of the Short-Term and Long-Term Effects of Boston's Summer Youth Employment Program." <https://owd.boston.gov/wp-content/uploads/2017/12/SYEP-Report-FINAL-12.12.17.pdf>.
- Miles, Monique, Nancy Martin, and Mike Swigert. 2020. "Digital Summer Youth Employment Toolkit 2.0." The Aspen Institute Forum for Community Solutions. <https://aspencommunitysolutions.org/wp-content/uploads/2020/12/AIFCS-Digital-Summer-Youth-Employment-Toolkit-2.0-December-2020.pdf>.
- Modestino, Alicia Sasser. 2019. "Do Summer Youth Employment Programs Work?" *EconoFact*. <https://econofact.org/do-summer-youth-employment-programs-work>.
- \*Modestino, Alicia Sasser. 2019. "How Do Summer Youth Employment Programs Improve Criminal Justice Outcomes, and for Whom?" *Journal of Public Policy Analysis and Management* 38, no. 3 (April): 600–628. doi: <https://doi.org/10.1002/pam.22138>.

## APPENDIX C. REFERENCES

- \*Modestino, Alicia Sasser, and Richard J. Paulsen. 2019. "Reducing Inequality Summer by Summer: Lessons From an Evaluation of the Boston Summer Youth Employment Program." *Evaluation and Program Planning* 72 (April): 40–53. doi: <https://doi.org/10.1016/j.evalprogplan.2018.09.006>.
- \*Modestino, Alicia Sasser, and Richard Paulsen. 2022. "School's Out: How Summer Youth Employment Programs Impact Academic Outcomes." *Education Finance and Policy*. Published ahead of print. doi: [https://doi.org/10.1162/edfp\\_a\\_00371](https://doi.org/10.1162/edfp_a_00371).
- Neumark, David. 2002. "Youth Labor Markets in the United States: Shopping around vs. Staying Put." *The Review of Economics and Statistics* 84, no. 3 (August): 462–482. doi: <https://doi.org/10.1162/003465302320259475>.
- NYC Department of Youth and Community Development. N.d. "Summer Youth Employment Program (SYEP)." <https://www1.nyc.gov/site/dycd/services/jobs-internships/summer-youth-employment-program-syep.page>.
- One Summer Chicago. 2014. "One Summer Chicago Annual Report 2014." [http://mhalabs.org/wp-content/uploads/2014/04/OneSummerChicago\\_AnnualReport\\_2014.pdf](http://mhalabs.org/wp-content/uploads/2014/04/OneSummerChicago_AnnualReport_2014.pdf).
- Results for America. N.d. "NYC Summer Youth Employment Program." <https://catalog.results4america.org/program/nyc-summer-youth-employment-program?issueArea=119>.
- Ross, Martha, and Richard Kazis. 2016. "Youth Summer Jobs Programs: Aligning Ends and Means." Brookings Institution. <https://www.brookings.edu/research/youth-summer-jobs-programs-aligning-ends-and-means>.
- \*Schwartz, Amy Ellen, Jacob Leos-Urbel, Joel McMurry, and Matthew Wiswall. 2021. "Making Summer Matter: The Impact of Summer Youth Employment on Academic Performance." *Quantitative Economics* 12, no. 2 (May): 477–504. doi: <https://doi.org/10.3982/QE883>.
- Spievack, Natalie. 2019. "For People of Color, Employment Disparities Start Early." Urban Institute. July 25, 2019. <https://www.urban.org/urban-wire/people-color-employment-disparities-start-early>.
- Spievack, Natalie, and Nathan Sick. 2019. "The Youth Workforce: A Detailed Picture." Urban Institute. July 2019. [https://www.urban.org/sites/default/files/publication/100688/the\\_youth\\_workforce\\_0.pdf](https://www.urban.org/sites/default/files/publication/100688/the_youth_workforce_0.pdf).
- Sum, Andrew, Ishwar Khatiwada, Mykhaylo Trubskyy, Martha Ross, Walter McHugh, and Sheila Palma. 2014. "The Plummeting Labor Market Fortunes of Teens and Young Adults." Brookings Institution. March 2014. [https://www.brookings.edu/wp-content/uploads/2014/03/Youth\\_Workforce\\_Report\\_FINAL-1.pdf](https://www.brookings.edu/wp-content/uploads/2014/03/Youth_Workforce_Report_FINAL-1.pdf).
- Swigert, Mike. 2021. "Summer Youth Employment Programs 2020: Lessons from the Field." The Center for Law and Social Policy (CLASP) and The Aspen Institute Forum for Community Solutions. <https://www.clasp.org/summer-youth-employment-programs-2020-lessons-field/>.
- \*Valentine, Erin Jacobs, Chloe Anderson, Farhana Hossain, and Rebecca Unterman. 2017. "An Introduction to the World of Work: A Study of Implementation and Impacts of New York City's Summer Youth Employment Program." MDRC. <https://www.mdrc.org/publication/introduction-world-work/file-full>.