

Appendix

Appendix A1 Study Characteristics: Schochet, Burghardt, & Glazeran, 2001 (randomized controlled trial)

Characteristic	Description
Study citation	Schochet, P. Z., Burghardt, J., & Glazeran, S. (2001). <i>National Job Corps Study: The impacts of Job Corps on participants' employment and related outcomes</i> . Princeton, NJ: Mathematica Policy Research, Inc.
Participants	<p>The study sample was drawn from the 80,883 youth who applied to <i>Job Corps</i> nationwide between November 1994 and December 1995 and were found to be eligible for the program by the end of February 1996. From the 80,883 eligible applicants, 9,409 were randomly assigned to the program group that could participate in <i>Job Corps</i>, and 5,977 were randomly assigned to the control group that could not. The remaining 65,497 were assigned to a nonresearch group that was allowed to enroll in <i>Job Corps</i>.</p> <p>To be eligible for <i>Job Corps</i>, an applicant must meet the following six criteria: (1) be between 16 and 24 years old, (2) be a U.S. citizen or legal resident, (3) be economically disadvantaged, (4) be from a home environment in which the youth cannot benefit from other training programs, (5) be in good health, and (6) be able to conform to <i>Job Corps</i> standards of conduct.¹</p> <p>About 60% of eligible applicants were male, and more than 70% were younger than 20 years old. Half were African-American and about one in five were Hispanic. At program entry, 77% did not have a high school credential. On average, sample members had completed 10.1 years of education. Nearly 60% received some form of public assistance during the year prior to random assignment.</p> <p>Effects were estimated at three points in time: 12 months, 30 months, and 48 months following random assignment. Estimates based on the 48-month follow-up were used for WWC effectiveness ratings. The analysis sample at the 48-month follow-up consisted of 11,313 young adults (6,828 program group members and 4,485 control group members). This sample represents 73% of the original program group sample and 75% of the original control group sample. The study authors used sample weights to adjust their results for survey nonresponse when estimating program impacts.</p>
Setting	The impact evaluation of <i>Job Corps</i> was based on a nationally representative sample of eligible applicants at the 105 <i>Job Corps</i> centers in the contiguous 48 states and the District of Columbia that were in operation during the study's sample intake period.

(continued)

Appendix A1 Study Characteristics: Schochet, Burghardt, & Glazerman, 2001 (randomized controlled trial) (continued)

Characteristic	Description
Intervention	<p><i>Job Corps</i> is a federally funded education and vocational training program for disadvantaged youth administered by the U.S. Department of Labor. Most <i>Job Corps</i> applicants are recruited through the program's outreach and recruiting network; others apply directly. The program's core services—academic instruction, vocational training, and residential living services—are provided through one of the more than one hundred <i>Job Corps</i> centers nationwide. <i>Job Corps</i> is a self-paced program, so the length of time in the program varies considerably across participants. Among study sample members who enrolled in <i>Job Corps</i>, 28% participated for less than three months, while 25% participated for more than a year (Schochet et al., 2001). On average, <i>Job Corps</i> enrollees spent about eight months in the program and received 1,140 hours of academic and vocational instruction.</p> <p>During their first weeks in <i>Job Corps</i>, participants are assessed to determine their skills and interests. Based on this assessment, participants receive an individualized mix of vocational and academic instruction. <i>Job Corps'</i> education services include remedial education that emphasizes reading and math skills, GED preparation, consumer education, driver's education, home and family living training, and health education. The program's vocational curricula emphasize the skills necessary to work in specific trades. This training prepares students for work as carpenters, masons, welders, electricians, mechanics, food and health service workers, and other professions. The vocational training available varies across <i>Job Corps</i> centers. A typical center offers specialized training for about 10 trades. Upon completion of their education and training, <i>Job Corps</i> provides its participants with job placement assistance. Placement services help students refine their interview and resume writing skills and identify job opportunities.</p> <p>Residential living services are a distinctive feature of <i>Job Corps</i>. Resident participants are housed in dormitories at the <i>Job Corps</i> center. In addition to room and board, these participants are offered counseling, health services, social-skills training, recreational activities, and a biweekly living allowance. Some centers offer a nonresidential version of the program in which participants receive all <i>Job Corps</i> services and supports but do not reside at the center.</p> <p>Some who were randomly assigned to <i>Job Corps</i> did not enroll in the program. Among those in the <i>Job Corps</i> group, 73% reported enrolling in <i>Job Corps</i> within 48 months. Three quarters of enrollees did so within a month of random assignment (Schochet et al., 2001).</p> <p>Among <i>Job Corps</i> enrollees, 82% received academic instruction, and 89% received vocational training. Many participants not receiving academic instruction through <i>Job Corps</i> entered the program with a high school diploma or GED certificate and focused their time in <i>Job Corps</i> on vocational training.</p>
Comparison	<p>Control group members were restricted from entering <i>Job Corps</i> for the first three years after random assignment. Even so, a small portion of control group youth (about 1%) did enroll in <i>Job Corps</i> during this period. When the restriction on enrolling in <i>Job Corps</i> was lifted, an additional 3% of control group youth enrolled in the program.</p> <p>Although control group youth were not allowed to enroll in <i>Job Corps</i>, they were free to participate in other programs available in the community. According to study authors, 72% of control group youth participated in an education or training program during the 48-month study follow-up period, compared with 93% of <i>Job Corps</i> youth. On average, <i>Job Corps</i> youth spent almost twice as much time in education and training during the study period than those in the control group—an average of 1,581 hours compared with 853 hours for the control group (Schochet et al., 2001).</p>
Primary outcomes and measurement	<p>Two relevant outcomes from the <i>Job Corps</i> study are included in this summary: years of school completed and receipt of a high school diploma or GED certificate. (For a more detailed description of these outcome measures, see Appendices A2.1 and A2.2.)</p> <p>The <i>Job Corps</i> study also estimated impacts on employment and earnings and nonlabor market outcomes. The nonlabor market outcomes include welfare, crime, alcohol and illegal drug use, health, family formation, and mobility. These outcomes are not included in this report because they do not fall within the three domains (staying in school, progressing in school, and completing school) examined by the WWC's review of dropout prevention interventions.</p>
Staff training	The study did not provide specific information concerning staff training.

1. The WWC dropout prevention protocol specifies that relevant interventions should target students ages 14 to 21. The WWC confirmed from study authors that 89% of *Job Corps* participants were in this age range at program entry. For this reason, the WWC deemed this intervention appropriate for inclusion in the dropout prevention reviews.

Appendix A2.1 Outcome measures for the progressing in school domain

Outcome measure	Description
Highest grade completed	This measure represents the number of years of regular schooling completed at the time of the 48-month follow-up survey. These data were self-reported. Respondents who reported fewer than 12 years of regular school and indicated that they had earned a GED certificate were not recoded as having completed 12 years of school.

Appendix A2.2 Outcome measures for the completing school domain

Outcome measure	Description
Earned a high school diploma or GED certificate	This measure represents the percentage of students who received a high school diploma or GED certificate. These data were self-reported and collected from 48-month follow-up surveys. This measure is available only for those who entered the program without a high school credential.

Appendix A3.1 Summary of study findings included in the rating for the progressing in school domain¹

Outcome measure	Study sample	Sample size (students)	Authors' findings from the study			WWC calculations		
			Mean outcome (standard deviation) ²		Mean difference ³ (Job Corps – comparison)	Effect size ⁴	Statistical significance ⁵ (at $\alpha = 0.05$)	Improvement index ⁶
			Job Corps group	Comparison group				
Schochet, Burghardt, & Glazerman, 2001 (randomized controlled trial)⁷								
Highest grade completed	Full sample	11,313	10.7 (1.58)	10.8 (1.58)	–0.1	–0.06	ns	–3
Domain average for progressing in school⁸						–0.06	ns	–3

ns = not statistically significant

1. This appendix reports findings considered for the effectiveness rating and the improvement index for the progressing in school domain.
2. The standard deviation across all students in each group shows how dispersed the participants' outcomes are: a smaller standard deviation on a given measure would indicate that participants had more similar outcomes. Standard deviations for average highest grade completed are not included in Schochet et al. (2001) and were reported to the WWC by the study authors.
3. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. All estimates were calculated using sample weights to account for the sample design and interview nonresponse.
4. For an explanation of the effect size calculation, see [Technical Details of WWC-Conducted Computations](#).
5. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
6. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.
7. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering correction, see the [WWC Tutorial on Mismatch](#). For the formulas the WWC used to calculate statistical significance, see [Technical Details of WWC-Conducted Computations](#). For Schochet et al. (2001), no corrections for clustering or multiple comparisons were needed.
8. The domain improvement index is calculated from the average effect size.

Appendix A3.2 Summary of study findings included in the rating for the completing school domain¹

Outcome measure	Study sample	Sample size (students)	Authors' findings from the study					
			Mean outcome		Mean difference ² (<i>Job Corps</i> – comparison)	WWC calculations		
			<i>Job Corps</i> group	Comparison group		Effect size ³	Statistical significance ⁴ (at $\alpha = 0.05$)	Improvement index ⁵
Schochet, Burghardt, & Glazerman, 2001 (randomized controlled trial)⁶								
Earned a high school diploma or GED certificate (%)	Those who entered study without a high school credential	8,597	47.3	34.4	12.9	0.33	Statistically significant	+13
Domain average for progressing in school⁷						0.33	Statistically significant	+13

1. This appendix reports findings considered for the effectiveness rating and the improvement index for the completing school domain. Subgroup findings by age are presented in Appendix A4.1. Appendix A.4.2 reports the separate effects of *Job Corps* on earning a GED certificate or high school diploma, which were not used in *Job Corps*' effectiveness rating.
2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. All estimates were calculated using sample weights to account for the sample design and interview nonresponse.
3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see [Technical Details of WWC-Conducted Computations](#).
4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.
6. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering correction, see the [WWC Tutorial on Mismatch](#). For the formulas the WWC used to calculate statistical significance, see [Technical Details of WWC-Conducted Computations](#). For Schochet et al. (2001), no corrections for clustering or multiple comparisons were needed.
7. The domain improvement index is calculated from the average effect size.

Appendix A4.1 Summary of subgroup findings by age for the completing school domain¹

Outcome measure	Study sample	Authors' findings from the study						
		Sample size (students)	Mean outcome		WWC calculations			
			<i>Job Corps</i> group	Comparison group	Mean difference ² (<i>Job Corps</i> – comparison)	Effect size ³	Statistical significance ⁴ (at $\alpha = 0.05$)	Improvement index ⁵
Schochet, Burghardt, & Glazerman, 2001 (randomized controlled trial)⁶								
Earned a high school diploma or GED certificate (%)	Age 16–17 and no high school credential at baseline	4,515	46.7	36.2	10.6	0.26	Statistically significant	+10
Earned a high school diploma or GED certificate (%)	Age 18–24 and no high school credential at baseline	4,082	47.9	32.3	15.6	0.40	Statistically significant	+15

1. This appendix presents subgroup findings by age for *Job Corps*' effects on receiving a high school diploma or GED certificate. Results for the full age range of sample members (ages 16–24 at baseline) were used for determining *Job Corps*' effectiveness rating in the completing school domain. These findings are presented in Appendix A3.2.
2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. All estimates were calculated using sample weights to account for the sample design and interview nonresponse.
3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see [Technical Details of WWC-Conducted Computations](#).
4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between –50 and +50, with positive numbers denoting results favorable to the intervention group.
6. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering correction, see the [WWC Tutorial on Mismatch](#). For the formulas the WWC used to calculate statistical significance, see [Technical Details of WWC-Conducted Computations](#). For Schochet et al. (2001), no corrections for clustering or multiple comparisons were needed.

Appendix A4.2 Summary of additional findings for the completing school domain¹

Outcome measure	Study sample	Authors' findings from the study						
		Sample size (students)	Mean outcome		WWC calculations			
			Job Corps group	Comparison group	Mean difference ² (Job Corps – comparison)	Effect size ³	Statistical significance ⁴ (at $\alpha = 0.05$)	Improvement index ⁵
Schochet, Burghardt, & Glazerman, 2001 (randomized controlled trial)⁶								
Earned a GED certificate (%)	Those who entered study without a high school credential	8,597	41.6	26.6	15.0	0.41	Statistically significant	+16
Earned a high school diploma (%)	Those who entered study without a high school credential	8,597	5.3	7.5	-2.2	-0.22	Statistically significant	-9

1. This appendix presents the separate effects of *Job Corps* on receiving a GED certificate or high school diploma. The intervention's combined effect on receiving a high school diploma or GED certificate was used for determining the effectiveness rating and is presented in Appendix A3.2. The percentage who earned a high school diploma and the percentage who earned a GED certificate reported here do not sum exactly to the percentage who earned either a high school diploma or GED certificate reported in Appendix A3.2. The WWC confirmed with study authors that this small discrepancy arises because slightly different samples were used to estimate effects for each of these measures because of differing numbers of missing values across the three measures.
2. Positive differences and effect sizes favor the intervention group; negative differences and effect sizes favor the comparison group. All estimates were calculated using sample weights to account for the sample design and interview nonresponse.
3. Effect sizes for dichotomous variables were computed using the Cox Index. For an explanation of the effect size calculation, see [Technical Details of WWC-Conducted Computations](#).
4. Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between groups.
5. The improvement index represents the difference between the percentile rank of the average student in the intervention condition and that of the average student in the comparison condition. The improvement index can take on values between -50 and +50, with positive numbers denoting results favorable to the intervention group.
6. The level of statistical significance was reported by the study authors or, where necessary, calculated by the WWC to correct for clustering within classrooms or schools and for multiple comparisons. For an explanation about the clustering correction, see the [WWC Tutorial on Mismatch](#). For the formulas the WWC used to calculate statistical significance, see [Technical Details of WWC-Conducted Computations](#). For Schochet et al. (2001), no corrections for clustering or multiple comparisons were needed.

Appendix A5.1 Job Corps rating for the progressing in school domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.¹

For the outcome domain of progressing in school, the WWC rated *Job Corps* as having no discernible effects. It did not meet the criteria for other ratings (positive effects, potentially positive effects, mixed effects, potentially negative effects, and negative effects) because the one study that met WWC evidence standards did not show statistically significant or substantively important effects.

Rating received

No discernible effects: No affirmative evidence of effects.

- Criterion 1: No studies showing a statistically significant or substantively important effect, either *positive* or *negative*.

Met. The only study of *Job Corps* passing evidence standards found no statistically significant or substantively important effects in this domain.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *positive* effects, at least one of which met WWC evidence standards for a strong design.

Not met. *Job Corps* had only one study meeting WWC evidence standards.

AND

- Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect.

Not met. No study found statistically significant or substantively important positive effects in this domain.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

Mixed effects: Evidence of inconsistent effects as demonstrated through either of the following criteria.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect, and at least one study showing a statistically significant or substantively important *negative* effect, but no more such studies than the number showing a statistically significant or substantively important *positive* effect.

Not met. No study found statistically significant or substantively important effects, either positive or negative, in this domain.

OR

- Criterion 2: At least one study showing a statistically significant or substantively important effect, and more studies showing an *indeterminate* effect than showing a statistically significant or substantively important *important* effect.

Not met. No statistically significant or substantively important effects were found in this domain.

(continued)

Appendix A5.1 Job Corps rating for the progressing in school domain (continued)

Potentially negative effects: Evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *negative* effect.

Not met. No study found statistically significant or substantively important negative effects in this domain.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *positive* effect, or more studies showing statistically significant or substantively important *negative* effects than showing statistically significant or substantively important *positive* effects.

Met. No study found statistically significant or substantively important positive effects in this domain.

Negative effects: Strong evidence of a negative effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *negative* effects, at least one of which met WWC evidence standards for a strong design.

Not met. No study found statistically significant negative effects in this domain.

AND

- Criterion 2: No studies showing statistically significant or substantively important *positive* effects.

Met. No study found statistically significant or substantively important positive effects in this domain.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. For a complete description, see the [WWC Intervention Rating Scheme](#).

Appendix A5.2 Job Corps rating for the completing school domain

The WWC rates an intervention's effects for a given outcome domain as positive, potentially positive, mixed, no discernible effects, potentially negative, or negative.¹

For the outcome domain of completing school, the WWC rated *Job Corps* as having potentially positive effects. *Job Corps* did not meet the criteria for positive effects because only one study of *Job Corps* met WWC evidence standards. The remaining ratings (mixed effects, no discernible effects, potentially negative effects, and negative effects) were not considered because *Job Corps* was assigned the highest applicable rating.

Rating received

Potentially positive effects: Evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: At least one study showing a statistically significant or substantively important *positive* effect.

Met. One study of *Job Corps* demonstrated a statistically significant positive effect.

AND

- Criterion 2: No studies showing a statistically significant or substantively important *negative* effect and fewer or the same number of studies showing *indeterminate* effects than showing statistically significant or substantively important *positive* effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

Other ratings considered

Positive effects: Strong evidence of a positive effect with no overriding contrary evidence.

- Criterion 1: Two or more studies showing statistically significant *positive* effects, at least one of which met WWC evidence standards for a strong design.

Not met. *Job Corps* had only one study meeting WWC evidence standards.

AND

- Criterion 2: No studies showing statistically significant or substantively important *negative* effects.

Met. No study found statistically significant or substantively important negative effects in this domain.

1. For rating purposes, the WWC considers the statistical significance of individual outcomes and the domain-level effect. The WWC also considers the size of the domain-level effect for ratings of potentially positive or potentially negative effects. For a complete description, see the [WWC Intervention Rating Scheme](#).

(continued)

Appendix A6 Extent of evidence by domain

Outcome domain	Number of studies	Sample size		Extent of evidence ¹
		Schools	Students	
Staying in school	0	na	na	na
Progressing in school	1	105	11,313	Small
Completing school	1	105	8,597	Small

na = not applicable/not studied

1. A rating of “moderate to large” requires at least two studies and two schools across studies in one domain and a total sample size across studies of at least 350 students or 14 classrooms. Otherwise, the rating is “small.”