WWC Single Study Review

INSTITUTE OF EDUCATION SCIENCES

March 2015

WWC Review of the Report "The Forgotten Summer: Does the Offer of College Counseling After High School Mitigate Summer Melt Among College-Intending, Low-Income High School Graduates?": Analysis of the Atlanta Program[1,2]

The findings from this review do not reflect the full body of research evidence on summer counseling for college-bound high school graduates.

What is this study about?

The study examined whether two summer counseling programs for college-bound students, one in Atlanta, GA, and one in Boston, MA, increased college enrollment and persistence into the sophomore year. This WWC report focuses on the design, analysis, and findings from the Atlanta site; a separate single study review provides information about the design, analysis, and findings from the Boston site.

The summer counseling intervention was intended to reduce what the study authors call summer "melt," a phenomenon in which students have been accepted to college but fail to matriculate. According to the authors of the study, college-bound students, especially those of low socioeconomic status, may lack the financial and college literacy to complete typical matriculation requirements. The program targeted students' financial and college literacy by providing information about the steps necessary to matriculate and assisting students with completing those steps, such as taking placement tests, arranging for housing, acquiring medical insurance, obtaining financial aid, and registering for courses.

Recent high school graduates in Atlanta who indicated on an exit survey that they were planning to attend college the following fall were randomly assigned either to receive an offer of college counseling over the summer or to not receive the offer of counseling. Students in the intervention group were offered counseling through the Fulton County school district. Students in the comparison group were not offered counseling, but counselors were instructed not to deny assistance to any comparison group students who sought help.

The impact of the intervention was examined on immediate enrollment in college and persistence into the second semester and second year of college.[3] The authors also report on enrollment and persistence for low socioeconomic status students.

Features of Summer Counseling

Students were contacted by counselors through phone, e-mail, and text and Facebook messaging. Students were then offered counseling that focused on completing required steps for enrolling in college in the fall. Counselors provided a range of information to students about the matriculation process, including information about financial aid, key summer deadlines, and how to complete paperwork. Counselors noted that most of the counseling focused on issues of financial aid.

What did the study find?

Study authors reported that there were no statistically significant impacts for the summer counseling program in initial college enrollment or persistence into the sophomore year.

See Appendix C for more information about the results from this study. Appendix D provides information about supplementary findings.

WWC Rating

The research described in this report meets WWC group design standards without reservations

The Atlanta study was a well-executed randomized controlled trial with no attrition.

Appendix A: Study details

Castleman, B. L., Page, L. C., & Schooley, K. (2014). The forgotten summer: Does the offer of college counseling after high school mitigate summer melt among college-intending, low-income high school graduates? *Journal of Policy Analysis and Management, 33*(2), 320–344. doi:10.1002/pam.21743

Setting

The study took place in the Fulton County School district near Atlanta, Georgia in the summer between high school and college in 2011. Participants had graduated from Atlanta public high schools and were randomly assigned to receive an offer of counseling from counselors at the participating high schools who staffed the intervention. These counselors also performed outreach via phone, e-mail, text, and Facebook and offered counseling to the students. Most counseling occurred over the phone rather than face-to-face.

Study sample

In the Atlanta study, there were 480 students in the intervention group and 966 students in the comparison group, for a total of 1,446 students in the overall sample. All students had graduated from one of six public high schools in the Atlanta area. Ethnic minority students comprised 61% of the sample (49% Black, 6% Hispanic, 4% Asian, and 2% multiracial), and 54% of the students were female. The students in the sample had higher GPAs and standardized test scores relative to similar high school students in the Atlanta area. Thirty-seven percent of the students qualified for free or reduced-price lunch (FRL).

Intervention group

Counselors attempted to contact each intervention group student via phone, e-mail, text, and Facebook to offer support. They were encouraged to use an intake form in their initial meeting with students that outlined the tasks required for college enrollment. Counselors who met with students in person primarily did so at the school from which they were working, but the counselors depended on phone conversations to provide most of their support.

Counselors maintained records of interactions with students in both intervention and comparison groups. Authors noted that many of the counselors' interactions with students focused on issues of financial aid. Counselors also reported addressing a variety of informational questions, such as how to access a college's web portal, how to complete required paperwork, and what the matriculation process entailed. About 35% of the students had any communication with a counselor; approximately 25% of the non-FRL students had contact with a counselor, while nearly 54% of the FRL students had contact with a counselor.

Comparison group

The comparison group students did not receive outreach though they were assigned to a counselor. Counselors were instructed not to deny support to any comparison group student who actively sought help. According to logs maintained by the counselors, about 1% of the comparison group students had contact with an advisor.

Outcomes and measurement

Program impacts were examined on initial enrollment and on persistence into the next semester and into the second year of college. For a more detailed description of these outcome measures, see Appendix B.

Support for implementation

Study authors provided supplemental training for the counselors that focused on the federal and state financial aid application process.

Reason for review

Several federal grant funding programs require that funding applications be supported by strong evidence of effectiveness based on WWC standards. This study was identified for review by the WWC because it was cited by a grant applicant.

Appendix B: Outcome measures for each domain

Enrollment	
Immediate enrollment	Information on initial enrollment in college in the fall of 2011 was obtained from the National Student Clearinghouse.
Credit accumulation	
Persistence into the second semester	Information on persistence into the second semester of college in the spring of 2012 was obtained from the National Student Clearinghouse. The results on this outcome are supplementary findings and are reported in Appendix D.
Persistence into the sophomore year	Information on persistence into the sophomore year of college in the fall of 2012 was obtained from the National Student Clearinghouse. The Postsecondary Education review protocol prioritizes the longest follow-up period as primary. Therefore, persistence into the sophomore year was selected as the primary outcome in the credit accumulation domain.

Table Notes: The study also examined whether students enrolled and persisted at (1) the specific institution in which they intended to enroll as of high school graduation and (2) the type of institution (i.e., 2-year vs. 4-year, public vs. private) in which they intended to enroll as of high school graduation. These outcomes were used to examine whether students followed through on their expected plans after high school and are not eligible for review under the Postsecondary Education review protocol.

Appendix C: Study findings for each domain

Domain and outcome measure	Study sample	Sample size	Mean (standard deviation)		WWC calculations			*p*-value
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index	
Enrollment								
Immediate enrollment	Atlanta sample	1,446 students	87.6%	85.4%	2.2%	0.11	+5	> .10
Domain average for enrollment						**0.11**	**+5**	**Not statistically significant**
Credit accumulation								
Persistence into the sophomore year	Atlanta sample	1,446 students	70.6%	68.0%	2.6%	0.07	+3	> .10
Domain average for credit accumulation						**0.07**	**+3**	**Not statistically significant**

Table Notes: For mean difference, effect size, and improvement index values reported in the table, a positive number favors the intervention group and a negative number favors the comparison group. The effect size is a standardized measure of the effect of an intervention on individual outcomes, representing the average change expected for all individuals who are given the intervention (measured in standard deviations of the outcome measure). The improvement index is an alternate presentation of the effect size, reflecting the change in an average individual's percentile rank that can be expected if the individual is given the intervention. The statistical significance of the study's domain average was determined by the WWC. Some statistics may not sum as expected due to rounding.

Study Notes: No corrections for clustering or multiple comparisons and no difference-in-differences adjustments were needed. The *p*-values presented here were reported in the original study. The study is characterized as having an indeterminate effect because the estimated effect is neither statistically significant or substantively important. For more information, please refer to the WWC Standards and Procedures Handbook (version 3.0), pp. 25–26.

Appendix D: Supplemental findings by domain

Domain and outcome measure	Study sample	Sample size	Mean (standard deviation)		WWC calculations			*p*-value
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index	
Enrollment								
Immediate enrollment	Atlanta, FRL	910 students	71.9%	63.4%	8.5%	0.24	+9	< .10
Immediate enrollment	Atlanta, non-FRL	536 students	92.6%	92.8%	–0.2%	–0.02	–1	> .10
Credit accumulation								
Persistence into second semester	Atlanta	1,446 students	83.0%	81.1%	1.9%	0.08	+3	> .10
Persistence into second semester	Atlanta, FRL	910 students	62.3%	59.3%	3.0%	0.08	+3	> .10
Persistence into second semester	Atlanta, non-FRL	536 students	90.2%	89.4%	0.8%	0.05	+2	> .10
Persistence into sophomore year	Atlanta, FRL	910 students	44.1%	39.2%	4.9%	0.12	+5	> .10
Persistence into sophomore year	Atlanta, non-FRL	536 students	83.4%	80.9%	2.5%	0.10	+4	> .10

Table Notes: The supplemental findings presented in this table are additional findings that do not factor into the determination of the evidence rating. For mean difference, effect size, and improvement index values reported in the table, a positive number favors the intervention group and a negative number favors the comparison group. The effect size is a standardized measure of the effect of an intervention on individual outcomes, representing the average change expected for all individuals who are given the intervention (measured in standard deviations of the outcome measure). The improvement index is an alternate presentation of the effect size, reflecting the change in an average individual's percentile rank that can be expected if the individual is given the intervention. Some statistics may not sum as expected due to rounding.

Study Notes: No corrections for clustering or multiple comparisons and no difference-in-differences adjustments were needed. Sample sizes for the subgroups were provided by the authors. The *p*-values presented here were reported in the original study.

Endnotes

[1] Single study reviews examine evidence published in a study (supplemented, if necessary, by information obtained directly from the authors) to assess whether the study design meets WWC group design standards. The review reports the WWC's assessment of whether the study meets WWC group design standards and summarizes the study findings following WWC conventions for reporting evidence on effectiveness. This study was reviewed using the review protocol for individual studies in the Postsecondary Education topic area (version 3.0).

[2] The study also examined the impact of a similar summer counseling intervention implemented in Boston, Massachusetts, relative to a separate comparison group that was formed by random assignment. The findings from that analysis are reported in a separate single study review by the WWC because the two programs had slightly different features and separate results were reported by the authors.

[3] There were two outcomes included in the study that are not described in this WWC report. The study also examined whether students enrolled and persisted at (1) the specific institution in which they intended to enroll as of high school graduation and (2) the type of institution (i.e., 2-year vs. 4-year, public vs. private) in which they intended to enroll as of high school graduation. These outcomes were used to examine whether students followed through on their expected plans after high school and are not eligible for review under the Postsecondary Education review protocol. See the table notes in Appendix B for more information.

Recommended Citation

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2015, March). *WWC review of the report: The forgotten summer: Does the offer of college counseling after high school mitigate summer melt among college-intending, low-income high school graduates?: Analysis of the Atlanta program.* Retrieved from http://whatworks.ed.gov

Glossary of Terms

Attrition Attrition occurs when an outcome variable is not available for all participants initially assigned to the intervention and comparison groups. The WWC considers the total attrition rate and the difference in attrition rates across groups within a study.

Clustering adjustment If intervention assignment is made at a cluster level and the analysis is conducted at the student level, the WWC will adjust the statistical significance to account for this mismatch, if necessary.

Confounding factor A confounding factor is a component of a study that is completely aligned with one of the study conditions, making it impossible to separate how much of the observed effect was due to the intervention and how much was due to the factor.

Design The design of a study is the method by which intervention and comparison groups were assigned.

Domain A domain is a group of closely related outcomes.

Effect size The effect size is a measure of the magnitude of an effect. The WWC uses a standardized measure to facilitate comparisons across studies and outcomes.

Eligibility A study is eligible for review if it falls within the scope of the review protocol and uses either an experimental or matched comparison group design.

Equivalence A demonstration that the analytic sample groups are similar on observed characteristics defined in the review area protocol.

Improvement index Along a percentile distribution of individuals, the improvement index represents the gain or loss of the average individual due to the intervention. As the average individual starts at the 50th percentile, the measure ranges from –50 to +50.

Multiple comparison adjustment When a study includes multiple outcomes or comparison groups, the WWC will adjust the statistical significance to account for the multiple comparisons, if necessary.

Quasi-experimental design (QED) A quasi-experimental design (QED) is a research design in which study participants are assigned to intervention and comparison groups through a process that is not random.

Randomized controlled trial (RCT) A randomized controlled trial (RCT) is an experiment in which eligible study participants are randomly assigned to intervention and comparison groups.

Single-case design (SCD) A research approach in which an outcome variable is measured repeatedly within and across different conditions that are defined by the presence or absence of an intervention.

Standard deviation The standard deviation of a measure shows how much variation exists across observations in the sample. A low standard deviation indicates that the observations in the sample tend to be very close to the mean; a high standard deviation indicates that the observations in the sample are spread out over a large range of values.

Statistical significance Statistical significance is the probability that the difference between groups is a result of chance rather than a real difference between the groups. The WWC labels a finding statistically significant if the likelihood that the difference is due to chance is less than 5% ($p < .05$).

Substantively important A substantively important finding is one that has an effect size of 0.25 or greater, regardless of statistical significance.

Please see the WWC Procedures and Standards Handbook (version 3.0) for additional details.