

What Works Clearinghouse™



December 2014

WWC Review of the Report “Freshman Year Financial Aid Nudges: An Experiment to Increase FAFSA Renewal and College Persistence”¹

The findings from this review do not reflect the full body of research evidence on text message financial aid reminders.

What is this study about?

The study measured the impact of sending text message reminders regarding annual Free Application for Federal Student Aid (FAFSA) renewal to first-year college students who were already receiving financial aid. Specifically, the study authors measured the effect of these messages on persistence into the second year of college. The text messages (a) provided information about how the students could obtain help with financial aid, (b) reminded students about important deadlines and requirements for refilling the FAFSA, and (c) offered assistance on financial aid related processes. Students in the comparison group did not receive text message reminders, but did have financial aid process assistance available to them on request (in-person assistance rates were similar in the intervention and comparison groups). The study authors state that the intervention costs about \$5 per student.

Most of the students participating in this study were attending a postsecondary institution in Massachusetts. All of the participants were first-time college students who had received services during high school from the host organization (uAspire, a national nonprofit that provides financial aid counseling). About 62% of the participants were female, 91% were members of a racial/ethnic minority group, and 83% were eligible for Pell Grants. Seventy-two percent of students attended a 4-year institution during their freshman year.

What did the study find?

The study authors reported that, overall, there was no statistically significant effect on the rates of student persistence from their freshman to their sophomore years (persistence rates were about 81% in both groups). However, the intervention’s effect differed for students attending 2-year vs. 4-year institutions. While the persistence rates were similar among students attending a 4-year institution (84% in the intervention group and 87% in the comparison group), students attending a 2-year institution who participated in the intervention persisted at a higher rate (75%) than did students in the comparison condition (64%).²

Features of Text Message Reminders

Students received text messages approximately every 2 weeks. The text messages focused on financial aid renewal by:

- offering assistance with the financial aid process,
- reminding students of important deadlines, and
- reminding students of the need to maintain satisfactory academic progress.

WWC Rating

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

This study is a well-executed randomized controlled trial.

Appendix A: Study details

Castleman, B. L., & Page, L. C. (2014). *Freshman year financial aid nudges: An experiment to increase FAFSA renewal and college persistence* (EdPolicyWorks Working Paper Series No. 29).
Charlottesville, VA: EdPolicyWorks.

Setting	The students in this sample were attending postsecondary institutions, most of which were located in Massachusetts.
Study sample	The sample included 808 students. Most of the students participating in this study were attending a postsecondary institution in Massachusetts. All of the participants were first-time college students who were receiving financial aid. About 62% of the participants were female, 91% were members of a racial/ethnic minority group, and 83% were eligible for Pell Grants. All of the students in the sample had received services during high school from the host organization (uAspire, a national nonprofit organization that provides financial aid counseling). To be included in the study, students must have had a cell phone number on file with uAspire and must have enrolled in college for the fall 2012 semester.
Intervention group	The intervention group in the study was comprised of students who were randomly assigned to receive the text message reminders.
Comparison group	The comparison group in the study was comprised of students who were randomly assigned not to receive the text message reminders. These students were eligible for support from uAspire on request.
Outcomes and measurement	The study reported findings for one eligible outcome—persistence from the first year to the second year of college. The outcome measure was based on data from the National Student Clearinghouse.
Support for implementation	The authors did not provide information on training received by uAspire counselors.
Reason for review	This study was reviewed by the WWC in response to receiving significant media attention.

Appendix B: Outcome measure for the credit accumulation domain

Credit accumulation	
<i>Persistence</i>	This outcome is measured via a binary indicator of whether or not the student re-enrolled in college for the fall semester of the second year, obtained from the National Student Clearinghouse.

Study Notes: This study also assessed the impact of text message reminders on several indicators related to intervention take up and on whether students re-enrolled at the same institution. None of these outcomes were eligible for review under the Postsecondary Education review protocol, and therefore, are not included in this single study review.

Appendix C: Study findings for the credit accumulation domain

Domain and outcome measure	Study sample	Sample size	Mean (standard deviation)		WWC calculations				<i>p</i> -value
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index		
Credit accumulation									
<i>Persistence</i>	Postsecondary students	808 students	81%	81%	1%	+0.02	+1	> .05	
Domain average for credit accumulation									
						+0.02	+1		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 WWC-computed average effect size is a simple average rounded to two decimal places; the average improvement index is calculated from the average effect size. The statistical significance of the study's domain average was determined by the WWC; for example, the study is characterized as having a statistically significant positive effect because univariate statistical tests are reported for each outcome measure, the effect for at least one measure within the domain is positive and statistically significant, and no effects are negative and statistically significant, accounting for multiple comparisons. Some statistics may not sum as expected due to rounding.

Study Notes: No corrections for clustering or multiple comparisons and no difference-in-differences adjustment were needed. The *p*-value presented here was reported in the original study. Unadjusted standard error estimates were obtained from the study authors. These statistics form the basis of the effect size calculation. Some statistics may not sum as expected due to rounding.

Appendix D: Supplemental findings for the credit accumulation domain

Domain and outcome measure	Study sample	Sample size	Mean (standard deviation)		WWC calculations				<i>p</i> -value
			Intervention group	Comparison group	Mean difference	Effect size	Improvement index		
Credit accumulation									
<i>Persistence</i>	4-year institution	583 students	84%	87%	-3%	-0.11	-4	> .05	
<i>Persistence</i>	2-year institution	225 students	75%	64%	11%	0.28	+11	< .05	

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.

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. Using data obtained from the study authors, tests for subgroup interaction revealed a statistically significant difference in effects across subgroups.

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 design standards. The review reports the WWC's assessment of whether the study meets WWC design standards and summarizes the study findings following WWC conventions for reporting evidence on effectiveness. This study was reviewed using the Postsecondary Education topic area review protocol, version 3.0. The WWC rating applies only to the study outcomes that were eligible for review under this topic area. The reported analyses in this SSR are only for those eligible outcomes that either met WWC design standards without reservations or met WWC design standards with reservations, and do not necessarily apply to all results presented in the study.

² There were outcomes included in the study that are not described in this WWC report—several indicators related to intervention take up, and on whether students re-enrolled at the same institution. See the study notes in Appendix B for more information.

Recommended Citation

U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2014, December). *WWC review of the report: Freshman year financial aid nudges: An experiment to increase FAFSA renewal and college persistence*. 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 analysis 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.