Social Belonging Interventions

Intervention Brief │ Supporting Postsecondary Success
Topic Area

Large numbers of students who enroll in college do not complete a degree. Yet, earning a college degree is one of the primary pathways for economic success and is increasingly required for good jobs and high wages.[1] *Social Belonging* interventions for college students aim to reduce the impacts of negative stereotypes that may burden students in underrepresented groups and affect their persistence in college. Examples of such groups are racial or ethnic minority groups, women in engineering, and first-generation college students. There are different variations of *Social Belonging* interventions but they all have in common a goal of influencing students' sense that they could be successful within a college setting.[2]

This What Works Clearinghouse (WWC) report, part of the WWC's Supporting Postsecondary Success topic area, explores the effects of *Social Belonging* interventions on postsecondary students' academic achievement, progressing in college, and college enrollment. The WWC identified 14 studies of *Social Belonging* interventions. Seven of these studies meet WWC standards. The evidence presented in this report is from studies of the impact of *Social Belonging* on postsecondary students in less advantaged or underrepresented groups–including Asian, White, Black, Hispanic, first-generation, and female students–in both public and private postsecondary settings.

What Happens When Students Participate in *Social Belonging* Interventions?[3]

The evidence indicates that implementing *Social Belonging* interventions:

- **has inconsistent effects on academic achievement**
- **has inconsistent effects on progressing in college**
- **may result in little to no change in college enrollment**

Findings on *Social Belonging* interventions from seven studies that meet WWC standards are shown in Table 1.

The table reports an effectiveness rating, the improvement index, and the number of studies and students that contributed to the findings. The improvement index is a measure of the intervention's effect on an outcome. It can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention.

Table 1. Summary of findings on *Social Belonging* interventions from studies that meet WWC standards

Outcome domain	Effectiveness rating	Study findings Improvement index (percentile points)	Evidence meeting WWC standards (version 4.0) Number of studies	Number of students
Academic achievement	Mixed effects	+6	6	3,640
Progressing in college	Mixed effects	+6	3	2,484
College enrollment	No discernible effects	-1	2	1,893

Note: The improvement index can be interpreted as the expected change in percentile rank for an average comparison group student if that student had received the intervention. For example, an improvement index of +6 means that the expected percentile rank of the average comparison group student would increase by 6 points if the student received a *Social Belonging* intervention. The improvement index values are generated by averaging findings from the outcome analyses that meet WWC standards within each of the respective domains, as reported by Broda et al. (2018), LaCosse et al. (2020), Murphy et al. (2020), Walton & Cohen (2011), Weaver et al. (2020), and Yeager et al. (2016), Experiments 2 and 3. A positive improvement index does not necessarily mean the estimated effect is statistically significant. Academic achievement outcomes reported in these studies include semester grade point average (GPA); Science, Technology, Engineering, and Mathematics (STEM) GPA; first-term GPA; cumulative GPA sophomore to senior year; course grade in calculus; and exam averages in calculus courses. Progressing in college outcomes reported in these studies include college credits completed in the first term, college persistence for one year, and earning 12+ credits in the first term. College enrollment outcomes reported in these studies include full-time college enrollment and attempting 12+ credits in the first term. The effects of *Social Belonging* interventions are not known for other outcomes within the Supporting Postsecondary Success topic area, including college attendance, postsecondary degree attainment, credential attainment, employment, and earnings.

How are *Social Belonging* Interventions Implemented?

The following section provides details of how postsecondary institutions implemented *Social Belonging* interventions. This information can help educators identify the requirements for implementing a *Social Belonging* intervention and determine whether implementing this type of intervention would be feasible in their institutions. Information on *Social Belonging* interventions presented in this section comes from the studies that meet WWC standards (Broda et al., 2018; LaCosse et al., 2020; Murphy et al., 2020; Walton & Cohen, 2011; Weaver et al., 2020; and Yeager et al., 2016, Experiments 2 and 3) and from correspondence with researchers in the field.

- **Goal:** *Social Belonging* interventions aim to improve academic achievement and college persistence by helping students view doubts about whether they belong in college as normal and temporary reactions to the challenges of adjusting to college.
- **Target population:** *Social Belonging* interventions implemented in postsecondary settings often target students from historically underrepresented groups (such as those who are Black, Hispanic, or first-generation to college) who may have greater concerns about whether they belong in college.
- **Method of delivery:** *Social Belonging* interventions in postsecondary settings are typically delivered to students

> **Comparison group:** In the seven studies that contribute to this intervention report, students in the comparison group also participated in similar activities in which they reviewed other students' experiences with challenges and reflected about their own potential success afterwards. However, the challenges were focused on areas related to success in college that did not involve social belonging.

individually through online modules and may also be delivered in groups or in a classroom setting.
- **Frequency and duration of service:** *Social Belonging* interventions in postsecondary settings typically occur once, prior to or soon after the start of a student's first year of college enrollment, and typically last less than an hour.
- **Intervention components:** *Social Belonging* interventions for postsecondary students typically include an exposure component, in which students are exposed to descriptions of other students' experiences with concerns about social belonging, and a reflection component, in which students reflect on their own futures. Refer to Table 2 for additional details.

Table 2. Components of *Social Belonging* interventions

Key component	Description
Exposure to other student experiences with social belonging	Students are exposed to stories or testimonials about other students who initially felt like they did not belong in college and experienced challenges making friends, fitting in, or achieving academic success. The stories emphasize that these experiences are normal, and that with sustained social and academic engagement, these challenges can be overcome.
Student reflection	Students are prompted to reflect on and describe their own experiences with belonging concerns improving over time. Students are encouraged to share advice and stories with future students who have concerns about fitting in to help others improve their transition to college.

What Do *Social Belonging* Interventions Cost?

This preliminary list of costs is not designed to be exhaustive; rather, it provides educators an overview of the major resources needed to implement *Social Belonging* interventions. The program costs described in Table 3 are based on the information available as of November 2020.

Table 3. Cost ingredients for *Social Belonging* interventions

Cost ingredients	Description	Source of funding
Personnel	College personnel oversee the preparation and delivery of materials to students.	College
Facilities	*Social Belonging* interventions can be administered in an existing classroom, laboratory, or other campus facility, or delivered online in a location of each student's choosing.	College
Equipment and materials	Postsecondary institutions can access existing intervention materials for free online at sites such as PERTS (Project for Education Research that Scales). Alternatively, college personnel can adapt intervention materials described or provided in the studies reviewed here. Other costs may include the information technology infrastructure and software needed to deliver the intervention online.	College

For More Information:

About *Social Belonging* interventions
> Web:
> College Transition Collaborative: https://collegetransitioncollaborative.org/social-belonging/
> Project for Education Research that Scales (PERTS), *Social Belonging* for College Students: https://www.perts.net/orientation/cb
> Research on *Social Belonging* interventions: https://mindsetscholarsnetwork.org/learning-mindsets/belonging/

In What Context Was *Social Belonging* Studied?

The following section provides information on the setting of the seven studies of *Social Belonging* interventions that meet WWC standards, and a description of the participants in the research from six of the seven studies.[4]

This information can help educators understand the context in which the studies of *Social Belonging* interventions were conducted, and determine whether the program might be suitable for their setting.

WHERE THE STUDY WAS CONDUCTED

7 studies, 5,096 students in 24 postsecondary institutions

Race

33%	23%	9%	35%
Asian	White	Black	Other

Ethnicity

29%	71%
Hispanic	Non-Hispanic
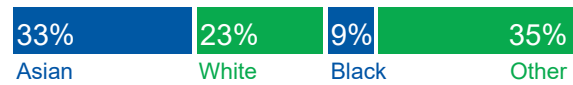
Grades PK K 1 2 3 4 5 6 7 8 9 10 11 12 PS

LEARN MORE

Read more about *Social Belonging* interventions and the studies that are summarized here in the [Intervention Report](#).

Endnotes

[1] McFarland, J., Hussar, B., Zhang, J., Wang, X., Wang, K., Hein, S., Diliberti, M., Forrest Cataldi, E., Bullock Mann, F., and Barmer, A. (2019). *The Condition of Education 2019* (NCES 2019-144). U.S. Department of Education. Washington, DC: National Center for Education Statistics. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2019144

[2] The WWC provided a description of this category of interventions to a researcher familiar with *Growth Mindset* and *Social Belonging* interventions in July 2021 and the WWC incorporated feedback from these researchers. Further verification of the accuracy of the descriptive information for this type of intervention is beyond the scope of this review.

[3] The literature search reflects documents publicly available as of November 2020. Reviews of the studies in this report used the standards from the WWC Procedures and Standards Handbook (version 4.0) and the Supporting Postsecondary Success review protocol (version 4.0). The evidence presented in this report is based on available research. Findings and conclusions could change as new research becomes available.

[4] Race/ethnicity characteristics are reported for the following six studies: Broda et al. (2018), LaCosse et al. (2020), Murphy et al. (2020), Walton & Cohen (2011), and Yeager et al. (2016), Experiments 2 and 3. Race/ethnicity characteristics were not available for the samples that were the focus of this review for the Weaver et al. (2020). Data for Weaver et al. (2020) were only presented in aggregate for underrepresented groups. Sample 1 from this study included 3% Black, Hispanic, and Native American students, and Sample 2 included 10% Black, Hispanic, and Native American students.