



Exploring Differences in Background Can Promote Greater Equality in Outcomes

BY JESS HENNESSEY

RESEARCH SUMMARY | NOVEMBER 2015

Nicole Stephens, MarYam Hamedani, and Mesmin Destin examined the effectiveness of a program that helped students understand how differences in social background contribute to their experiences in college.

College is often seen as a valuable investment in students' futures and those of their families and communities. But for some students the transition to college can be more challenging than others. First-generation college students—students whose parents don't have a college education—have higher dropout rates and lower academic grades on average than their continuing-generation peers.^{1,2}

How can we disrupt this pattern and help all students succeed in college settings, regardless of their background? Many different factors underlie poor college outcomes. But research shows that social and psychological factors are an important contributor to this achievement gap.¹ Can a seemingly “small” or brief social psychological program improve first-generation students' odds of success?

To explore these questions, Nicole Stephens, MarYam Hamedani, and Mesmin Destin conducted a randomized controlled trial in which they tested the effectiveness of a program for incoming freshmen that focused on how differences in students' social backgrounds contributed to their college experiences. The researchers wanted to test whether this “difference-education” program could decrease the gap in academic performance between first-generation college students and their continuing-generation peers.

This research summary highlights findings from the following articles:

Stephens, N. M., Hamedani, M. G., & Destin, M. (2014). Closing the social-class achievement gap: A difference-education intervention improves first-generation students' academic performance and all students' college transition. *Psychological Science*, 25, 943-953.

Stephens, N. M., Townsend, S. S., Hamedani, M. G., Destin, M., & Manzo, V. (2015). A Difference-Education Intervention Equips First-Generation College Students to Thrive in the Face of Stressful College Situations. *Psychological Science*, 0956797615593501.

Key Findings

- The difference-education program closed the gap in grade point average between first-generation students and their continuing-generation peers at a private university.
- Both first-generation and continuing-generation students showed improved overall well-being.

STUDY DESIGN

During the first month of school, first-year students at a private university were invited to attend a panel discussion on improving the transition to college. 147 students participated, including 66 first-generation students (neither parent had a 4-year college degree) and 81 continuing-generation students (students with at least one parent who had a 4-year college degree).

Participants were randomly assigned to receive either the difference-education program or a control condition. In both conditions the participating students listened to a diverse panel of older students discuss their transition to college using real-life examples.

MINDSET
SCHOLARS
NETWORK

Hosted at the Center for Advanced Study in the Behavioral Sciences at Stanford University, the Mindset Scholars Network is a group of leading social scientists dedicated to improving student outcomes and expanding educational opportunity by advancing our scientific understanding of students' mindsets about learning and school.

The difference-education version of the panel explored students' social-class backgrounds and the effect they had on their college experiences. The panelists talked about how their social-class backgrounds contributed both positively and negatively to their time in college and how they were able to use strategies to be successful. For example, when a panelist was asked about a challenge they faced in college they responded,

“Because my parents didn’t go to college, they weren’t always able to provide me the advice I needed. So it was sometimes hard to figure out which classes to take and what I wanted to do in the future. But there are other people who can provide that advice, and I learned that I needed to rely on my adviser more than other students.”

The control group also listened to panelists discuss their transitional experiences. However, the panelists did not mention their specific background and how that impacted their time at college.

After listening to the panel, the researchers had the participants engage in activities that have been shown to help individuals internalize messages they receive. All participants completed a survey that asked about the lessons they learned and how they would advise future incoming students about what had been discussed in the panel. Each participant created a short video testimonial about the experience, which they were told would be shared with incoming students the following year.

FIRST-YEAR RESULTS

At the end of the school year, the researchers collected data on participants' grade point averages (GPA) and a survey that assessed retention of the program's central ideas, whether students took advantage of school resources, and their general psychosocial wellbeing. Did the difference-education program have the desired effect?

The program eliminated disparities in academic performance.

The researchers documented a gap of .30 grade points between the first-generation students and continuing-generation students in the control group. But the researchers found no evidence of a gap in GPA between these two groups for the students who had participated in the difference-education program. First-generation students in the difference-education group earned higher GPAs than their first-generation peers in the control group.

The program closed gaps in seeking out valuable college resources.

First-generation students in the control group were less likely than their continuing-generation peers to seek out college resources (e.g., emailing or meeting with professors; seeking extra help) during their first year in college. But the difference-education program closed this resource-seeking gap, and further analyses suggested that these positive habits might have contributed to these students' increased academic performance.

The program improved the overall wellbeing of all students. The difference-education program had a positive effect on overall wellbeing for both first-generation students and continuing-generation students. Students in the difference-education group reported less stress and anxiety, better adjustment to college, and more engagement in academics and social situations than their peers in the control condition. They also reported a higher appreciation of differences and perspective-taking than the students in the control group.

LONGER-TERM FOLLOW-UP

In order to look into the long-term benefits of this intervention, the researchers followed-up with the same students almost two years after receiving the original one-hour program. In this follow-up study, participants completed “stressful” tasks (a speech about their background; a high-level math and verbal test). Students then took a survey about their perceptions of the task and provided saliva samples to measure physiological stress responses.

The results showed that effects of the program endured years later. Students who had received the difference-education program two years prior discussed their background more often in their speech. First-generation students from the difference-education group also showed signs of more physiological thriving, as shown by greater anabolic balance reactivity during the stressful tasks, than the first-generation students in the control group. Two years after participating in the program students were still displaying positive effects.

IMPLICATIONS OF THIS RESEARCH

These two studies showed that a low-impact, low-cost program could have lasting benefits that reduced academic gaps between first-generation and continuing-generation college students. The program positively affected grades, resource seeking, and general wellbeing during the college transition. These beneficial psychosocial results applied not just to first-generation students, but to continuing-generation students, as well. This research suggests that helping students understand how differences in backgrounds shape experiences—and that students from all backgrounds can succeed—can be beneficial for all students and lead to greater equality in our colleges and beyond.

Future research could explore the exact mechanisms that give rise to the benefits of a difference-education approach. Answering this question will give us a clearer picture of how we can best foster success and wellbeing for students from all backgrounds seeking to earn a college degree.

This brief was edited by Lisa Quay, Managing Director of the Mindset Scholars Network.

¹ Pascarella, E., Pierson, C., Wolniak, G., & Terenzini, P. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education, 75*, 249–284. doi:10.1353/jhe.2004.0016.

² Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research, 75*, 417–453. doi:10.3102/00346543075003417.