What We Know About Belonging from Scientific Research

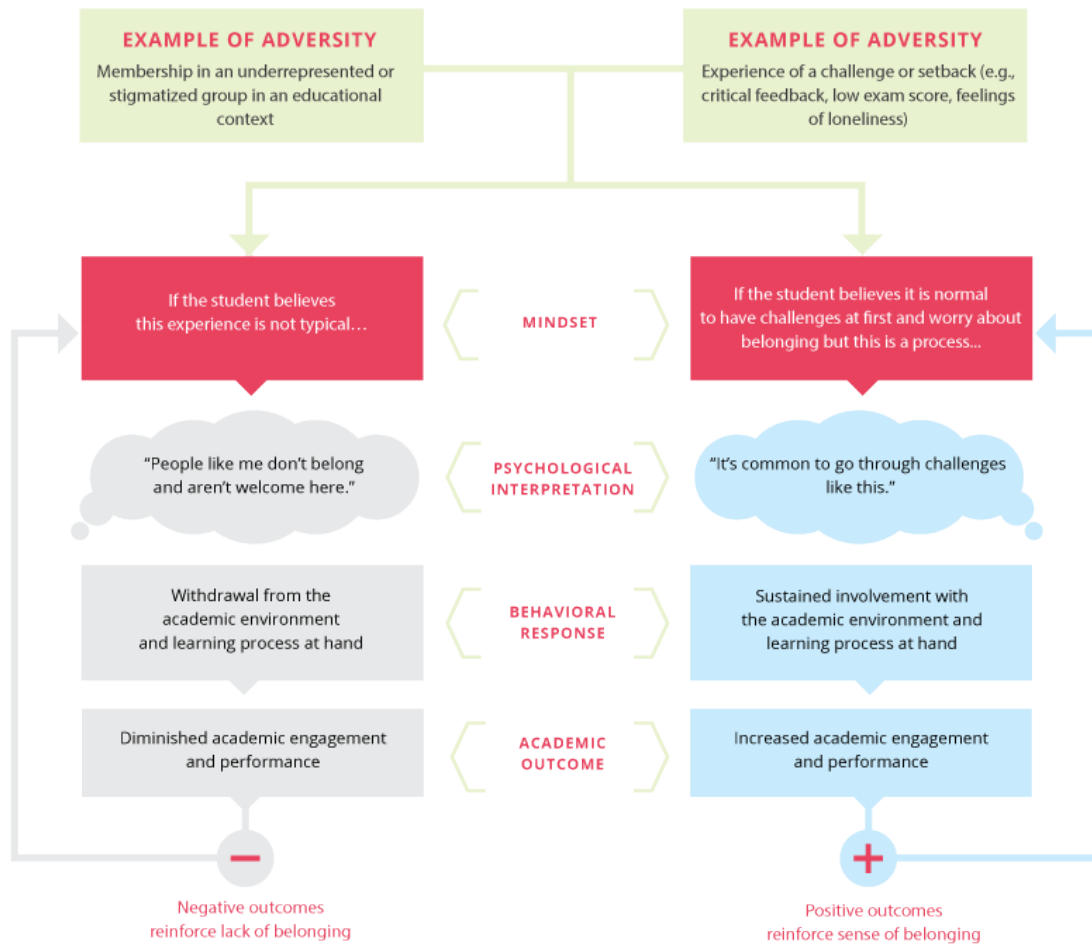BY CARISSA ROMERO

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BELONGING: WHAT IS IT?

Students with a sense of belonging in school feel socially connected, supported, and respected. They trust their teachers and their peers, and they feel a sense of fit at school. They are not worried about being treated as a stereotype and are confident that they are seen as a person of value.

WHY DOES IT MATTER?

Students who are confident they belong and are valued by their teachers and peers are able to engage more fully in learning. They have fewer behavior problems, are more open to critical feedback, take greater advantage of learning opportunities, build important relationships, and generally have more positive attitudes about their classwork and teachers. In turn, they are more likely to persevere in the face of difficulty and do better in school.

An example of how students' sense of belonging can shape their responses to adversity in school

EXAMPLE OF ADVERSITY
Membership in an underrepresented or stigmatized group in an educational context

EXAMPLE OF ADVERSITY
Experience of a challenge or setback (e.g., critical feedback, low exam score, feelings of loneliness)

MINDSET

If the student believes this experience is not typical...

If the student believes it is normal to have challenges at first and worry about belonging but this is a process...

PSYCHOLOGICAL INTERPRETATION

"People like me don't belong and aren't welcome here."

"It's common to go through challenges like this."

BEHAVIORAL RESPONSE

Withdrawal from the academic environment and learning process at hand

Sustained involvement with the academic environment and learning process at hand

ACADEMIC OUTCOME

Diminished academic engagement and performance

Increased academic engagement and performance

Negative outcomes reinforce lack of belonging

Positive outcomes reinforce sense of belonging

MINDSET SCHOLARS NETWORK

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.

When students are uncertain about whether they belong, they are vigilant for cues in the environment that signal whether or not they belong, fit in, or are welcome there. They may also be concerned about confirming a negative stereotype about their group. This hypervigilance and extra stress uses up cognitive resources that are essential for learning, diminishing their performance and discouraging them from building valuable relationships.

Students from underrepresented or negatively stereotyped groups may worry about whether people like them are accepted by their peers and teachers

Sometimes, students may question whether or not they belong in their classroom or school. These questions about belonging are most common among students from negatively stigmatized groups. These students are aware that they are underrepresented in a particular environment and recognize that negative stereotypes exist about their group. Claude Steele has compared this to the feeling of being told there is a snake in your house. It could be anywhere and it could harm you, but it also might not; regardless, you are constantly on the lookout.

These students are forced to split their attention between assessing their belonging and focusing on the learning task at hand

When students have questions about their belonging, they search for cues in their environment to signal whether or not they fit in and are valued by others at school. When things are going well in school, they feel like they do belong. But when they experience adversity, their sense of belonging can decrease.

This vigilance to cues of whether or not they belong can become distracting and undermine performance. Cognitive resources that would otherwise be used to focus on learning are instead used to figure out if they belong. Because questions about belonging undermine performance and are more pervasive and persistent for students from underrepresented and stigmatized groups, they contribute to achievement gaps.

FIGURE 1. Unlike white students, African American students' sense of belonging in college was tied to the amount of adversity they experience on a given day
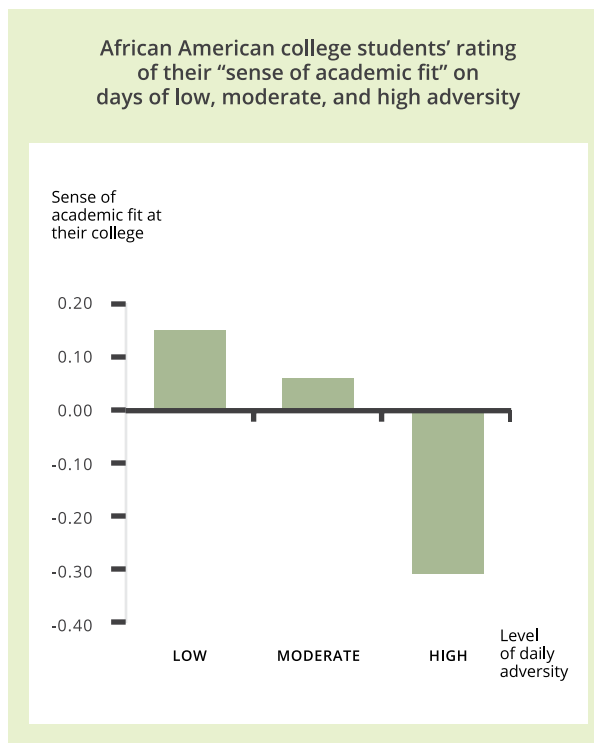
SOURCE: WALTON & COHEN, 2007

WHAT WE'VE LEARNED ABOUT HOW TO ALLEVIATE QUESTIONS ABOUT BELONGING

Studies show that brief programs can help alleviate students' worries about fit and belonging. In recent years, researchers have also learned more about the instructional and institutional practices that make students confident they are accepted members of their school community.

> Students who are confident they belong and are valued by their teachers and peers are able to engage more fully in learning.

Direct-to-student programs and changes in instructional and institutional practices have been linked to long-term gains in academic performance and reductions in achievement gaps on the basis of race, ethnicity, gender, and being the first in one's family to go to college.

Effective programs help students understand and normalize questions about belonging

Programs that help reduce concerns about belonging have been particularly effective at reducing achievement gaps.[1]

In some of these programs, students read findings from a survey of more senior students. The findings that are presented show that everyone questions their belonging during academic transitions, but that these concerns typically lessen over time. They also include quotes from more senior students that specifically address their worries, such as:
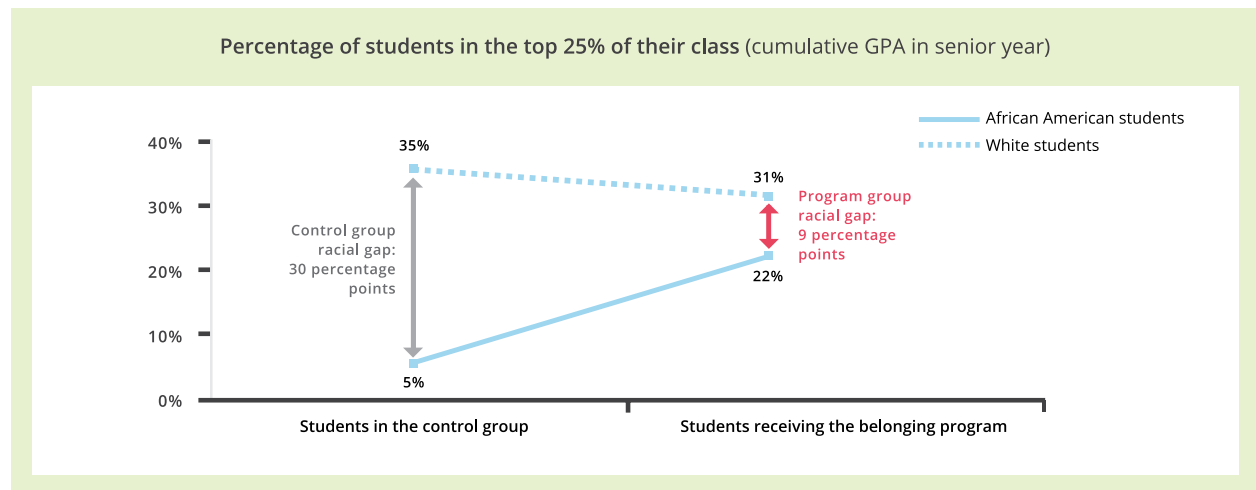
"As excited as I was to come here, I must admit that part of me thought I had been accepted due to a stroke of luck, and that I would not measure up to the other students. Early on, I bombed a test. It was the worst grade I'd ever received, and I felt terrible and isolated. But then, I found out I wasn't the only one. No one did well on that test. It was really hard—the professor was trying to set a high standard. He knew it'd be tough, but he knew that if we worked hard we could get to that level. It wasn't for some time that I believed that I was up to par and could totally hold my own. But eventually I did, and this place started to feel more like home. Though I still have doubts about myself sometimes, I know they're the kinds of things everybody feels on occasion."

After students read the survey results and student quotes, they write about how their own experience is similar to those of the students they read about. They are told that their experiences will be shared with future students making a similar transition. Similar to other mindset interventions, this writing exercise helps students internalize the key message of the program and makes participation an honor rather than a remediation.

Other programs educate students from underrepresented groups (e.g., first-generation college students) about how their backgrounds may affect their experiences in school. The "difference-education" program emphasizes how students' social-class backgrounds can be sources of challenge and strength—and provides students with strategies for how to navigate the transition to college successfully, and how these strategies might differ depending on their social-class background. For example, incoming students heard a first-generation college student respond to the question, "Can you provide an example of an obstacle that you faced when you came to [this university] and how you resolved it?" in the following way:

"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

FIGURE 2. When African American college students received a belonging program in their sophomore year, the proportion who were in the top 25% of their class by senior year more than quadrupled

Percentage of students in the top 25% of their class (cumulative GPA in senior year)

— African American students
····· White students

Control group racial gap: 30 percentage points

Program group racial gap: 9 percentage points

35%

31%

22%

5%

Students in the control group

Students receiving the belonging program

SOURCE: WALTON & COHEN, 2011

> Direct-to-student programs and changes in instructional practices have been linked to long-term gains in academic performance and reductions in achievement gaps on the basis of race/ethnicity, gender, and being the first in one's family to go to college.

needed to rely on my adviser more than other students."

Belonging programs have reduced achievement gaps significantly

Programs that mitigate questions of belonging have reduced racial achievement gaps in college grade point average (for example, see Figure 2), decreased gaps between first- and continuing-generation college students' achievement, reduced gender gaps in STEM courses, reduced disciplinary citations in middle school, and even improved African American college students' health and happiness in college and their life and career satisfaction years later.[2]

Instructional practices that promote trust and enhance belonging also have long-lasting effects on student outcomes

Researchers have also tested certain instructional practices that improve belonging among students from negatively stereotyped groups. One study examined the effect of teachers' critical feedback on 7th graders' academic behaviors. When the teacher's criticism on an essay was accompanied by a message that conveyed high standards and assurances that they were confident the student could meet those standards, African American students were over four times as likely to revise and resubmit the essay than if they received the criticism alone; this type of feedback also improved the quality of students' revisions.[3]

Re-building trust during a critical developmental window can have long-lasting effects. Follow-up on these same students showed that students who received a personal note that built trust with a teacher in 7th grade were more likely to enroll in a 4-year college immediately after graduating from high school compared to those who did not receive the note.[4]

Institutional actions also affect students' sense of belonging

Researchers are exploring how institutional policies and practices can shape students' sense of belonging— and how they can be modified to support students' sense of belonging. One area of recent study is students' experience of being placed on academic probation, which can provoke feelings of shame and stigma that can lead students to disengage from the academic environment. Changing the content of academic probation letters to clearly signal the institution's ongoing respect for and valuing of the student, acknowledge the real challenges students may face, and emphasize probation as a process and the potential to return to good academic standing has been found to reduce students' feelings of shame and stigma. This modified communication increased the likelihood that students took advantage of academic supports available on campus. In one sample, the revised letter raised students' likelihood of returning to good academic standing from 26% to 43%.[5]

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[3] Yeager et al., (2014).

[4] Yeager, D. S., Purdie-Vaughns, V., Hooper, S. Y., & Cohen, G. L. (2017).

[5] Brady, S. T., Walton, G. M., Cohen, G. L., Fotuhi, O., Gomez, E., & Urstein, R. (in prep). Revising the scarlet letter of academic probation: Reframing institutional messages to increase student success and reduce shame and stigma.