Belonging

Annotated Biography (provided by Jamie Owen-DeSchreyver)

Yust, P., Liu, J., & Hard, B. (2021). Course belonging and engagement in introductory psychology: Why they matter and what predicts them. *Scholarship of Teaching and Learning in Psychology, 7,* 206-227.

- Participants: 508 students for study 1, 296 students for study 2
- Gusto, interest – both momentary/situational, and personal/individual interest in the topic
- Peer relationships - the number of classmates they knew well, the number of classmates they would feel comfortable borrowing notes from, the number of classmates they would feel comfortable asking to study with them, and the number of new friends they made in the course
- Course engagement - In the last 2 weeks of the semester, students' "gusto" for the course material was assessed with a measure adapted from Asher et al. (2010) in which references to courses in general were changed to reference Intro Psych. These items were on a 5-point scale (1 = not at all, 5 = extremely).
- Belonging. Sense of belonging in the course was assessed in the last 2 weeks of the semester using a measure adapted from Asher and Weeks (2014) to reference the course instead of the university. Students responded to questions on a 5-point scale (1 = strongly disagree, 5 = strongly agree). "Belonging does not necessarily imply a connection to the course material, but rather a sense of fit and welcome in the classroom"; having more peer connections early in the course may have jumpstarted students early belonging and engagement
- Instructor and course perceptions - Perceptions of their instructor and teaching fellow were each assessed using 8-item composites. Each measure asked about students' level of agreement on a 7-point scale (1 = strongly disagree, 7 = strongly agree) with statements describing the instructor/TF (i.e., "was prepared," "was responsive,": Table S2
- Future interest - At the end of the semester, students responded to two questions indicating their interest in taking additional psychology courses and interest in becoming involved in psychology research on 5-point scales (1 = definitely no, 5 = definitely yes).
- Generally, belonging and engagement didn't change significantly from the beginning to the end of the semester
- Results: Engagement with material was a better predictor of future interest in psychology than belonging was; belonging was higher with psychology majors and undeclared majors than it was with those who were in another declared major; early engagement (early gusto) predicted performance on the first exam; URM (underrepresented minority status) and FG (first generation) students reported similar levels of belonging and engagement but still had an achievement gap; student perception of lecture was a key predictor of both belonging and engagement
- Suggests that efforts to prioritize peer relationships (think-pair-shares, jigsaws) may have positive effects

Chen, S., Binning, K., Manke, K., Brady, S., McGreevy, E., Betancur, L, Limeri, L. & Kaufmann (2021). Am I a science person? A strong science identity bolsters minority students' sense of belonging and performance in college. *Personality and Social Psychology Bulletin, 47*, 593-606

- Participants: Intro biology class (368 & 639 participants)
- For study 2, they manipulated belonging by delivering a social belonging intervention; intervention focused on teaching students to view adversity and setbacks in college as normal and temporary, not due to internal characteristics or common stereotypes;
- Measures:
    - Science Identification – measured by four items: ex., 1) I am a science person
    - Sense of belonging- also measured by four items: ex., 1) I feel like I belong at school
- Intervention: students wrote for 10-min about difficulties experiencing in the first week of their transition; then instructor provided three quotes from Junior and senior students that reinforced the idea that college transition is difficult for everyone, it's temporary, not a personal deficit and not a permanent impediment to success and belonging; team discussion of similarities and differences between their own experiences and the situations in the quotes, commonalities, everyone feels this way
- Results: For students in the control group, having a strong science identification led to higher performance, while weak science identification led to lower performance; however when students were given a social belonging exercise, it eliminated this relationship and minority students performed similarly to majority students.

Strayhorn, T. (2021). Analyzing the short-term impact of a brief web-based intervention on first-year students' sense of belonging at an HBCU: A quasi-experimental study. Innovative Higher Education,

- This study focused on HBCU students and was more focused on university belonging than classroom belonging
- Prior research suggests that sense of belonging was positively associated with tutoring others, talking with faculty and academic achievement (272 Latino students)- Hurtado & Carter, 1997
- Participants: 115 participants, mostly black students
- Measures: 3 survey items: would friend miss you if you left college unexpectedly
- Intervention: 5-min video with short vignettes of diverse students and how they adjusted academically and socially; personal stories, statements about mattering and belonging (you're here on purpose, black lives matter), it's normal to feel out of place, many students feel lonely at first, all students have doubts; animated list of ways to find a sense of belonging (join a club), access to resources (counseling center
- Results: seeing the experimental video was associated with higher sense of belonging

Wilton, M., Gonzalez-Nino, E., McPartian, P., Terner, Z., Christoffersen, R., & Rothman, J. (2019). Improving academic performance, belonging, and retention through increasing structure of an introductory biology course. *CBE Life Science Education, 18*, 1-13.

- Intervention: Altered format to include 3 lectures + 1 discussion (versus 4 lectures), graded collaborative problem sets; clicker questions, think-pair-share, mock exam questions, whole class questions, muddiest point
- Measures – performance on common exam questions; final grades; sense of student belonging (belongingness, motivation, growth mindset – 12 questions), student retention
- Results – students in the intervention group had 12% increase in correct responses on common exam questions; intervention students had a higher sense of student belonging; increased student perception of faculty support and classroom comfort, increased student retention
- EOP(educational opportunities program eligible based on parent SES or being a low-income student) and URM students did NOT disproportionately benefit academically, or in their perceptions of belonging

Walton, G. & Cohen, G. (2011). A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students. Science, 18, 1447-1451.

- Abstract- A brief intervention aimed at buttressing college freshmen's sense of social belonging in school was tested in a randomized controlled trial ($N = 92$), and its academic and health-related consequences over 3 years are reported. The intervention aimed to lessen psychological perceptions of threat on campus by framing social adversity as common and transient. It used subtle attitude-change strategies to lead participants to self-generate the intervention message. The intervention was expected to be particularly beneficial to African-American students ($N = 49$), a stereotyped and socially marginalized group in academics, and less so to European-American students ($N = 43$). Consistent with these expectations, over the 3-year observation period the intervention raised African Americans' grade-point average (GPA) relative to multiple control groups and halved the minority achievement gap. This performance boost was mediated by the effect of the intervention on subjective construal: It prevented students from seeing adversity on campus as an indictment of their belonging. Additionally, the intervention improved African Americans' self-reported health and well-being and reduced their reported number of doctor visits 3 years postintervention. Senior-year surveys indicated no awareness among participants of the intervention's impact. The results suggest that social belonging is a psychological lever where targeted intervention can have broad consequences that lessen inequalities in achievement and health.

Schnabel, N., Purdie-Vaughns, V., Cook, J., Garcia, J. & Cohen, G. (2013). Demystifying Values Affirmation Interventions: Writing about social belonging is a key to buffering against identity threat. *Personality and Social Psychology Bulletin, 39,* 1-14.

- Abstract: Two experiments examined for the first time whether the specific content of participant-generated affirmation essays—in particular, writing about social belonging—facilitated an affirmation intervention's ability to reduce identity threat among negatively stereotyped students. Study 1, a field experiment, revealed that seventh graders assigned to a values-affirmation condition wrote about social belonging more than those assigned to a control condition. Writing about belonging, in turn, improved the grade point average (GPA) of Black, but not White students. In Study 2, using a modified "belonging-affirmation" intervention, we directly manipulated writing about social belonging before a math test described as diagnostic of math ability. The more female participants wrote about belonging, the better they performed, while there was no effect of writing about belonging for males. Writing about social belonging improved performance only for members of negatively stereotyped groups. Implications for self-affirmation theory and practice are discussed