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A Sense of Belonging: How Student Feelings Correlate with Learning about Race

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Abstract

Learning about race and racism can be a difficult process. Previous work has shown that courses in this area can help to increase awareness of racial bias and discrimination, but less work has focused on how that change occurs. We hypothesized that feelings of belonging within the classroom could correlate with student learning and our results indeed showed a strong correlation among these factors. Across three courses, all focused on race and diversity, feelings of belonging predicted not only perceptions of learning, but also graded forms of learning and increases in racial awareness. Results are discussed in terms of the larger literature on feelings of belonging.

Keywords

racial attitudes, belonging, grades, learning

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A Sense of Belonging: How Student Feelings Influence Learning about Race

Courses that address race, diversity, and racism can be emotionally and cognitively challenging for students as well as professors (Chick, Karis, & Kernahan, 2009; Fallon, 2006; Goldsmith, 2006). Cognitively, it can be quite difficult for students to understand the complicated ways in which race influences individuals and our culture. Emotionally there are often feelings of anxiety, guilt, anger, and helplessness to contend with (Tatum, 1992; 1994). To help instructors navigate this terrain, numerous guides and articles have been written (see Adams, Bell, & Griffin, 2007 as one example). In addition, researchers have begun to examine the best ways to help students learn about race and racism (Chick et al., 2009) just as others have begun to focus on improving diversity training across a variety of contexts (Kowal, Franklin, & Paradies, 2013).

Many studies have shown that learning about race and racism can reduce students' racial bias and increase their understanding of institutional racism and racial privilege using standard racial attitudes scales (Case, 2007; Cole, Case, Rios, & Curtain, 2011; Kernahan & Davis, 2007; 2010; Probst, 2003; Rudman, Ashmore, & Gary, 2001; Tatum, 1992; 1994). In addition, these changes show some long-term perseverance (Kernahan & Davis, 2010). That is, students are better able to understand how whites are systematically and systemically advantaged in U.S. society (White Privilege) as well as how laws and policies connected to U.S. institutions (housing, education, criminal justice, health care, etc.) lead to inequities and disadvantage for those who are not white. What is less clear, however, is how such learning occurs. What are the processes that allow students to move from a relatively shallow understanding of something as complex as racism to a fuller understanding and an increased awareness?

One approach, taken by Chick et al., (2009) was to examine students' metacognitive reflections of their understanding of course content over the course of a semester. Students in four classes (literature, graduate and undergraduate psychology, and geography) were asked to write about their own

and their classmates' perceived learning. They answered a series of structured questions and shared their responses with the rest of the class. Each student read their classmates' reflections and discussed these reflections in small groups. In addition, qualitative and quantitative measures assessed the students' attitudes and learning over time. Results showed that students in the non-lecture classes (psychology and literature) were more likely to show an increased awareness of racial privilege and institutional racism (again measured with a standard attitudes scale). Reasons for this difference likely include students' self-reports that class discussions as well as some of the class materials (especially when narrative or literary in nature) allowed them to empathize with the experiences of those who had experienced racism. They also cited the importance of hearing that other students were experiencing emotional difficulty (anger or anxiety, helplessness and guilt) as they learned about racism. These findings, many of which emphasized the importance of the group discussions within the classroom, point the way to a focus on the bonds students share with others as they learn.

Other experimental work (Adams, Tormala, & O'Brien, 2005; Lowery, Knowles, & Unzueta, 2007; Unzueta & Lowery, 2008) suggests the importance of the emotional feel in the classroom. The ability to empathize and "open up" to threatening information is likely contingent on feelings of security and a sense of trust. Mikulincer and Shaver (2007) argue, based on years of research, that feelings of attachment security (an individual difference) contribute to one's ability to take in threatening information and to avoid prejudiced responses. In addition, such feelings have also been manipulated across a variety of studies using something known as a values affirmation (see Sherman & Hartson, 2011 for an excellent review). Values affirmation manipulations have been shown to reduce both the gender and racial achievement gaps in college students (Cohen, Garcia, Apfel, & Master, 2006; Miyake et al., 2010) and though the exact causal mechanism is still unclear (Burson, Crocker, & Mischkowski, 2012; Crocker, Niiya, & Mischkowski, 2008), it appears that affirming one's values leads to feelings of belonging and connection with others. Indeed, more recent research

(Shnabel, Purdie-Vaughns, Cook, Garcia, & Cohen, 2013) has shown that it is increased feelings of belonging (a byproduct of the values affirmation) that cause students to improve or maintain academic gains.

What all of these findings suggest is that feelings of security, trust, and belonging are paramount to learning new and potentially threatening information (i.e., racism and prejudice). To date, however, no study that we are aware of has involved directly measuring students' feelings of belonging, trust and security within a classroom environment. Furthermore, we are not aware of any other studies that examine specifically how this set of feelings might relate to and correlate with learning as assessed via multiple measures: attitudes (as measured by the standard racial attitudes scales used in previous work), grades, and the students' own perceptions that they had learned.

Hypotheses

As noted, racism and especially racial privilege are potentially threatening to the self (i.e., white students learning about white privilege, all students learning about the size and scope of institutional racism) and generally provoke feelings of guilt, anger, and defensiveness (Fallon, 2006; Kernahan & Davis, 2007; 2010; Tatum, 1992; 1994). When students felt they could discuss their learning with others and hear the experiences of their classmates they reported feeling that they learned more (Chick et al., 2009). In this study, we wanted to extend these findings to examine how a sense of belonging within the classroom (cohesion, belonging, trust, security, feeling heard and listened to) might correlate with learning outcomes. We anticipated that students who reported higher levels of such feelings would increase their learning as compared to students who did not report such feelings. Learning was measured in three ways: post-course racial attitudes (assessed pre- and post-course and expected to increase as a result of the course), self-perceived learning, and graded learning.

Method

Participants

We collected data across three courses, all taught at the same mid-size Midwestern university. The first year, we were only able to collect data on one course, and because this course

is only taught in the spring, we agreed to build on the initial data using the same course (and adding in the workplace course) the following year.

Course 1 Spring 2012. Participants were 29 undergraduates enrolled in the Psychology of Prejudice and Racism taught by the first author (white, female). Twenty-seven students completed both pre- and post-tests and so only their data were used for analysis. Self-reported race and gender were as follows: 24 white, 2 Hispanic/Latino, 1 bi/multiracial; 21 female, 6 male.

Course 2 Spring 2013. Participants were 76 undergraduates enrolled in Managing Workplace Diversity taught by the second author (Asian, female). Fifty-seven students completed both pre- and post-tests and so only their data were used for analysis. Self-reported race and gender were as follows: 55 white, 1 Black/African American, 1 Hispanic/Latino; 27 female, 26 male.

Course 3 Spring 2013. Participants were 29 undergraduates enrolled in the Psychology of Prejudice and Racism taught by the first author (white, female). Twenty-eight students completed both the pre- and post-tests so only their data were used for analysis. Self-reported race and gender were as follows: 23 white, 2 Asian/Asian American, 1 Black/African American, 2 Hispanic/Latino, 1 bi/multiracial; 23 female, 4 male, 1 other.

Procedure

Pretesting occurred during the first day of class, posttesting during the last week of courses or during finals week. Both surveys contained the same measure of racial attitudes (described below) but only the posttest included questions assessing their feelings about the class environment (belonging) and demographic questions. Because socially desirable responding can be an issue when asking about racial attitudes, several steps were taken to assure students' feelings of anonymity and to communicate to them that their instructors would not be able to match their responses to their names. Prior to survey distribution, the instructor left the room and a research assistant (white male undergraduate in course 1, white female undergraduate in courses 2 and 3) told participants that the

study was optional and involved understanding how students learn. All participants were then handed a sealed envelope containing the survey. The survey asked them to include their last name (course 1) or their university id number (course 2 and 3) at the top of the first page. They were assured that this was only for matching purposes and that these identifiers would be removed and replaced with an anonymous code number by the assistant at the end of the semester. They were further told that all tests would be locked in the main psychology office by the assistant until grades were submitted. Finally, and to reinforce their feelings of anonymity, participants placed both their pre- and post-test surveys back into the individual envelopes before turning them in. We obtained IRB approval.

Racial Attitudes Measure. The CoBRAS (Neville, Lilly, Duran, Lee, & Browne, 2000) subscales measure awareness of racism and racial privilege using a 1 (agree strongly) to 5 (disagree strongly) range (Racial Privilege $\alpha = .69$, Institutional Discrimination $\alpha = .76$, and Blatant Racial Issues $\alpha = .66$; see Neville et al. for specific items). Example statements include: "White people in the U.S. have certain advantages because of the color of their skin" (Racial Privilege subscale), "Social policies, such as affirmative action, discriminate unfairly against white people" (Institutional Discrimination subscale), "Racial problems in the U.S. are rare, isolated situations" (Blatant Racial Issues subscale). Please note that α refers to alpha, a measure of internal consistency and reliability amongst the items of the scale.

Classroom Belonging Measure. As part of the posttest, participants were asked several questions about their feelings during the class: "I felt that this class was cohesive and close", "I felt a sense of belongingness in this class", "I trusted others in this class", "I felt secure in this class", "I felt listened to in this class", "I felt heard in this class" all answered on a 1 (not at all) to 7 (very much) range. These items were combined to form a belonging scale ($\alpha = .85$ course 1; $\alpha = .89$ course 2; $\alpha = .85$ course 3). In addition, participants reported their race and sex.

Grades and Learning. One question specifically asked how much participants felt they learned during the class, "Thinking about the class overall, how much do you feel you learned"

answered on a 1 (not at all) to 7 (very much) range. In addition, we asked for permission (as part of the consent form) to access students' final grades for analysis. To assess their learning, we used similar measures across course. For courses 1 and 3, their weekly writing assignment totals represent the most difficult of the points they receive and are the most direct assessment of how well they grasp the concepts (each week they are asked to explain and apply concepts from the class, similar to an essay exam question). Similarly, for course 2, the measure of graded learning was the total of their individual weekly assessments (graded short answer questions designed to measure how well they understood the readings and material).

Results

First, we checked for differences between the courses on the measures they shared in common (pre- and postcourse racial attitudes, measure of belonging, and the measure of perceived learning). The multivariate analysis indeed showed that there were differences across courses on these shared measures, $F(16,198) = 3.87, p < .01$. Because of these differences, we conducted all subsequent analyses separately by class or controlling for class. Before examining our main hypothesis regarding feelings of belonging, we first attempted to replicate the findings of previous work (Chick et al., 2009; Kernahan & Davis, 2007; 2010). As shown in Table 1 this replication was successful as participants in all three courses increased their awareness of white Racial Privilege with significant to marginal increases in awareness for the other types of racial bias (awareness of Institutional Discrimination and of Blatant Racial Issues).

Table 1

Pre- to Post-Test Comparisons of Racial Attitudes by Course

	<i>Pre M (SD)</i>	<i>Post M (SD)</i>	<i>t (df)</i>	<i>p <</i>
Course 1				
Racial Privilege	3.11 (0.71)	2.27 (0.14)	5.64 (26)	0.01
Institutional Discrimination	3.35 (0.47)	3.77 (0.55)	-3.67 (26)	0.01
Blatant Racial Issues	4.07 (0.48)	4.28 (0.66)	-1.68 (26)	0.11
Course 2				
Racial Privilege	3.65 (0.59)	3.19 (0.67)	7.02 (56)	0.01
Institutional Discrimination	2.90 (0.63)	3.00 (0.71)	-1.45 (56)	0.15
Blatant Racial Issues	3.52 (0.55)	3.73 (0.56)	-2.70 (56)	0.01
Course 3				
Racial Privilege	3.13 (0.79)	2.22 (0.77)	5.23 (27)	0.01
Institutional Discrimination	3.44 (0.74)	3.80 (0.77)	-1.92 (27)	0.07
Blatant Racial Issues	4.04 (0.63)	4.32 (0.68)	-1.54 (27)	0.14

Note: The Racial Privilege Awareness subscale scores decrease as awareness increases.

To test our main hypothesis, we focused on the feelings of belonging that the participants held with respect to class experiences. We ran a series of linear regression analyses to determine how much influence participants' feelings of belonging had over their postcourse racial attitudes (again using the CoBRAS posttest subscale scores of Racial Privilege, Institutional Discrimination, and Blatant Racial Issues awareness), their

perceptions of overall learning, and their graded weekly learning. We included all three courses in each regression analysis. To mitigate the potential influence of class-related variables, we controlled for class in all regressions (class was coded into 3 dummy variables). Consistent with our hypotheses, after controlling for class, belonging was significantly related to perceived learning ($\beta = .53$, $p < .001$). To test for graded learning, weekly assignments were used in all three courses. However, course 2 assignments were quiz type items while Courses 1 and 3 involved essay questions. To make the grades comparable, we calculated percentage earned out of the total points possible as a standard measure of graded learning. Our regression results showed that belonging significantly predicted graded learning after class was controlled ($\beta = .30$, $p < .05$). Please note that β refers to the unstandardized regression coefficient.

To test the effect of belonging on post-class racial attitude, in addition to class, we controlled for pre-class racial attitude and our regression results showed that two of the post-class CoBRAS subscales were significantly related to feelings of belonging: racial privilege awareness ($\beta = -.12$, $p < .1$) and blatant racial issues awareness ($\beta = .19$, $p < .05$), while institutional discrimination awareness was not significantly related to belonging ($\beta = .03$, $p = .67$).

Discussion

Although prior research (e.g., Chick et al., 2009) suggests the importance of feeling a sense of belonging, these results are the first to directly show how a sense of belonging is positively correlated with students' perceptions of their own learning, their grades, and their awareness of some aspects of racial privilege and discrimination. Across three courses (diversity courses that focus on issues of oppression, race, and racism) students who reported a stronger sense of belonging within their course were more likely to perform well on weekly assessments of their learning and to perceive that they had learned a lot in the course. Their awareness of two types of racial discrimination (racial privilege and blatant racial issues) were also significantly related to their sense of belonging.

Table 2 Regression results¹

Independent variable	Perceived learning	Graded learning	Post-class racial attitude		
			Post Racial Privilege	Post Inst Discrim	Post Blatant Racial Issues
Controls					
Pre Racial Privilege			.43***		
Pre Inst Discrim				.42***	
Pre Blatant Racial Issues					.25**
Main effects					
Belonging	.53***	.30**	-.12 ⁺	.03	.19*
Model F	46.04** *	14.71** *	26.26** *	18.35** *	9.85** *
R ²	.57	.29	.50	.41	.27

⁺ p<0.1. * p<0.05. ** p<0.01. *** p<0.001.

¹ Class controlled as dummy variables in all regressions.

Finally, and in a replication of much previous work (e.g., Case, 2007; Kernahan & Davis, 2007; 2010) all students seemed to gain in terms of their levels of racial awareness. Students in all three courses become more aware of white racial privilege from pre- to postcourse and there were marginal to significant effects for the other racial attitudes subscales (e.g., awareness of institutional discrimination and blatant racial issues).

Although we did not compare the classes beyond an overall multivariate analysis, inspection of the means (see Table 1) suggests that those taking the course on workplace diversity (course 2) started the course with lower levels of awareness of racial privilege and discrimination as compared to those in the psychology courses. For our purposes, in terms of replicating previous work, the important finding was that all students (examined separately by class) gained in their racial awareness. Additionally, we were also able to show that feelings of belonging correlated with perceived and graded learning even after controlling for the effects of the individual class. Despite these similarities, though, it would be useful for future work to examine the attitudes of different groups of students who are taking (or are drawn to) different courses. Sidanius, Levin, van Laar, & Sears, 2008, for example, thoroughly examined the racial attitudes of undergraduates from across the UCLA campus and found that certain subgroups (i.e., those in Greek organizations such as fraternities and sororities) were more likely to hold biased racial attitudes and to maintain or strengthen those biases over time despite their finding for a small “liberalizing” effect of college on racial attitudes for most students.

The idea that feeling a sense of belonging would be important for learning is not at all surprising given the findings for individual attachment security noted by Mikulincer and Shaver (2007), as well as the growing body of work that illustrates how a sense that one “fits in” and belongs can have profound effects on academic achievement. In addition to the values affirmation literature noted previously, Walton and Cohen (2011) showed how important it is for students to feel a sense of belonging and similarity to others during their first year of college. They asked freshman participants and Stanford students (both black and white) to read about the experiences of upper classmen at Stanford University (in the form of purported survey results). The narratives they read described how the students had struggled as freshman but how they had eventually begun to find their way and feel more of a sense that they belonged at Stanford. The study participants (who were only in their second semester) read these narratives and then went on to write about

their own struggles and how they echoed those that they had just read about. After this brief intervention (lasting about an hour), the participants were followed through their senior year (and compared to multiple control groups). The results were dramatic: the black students significantly improved their GPA's over time (reducing the achievement gap by half), felt happier and healthier and had less self-doubt. The white students performed well and felt equally happy and healthy regardless of the intervention. These and other studies (Shnabel et al., 2013; Wilson, 2011) strongly suggest that a sense of belonging and cohesion with others is a key to learning and development.

Our purpose in this work was to show a direct relationship between feelings of belonging and learning. There is much work left to be done, however, in terms of showing that feelings of belonging can truly predict learning. First, when does belonging develop? Feelings of belonging should be measured both pre- and postcourse to rule out the possibility that stronger students are simply more likely to feel a sense of belonging in all of their courses. Next, how is a sense of belonging generated within the classroom? Is it a result of the course content or perhaps the structure of the course? The courses examined here were all focused on race and diversity and they all utilized discussion and small groups work. This is in keeping with the findings of Chick et al. (2009) who found that discussion was superior to lecture in terms of increasing racial awareness. Future work might examine how (or if) belonging matters to learning in other content areas outside the sensitive topics of race and ethnicity. Additionally, future work could focus on better understanding the role of discussion in creating feelings of belonging. Chick et al., (2009) reported that hearing about the struggles of other students and sharing their experiences were central to student perceptions that they were learning. One way to examine this better might be to create different courses or class sessions that allow for this sharing of experiences and some that do not. Belonging and learning could then be measured. Control courses that vary both content (racism and oppression versus other, less emotionally sensitive areas) and the sharing of experiences (present or absent) should allow us to better determine when feelings of belonging are important to learning.

It is also important to measure other variables that may play a role in these processes. Wilson and Ryan (2013), reporting on the importance of professor-student rapport, showed that six simple questions regarding the student's feelings of engagement with the course (e.g., "my professor encourages questions and comments", "my professor is approachable") were the best predictors of student attitudes, motivation, and learning. A strong test of the ideas presented here would include this measure along with measures of belonging. Including these measures, especially with a control condition (or conditions) as described above, could provide the best opportunity to fully understand and elucidate these processes. Disentangling the role of the professor, the class structure, and the content itself may not be fully possible, but efforts to do so could result in helpful insights for those seeking to teach these topics more effectively.

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