

## Do I Belong? It Depends on When You Ask

Robyn K. Mallett  
Loyola University, Chicago

Zena R. Mello  
University of Colorado, Colorado Springs

Dana E. Wagner  
Loyola University, Chicago

Frank Worrell  
University of California, Berkeley

Risë Nelson Burrow  
Mercy College

James R. Andretta  
San Francisco Unified School District, San Francisco, California

A feeling of belonging to an academic context is a critical determinant of academic achievement and persistence, particularly for students of color. Despite the fact that students of color are generally more susceptible to fluctuations in belonging uncertainty than White students, survey design can unintentionally mask this reality. We investigated whether context effects undermine the accurate assessment of belonging uncertainty in junior high and high school students (Study 1) and college students (Study 2). Considering one's ethnic identification (Study 1) and personal experiences with discrimination (Study 2) threatens sense of belonging in students of color, but not White students. Researchers should consider question order within surveys so as not to artificially mask belonging uncertainty in students of color.

*Keywords:* belonging uncertainty, race, identity, discrimination, educational expectations

The need for belonging is a fundamental human motive, and fulfilling this need is essential for psychological and physical well-being (Baumeister & Leary, 1995). Feeling that one belongs in an academic environment is an important predictor of academic expectations, values, performance, and persistence (Archambault, Janosz, Jean-Sebastien, & Pagani, 2009; Goodenow, 1993), particularly for students of color (Fischer, 2007). Walton and Cohen (2007) proposed that, among students of color, awareness of educational disparities and stereotypes manifests in a sense of uncertainty about the quality of their social relationships in educational settings. Belonging uncertainty arises during any situation that highlights one's lack of social connection (Walton & Cohen, 2007). When school belonging is threatened, students of color show declines in academic motivation and achievement, whereas White students are unaffected by such threats (Walton & Cohen, 2007).

In this study, we investigated the activation of belonging uncertainty in junior high, high school, and college students by answering

two questions: Does making ethnic identification or personal experiences of discrimination salient activate belonging uncertainty? Does activation of belonging uncertainty decrease the degree to which students of color feel a sense of potential in school?

Belonging uncertainty differs from stereotype threat, which is defined as "being at risk of confirming, as self-characteristic, a negative stereotype about one's group" (Steele & Aronson, 1995, p. 797). Compared with stereotype threat, belonging uncertainty is a more general concern that is triggered by events that lead one to question social connection in a particular domain such as academics (Walton & Cohen, 2007). One need not experience an evaluative test or receive negative feedback for belonging uncertainty to occur. Rather, one entertains the hypothesis that "people like me do not belong here" simply as a result of considering the social environment (Walton & Cohen, 2007). For example, experiences of discrimination, awareness of stereotypes, and historical underrepresentation of one's group in a given setting may manifest in feelings of belonging uncertainty.

For students of color, one potential trigger of belonging uncertainty in an academic context is their racial or ethnic identification. Unlike White students, students of color must contend with the knowledge that their group is taxed with a stereotype that calls into question their academic abilities (Steele, Spencer, & Aronson, 2002). Even if one does not personally believe the stereotype is true, a sense of collective threat can arise because one belongs to a socially devalued group (Cohen & Garcia, 2005). Thus, simply considering one's racial or ethnic identification can contribute to a sense of belonging uncertainty or a doubt about whether one will be accepted in an academic environment.

Another potential trigger of belonging uncertainty is discrimination (Smart Richman & Leary, 2009). Although intergroup

---

This article was published Online First September 12, 2011.

Robyn K. Mallett and Dana E. Wagner, Department of Psychology, Loyola University, Chicago; Zena R. Mello, Department of Psychology, University of Colorado, Colorado Springs; Frank Worrell, Cognition and Development, University of California, Berkeley; Risë Nelson Burrow, College Opportunity Program, Mercy College; James R. Andretta, Screening and Assessment Center, San Francisco Unified School District, San Francisco, California.

We thank Tracy DeHart, Christine Li-Grining, Kala Melchiori, and Reyna Pena for their comments on a draft of the article.

Correspondence concerning this article should be addressed to Robyn K. Mallett, Department of Psychology, Loyola University, Chicago, 1032 W. Sheridan Road, Chicago, IL 60660. E-mail: rmallett@luc.edu

relations in the United States have improved significantly over the past century, discrimination against people of color remains common (Feagin, 1991). For example, college students of color report personally experiencing discrimination at least once a week (Mallett & Swim, 2009). Because of the threat of social rejection inherent in discrimination, we expected that students of color would be more susceptible to events that evoke belonging uncertainty than White students. Moreover, because students of color experience more discrimination than White students, their reports of belonging after considering discrimination are likely to be a more accurate reflection of their typical feelings of school belonging than their reports of belonging before considering discrimination.

Because feeling a lack of social connectedness in school is negatively related to achievement and retention, it is important for academic institutions to accurately assess school belonging. In response to this need, university administrators have conducted campus climate surveys. These surveys show that students of color experience more discrimination than their White peers, feel less supported, and have more negative views of their respective university (Rankin & Reason, 2005; Reid & Radhakrishnan, 2003). Administrators use this information to allocate funding for programming to increase retention among students of color by improving their social experiences on campus (Harper & Hurtado, 2007; Rankin & Reason, 2005).

Although students of color are more susceptible to fluctuations in belonging uncertainty than White students, the design of campus climate surveys can unintentionally mask this reality. Specifically, context effects can hide underlying differences in belonging uncertainty between students of color and White students. Self-reports are generated based on information that is accessible at the time of judgment (Higgins, 1996). Context effects increase or decrease agreement with subsequent items depending on the nature of accessible information (Schwarz, 1999). For example, asking about marital satisfaction first would increase self-reports of well-being if one's marriage were happy but decrease self-reports of well-being if one's marriage were unhappy. Similarly, thinking about personal experiences with discrimination could reveal belonging uncertainty for students who frequently experience discrimination. In comparison, asking about belonging before discrimination could unintentionally conceal belonging uncertainty in those same students.

We examined whether context effects activate belonging uncertainty in junior high, high school, and college students of color. We expected that, given the pervasively negative nature of academic stereotypes about racial and ethnic minorities and their historical lack of numerical representation on college campuses, students of color would experience feelings of social disconnection after considering their ethnic identification. Similarly, given the nature of intergroup relations in the United States, we hypothesized that students of color would report experiencing more discrimination than White students. Critically, because of these factors, students of color should report greater belonging uncertainty when they think about their ethnic identification or their personal experiences with discrimination before reporting belonging compared with when they think about belonging and then consider these factors. Because White students are not subject to negative academic stereotypes about their group, often have numerical majority status

on a campus, and rarely experience discrimination, their reports of belonging should be unaffected by question order.

## Study 1

Study 1 tested whether considering one's ethnic identification before evaluating the extent to which one belongs in an academic environment activates belonging uncertainty in junior high and high school students of color. We hypothesized that considering attitudes related to one's racial or ethnic group membership would increase their awareness of educational disparities and stereotypes associated with their group membership. We further hypothesized that this context effect would activate feelings of a lack of social connection at school. Among Whites, feelings of belonging should not be affected by priming thoughts about one's ethnic group membership.

We also examined whether feelings of belonging in school are positively associated with educational expectations. Limited educational expectations based on a sense that one does not belong affect persistence and achievement in college (Fischer, 2007; Walton & Cohen, 2007), which have important consequences for life outcomes including income and well-being (U.S. Census Bureau, 2009). We tested whether feeling as if one belongs in school is also related to educational expectations for junior high and high school students, regardless of racial or ethnic group membership. In line with past research, we expected that the more students feel like they belong in school, the greater expectations they will have for their future educational attainment.

## Method

**Participants.** Participants were recruited from schools in midwestern and western states. Participants returned both a consent form that required a parental signature and an assent form that required their own signature. The sample ranged in age from 12 to 19 years ( $M = 16$  years,  $SD = 1.25$ ), was 60% male, and included students in Grades 6 to 12. Socioeconomic status (SES) was measured with one item, "How would you describe your family's socioeconomic status?" Participants chose which SES group best described their family's SES on a 7-point scale that ranged from 1 (*poor*) to 7 (*wealthy*). The average SES was 4.02 ( $SD = 1.35$ ). We divided participants into two groups according to a single self-report item that asked about racial or ethnic group membership: students of color (African American,  $n = 35$ , Latino/a,  $n = 35$ , Native American,  $n = 15$ ; 41%) and White students ( $n = 123$ ; 59%).

### Materials and procedure.

**Belonging uncertainty manipulation.** To manipulate belonging uncertainty, participants were randomly assigned to report their racial or ethnic identification and complete the 20-item Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) either at the beginning (belonging uncertainty condition) or end (control condition) of the survey. The MEIM measures affiliation with a racial/ethnic group using two subscales—Ethnic Identity (EI;  $\alpha = .78$ , students of color;  $\alpha = .83$ , White students) and Other Group Orientation (OGO;  $\alpha = .73$ , students of color;  $\alpha = .70$ , White students). An example of an EI item is, "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs," and an example of an OGO item is, "I

like meeting and getting to know people from ethnic groups other than my own.” Ratings were made on a scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*).

**Belonging.** Belonging was measured with the item, “To what extent do you experience a sense of exclusion or a sense of belonging at your school?” (Sidanius, Van Laar, & Levin, 2004). Ratings were made on a scale ranging from 1 (*strong sense of exclusion*) to 7 (*strong sense of belonging*;  $M = 5.25$ ,  $SD = 1.73$ ).

**Educational expectations.** Educational expectations were measured with a single item: “How much schooling do you expect to have by the time you are 30 years old?” Response options included 1 (*high school diploma*), 2 (*certificate/license*), 3 (*associate’s degree*), 4 (*bachelor’s degree*), 5 (*master’s degree*), and 6 (*doctorate or professional degree*).

## Results

A 2 (order: control, belonging uncertainty)  $\times$  2 (group membership: students of color, White students) analysis of variance (ANOVA) revealed a marginally significant main effect of group membership for belonging,  $F(1, 194) = 3.18$ ,  $p = .08$ ,  $\eta_p^2 = .02$ . Students of color reported less belonging ( $M = 4.83$ ,  $SD = 1.91$ ) than White students ( $M = 5.53$ ,  $SD = 1.56$ ), with a moderate effect size ( $d = 0.41$ ). There was also a marginal main effect of order,  $F(1, 194) = 3.05$ ,  $p = .08$ ,  $\eta_p^2 = .02$ . Reports of belonging were slightly lower in the belonging uncertainty condition ( $M = 5.12$ ,  $SD = 1.81$ ) than in the control condition ( $M = 5.50$ ,  $SD = 1.58$ ,  $d = 0.22$ ). As predicted, there was an interaction between order and group membership,  $F(1, 194) = 4.15$ ,  $p = .04$ ,  $\eta_p^2 = .02$ . In the belonging uncertainty condition, students of color reported significantly lower belonging than in the control condition (see Figure 1). White students’ reports of belonging were unaffected by question order; thus, making one’s ethnic identification salient activated belonging uncertainty in junior and high school students of color.

Also as predicted, belonging was significantly associated with educational expectations (Spearman’s  $\rho = .18$ ,  $p = .002$ ), although the relationship was small. Regardless of racial or ethnic identification, the more students felt like they belonged in school, the more education they expected to have completed by age 30.<sup>1</sup> However, to the extent that students of color consider their ethnic

identification in the classroom context, their feelings of belonging appear to suffer. Given that school belonging is positively related to educational expectations, it is important to consider how we can reduce belonging uncertainty in junior high and high school students.

## Study 2

Study 1 showed that considering one’s ethnic identification before evaluating the extent to which one belongs at school decreased feelings of belonging in junior high and high school students of color. Moreover, feelings of school belonging were shown to have a positive relationship with educational expectations.

In Study 2, we examined belonging uncertainty in college students by testing whether a different manipulation instills the same type of belonging uncertainty in students of color. Just as considering one’s ethnic identification can call into question the extent to which one belongs at school, considering whether one has personally experienced discrimination should also threaten school belonging.

## Method

**Participants.** Undergraduates ( $N = 546$ ) at a midwestern university participated in an online survey. Participants provided consent by clicking “I agree to participate” on a page at the beginning of the survey. The sample ranged in age from 18 to 44 years ( $M = 19.52$  years,  $SD = 2.13$ ), was 27% male, and included students in all 4 years of college (first year,  $n = 223$ ; second year,  $n = 143$ ; third year,  $n = 88$ ; fourth year,  $n = 86$ ).<sup>2</sup> SES was measured with one item: “What is your best estimate of your parent(s) or guardian(s) combined income from last year? If you file taxes independently from your parents (you are not a dependent on their income tax return), indicate your own income.” Participants chose which SES group best described their family’s SES on an 8-point scale that included 0 (*less than \$12,500*), 1 (*\$12,500–\$24,999*), 2 (*\$25,000–\$39,999*), 3 (*\$40,000–\$54,999*), 4 (*\$55,000–\$74,999*), 5 (*\$75,000–\$99,999*), 6 (*\$100,000–\$149,999*), 7 (*\$150,000–\$199,999*), and 8 (*\$200,000 and over*). The average SES was 4.32 ( $SD = 2.35$ ). Because the primary manipulation in this study was discriminatory experiences and not racial or ethnic identification, all participants reported group identification at the end of the questionnaire using a single self-report item. We divided participants into two groups: students of color (African American,  $n = 18$ , Latino/a,  $n = 48$ , Asian,  $n = 80$ , multiracial,  $n = 51$ , total  $n = 197$ ; 36%) and White students ( $n = 340$ ; 62%). Nine participants (2%) indicated “rather not say” and

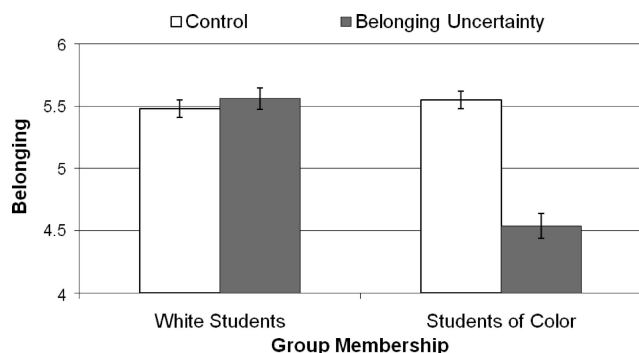


Figure 1. When first asked about their ethnic identification, students of color reported significantly lower belonging than when first asked about belonging (Study 1). White student reports were unaffected by the question order.

<sup>1</sup> Multiple regression analysis showed that this was a direct effect of belonging on educational expectations. The belonging uncertainty manipulation (0 = control, 1 = belonging uncertainty), group membership (0 = White, 1 = students of color), and their interaction product were unrelated to educational expectations. Belonging did not mediate the association between the Order  $\times$  Group Membership interaction and educational expectations.

<sup>2</sup> Six students skipped the item assessing year in school.

Table 1  
Correlations Between Variables in Study 2

Variable	Belonging uncertainty manipulation	Group membership	Perceived discrimination	Belonging	Age
Belonging uncertainty manipulation (0 = control, 1 = belonging uncertainty)	—				
Group membership (0 = White, 1 = students of color)	-.09 <sup>±</sup>	—			
Perceived discrimination	-.02	.21 <sup>***</sup>	—		
Belonging	-.01	-.14 <sup>***</sup>	-.45 <sup>***</sup>	—	
Age	-.08 <sup>±</sup>	.01	.12 <sup>**</sup>	-.08 <sup>±</sup>	—
Income	.02	-.26 <sup>***</sup>	-.12 <sup>**</sup>	.11 <sup>*</sup>	-.14 <sup>**</sup>

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . <sup>±</sup>  $p < .10$ .

were excluded from the analysis. Table 1 shows the correlations between all variables.

**Materials and procedure.**

**Belonging uncertainty manipulation.** To manipulate belonging uncertainty, participants were randomly assigned to report discriminatory experiences either before (belonging uncertainty condition;  $n = 261$ ) or after (control condition;  $n = 285$ ) answering belonging items.

**Belonging.** Eleven items measured sense of belonging on campus (e.g., “The climate is inclusive,” “I ‘fit in’ academically”;  $\alpha = .86$ ) using a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Discrimination.** Following the stem, “I have experienced discrimination within. . .” participants answered four items about discrimination in academic, administrative, social, and other settings ( $\alpha = .90$ ) using a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Results**

A 2 (order: control, belonging uncertainty)  $\times$  2 (group membership: students of color, White students) ANOVA revealed a main effect of group membership on reports of discrimination,  $F(1, 536) = 21.39, p < .001, \eta_p^2 = .04$ . As expected, students of color reported more discrimination ( $M = 2.57, SD = 1.71$ ) than White students ( $M = 1.98, SD = 1.27, d = -0.41$ ). There was no main effect of order and no interaction,  $F_s(1, 536) < 1.39, p > .05$ .

Replicating Study 1, an ANOVA revealed a main effect of group membership for belonging,  $F(1, 536) = 14.16, p_s < .001, \eta_p^2 = .03$ . Students of color reported less belonging ( $M = 5.16, SD = 0.96$ ) than White students ( $M = 5.45, SD = 0.89, d = 0.32$ ). There was no main effect of order in this sample,  $F(1, 536) = 2.38, ns$ . As predicted and replicating Study 1, there was an interaction between order and group membership,  $F(1, 536) = 3.92, p = .048, \eta_p^2 = .01$ . In the belonging uncertainty condition, students of color reported significantly lower belonging than in the control condition (see Figure 2). White students’ reports of belonging were unaffected by question order. Thus, considering one’s experiences with discrimination effectively activated belonging uncertainty among college students of color.

Given the fact that students of color reported experiencing more discrimination than White students, their reports of belonging after considering discrimination are likely a more accurate reflection of their typical feelings of belonging on campus. However, we cannot

be certain this is the case in all contexts; therefore, this assumption should be further examined in future research. In comparison, White students reported fewer experiences with discrimination, and their reports of belonging were unaffected by first considering those experiences.

**General Discussion**

Two randomized surveys showed that junior high, high school, and college students of color experienced greater fluctuations in belonging uncertainty than White students. Yet context effects created by question order can mask these fluctuations. When students of color first considered either ethnic identification (Study 1) or personally experienced discrimination (Study 2), their sense of school belonging was lower than when they first considered their sense of school belonging. Moreover, as in past research, a sense of school belonging was positively related to educational expectations (Study 1) for all students. Questioning whether one fits in the context of higher education can negatively affect high school students’ intentions to enroll in college and their academic achievement once they begin to pursue a college degree.

One important contribution of this research is knowledge of the impact that question order has on responses to subsequent questions. We found that reports of belonging uncertainty by students of color were lower when they followed (a) considerations of ethnic identification and (b) reports of personal discrimination than

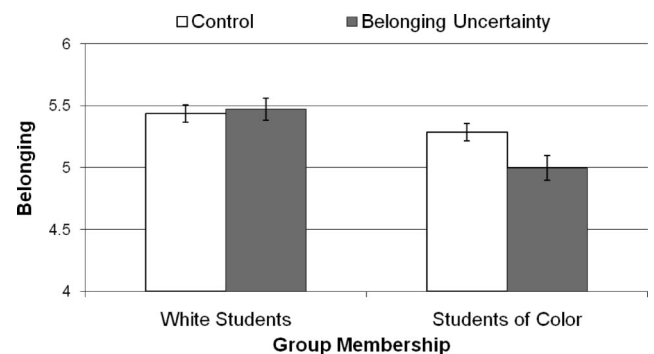


Figure 2. When first asked about discrimination, students of color reported significantly lower belonging than when first asked about belonging (Study 2). White student reports were unaffected by the question order.

when they preceded such reports. This difference was not present for White students. Thus, there is the potential that any variable that is sensitive to an intergroup context may be similarly affected by question order. This should serve as a reminder to researchers to carefully consider question order when designing survey research.

The present research sampled a diverse group of students from midwestern and western states. Participants ranged in age from 12 to 44 years and were mostly from middle-class families, with Study 2 participants reporting an average family income of \$55,000–\$74,999. Our students of color included African American, Latino/a, Native American, Asian, and multiracial individuals. We expect that our findings would generalize to other samples with comparable demographics. Although SES was not a significant moderator in the present research, future research that targets very poor and very wealthy samples could reveal SES as a moderator, with very poor students being more susceptible and very wealthy students being less susceptible to these threats to school belonging.

Feeling as if one belongs in school is a critical determinant of academic achievement and retention for students of color. The pervasiveness of negative stereotypes about academic achievement and the awareness of numerical underrepresentation of one's group serve as environmental cues that confirm the hypothesis that one does not belong in an educational setting (Walton & Cohen, 2007). The current studies demonstrate that simply thinking about one's group membership or recalling discriminatory experiences are enough to bring these cues to the forefront and trigger belonging uncertainty in students of color. This is problematic because when students feel undervalued or unsafe in school they are more likely to drop out (Archambault et al., 2009; Fischer, 2007) than students who feel secure within their school's walls.

Considering the present research, it is important for school administrators to obtain an accurate barometer of students' feelings of belonging. Careful consideration should be given to the order of questions within surveys so as not to artificially mask the presence of belonging uncertainty in students of color. Where disparities in belonging uncertainty do exist, administrators should work to create conditions of *identity safety* for students of color through programming and support for student organizations (Steele et al., 2002).

## References

- Archambault, I., Janosz, M., Jean-Sebastien, F., & Pagani, L. S. (2009). Student engagement and its relationship with early high school dropout. *Journal of Adolescence, 32*, 651–670. doi:10.1016/j.adolescence.2008.06.007
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529. doi:10.1037/0033-2909.117.3.497
- Cohen, G. L., & Garcia, J. (2005). "I am us": Negative stereotypes as collective threats. *Journal of Personality and Social Psychology, 89*, 566–582. doi:10.1037/0022-3514.89.4.566
- Feagin, J. R. (1991). The continuing significance of race: Anti-Black discrimination in public places. *American Sociological Review, 56*, 101–116. doi:10.2307/2095676
- Fischer, M. J. (2007). Settling into campus life: Differences in race/ethnicity in college involvement and outcomes. *Journal of Higher Education, 78*, 125–161. doi:10.1353/jhe.2007.0009
- Goodenow, C. (1993). Classroom belonging among early adolescent students: Relationship to motivation and achievement. *Journal of Early Adolescence, 13*, 21–43. doi:10.1177/0272431693013001002
- Harper, S. R., & Hurtado, S. (2007). Nine themes in campus racial climates and implications for institutional transformation. *New Directions for Student Services, 120*, 7–24. doi:10.1002/ss.254
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 133–168). New York, NY: Guilford Press.
- Mallett, R. K., & Swim, J. K. (2009). Making the best of a bad situation: Proactive coping with racial discrimination. *Basic and Applied Social Psychology, 31*, 304–316. doi:10.1080/01973530903316849
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*, 156–176. doi:10.1177/074355489272003
- Rankin, S. R., & Reason, R. D. (2005). Differing perceptions: How students of color and White students perceive campus climate for underrepresented groups. *Journal of College Student Development, 46*, 43–61. doi:10.1353/csd.2005.0008
- Reid, L. D., & Radhakrishnan, P. (2003). Race matters: The relation between race and general campus climate. *Cultural Diversity & Ethnic Minority Psychology, 9*, 263–275. doi:10.1037/1099-9809.9.3.263
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54*, 93–105. doi:10.1037/0003-066X.54.2.93
- Sidanius, J., Van Laar, C., & Levin, S. (2004). Ethnic enclaves and the dynamics of social identity on the college campus: The good, the bad, and the ugly. *Journal of Personality and Social Psychology, 87*, 96–110. doi:10.1037/0022-3514.87.1.96
- Smart Richman, L., & Leary, M. (2009). Reactions to discrimination, stigmatization, ostracism, and other forms of interpersonal rejection: A dynamic, multi-motive model. *Psychological Review, 116*, 365–383. doi:10.1037/a0015250
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*, 797–811. doi:10.1037/0022-3514.69.5.797
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 34, pp. 379–440). San Diego, CA: Academic Press.
- U.S. Census Bureau. (2009). *Mean earnings of workers 18 years and over, by educational attainment, race, Hispanic origin, and sex: 1975 to 2006*. Retrieved from <http://www.census.gov/population/www/socdemo/educ-attn.html>
- Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology, 92*, 82–96. doi:10.1037/0022-3514.92.1.82