Chapter 7
Places of Belonging: Person- and Place-Focused Interventions to Support Belonging in College

Lisel Alice Murdock-Perriera, Kathryn L. Boucher, Evelyn R. Carter, and Mary C. Murphy

Feeling a sense of belonging in college is important. But what is belonging? College students experience and report a sense of belonging as a feeling of fit, inclusion, and relationship with others in their academic and social contexts (e.g., Walton & Brady, 2017; Walton & Cohen, 2007). Feeling a sense of belonging helps students turn toward important tasks and feel secure that others care for them (Zirkel, 2004). A sense of belonging has implications for many academic outcomes including motivation, GPA, and retention (e.g., Hausmann, Schofield, & Woods, 2007; Juvonen, 2006; Patrick, Ryan, & Kaplan, 2007; Walton & Cohen, 2011; Yeager et al., 2016); moreover, feeling as if one belongs in college enhances other key dimensions of students' experiences such as their physical and mental health, psychological well-being, relationships, and career intentions (e.g., Hurtado & Carter, 1997; Jones, Peddie, Gilrane, King, & Gray, 2016; Walton & Cohen, 2011).

Yet, at one time or another, almost all students question their sense of belonging in college. College students may wonder whether they belong with the academic and intellectual community broadly (e.g., "Do I belong in college at all?"), whether

L. A. Murdock-Perriera (✉)
Graduate School of Education, Stanford University, Stanford, CA, USA
e-mail: murdockl@stanford.edu

K. L. Boucher
School of Psychological Sciences, University of Indianapolis, Indianapolis, IN, USA
e-mail: boucherk@uindy.edu

E. R. Carter
Office of Equity, Diversity and Inclusion, University of California, Los Angeles,
Los Angeles, CA, USA
e-mail: ecarter@equity.ucla.edu

M. C. Murphy
Department of Psychological and Brain Sciences, Indiana University, Bloomington, IN, USA
e-mail: mcmpsych@indiana.edu

they belong at their specific institution (e.g., "Do I belong, here, at this college?"), whether they belong in their classes (e.g., "Am I smart enough to cut it? Does my professor think I'm smart enough to be here?"), and whether they belong and feel included in the social communities of the campus (e.g., "Do others want to hang out with me? Will they be my friends?").

While many students struggle with feeling a sense of belonging in college early on, belonging concerns and belonging uncertainty can take on a more threatening, negative, and even global meaning among underrepresented and stigmatized students, compared to their majority and non-stigmatized peers (e.g., Hurtado & Carter, 1997; Steele, Spencer, & Aronson, 2002; Walton & Brady, 2017). Why might this be?

First, unlike their majority-group peers who can attribute their feelings of non-belonging to the situation (e.g., "This is just how it is when you start college.") or to something about themselves personally (e.g., "Maybe the professor doesn't like *me*."), stigmatized students' feelings of non-belonging may also be attributed to their stigmatized group membership (e.g., "The staff member said that because I'm *Latino*." or "They didn't invite me out because I don't have a lot of money."). These identity and group-based attributions for feelings of non-belonging make belonging uncertainty particularly challenging for students from stigmatized and underrepresented backgrounds.

Second, the socio-cultural and historical contexts of higher education may also cause stigmatized students to draw more negative meaning from feelings of non-belonging. That is, stigmatized students' feelings of non-belonging occur in the context of institutions of higher education—a context that has historically marginalized, underrepresented, and, at times, even excluded their social groups. Is it not surprising then, that this historical legacy has consequences for students from stigmatized backgrounds—shaping whether students feel like they can belong, be included and respected, and succeed in American college and university settings?

Finally, due to negative societal stereotypes about ability and intelligence, there are more academic and social situations that can cause students from stigmatized groups to question their sense of belonging on campus than there are for their majority-group peers. For example, being one of few students from your group in class, in your major, or on your chosen career path can prompt belonging concerns, as can instances of subtle or overt bias communicated through stereotypic expectations, derogatory language, or discriminatory behavior.

To understand the experience of stigmatized students in college, let's consider the experience of a Mexican-American student, Vanessa, who is attending a private, predominantly White college. Vanessa grew up in a working-class household with two high-school educated parents, speaking only Spanish at home. Her college is comprised of mostly White and wealthy students—a markedly different community than her family and network at home. At college, only English is spoken, and most readings are by White, male authors, even in her "contemporary literature" course. Vanessa might ask whether she belongs at this college; whether her peers and instructors will see her through a stereotypical lens and question her intelligence and abilities; and whether her new friends will understand or want to learn about her home

traditions and ideas. Vanessa might question herself, wondering if she has what it takes to succeed in this college environment. Taken together, these concerns, if unresolved for students like Vanessa, can contribute to a lack of belonging that makes it difficult to thrive and engage in the social and academic fabric of college life.

Vanessa's experience highlights one way that belonging concerns could develop in relation to one's social identities. Students' social identities shape how they gather information about whether they are valued and welcomed by their peers, interpret critical feedback, and contend with minimal numerical diversity on campus. These questions—and the ways in which they are answered—can create barriers to belonging. For instance, when Vanessa receives grammatical corrections on her first term paper, she may wonder whether her professor is offering genuine feedback to help improve her writing, or whether her professor views her through a stereotypical lens as just "another" under-educated Mexican-American who struggles with English as her second language.

As research reveals and deepens our understanding of barriers to belonging, social psychologists have developed several successful strategies to address these barriers by changing how students construe them. These strategies aim to change how students view and understand such barriers to belonging and their relationship to them. Known as interventions, these strategies are generally short reading and writing exercises in which students consider barriers to belonging at critical moments during the transition to and through college. For example, Vanessa might complete an intervention prior to matriculating at her university in which she might read about students' early experiences transitioning to college. The intervention might include stories that describe different kinds of academic and social challenges that many students experience, which caused them, at first, to question their belonging in college. She would learn about different strategies that students found helpful in dealing with questions of belonging. Because these stories reflect a diverse array of current students' experiences at her school, Vanessa would likely see herself in at least a few of them. After reading about students' experiences, she would then be asked to reflect on these stories from her own perspective—imagining the obstacles she might encounter, considering these obstacles as normal and temporary, and brainstorming ways she might deal with these obstacles in order to move beyond them and have a successful college experience.

There is consistent evidence that interventions that address these barriers to belonging, such as the one described above, help change the ways that students view potential roadblocks and improve students' academic and psychological outcomes, particularly among stigmatized students. For example, research shows that students from stigmatized groups who participate in these interventions are more likely to attribute struggles in college to situational or universal causes and will learn to construe situations that could threaten their sense of belonging as typical of college— and not unique to their experiences (Walton & Cohen, 2007). However, we argue that these interventions are just the beginning of how psychological science may be leveraged to address belonging concerns for stigmatized students in college.

This chapter details the barriers to belonging that many students can face in college. We review successful social psychological interventions, such as the one

described previously, in terms of how they address belonging concerns (see Kenthirarajah & Walton, 2015 and Yeager & Walton, 2011 for additional, extensive reviews) and the psychological and performance outcomes that they impact. However, we note that most (if not all) social psychological belonging interventions to date have been person-focused. That is, these interventions help individual students understand themselves and their environments in ways that are beneficial. For example, as a function of the intervention's messages, Vanessa may develop the expectation that it is normal to initially question one's feelings of belonging in a new place and that these thoughts and feelings are likely to improve over time. However, the college environment surrounding Vanessa may not always be conducive to sustaining this construal. That is, if Vanessa's college context actually contains extensive bias, stereotyping, and prejudice, her reality would consistently fail to match the expectations and perceptions put forward by the intervention.

Recognizing such potential discrepancies, we help university administrators, faculty, and staff—who have power to shape the college environment—think about how to support their students' sense of belonging in ways that are both person- and place-focused. That is, we offer strategies to help administrators, faculty, and staff change both the mindsets of students *and* the campus environments in which students live and learn to be places that support their sense of belonging in college.

We describe why research should examine the environment that surrounds students to find points of intervention that might enhance their sense of belonging in college. We argue that if universities and colleges wish to construct an inclusive environment, they should bring together both person-focused interventions *and* changes to environmental cues and messages that impede students' belonging in college. Such inclusive environments promote students' sense of belonging and may support and enhance person-focused belonging interventions. What would belonging-supportive environments look like at colleges and universities? In the final pages of this chapter, we explore features of inclusive college environments and provide concrete strategies for developing such environments.

7.1 How Concerns About Belonging and Fit Emerge

Belonging Is Complex Students' sense of belonging in college is dependent upon many factors (e.g., Murphy & Zirkel, 2015; Wilcox, Winn, & Fyvie-Gauld, 2005). Belonging becomes especially important in evaluative environments where college students need to perform and achieve academically. Belonging is similarly important when students leave behind former social networks and support systems for an environment in which they must develop these networks anew. Educational research suggests that a sense of fit in college and a feeling of connection to the campus community are extremely important in terms of students' well-being and performance (e.g., Strayhorn, 2008a; Tinto, 1975, 1993), especially during the first few weeks of the transition to college (Tinto, 1988). Incoming college students who leave their

homes and families for the first time and face new demands on their academic performance are thus especially vulnerable to concerns about belonging.

Belonging Uncertainty When transitioning to new contexts, it is not always true that students feel that they do not belong. Instead, in moments of transition, students can simply experience more uncertainty about whether they will fit in and belong in their new environments. This is especially the case when students encounter academic or interpersonal difficulties early in their transitions, such as poor scores on placement exams or challenges with roommates. Indeed, students look to their environment to ascertain whether they could belong within it (Murphy, Steele & Gross, 2007). They search for cues as to whether they can be authentically themselves and whether they will be respected and included by faculty, staff, advisors, and their peers (Murphy & Taylor, 2012). When environmental cues and interpersonal interactions signal that students' goals for connection, affiliation, and respect can be met, students feel a sense of fit and belonging. The opposite is true when environmental cues signal that students' academic and social goals cannot be met or when such cues are ambiguous (Walton & Brady, 2017).

Subtle and ambiguous cues can be interpreted in many ways—some of which are more identity-threatening and some of which are more identity-safe (Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008). For example, a professor may respond to a student's question by speaking very quickly. If the student's native language is English, the student might think little of the interaction, but for a student whose native language is not English, the interaction could be interpreted as potentially signaling bias or exclusion on the part of the professor. Ambiguous interpersonal interactions with faculty, staff, administrators, and peers can include conflicting cues to belonging—some that suggest that students' social identities are being viewed negatively and some that suggest that students' social identities are being viewed positively. Things like receiving critical feedback on an assignment, being left behind when the dorm floor is going to dinner, being invited to join a campus group for underrepresented students (or not being invited to join); all of these situations can cause students to be uncertain about their belonging in college. Students try to answer questions like: why did I receive this criticism? Why didn't anyone invite me to dinner? Why am I being asked to join this campus group or why was I not included? When interactions and cues in the environment prompt these questions, students may become more uncertain about their belonging in college.

Vigilance and Uncertainty Among Stigmatized Students   When threatening situational cues and interactions trigger belonging uncertainty, this uncertainty sets off a process that makes students even more vigilant to their local environment. In other words, heightened uncertainty about one's belonging in college means that students are relatively vigilant for more evidence that could help them resolve this uncertainty. Thus, stigmatized and underrepresented students are vigilant to aspects of the environment that signal whether they belong within it (e.g., Murphy et al., 2007; Murphy & Taylor, 2012). When situational cues are unclear in terms of their meaning for one's belonging, students engage in the cognitively and emotionally taxing

work of determining the meaning behind these cues (Murphy, Richeson, Shelton, Rheinschmidt, & Bergsieker, 2013). When students identify with multiple social groups that are stigmatized or numerically underrepresented in college settings, concerns about whether they will be accepted and respected can be amplified (e.g., Gonzales, Blanton, & Williams, 2002; Strayhorn, 2012). These concerns about belonging serve as an additional psychological burden that college students from stigmatized groups contend with, relative to their peers from non-stigmatized groups. Students who experience belonging uncertainty and vigilance can often feel like they are the only ones who experience college this way and thus they may be less likely to reach out and share those experiences with faculty or friends. Indeed, the extent to which students experience belonging uncertainty predicts the degree to which they have strong connections to faculty and peers as well as their academic performance on campus (e.g., Walton & Cohen 2007, 2011).

Consequences of Vigilance Any student can worry about their belonging in college, however the extent to which these worries trigger a vigilance process may depend on the social groups with which students identify. That is, a vigilance process is more likely to be invoked when a student is in a situation that makes salient a stereotyped or stigmatized social group membership that is important to that student (e.g., Murphy et al., 2007; Murphy & Taylor, 2012). For example, when a woman finds that she is one of very few women in her advanced math class, her gender identity is likely to come to the fore and trigger a vigilance process in which she examines the setting and her interactions for signals about whether her peers and professor feel that she belongs in the class. Thus, social identity is a lens through which students answer important questions of belonging. Cues in the campus environment can have different meaning among stigmatized students who contend with societal stereotypes than they do for non-stigmatized students who are presumed to belong in higher education settings (e.g., Boucher & Murphy, 2017; Walton & Brady, 2017).

Behaviors, comments, and chains of events that may be viewed as minor or relatively insignificant to majority group members may have great implications for stigmatized and numerically underrepresented students' sense of belonging. For example, a conflict with a roommate may upset any student, but it might especially call into question feelings of belonging for a Black student. A Black student might wonder why their roommate did not respond to a question they asked. They might wonder: "Did my roommate not hear me? Are they angry with me? Or, are they ignoring me because they are racist?" This experience—one that occurred in what should be a place of home and comfort—may make the Black student wonder whether many of their interactions at this new school might be similarly influenced by their racial/ethnic identity. Thus, this student may be vigilant during many of their interactions with new peers to determine whether they can belong and whether they will be valued and respected by others at their college.

Similarly, failing a midterm may be deflating to both male and female students in science, technology, engineering, and math (STEM) courses, but it might be viewed by female students as potentially stereotype-confirming evidence that they

and their group cannot perform well or belong in STEM. For women, who are stereotyped as less capable than men in STEM, poor performance may confirm these stereotypes—in the eyes of women students and in the eyes of their peers and professors—in a way that men's poor performance does not. Thus, female students may worry that they must represent their gender every time they sit down to take a math exam. In this way, stereotypes raise the stakes as performance settings represent instances where one might confirm societal stereotypes. Such worries consume valuable cognitive resources that students who face stereotypes in a given environment—in this case, women—might otherwise devote to the task at hand (Schmader, Johns, & Forbes, 2008).

Finally, as a last example, the first months of college may prompt homesickness for both first-generation and continuing-generation college students. However, this homesickness may undermine first-generation college students' certainty about their abilities to successfully navigate and complete college. Whereas continuing-generation students may find assurance and confirmation about their belonging in college among parents, siblings, family friends, and acquaintances who help them understand homesickness as a natural part of the process of transitioning to college, first-generation college students are less likely to have access to social networks that can provide this helpful interpretative lens. These students and their families may interpret these feelings as a sign that maybe college isn't meant for them and families may urge their children to come home. Taken together, these examples highlight how some social or academic situations can threaten the sense of belonging of students who are stigmatized and stereotyped in higher education settings in ways the same situations would not threaten the belonging of non-stigmatized or non-stereotyped peers.

7.2   Belonging Across Multiple Identity Groups

Research on students' sense of belonging has largely focused on the experiences of students from social groups that are historically stigmatized, negatively stereotyped, or numerically underrepresented in college settings. In particular, much of the extant research in this area has examined the experiences of students from underrepresented, stigmatized, or negatively stereotyped racial and ethnic groups (e.g., Cheryan & Monin, 2005; Covarrubias & Fryberg, 2015; Hurtado & Carter, 1997; Johnson, Soldner, et al., 2007; Lee, 2005, 2011; Murphy & Zirkel, 2015; Shimpi & Zirkel, 2012; Steele, 1997; Strayhorn, 2012; Walton & Cohen, 2007, 2011), female students in STEM classes and majors (e.g., Cheryan, Plaut, Davies, & Steele, 2009; Dasgupta, Scircle, & Hunsinger, 2015; Good, Aronson, & Inzlicht, 2003; Inzlicht & Ben-Zeev, 2000), and students from lower socioeconomic backgrounds or whose parents did not attend college (i.e., first-generation college students; e.g., Covarrubias & Fryberg, 2015; Lynch & O'Riordan, 1998; Ostrove & Long, 2007; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012).

Although less research has examined the experiences of students from other social groups, sense of belonging is emerging as a key factor in the college experience of international students (e.g., Slaten, Elison, Lee, Yough, & Scalise, 2016), immigrants (e.g., Mallet, Calvo, & Waters, 2017; Stebleton, Soria, & Huesman, 2014; Wignall, 2013), and students whose first or preferred language is not English or who may speak stigmatized dialects of English (Murdock-Perriera, Boucher, Fisher, & Logel, 2018). Students' sense of belonging in college may also be shaped by their gender identity, sexual orientation, and religious affiliation—causing these students to be more uncertain about their belonging, especially when the local college community differs from their home community (Strayhorn, 2012). Moreover, feeling a sense of fit, acceptance, and welcome may be critical for students who have different needs and expectations for college, such as those who have visible or invisible disabilities (e.g., Fleming, Oertle, Plotner, & Hakun, 2017; Graham-Smith & Lafayette, 2004; Jones, Brown, Keys, & Salzer, 2015; Mahar, Cobigo, & Stuart, 2013; Quinn, Kahng, & Crocker, 2004; Vaccaro, Daly-Cano, & Newman, 2015), veterans, and older college students who may have families of their own (e.g., Magolda, 2000; Read, Archer, & Leathwood, 2003).

It is evident that feeling a sense of belonging in college is meaningful to students from a diverse range of social groups. Even though there may be some commonalities in the extent and form of belonging concerns among groups, environmental and interpersonal cues that signal one's belonging are likely to differ between groups and among individuals based on the local academic and social context, the stereotypes that are relevant to their group, and their group's historical and continuing disadvantage. For example, college students from different stigmatized backgrounds who enter a brand new, high-tech classroom may all feel increased belonging uncertainty, but for different reasons. A student in a wheelchair may worry about physically navigating this new space and whether the technology is accessible for their needs. A student from a lower income background may worry that the class will require supplementary software that is expensive, and wonder whether they will be viewed negatively for not knowing how to access and use a technology that was not available in their high school or home. A woman might worry that as she asks questions and learns how to use the new technology in this classroom alongside her male peers, she will confirm stereotypes about women's lack of technological abilities.

As research continues to explore the countless ways in which students from different social groups contend with belonging uncertainty, college administrators, faculty, and staff should consider the intersectionalities of student backgrounds and how students with intersectional identities experience belonging concerns and belonging uncertainty. For example, whereas women make fewer cents on the dollar compared to men, the pay gap is even larger for women of color. Thus, an International Women's Day panel comprised of White women speakers who discuss gender pay disparities may cause White women students to experience a greater sense of community and belonging; however the same event may ironically serve as a cue to *non*-belonging for Black, Latina, and Native American women students. This, and many other examples, highlight the ways in which race, gender, sexual orientation, and other social identities can interact to powerfully shape the stereo-

types, biases, and experiences that members of intersectional social groups face (e.g., Crenshaw, 1991; Livingston, Rosette, & Washington, 2012; Purdie-Vaughns & Eibach, 2008). Negative stereotypes, underrepresentation, and bias can have additive or interactive effects as they accrue across different group memberships (e.g., Covarrubias & Fryberg, 2015; Strayhorn, 2008b, 2014; Strayhorn & Tillman-Kelly, 2013) and such experiences need to be further examined in order to reduce barriers to belonging for all students.

7.3 Barriers to Belonging in College

As noted previously, students' social group memberships guide their understanding of their environment. Researchers have explored the types of cues that signal to students whether they may or may not belong on campus and/or in their classrooms. Building on the framework developed by Walton and Brady (2017), we discuss three barriers to belonging that influence students' psychological, emotional, and academic experiences in college. These barriers include (a) negative societal stereotypes about one's group, (b) numerical underrepresentation in academic and social campus settings, and (c) uncertainty about how the institution—and the people within it—value one's group and the aims of diversity and inclusion overall. We discuss the belonging concerns that emanate from each of these barriers in turn.

Societal Stereotypes One barrier to students' sense of belonging is the potential to be viewed or evaluated in line with negative stereotypes about one's social group (i.e., stereotype threat; e.g., Steele, 1997; Steele & Aronson, 1995; Steele et al., 2002). Widely known societal stereotypes about intelligence and ability raise concerns for members of stereotyped groups about whether others will reduce them to these stereotypes. For instance, when a female student is called out for an incorrect answer in a challenging math class, she may worry that her peers and the instructor will think about her as an example that women are not as capable in mathematics as men—confirming gender stereotypes. As a result, she may disengage from the course and may possibly even switch majors to a field in which her belonging is not called into question by these societal stereotypes.

Expectations for which groups belong in academic settings can also be conveyed through the language that instructors use to describe the qualities required for success in class. For example, when STEM professors describe success as requiring fixed, natural ability (vs. hard work and dedication), it can bring to mind ability stereotypes that favor men (vs. women) (e.g., Emerson & Murphy, 2015; Good, Rattan, & Dweck, 2012; Murphy & Dweck, 2010; Rattan, Good, & Dweck, 2012). Moreover, when instructors describe careers as requiring or valuing masculine (vs. feminine) traits and agentic (vs. communal) goals, they are more likely to encourage male (vs. female) students to enter these career fields (e.g., Diekman, Clark, Johnston, Brown, & Steinberg, 2011; Gaucher, Friesen, & Kay, 2011; Stout & Dasgupta, 2011; Vervecken, Hannover, & Wolter, 2013).

As noted above, receiving critical feedback from authority figures is a primary context in which negative group stereotypes can serve as a barrier to belonging (Juvonen, Yeshina, & Grand, 2006). For students who constitute the numerical majority in college—like White students at a predominantly White institution, or students whose parents graduated from college in any college setting—evaluative concerns may arise after receiving critical feedback but these concerns are generally manageable and attributable to the instructor's goal of helping students improve. However, in the context of receiving critical feedback, stigmatized students can be uncertain about the goal of the instructor. For instance, a Black student may feel unsure about whether critical feedback from a White professor is genuinely aimed at improving their work or whether the professor is intentionally or unintentionally evaluating them in line with negative stereotypes about Black students.

In such situations, students must make sense of unclear intentions and determine whether to take the feedback seriously and work toward improving their performance; or whether to dismiss the feedback as potentially biased (e.g., Cohen, Steele, & Ross, 1999; Crocker, Voelkl, Testa, & Major, 1991). Students from stigmatized groups are more likely to experience *attributional ambiguity*—or uncertainty about the motives behind their treatment—because the intentions of others can be attributed to negative stereotypes about their social group. Repeated attributionally-ambiguous experiences can reduce trust in faculty and other authority figures, which can in turn lead to a lower sense of belonging in college and worse academic outcomes (e.g., Cohen et al., 1999; Yeager, Henderson, et al., 2014). Critical feedback on assignments, tests, and in the forms of academic probation or scholarship/extracurricular ineligibility can increase students' feelings of belonging uncertainty by inspiring shame and stigma despite institutional goals of conveying concern and offering students resources and support (Brady et al., 2018).

Numerical Representation Societal stereotypes about ability and performance are not the only barriers to belonging in college. The identity groups that students see inside and outside of the classroom shape students' sense of belonging as well. Perceptions of diversity on campus—among peers as well as within prestigious academic positions—impact students' feelings of identity safety and social satisfaction (e.g., Juvonen, 2006; Read, Archer, & Leathwood, 2003). Numerical underrepresentation—that is, when there are few people from one's social identity group on campus or within one's field or major—prompts belonging concerns because it makes students worry about being spotlighted. When there are few members of one's group in an academic or social setting, students feel they are expected to speak for, and be a good representative of, their group (e.g., Crosby, King, & Savitsky, 2014; London, Downey, Romero-Canyas, Rattan, & Tyson, 2012; Steele et al., 2002). These belonging concerns—that stem from numerical underrepresentation—have a dampening effect on students' academic outcomes and career interests. For example, being one of few women in STEM learning environments can impair performance (Inzlicht & Ben-Zeev, 2000), negatively influence STEM attitudes and self-concepts (Dasgupta et al., 2015), increase physiological stress reac-

tions and reduce interest in pursuing STEM majors and fields (Murphy et al., 2007). On the other hand, having a role model from the same underrepresented group can sustain belonging and mitigate these detrimental outcomes (e.g., Dasgupta, 2011; McIntyre, Paulson, & Lord, 2003; Stout, Dasgupta, Hunsinger, & McManus, 2011).

Numerical underrepresentation can be a barrier to belonging in more nuanced ways than simply the physical representations of who students see around them. Before students get to the institution, recruitment materials and comments made on campus tours can reinforce the expectation that the normative college student is White, middle-class, and young (e.g., Archer & Hutchings, 2000; Magolda, 2000; Reay, Davies, David, & Ball, 2001). These messages continue when students matriculate to the institution. Seeing few representations of people from one's group in key places within the learning environment—including as administrators, faculty, and fellow students—can further trigger students' concerns about belonging at their particular college, as well as within higher education contexts more broadly.

The cue of underrepresentation can also be present in media representations, posters on the walls of the hallway, and in textbooks (e.g., Cheryan et al., 2009; Cheryan, Plaut, Handron, & Hudson, 2013; Good, Woodzicka, & Wingfield, 2010). For instance, these media can depict leaders in STEM fields as White and male— and as people who, stereotypically, love Star Trek and video games. Even when members of one's group are highlighted as exemplars, if their success seems rare and unattainable, these role models can be demotivating for students (Betz & Sekaquaptewa, 2012). Moreover, while including perspectives from underrepresented groups in ethnic studies courses can enhance students' sense of belonging and their academic outcomes (Dee & Penner, 2017), the incorporation of these perspectives into mainstream courses is rare; instead, these perspectives are often siloed into specialty programs or included to fulfill diversity requirements.

Value of Diversity and Inclusion Another major barrier to belonging is the uncertainty that stigmatized students face about the value that their institution places on their group and their group's inclusion in the social and academic life of college. This is a challenge both because institutional biases (i.e., racism, sexism, classism, ableism, heteronormativity) exist on college campuses and because students often question their institution's commitment to diversity and inclusion. These concerns can stem from the ways in which colleges or universities handle microaggressions that are frequently experienced by students. Microaggressions—defined by Sue et al. (2007) as brief, everyday exchanges that send denigrating messages to people because they belong to a particular stigmatized group—can undermine students' sense of belonging in college. If these everyday experiences are unaddressed by colleges and universities, they can undermine students' identification with the school and with higher education more broadly. Stigmatized students are likely to wonder about the institutional processes that have been put in place to address these experiences and the mechanisms of accountability for students, faculty, administrators, and staff who engage in these behaviors on campus. Moreover, students can perceive that their institution lacks a commitment to diversity and inclusion when there is backlash against diversity events; sanitizing of stigmatized students' per-

spectives; and limiting discussions of diversity to special days, weeks, or months of the year or to particular courses and venues (Brannon, Carter, Murdock-Perriera, & Higginbotham, 2018). Generic efforts to promote community that do not address the strengths and contributions of different social groups can ring hollow if students question whether they are seen or valued (e.g., Covarrubias & Fryberg, 2015; Hausmann, Ye, Schofield, & Woods, 2009). Lastly, students look at how resources are allocated, and the ease with which those resources can be accessed, to determine the value and meaning of their social groups in college.

7.4   Strategies for Addressing Barriers to Belonging

Social psychological interventions speak to students' belonging concerns by mitigating the impact of some of the barriers described above. Most of these interventions are intended to help students shift the ways they construe situations—like disagreements with roommates or challenging introductory courses—that may be especially likely to threaten students' sense of belonging in college. These person-focused interventions help students make meaning of their interactions and experiences in ways that affirm and support their sense of belonging in college. In this section, we describe belonging attribution and social belonging interventions. These interventions directly address students' sense of belonging in college by leveraging construal and attribution processes to reduce the threat of negative and attributionally ambiguous social and academic situations.

The Belonging Attribution Intervention   A rich social psychological tradition undergirds belonging interventions. Extensive literature on causal attributions dates back to Heider (1958), Seligman (1978), and Weiner (1985). Causal attributions in educational contexts refer to students' explanations or reasons for their success or failure. As discussed in a recent review (Weiner, 2018), this meaning-making seems to occur along three important dimensions: internal versus external causes, stable versus unstable causes, and controllable versus uncontrollable causes. For example, a struggling student who makes attributions that are internal, stable, and uncontrollable might believe that they are struggling with a topic because they are *incapable* of mastering it, that they will *always* struggle at the topic, and that their struggle is due to poor aptitude in the topic. Conversely, a student who makes attributions that are external, unstable, and controllable might believe that, in spite of struggling with a skill, they can improve if they learn more about it, that they are capable of improving, and ultimately that they can work to improve their skill. Although all three dimensions influence causal attributions, Perry and colleagues (Perry, Hladkyj, Pekrun, Clifton, & Chipperfield, 2005; Perry, Hladkyj, Pekrun, & Pelletier, 2001) find that students' sense of control or lack thereof is critical to college students' success. Specifically, they show that college students' feelings of lack of control over academic performance when transitioning to college was linked to negative emotions, such as anxiety and boredom, as well as poorer academic performance in

terms of grades and retention. Richardson, Abraham, and Bond (2012) similarly argue that such perceived control is a strong predictor of GPA for college students.

Experiences of belonging, and the interventions developed to address it, are closely related to *attributional retraining* work—an approach that stems from the causal attribution literature and is designed to address the attributional challenges described above. Specifically, attributional retraining promotes more adaptive attributions or meaning-making surrounding the challenges that many students face. For example, in an attributional retraining paradigm, students may be encouraged to view the causes of a low test grade as controllable—that they put forward insufficient effort or used an ineffective study strategy, and that a repeated poor performance can be mitigated in the future (Haynes, Perry, Stupnisky, & Daniels, 2009). Moreover, these interventions sometimes involve sharing personal stories where the message of struggling initially but succeeding in the long run is conveyed (Perry & Penner, 1990). This intervention message structure is similar to that of the social belonging intervention described below.

Attributional retraining has been used in many settings (e.g., career and employment decisions, parenting, and social skills training), but it has been most frequently implemented in the academic achievement domain, from elementary school years through higher education (e.g., Haynes et al., 2009; Perry, Chipperfield, Hladkyj, Pekrun, & Hamm, 2014; Perry & Hamm, 2017). Attribution-based interventions routinely produce motivation and performance benefits for the stigmatized or stereotyped student groups mentioned in this chapter and provide a theoretical basis for facilitating students' sense of belonging. Without reframing attributions for challenges and setbacks, a recursive process of maladaptive attributions could undermine motivation, emotional and psychological functioning, and performance.

In the context of social belonging, Wilson, Damiani, and Shelton (2002) first called attention to the importance of attributions as a potential mechanism to improve the psychological and academic experiences of college students. Moreover, these researchers argued that stereotyped students may be more likely to make global and stable attributions for negative feedback—expecting that these experiences will persist throughout their time in college rather than understanding these struggles as challenges that often decrease over time. Through "attribution therapy," students learned to see these challenges as stemming from causes that were both unstable and external, rather than stable and internal. Thus, their work offered an important insight: that by changing a student's construal of their environment and the challenges they encountered, researchers could dramatically change students' psychological and academic experiences and potentially increase student belonging in college.

The Social Belonging Intervention Building on this idea, Walton and Cohen (2007, 2011) explored ways to deliver these attributional messages and improve students' sense of belonging in college. Drawing on stereotype threat theory (Steele et al., 2002), they proposed that African American students may experience more uncertainty about their belonging in college due to cultural stereotypes that impugn

their intellectual abilities and likelihood of success. In particular, they argued that these students may experience a lessened sense of belonging in college and are more likely to question the quality of their social bonds than are their majority-group peers. Indeed, in their studies, Walton and Cohen (2007, 2011) found that stigmatized students experienced more belonging uncertainty and felt that they were largely alone in these experiences.

Walton and Cohen (2007) also revealed an important effect of belonging uncertainty. They found that when African American students were more uncertain of their belonging, their feelings of belonging in college fluctuated with their daily experiences of adversity. For example, on days when students experienced positive moments—such as earning a top grade on an important exam or having a friendly interaction with a classmate during a group study session—they felt that they belonged in college. However, this sense of belonging in college was tenuous. On days when students encountered negative experiences—such as when a professor brushed off their question in class or when their roommates did not invite them to a party—students felt that they did not belong in college. Thus, when students had a good day, they would feel as though they belonged; but when students had a bad day—filled with social and academic hardships—their feelings of belonging plummeted. A crucial question for these researchers became not just how to increase feelings of belonging among stigmatized students, but how to reduce this contingency between belonging and the negative social and academic events that students experienced.

In two different studies, Walton and Cohen (2007) examined how belonging uncertainty undermines the achievement of students who face negative stereotypes in academic settings. In one study, they asked Black and White college students to list either a large (or small) number of friends in their major—a task they thought would make students feel that they had a lot (or a little) of social support. Black students—who already face stigma in academic domains due to intellectual stereotypes about their group—experienced a drop in their feelings of belonging in their major and in their academic potential when they were asked to list a large number of friends in their major (that is, a relatively difficult task that might ironically suggest the student has fewer friends than is expected). In contrast, this perceived social support manipulation did not impact White students' sense of belonging in their major or beliefs about their academic potential. Thus, the cue of available social support (or the lack thereof) was consequential for Black students' sense of belonging, while White students were unaffected by this cue.

A second study examined the efficacy of an intervention aimed specifically at addressing belonging concerns with incoming first-year college students. In particular, the goal of the intervention was to communicate two key messages: (1) that concerns about belonging are normal during the transition to college and are experienced by everyone and (2) that these concerns get better over time. Incoming students read anecdotal stories from current juniors and seniors at their university—successful older peers with wisdom to share about how to succeed in college. These stories described moments of academic and social struggle and came from students

from gender- and racially-diverse backgrounds. The stories underscored common challenges that students from all backgrounds encounter during their transition to college and described how students initially attributed those challenges to problems within themselves but learned that such experiences were typical of students and improved over time. The stories included proactive and productive strategies that mitigated students' academic and social belonging concerns, like going to office hours, seeking out campus resources such as academic counseling, and joining social clubs.

Importantly, students in the treatment condition did not just read these stories. They also wrote a brief essay that they later delivered as a videotaped speech about the challenges they anticipated in college and the ways that they could imagine overcoming them. This procedure, adopted from the self-persuasion literature, is referred to as "saying is believing" (Higgins & Rholes, 1978). While people might be swayed by a message that comes from a trusted peer or colleague, the persuasive impact of a message is likely to be further accepted and internalized when it comes from the self. Thus, the essay and speech served as opportunities to take the central messages of the intervention and make them relevant to students' own experiences.

In addition to writing and delivering the essay, some students were asked to keep daily diaries about their social and academic experiences during the two weeks that followed. In these daily reports, students wrote about the positive and negative experiences they had throughout the day and also kept track of the severity of these events. The results of these daily diaries were especially striking. As described above, daily adversities influenced Black students' sense of belonging in college—but they did not have the same effect among White students whose feelings of belonging in college remained steady and did not rise and fall with the daily adversities they experienced. There was a statistically significant impact on the academic and relational outcomes of Black students who received the intervention. Specifically, compared to Black students who were in the control group, Black students who received the intervention were more likely to have a faculty mentor, enroll in more challenging courses, and earn higher grades over time. Importantly, Black students who received the intervention still experienced daily adversity, but this adversity was no longer linked to these students' sense of belonging. However, White students' academic motivation and performance was unaffected by the intervention.

What happened to these students in the long-term? In their 2011 paper, Walton and Cohen followed up with the students from the 2007 study to determine the long-term effects of the intervention. They found that Black students who participated in the intervention maintained the significant and positive academic trajectory that started to emerge in the 2007 paper. Specifically, the belonging intervention significantly narrowed the racial achievement gap over students' four years in college. While Black students in the control group earned lower GPAs than did their White peers, Black students in the intervention treatment group earned significantly higher GPAs over time, such that at the end of their senior year in college, these students' GPAs were statistically indistinguishable from that of their White peers.

Beyond these measures of academic performance, there were striking results on students' motivational and psychological outcomes at the three-year follow up.

Specifically, the intervention had a positive impact on Black students' psychological and physical health. Relative to their control-group peers, Black students in the intervention condition reported lower levels of belonging uncertainty, had fewer doctor visits, and reported greater levels of happiness and wellbeing. Indeed, these effects might have been obtained through a virtuous cycle whereby the belonging intervention facilitated more positive interactions with faculty and peers, which might decrease stress, reduce vigilance to negative stereotypes, and boost academic and health outcomes—all outcomes observed at the three-year follow-up (Walton & Cohen, 2011).

Social belonging interventions aim to directly address belonging concerns that are experienced by all students but that may hold a more threatening meaning for stigmatized students. These interventions help people feel as though they belong through a form of attributional retraining—preparing students to think in adaptive ways about common negative events and situations. Such attributional interventions target students' psychological processes and the barriers that impact belonging and shape students' academic persistence, performance, and their connections with others.

Wise Feedback Interventions Another intervention that addresses students' belonging uncertainty is known as the wise feedback intervention. Students' sense of belonging academically is often challenged when they receive negative feedback from their professors. When they receive such critical feedback, students may come to believe that they are poor students, that their professors do not believe in them, or that they cannot improve; this hopelessness can lead to lack of belonging in college (Yeager, Henderson, et al. 2014). Instructors, thus, can exert significant influence on students' belonging through the ways they communicate with and provide feedback to students.

Wise feedback interventions by Cohen et al. (1999), Yeager, Henderson, et al. (2014), and Yeager, Purdie-Vaughns, Hooper, and Cohen (2017), shift the way instructors provide criticism and communicate the meaning of critical feedback explicitly to students so that the likelihood of misconstrual and/or negative attributions to stereotypes or students' group memberships are reduced. In these interventions, critical feedback is framed as an opportunity for teachers to communicate high standards to students along with their beliefs that students are capable of meeting those standards.

This reconstrual of what might otherwise be identity-threatening information benefits all students—and particularly benefits students from stigmatized and negatively stereotyped groups. Specifically, Yeager et al. (2017) found that when teachers provide feedback to their students in these ways, it dramatically increases students' academic achievement and motivation—increasing the likelihood that students will take advantage of opportunities to revise and improve their work. When underrepresented students (in this case, Black students) were provided with this "wise feedback," they were more likely not only to revise and improve their work, but also to trust their teachers more, an outcome linked to belonging in school.

Cultural Mismatch Another type of intervention that helps students feel that they are valued in and belong to the larger campus community are interventions that address the cultural mismatch often experienced by students from underrepresented racial/ethnic backgrounds and lower social class backgrounds. Colleges and universities often cultivate and reinforce cultures that prize independence over interdependence (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). For example, colleges and universities are often focused on individual accomplishment and personal growth (i.e., an independent focus). This focus can be seen in communications that highlight star students for their academic honors and in campus programs that teach students skills to "be on their own." This focus on independence can run counter to a more interdependent or collectivist perspective.

Many students from low-income and racially minoritized backgrounds come from communities that value interdependence and shared accomplishments that benefit the community as a whole. Indeed, students from more interdependent cultures are motivated to succeed in school in order to bring honor and pride to their family and community—and they often hope to give back to these communities upon graduation. In fact, interdependent students value contributions to their communities as much as, or even more than, contributions that simply elevate the self. When they come to college, interdependent students can experience a cultural mismatch between the values of independence (emphasized and valued by their university context) and interdependence (emphasized and valued by their home communities and culture). This cultural mismatch can affect students' academic success. For example, Stephens et al. (2012) found that the cultural focus on independence in American colleges and universities—in comparison to an interdependent or collectivist approach—undermined the academic performance of first-generation college students. Although belonging was not assessed, feeling a mismatch between the expectations and values of college and students' goals could prompt feelings of belonging uncertainty in college.

Interventions that seek to improve academic outcomes are theorized to be more efficacious when they are sensitive to students' cultural backgrounds. That is, when interventions acknowledge cultural diversity and validate multiple cultures within a given academic context, they are more likely to support students' success (Brady, Germano, & Fryberg, 2017). To this point, researchers have found that working-class students, first-generation students, and students of color who experience academic and social obstacles in college often underperform relative to their wealthier and White peers. However, an intervention that described how students from these identity and social class backgrounds experience unique obstacles in college and discussed the identity-based strengths of these backgrounds significantly mitigated the achievement gap between socially disadvantaged students and their more advantaged peers (e.g., Stephens, Hamedani, & Destin, 2014; Stephens, Townsend, Hamedani, Destin, & Manzo, 2015). As this work demonstrates, sharing common difficulties that are not experienced by more privileged peers can be helpful to stigmatized students; however, like many student-focused interventions, these efforts do not currently focus on altering or eliminating the obstacles within the

environment with which students contend. Nevertheless, this research underscores the need for sensitivity to students' diverse backgrounds and demonstrates that by acknowledging these unique identity-based challenges and strengths, institutions can help students both psychologically and academically.

Utility Value Interventions and Purpose Interventions To the extent that students do not see the relevance of college for their future goals, they may wonder what good it will do them to persist in college. These questions about relevance may lead some students to disengage and feel unconnected to school and academic work. Utility value and purpose interventions use different messages to stoke students' feelings of connection to their institution and academic work—and these messages can ultimately narrow achievement gaps. Utility value interventions help students see how the information they learn might be useful to them in the future (e.g., Harackiewicz et al., 2014; Hulleman & Harackiewicz, 2009). Utility value interventions are often delivered by teachers and instructors who describe the value of learning a particular topic or concept. For example, teachers might talk about why multiplication is useful for future behavior, like tipping at restaurants.

Hulleman and Harackiewicz (2009) argue that shedding light on how college work can be relevant to students enhances their interest in academic subjects and helps them develop deeper connections between themselves and school, thereby increasing academic performance. They found that when instructors offer class activities that encourage students to connect course material to their own lives, student motivation and learning improves. By highlighting the value of academic information that is communicated by peers or professors, and helping students connect this value to themselves and their goals, these utility value interventions can help students feel connected to the course material and to school.

Harackiewicz and Hulleman (2010) reviewed the role of goals and interest in promoting academic achievement, course choices, and career decisions and found that students' goals could prompt subsequent interest and academic performance. Purpose interventions draw on this theoretical approach by leveraging students' personal goals to increase academic motivation and performance. In these interventions, students are asked to reflect on their reasons for learning and how that learning will help them become the future selves they hope to be. For example, a student might want to become an engineer because they want to help develop robotic limbs for amputees. By harnessing their reasons for learning, the intervention helps stoke students' academic motivation and engagement. In support of this idea, Yeager, Purdie-Vaughns, et al. (2014) found that many important learning tasks feel uninteresting and tedious to students; however, by asking students to reflect on their purpose for learning, students were able to sustain interest and engaged in deeper learning and better performance.

7.5 Some Limitations of the Person-Focused Approach to College Belonging

One limitation of many of the interventions described above is that the interventions' main target of change is the individual student—students' construal of themselves, their psychological experience, or their fit and relationship to their local environment. While these person-focused interventions have successfully addressed the psychological concerns of students, and thereby buffered students' motivation, engagement, and performance, the full potential of these interventions is likely unrealized (Murphy, Kroeper, & Ozier, 2018). What gains might be possible if we also intervened directly on the environments that students experience? What if we created and restructured academic environments so that they minimized threats to belonging and potential? What if we reduced institutional signs that some students don't belong? How would changing academic environments to be *places of belonging* actually support and sustain the benefits of some of the person-focused interventions reviewed above?

7.6 Places of Belonging

Places of belonging in the context of higher education are social and learning environments that include intentional and systematic practices that reduce threats to students' sense of belonging and support students' feelings that they are valued and respected members of the campus community. Indeed, when colleges and universities help their faculty, staff, and administrators engage in evidence-based practices that establish their institution, classrooms, and offices as places of belonging, it means that interpersonal interactions, disagreements, and critical feedback provided in such environments are less likely to be experienced as threatening to students' sense of belonging because the college environment affirms students' identities and value.

What kinds of place-based interventions might support students' sense of belonging? Establishing college and classroom cultures that explicitly value discussion and critical thinking within a context of interpersonal respect is a start. Creating learning environments that prize growth, development, and improvement—instead of competitive cultures that reward only a few "smart" students—is likely to provide opportunities for students to collaborate, learn, and develop together, thereby increasing social connections, academic communities, and feelings of belonging in college (e.g., Dweck, 2012; Good, Aronson, & Inzlicht, 2003).

In addition to promoting a beneficial learning ethos in the classroom, place-based interventions can help equip all community members with the skills, opportunities, and efficacy to engage with those who differ from them. While it is an empirical question to test in the future, it is likely that the most effective place-based interventions to support students' sense of belonging will be those that shape

students' intergroup interactions with their peers, as well as interactions with people in authority such as faculty, staff, and administrators. While cultural centers and other programs (such as residential colleges or living-learning communities comprised of students pursuing a particular academic focus) aim to provide pockets of belonging on campus, these efforts should be supplemented with whole-campus and whole-classroom endeavors with students, faculty, administrators, and staff that focus on imbuing students' day-to-day interactions with a sense that they belong and are respected and valued on campus. Indeed, when college and university campuses operate as places of belonging, the psychological interventions described above are likely to be even more effective than the current evidence suggests. For example, when students are provided with more adaptive construals regarding difficult interpersonal interactions through person-focused interventions (such as the social belonging or wise feedback interventions described above), these interventions are likely to be more beneficial to students when there is evidence on-the-ground that supports these reappraisals.

7.7   Construal-Focused Interventions Delivered in Places of Belonging

One critique of some of the belonging interventions is that they may make students more vulnerable and unprepared when things do not get better over time or when the college environment is actually biased or prejudiced against them. That is, these interventions could teach students to falsely attribute potentially discriminatory realities to the ubiquitous idiosyncrasies of college life. Moreover, if the problem that the intervention targets is students' "maladaptive" perceptions, students from marginalized groups may experience greater blame when they do not succeed after participating in the intervention (Ikizer & Blanton, 2016). While there are certainly benefits of belonging interventions and other person-based interventions (reviewed above; also, see Lazowski & Hulleman, 2016), changing students' construal of their academic and social challenges might not be effective in college contexts that are actually biased or discriminatory. Thus, it seems important to combine person-focused interventions, like the social belonging intervention, with intentional belonging-supportive changes to the college environment. Together, these person- and place-based interventions have the potential to create settings where all students can belong and thrive. We spend the final pages of this chapter envisioning what such an environment would look like. That is, what would a college or university that was a *place of belonging* include?

At a basic level, places of belonging would anticipate and proactively address the barriers to belonging described above. These colleges and universities would carefully consider how institutional messages reinforce or assuage students' concerns about being viewed through the lens of negative group stereotypes. They would work toward creating a campus community that reflects the diversity of the city,

state, nation, and international communities the institution inhabits, and they would communicate, both implicitly and explicitly, that students' diverse backgrounds and experiences are welcomed, celebrated, and fundamental to the existence and success of the institution.

Institutions that strive to be places of belonging would do so because their leaders recognize that contexts that are places of *non*-belonging unfairly burden stigmatized students, who must contend with social and psychological barriers while being held to the same academic and social standards as their peers from non-stigmatized groups. Thus, creating colleges and universities that support belonging for all students becomes a radical act of inclusion, ensuring that all students who inhabit the college or university will be supported with the adequate resources needed to help them achieve success. In these settings there would be consistent accountability checks that evaluate whether efforts are leading to desired outcomes (e.g., feelings of belonging, respect, and inclusion among underrepresented students; equitable use of resources; narrowing achievement gaps), and stakeholders would look for early indicators of success or failure and act nimbly when there is evidence that they need to change course.

Places of belonging would likely include person-focused interventions that target students' particular needs at a particular institution (e.g., problems with belonging directly; cultural mismatch; wise feedback; utility value). The reality of college is that it *is* challenging, it *is* a transition, and students *do* learn through the process of reattribution how to persist through those challenges, particularly when the challenges are ones that many of their peers also encounter. It is therefore important to help students anticipate and attribute these challenges in ways that help create and sustain a sense of belonging in college. But these interventions are only likely to be as effective as the environments they inhabit. Thus, places of belonging must encompass a constellation of efforts, including context-based changes to address barriers to belonging that align with the core messages of construal-based interventions.

Addressing the Belonging Barrier of Stereotype Concerns We know that students' concerns about being stereotyped are a major threat to belonging—particularly among stigmatized students. Messages that suggest the possibility for stereotyping can come from interactions with peers, statements made by professors during class or office hours, university-wide communications (both pre- and post-matriculation) by staff and administrators, and by posters and photos in school materials that depict students from particular social backgrounds (e.g., White, male, higher SES) as excelling and those from other social backgrounds (e.g., people of color, women, lower SES) as struggling. Institutional change can begin with considering the unintentional consequences and construals of messages that are sent to students from the university. For example, universities might consider their welcome messages. Are these messages (that communicate the culture of the university) framed as valuing and prioritizing individual success? Could this framing unintentionally generate belonging uncertainty among students who come from and value a more interdependent cultural orientation—where students' motivation to

succeed is rooted in being successful for, and contributing to, their family or community? While leaders at every institution want to motivate and inspire pride in their students about their acceptance, messages that over-emphasize exceptional intelligence or brilliance (e.g., "this incoming class is the best and brightest we've ever had; three of you have written books, four of you have founded startups or non-profits…") may unintentionally make salient group-based inequalities and stereotypes about which groups have what it takes to be successful. These messages of praise can sometimes prompt underrepresented students to feel as if they are imposters on campus even before they enter the classroom.

A careful examination of messaging is particularly necessary when communications address academic preparedness. It is important to recognize that students enter institutions with a variety of prior experiences and preparation levels. Thus, although remediation classes and programs may be necessary, creating stigma by suggesting that students are deficient can unintentionally make students feel that they must prove their worth and value to the university, in addition to proving their academic skills and abilities. Practices such as offering no credit for remedial courses—required by just some students, often those from disadvantaged backgrounds—often serve to threaten students' sense of belonging. These students (by nature of their disadvantaged or underrepresented group membership) are already likely to wonder about their belonging on campus, and practices like these serve to undermine students' sense of belonging in college further. Instead, places of belonging will explicitly welcome students with a range of perspectives and experiences—describing how the class's diversity will strengthen the university community. Places of belonging will train their faculty, staff, and administrators to understand and be responsive to the various cultural orientations and backgrounds of their students. Such institutions will explicitly highlight the developmental trajectory of college—emphasizing how the qualities that students possess will guide them on their journey of growth, learning, and development, and will help them excel in this next phase of life. Finally, places of belonging will avoid suggesting a student's self-worth and value is contingent on prior or current academic performance. Together, these messages will support students' motivation and persistence, and will contribute to a greater sense of belonging in college.

Addressing the Belonging Barrier of Numerical Representation In addition to considering the explicit and implicit messages that are communicated to students, places of belonging also must consider whether they are fully representing the diversity of people at the institution. Given the importance of numerical representation for sense of belonging, trust, and persistence in college, it is imperative that students see themselves represented in every element of the institution. This includes being mindful of whose pictures are on the walls in the student union and throughout campus, which groups are celebrated with prestigious awards, which groups are represented in the curricula, and ensuring that those in positions of power and authority—staff, faculty, and senior administration—are similarly diverse. Moreover, efforts to increase the diversity of the student body are imperative to creating a climate of belonging for underrepresented students. These efforts take

time and require an explicit commitment from all those involved. While institutions actively work toward increasing numerical diversity, explicitly celebrating the diversity that is present—including the diversity of perspectives, experiences, and social backgrounds—and the value that this diversity contributes to the very core of the institution, can go a long way to signaling belonging, respect, and value to all students, especially those from marginalized backgrounds (i.e., see all-inclusive multiculturalism; Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011).

Addressing the Institutional Value of Diversity and Inclusion Finally, places of belonging must work to mitigate and remove questions that students may have about whether the institution and the academic community values their social group. Arguably, many institutions are becoming aware that they need to present messages that foster a sense of belonging among their students; similarly, many institutions have devoted financial resources to strategic diversity and inclusion plans that promise to improve the representation of students from stigmatized and underrepresented backgrounds (e.g., Friedersdorf, 2015; Yale News, 2015). These efforts constitute an important first step and should be unambiguously supported at all levels of the institution. However, addressing a student's sense of perceived value and respect on campus is a much more complex task; this sense of value, respect, and inclusion is experienced through each interaction the student has with their peers, professors, staff, and administrators. Places of belonging must address these perceptions and experiences of value and respect as a root cause of students' feelings of belonging in college. The institution must think carefully about the various needs that students have—and the interactions that may cause students to question their belonging on campus. Students from underrepresented and stigmatized backgrounds may have needs that are not met by common resources that were historically created to serve the "typical" (i.e., majority-group) student. Institutions should work to remove any stigma surrounding access to resources that are likely to address students' belonging concerns. Finally, institutions should seek to educate all students, faculty, and staff about the historical and current stigma that different social groups face and the ways in which the community can support and include these groups. These kinds of ongoing trainings and conversations help the campus community become more knowledgeable, intentional, and skillful about creating social justice and a climate of respect, value, and belonging.

One way that colleges and universities can address students' uncertainty about the institution's value of diverse social groups on campus is to create and maintain spaces that reduce or eliminate these questions. Ideally, a sense of belonging would permeate the university at large. While pursuing this ideal, there is also value in creating identity-focused spaces, like cultural centers or ethnic-themed housing, which foster a central hub of belonging. In these spaces, underrepresented students can be themselves (without having to prove their worth or represent their group), share their experiences with their peers, and find communities that lend social and academic support. These identity-focused spaces ultimately help students persist (e.g., Patton, 2010). Indeed, this kind of place-focused belonging intervention

relates to numerical underrepresentation as students can connect with peers who are from similar backgrounds, reducing feelings of isolation and nonbelonging. Institutions that strive to be places of belonging openly celebrate their diversity-themed spaces and events. For example, in places of belonging, widely-celebrated campus events related to underrepresented groups or identities are well-attended and well-funded; this social and financial support signals to members of those communities, and to majority-group students alike, that underrepresented groups' contributions, milestones, and celebrations are inextricably linked to the core identity and values of the institution.

Beyond these spaces, places of belonging will anticipate barriers to student success that may arise for certain stigmatized students and will proactively help students manage these barriers. For example, students from lower income families must navigate the (often complex) financial aid system, an additional burden not shouldered by their wealthy peers. Places of belonging recognize that this struggle to navigate a complex bureaucratic system has the potential to undermine students' sense of belonging; thus, places of belonging help reduce this burden. They do so by providing clear information about the application process, designating support staff who are adequately compensated to help and advocate for students, and by widely advertising that these campus services are available instead of leaving it to students to find these services independently or only making such resources available to struggling students (Reeves, Murphy, D'Mello, & Yeager, 2018).

Creating and maintaining spaces where people feel valued also means that students have a place to go to cope with and manage their experiences when they have been in situations that cause them to question their value. In general, college is a time of transition where many students first encounter struggles with their mental health (e.g., Hunt & Eisenberg, 2010; Soet & Sevig, 2006). Moreover, stigmatized college students are especially likely to experience mental health challenges as a result of persistent discrimination and structural bias that they encounter, and these challenges can often undermine their sense of belonging in college (e.g., Clark, Anderson, Clark, & Williams, 1999; Jones, Peddie, Gilrane, King & Gray, 2016; Kessler, Mickelson, & Williams, 1999; Levy, Heissel, Richeson, & Adam, 2016; Meyer, 2013; Oswalt & Wyatt, 2011). Thus, places of belonging must be equipped with counseling and psychological services that are a central, mainstream, non-stigmatized feature of college life, ideally with free access (O'Keefe, 2013). These centers should include counselors who are culturally competent and trained to adequately provide support to students who come from a variety of diverse social backgrounds.

Finally, addressing students' perceptions of an institution's diversity and inclusion values means signaling and holding all campus community members and interactions to respectful and egalitarian standards. This begins with the institution educating students, faculty, and staff about historical and current contexts that contribute to the stigmatization and social inequities that persist in society. Too often, this information is proffered in specialty courses (e.g., within ethnic or gender studies departments) instead of seamlessly integrated into mainstream courses. Moreover, campus events and experiences discussing diversity often occur early on

in the transition to college and are not spread across the college trajectory (e.g., Kuh, Kinzie, Schuh, & Whitt, 2011; Kuh & Umbach, 2005). As a result, all students are led to believe that the histories and perspectives of minoritized groups are not as valuable as those of majority groups. These perceptions can become reflected in norms and beliefs about other diversity initiatives on campus—leading students, for example, to view requirements to engage with diverse curricula and perspectives as an imposition. Though this backlash is predictable (Brannon et al., 2018), it creates challenges for intergroup relations, and it threatens stigmatized group members' sense of value and belonging on campus. Thus, places of belonging are ones in which faculty, staff, and students frequently engage in conversations about identity and how it shapes our knowledge, interactions, and experiences in the world around us. Places of belonging challenge colorblind ideologies that suggest that we are all the same and that group differences don't matter; they uphold the expectation that all members of the campus community are expected to engage in a way that champions the values of respect and inclusion.

7.8   Conclusion

Places of belonging are positive intellectual environments that openly acknowledge and proactively address the barriers to belonging that are created through stereotypes, numerical underrepresentation, and institutional culture and values. These belonging efforts are likely to create a campus climate and environment that enhances the positive effects that can be realized through person-focused belonging interventions.

Finally, it is important to acknowledge that for institutions that strive to become places of belonging, the work of securing and supporting students' sense of belonging in college is never truly or perfectly done. For places of belonging to be successful, they must take a learning orientation toward adopting, implementing, and evaluating practices that support their students' sense of belonging. Environments and society change; as a consequence, some messages and contexts that did not undermine belonging might begin to have this effect in light of larger societal and political trends and events. A learning orientation requires that everyone involved, at every level of the institution, make a commitment to interrogating the changes they can make to signal to all students that they belong. These efforts do not require perfection—in fact, mistakes are likely inevitable as institutional actors learn which efforts are effective at their institution and among their student body. However, places of belonging will embrace dedication toward greater understanding, growth, and reflection combined with data-driven, good faith efforts toward improvement. When these pervasive and ongoing commitments to enhancing and supporting students' sense of belonging are messages that students receive before they set foot on campus, and when such commitments are echoed through each interaction they have during their time at college, institutions of higher education will become places where the barriers to belonging are eliminated and where all students can be

academically and socially integrated into the fabric of college life. In these places of belonging, students will feel a sense of fit, inclusion, and value which will support their success as they pursue higher education.

References

Archer, L., & Hutchings, M. (2000). "Bettering yourself?" Discourses of risk, cost, and benefit in ethnically diverse, young working-class non-participants' constructions of higher education. *British Journal of Sociology of Education, 21*(4), 555–574.

Betz, D. E., & Sekaquaptewa, D. (2012). My fair physicist? Feminine math and science role models demotivate young girls. *Social Psychological and Personality Science, 3*(6), 738–746.

Boucher, K. L., & Murphy, M. C. (2017). Why so few?: The role of social identity and situational cues in understanding the underrepresentation of women in STEM fields. In M. J. Platow, K. Mavor, & B. Bizumic (Eds.), *Self and social identity in learning and educational contexts*. New York: Routledge.

Brady, L. M., Germano, A. L., & Fryberg, S. A. (2017). Leveraging cultural differences to promote educational equality. *Current Opinion in Psychology, 18*, 79–83.

Brady, S. T., Walton, G. M., Fotuhi, O., Gomez, E., Cohen, G. L., & Urstein, R. (2018). *Revising the scarlet letter of academic probation: Reframing institutional messages to increase student success and reduce shame and stigma*. Manuscript in preparation.

Brannon, T. N., Carter, E. R., Murdock-Perriera, L. A., & Higginbotham, G. D. (2018). From backlash to inclusion for all: Instituting diversity efforts to maximize benefits across group lines. *Social Issues and Policy Review, 12*(1), 57–90.

Cheryan, S., & Monin, B. (2005). Where are you really from? Asian Americans and identity denial. *Journal of Personality and Social Psychology, 89*(5), 717–730.

Cheryan, S., Plaut, V. C., Davies, P. G., & Steele, C. M. (2009). Ambient belonging: How stereotypical cues impact gender participation in computer science. *Journal of Personality and Social Psychology, 97*(6), 1045–1060.

Cheryan, S., Plaut, V. C., Handron, C., & Hudson, L. (2013). The stereotypical computer scientist: Gendered media representations as a barrier to inclusion for women. *Sex Roles, 69*(1–2), 58–71.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *American Psychologist, 54*(10), 805–816.

Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin, 25*(10), 1302–1318.

Covarrubias, R., & Fryberg, S. A. (2015). Movin' on up (to college): First-generation college students' experiences with family achievement guilt. *Cultural Diversity and Ethnic Minority Psychology, 21*(3), 420–429.

Crenshaw, K. W. (1991). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. In K. Bartlett & R. Kennedy (Eds.), *Feminist legal theory: Readings in law and gender* (pp. 57–80). San Francisco: Westview Press.

Crocker, J., Voelkl, K., Testa, M., & Major, B. (1991). Social stigma: The affective consequences of attributional ambiguity. *Journal of Personality and Social Psychology, 60*(2), 218–228.

Crosby, J. R., King, M., & Savitsky, K. (2014). The minority spotlight effect. *Social Psychological and Personality Science, 5*(7), 743–750.

Dasgupta, N. (2011). Ingroup experts and peers as social vaccines who inoculate the self-concept: The stereotype inoculation model. *Psychological Inquiry, 22*(4), 231–246.

Dasgupta, N., Scircle, M. M., & Hunsinger, M. (2015). Female peers in small work groups enhance women's motivation, verbal participation, and career aspirations in engineering. *Proceedings of the National Academy of Sciences, 112*(16), 4988–4993.

Dee, T. S., & Penner, E. K. (2017). The causal effects of cultural relevance: Evidence from an ethnic studies curriculum. *American Educational Research Journal, 54*(1), 127–166.

Diekman, A. B., Clark, E. K., Johnston, A. M., Brown, E. R., & Steinberg, M. (2011). Malleability in communal goals and beliefs influences attraction to stem careers: Evidence for a goal congruity perspective. *Journal of Personality and Social Psychology, 101*(5), 902–918.

Dweck, C. (2012). *Mindset: Changing the way you think to fulfill your potential* (Updated ed.). London: Little, Brown Book Group.

Emerson, K. T. U., & Murphy, M. C. (2015). A company I can trust? Organizational lay theories moderate stereotype threat for women. *Personality and Social Psychology Bulletin, 41*, 295–307.

Fleming, A. R., Oertle, K. M., Plotner, A. J., & Hakun, J. G. (2017). Influence of social factors on student satisfaction among college students with disabilities. *Journal of College Student Development, 58*(2), 215–228.

Friedersdorf. (2015, November 24). Brown university's $100 million inclusivity plan. *The Atlantic*. Retrieved from https://www.theatlantic.com/politics/archive/2015/11/brown-universitys-100-million-plan-to-be-more-inclusive/416886/

Gaucher, D., Friesen, J., & Kay, A. C. (2011). Evidence that gendered wording in job advertisements exists and sustains gender inequality. *Journal of Personality and Social Psychology, 101*(1), 109–128.

Gonzales, P. M., Blanton, H., & Williams, K. J. (2002). The effects of stereotype threat and double-minority status on the test performance of Latino women. *Personality and Social Psychology Bulletin, 28*(5), 659–670.

Good, C., Aronson, J., & Inzlicht, M. (2003). Improving adolescents' standardized test performance: An intervention to reduce the effects of stereotype threat. *Journal of Applied Developmental Psychology, 24*(6), 645–662.

Good, C., Rattan, A., & Dweck, C. S. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology, 102*(4), 700–717.

Good, J. J., Woodzicka, J. A., & Wingfield, L. C. (2010). The effects of gender stereotypic and counter-stereotypic textbook images on science performance. *The Journal of Social Psychology, 150*(2), 132–147.

Graham-Smith, S., & Lafayette, S. (2004). Quality disability support for promoting belonging and academic success within the college community. *College Student Journal, 38*(1), 90–100.

Harackiewicz, J. M., Canning, E. A., Tibbetts, Y., Giffen, C. J., Blair, S. S., Rouse, D. I., et al. (2014). Closing the social class achievement gap for first-generation students in undergraduate biology. *Journal of Educational Psychology, 106*, 375–389. https://doi.org/10.1037/a0034679

Harackiewicz, J. M., & Hulleman, C. S. (2010). The importance of interest: The role of achievement goals and task values in promoting the development of interest. *Social and Personality Psychology Compass, 4*(1), 42–52.

Hausmann, L. R., Schofield, J. W., & Woods, R. L. (2007). Sense of belonging as a predictor of intentions to persist among African American and White first-year college students. *Research in Higher Education, 48*(7), 803–839.

Hausmann, L. R., Ye, F., Schofield, J. W., & Woods, R. L. (2009). Sense of belonging and persistence in White and African American first-year students. *Research in Higher Education, 50*(7), 649–669.

Haynes, T. L., Perry, R. P., Stupnisky, R. H., & Daniels, L. M. (2009). A review of attributional retraining treatments: Fostering engagement and persistence in vulnerable college students. In J. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. 24, pp. 227–272). Amsterdam: Springer.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.

Higgins, E. T., & Rholes, W. S. (1978). "Saying is believing": Effects of message modification on memory and liking for the person described. *Journal of Experimental Social Psychology, 14*(4), 363–378.

Hulleman, C. S., & Harackiewicz, J. M. (2009). Promoting interest and performance in high school science classes. *Science, 326*(5958), 1410–1412.

Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. *Journal of Adolescent Health, 46*(1), 3–10.

Hurtado, S., & Carter, D. F. (1997). Effects of college transition and perceptions of the campus racial climate on Latino college students' sense of belonging. *Sociology of Education, 77*, 324–345.

Ikizer, E. G., & Blanton, H. (2016). Media coverage of "wise" interventions can reduce concern for the disadvantaged. *Journal of Experimental Psychology: Applied, 22*(2), 135–147.

Inzlicht, M., & Ben-Zeev, T. (2000). A threatening intellectual environment: Why females are susceptible to experiencing problem-solving deficits in the presence of males. *Psychological Science, 11*(5), 365–371.

Johnson, D. R., Soldner, M., Leonard, J. B., Alvarez, P., Inkelas, K. K., Rowan-Kenyon, H. T., et al. (2007). Examining sense of belonging among first-year undergraduates from different racial/ethnic groups. *Journal of College Student Development, 48*(5), 525–542.

Jones, N., Brown, R., Keys, C. B., & Salzer, M. (2015). Beyond symptoms? Investigating predictors of sense of campus belonging among postsecondary students with psychiatric disabilities. *Journal of Community Psychology, 43*(5), 594–610.

Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2016). Not so subtle: A meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management, 42*(6), 1588–1613.

Juvonen, J. (2006). Sense of belonging, social bonds, and school functioning. In P. A. Alexander & P. A. Winne (Eds.), *Handbook of educational psychology* (2nd ed.). Mahwah, NJ: Erlbaum & Associates.

Juvonen, J., Nishina, A., & Graham, S. (2006). Ethnic diversity and perceptions of safety in urban middle schools. *Psychological Science, 17*(5), 393–400.

Kenthirarajah, D. T., & Walton, G. M. (2015). How brief social-psychological interventions can cause enduring effects. In *Emerging trends in the social and behavioral sciences: An interdisciplinary, searchable, and linkable resource*. Hoboken, NJ: Wiley-Blackwell.

Kessler, R. C., Mickelson, K. D., & Williams, D. R. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior, 40*, 208–230.

Kuh, G. D., & Umbach, P. D. (2005). Experiencing diversity. *Liberal Education, 91*(1), 14–21.

Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter*. Wiley.

Lazowski, R. A., & Hulleman, C. S. (2016). Motivation interventions in education: A meta-analytic review. *Review of Educational Research, 86*(2), 602–640.

Lee, S. A. (2005). *Up against Whiteness: Race, school and immigrant youth*. New York: Teachers College Press.

Lee, S. A. (2011). *Unraveling the "model minority" stereotype: Listening to Asian American youth*. New York: Teachers College Press.

Levy, D. J., Heissel, J. A., Richeson, J. A., & Adam, E. K. (2016). Psychological and biological responses to race-based social stress as pathways to disparities in educational outcomes. *American Psychologist, 71*(6), 455–473.

Livingston, R. W., Rosette, A. S., & Washington, E. F. (2012). Can an agentic Black woman get ahead? The impact of race and interpersonal dominance on perceptions of female leaders. *Psychological Science, 23*(4), 354–358.

London, B., Downey, G., Romero-Canyas, R., Rattan, A., & Tyson, D. (2012). Gender-based rejection sensitivity and academic self-silencing in women. *Journal of Personality and Social Psychology, 102*(5), 961–979.

Lynch, K., & O'Riordan, C. (1998). Inequality in higher education: A study of class barriers. *British Journal of Sociology of Education, 19*(4), 445–478.

Magolda, P. M. (2000). The campus tour: Ritual and community in higher education. *Anthropology & Education Quarterly, 31*(1), 24–46.

Mahar, A. L., Cobigo, V., & Stuart, H. (2013). Conceptualizing belonging. *Disability and Rehabilitation, 35*(12), 1026–1032.

Mallet, M. L., Calvo, R., & Waters, M. C. (2017). "I don't belong anymore": Undocumented Latino immigrants encounter social services in the United States. *Hispanic Journal of Behavioral Sciences, 39*(3), 267–282.

McIntyre, R. B., Paulson, R. M., & Lord, C. G. (2003). Alleviating women's mathematics stereotype threat through salience of group achievements. *Journal of Experimental Social Psychology, 39*(1), 83–90.

Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychology of Sexual Orientation and Gender Diversity, 1*(S), 3–26.

Murphy, M. C., & Dweck, C. S. (2010). A culture of genius: How an organization's lay theory shapes people's cognition, affect, and behavior. *Personality and Social Psychology Bulletin, 36*(3), 283–296.

Murphy, M. C., Kroeper, K. M., & Ozier, E. M. (2018). Prejudiced places: How contexts shape inequality and how policy can change them. *Policy Insights from the Behavioral and Brain Sciences, 5*, 66–74.

Murphy, M. C., Richeson, J. A., Shelton, J. N., Rheinschmidt, M. L., & Bergsieker, H. B. (2013). Cognitive costs of contemporary prejudice. *Group Processes & Intergroup Relations, 16*(5), 560–571.

Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: How situational cues affect women in math, science, and engineering settings. *Psychological Science, 18*(10), 879–885.

Murphy, M. C., & Taylor, V. J. (2012). The role of situational cues in signaling and maintaining stereotype threat. In M. Inzlicht & T. Schmader (Eds.), *Stereotype threat: Theory, process, and applications*. New York: Oxford University Press.

Murphy, M. C., & Zirkel, S. (2015). Race and belonging in school: How anticipated and experienced belonging affect choice, persistence, and performance. *Teachers College Record, 117*(12), 1–40.

Murdock-Perriera, L.A., Boucher, K. L., Fisher, P., & Logel, C. (2018). *Language: An underexplored dimension of belonging*. Manuscript in preparation.

O'Keefe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal, 47*(4), 605–613.

Ostrove, J. M., & Long, S. M. (2007). Social class and belonging: Implications for college adjustment. *The Review of Higher Education, 30*(4), 363–389.

Oswalt, S. B., & Wyatt, T. J. (2011). Sexual orientation and differences in mental health, stress, and academic performance in a national sample of US college students. *Journal of Homosexuality, 58*(9), 1255–1280.

Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of Educational Psychology, 99*(1), 83–98.

Patton, L. D. (2010). *Culture centers in higher education: Perspectives on identity, theory, and practice*. Herndon, VA: Stylus Publishing.

Perry, R. P., Chipperfield, J. G., Hladkyj, S., Pekrun, R., & Hamm, J. M. (2014). Attribution-based treatment interventions in some achievement settings. In S. Karabenick & T. Urdan (Eds.), *Advances in motivation and achievement*. Bingley, UK: Emerald.

Perry, R. P., & Hamm, J. M. (2017). An attribution perspective on competence and motivation. In A. J. Elliot, C. S. Dweck, & D. S. Yeager (Eds.), *Handbook of competence and motivation (2nd Edition): Theory and application*. New York: Guilford Press.

Perry, R. P., Hladkyj, S., Pekrun, R. H., Clifton, R. A., & Chipperfield, J. G. (2005). Perceived academic control and failure in college students: A three-year study of scholastic attainment. *Research in Higher Education, 46*(5), 535–569.

Perry, R. P., Hladkyj, S., Pekrun, R. H., & Pelletier, S. T. (2001). Academic control and action control in the achievement of college students: A longitudinal field study. *Journal of Educational Psychology, 93*(4), 776–789.

Perry, R. P., & Penner, K. S. (1990). Enhancing academic achievement in college students through attributional retraining and instruction. *Journal of Educational Psychology, 82*, 262–271.

Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). "What about me?" Perceptions of exclusion and Whites' reactions to multiculturalism. *Journal of Personality and Social Psychology, 101*(2), 337–353.

Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles, 59*(5–6), 377–391.

Purdie-Vaughns, V., Steele, C. M., Davies, P. G., Ditlmann, R., & Crosby, J. R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology, 94*(4), 615–630.

Quinn, D. M., Kahng, S. K., & Crocker, J. (2004). Discreditable: Stigma effects of revealing a mental illness history on test performance. *Personality and Social Psychology Bulletin, 30*(7), 803–815.

Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok—Not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology, 48*(3), 731–737.

Read, B., Archer, L., & Leathwood, C. (2003). Challenging cultures? Student conceptions of "belonging" and "isolation" at a post-1992 university. *Studies in Higher Education, 28*(3), 261–277.

Reay, D., Davies, J., David, M., & Ball, S. J. (2001). Choices of degree or degrees of choice? Class, 'race' and the higher education choice process. *Sociology, 35*(4), 855–874.

Reeves, S. L., Murphy, M. C., D'Mello, S. K., & Yeager, D. S. (2018). *Caught up in red tape: Bureaucratic hassles undermine sense of belonging in college among first-generation students*. Manuscript in preparation.

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin, 138*(2), 353–387.

Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review, 115*, 336–356.

Seligman, M. E. (1978). Comment and integration. *Journal of Abnormal Psychology, 87*(1), 165–179.

Shimpi, P. M., & Zirkel, S. (2012). One hundred and fifty years of "the Chinese question": An intergroup relations perspective on immigration and globalization. *Journal of Social Issues, 68*(3), 534–558.

Slaten, C. D., Elison, Z. M., Lee, J. Y., Yough, M., & Scalise, D. (2016). Belonging on campus: A qualitative inquiry of Asian international students. *The Counseling Psychologist, 44*(3), 383–410.

Soet, J., & Sevig, T. (2006). Mental health issues facing a diverse sample of college students: Results from the college student mental health survey. *NASPA Journal, 43*(3), 410–431.

Stebleton, M. J., Soria, K. M., & Huesman, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at public research universities. *Journal of College Counseling, 17*(1), 6–20.

Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*(6), 613–629.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*(5), 797–811.

Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In *Advances in experimental social psychology* (Vol. 34, pp. 379–440). New York: Academic.

Stephens, N. M., Fryberg, S. A., Markus, H. R., Johnson, C. S., & Covarrubias, R. (2012). Unseen disadvantage: How American universities' focus on independence undermines the academic performance of first-generation college students. *Journal of Personality and Social Psychology, 102*(6), 1178–1197.

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*(4), 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, 26*(10), 1556–1566.

Stout, J. G., & Dasgupta, N. (2011). When he doesn't mean you: Gender-exclusive language as ostracism. *Personality and Social Psychology Bulletin, 37*(6), 757–769.

Stout, J. G., Dasgupta, N., Hunsinger, M., & McManus, M. A. (2011). STEMing the tide: Using ingroup experts to inoculate women's self-concept in science, technology, engineering, and mathematics (STEM). *Journal of Personality and Social Psychology, 100*(2), 255–270.

Strayhorn, T. L. (2008a). The role of supportive relationships in facilitating African American males' success in college. *NASPA Journal, 45*(1), 26–48.

Strayhorn, T. L. (2008b). Fittin' in: Do diverse interactions with peers affect sense of belonging for Black men at predominantly White institutions? *NASPA Journal, 45*(4), 501–527.

Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success for all students*. New York: Routledge.

Strayhorn, T. L. (2014). What role does grit play in the academic success of black male collegians at predominantly white institutions? *Journal of African American Studies, 18*(1), 1–10.

Strayhorn, T. L., & Tillman-Kelly, D. L. (2013). Queering masculinity: Manhood and Black gay men in college. *Spectrum: A Journal on Black Men, 1*(2), 83–110.

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A., Nadal, K. L., et al. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist, 62*(4), 271–286.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89–125.

Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education, 59*(4), 438–455.

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: The University of Chicago Press.

Vaccaro, A., Daly-Cano, M., & Newman, B. M. (2015). A sense of belonging among college students with disabilities: An emergent theoretical model. *Journal of College Student Development, 56*(7), 670–686.

Vervecken, D., Hannover, B., & Wolter, I. (2013). Changing (S)expectations: How gender fair job descriptions impact children's perceptions and interest regarding traditionally male occupations. *Journal of Vocational Behavior, 82*(3), 208–220.

Walton, G. M., & Brady, S. T. (2017). The many questions of belonging. In A. J. Elliot, C. S. Dweck, & D. S. Yeager (Eds.), *Handbook of competence and motivation (2nd Edition): Theory and application* (pp. 272–293). New York: Guilford Press.

Walton, G. M., & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology, 92*(1), 82–96.

Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science, 331*(6023), 1447–1451.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review, 92*, 548–573.

Weiner, B. (2018). The legacy of an attribution approach to motivation and emotion: A no-crisis zone. *Motivation Science, 4*, 4–14.

Wignall, J. (2013). *No longer in the shadows: Identity, citizenship, and belonging among undocumented college students in Southern California.* Doctoral dissertation, California State University, Long Beach, CA.

Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first-year experience of higher education. *Studies in Higher Education, 30*(6), 707–722.

Wilson, T. D., Damiani, M., & Shelton, N. (2002). Improving the academic performance of college students with brief attributional interventions. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education* (pp. 89–108). San Diego, CA: Academic.

Yale News. (2015, November 15). Yale launches five-year, $50 million initiative to increase faculty diversity. Retrieved from https://news.yale.edu/2015/11/03/yale-launches-five-year-50-million-initiative-increase-faculty-diversity

Yeager, D. S., Henderson, M. D., Paunesku, D., Walton, G. M., D'mello, S., Spitzer, B. J., et al. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation. *Journal of Personality and Social Psychology, 107*(4), 559–580.

Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., et al. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide. *Journal of Experimental Psychology: General*, *143*(2), 804–824.

Yeager, D. S., Purdie-Vaughns, V., Hooper, S. Y., & Cohen, G. L. (2017). Loss of institutional trust among racial and ethnic minority adolescents: A consequence of procedural injustice and a cause of life-span outcomes. *Child Development, 88*(2), 658–676.

Yeager, D. S., Romero, C., Paunesku, D., Hulleman, C. S., Schneider, B., Hinojosa, C., et al. (2016). Using design thinking to improve psychological interventions: The case of the growth mindset during the transition to high school. *Journal of Educational Psychology, 108*(3), 374–391.

Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research, 81*(2), 267–301.

Zirkel, S. (2004). What will you think of me? Social integration and educational achievement among White students and students of color in elementary and junior high school. *Journal of Social Issues, 60*(1), 57–74.

Lisel Alice Murdock-Perriera is a PhD candidate in Curriculum and Teacher Education at the Stanford Graduate School of Education. Her research is dedicated to introducing Linguistic Belonging—the idea that students' sense of belonging is shaped by interactions with their teachers in school about their language use—to the fields of education and social psychology. She also studies how race and language interact with regard to belonging in multiple settings, including elementary school and higher education. Lisel earned her A.B. in Sociology at Dartmouth College, summa cum laude, and her M.S.Ed. at the Bank Street College of Education.

Dr. Kathryn L. Boucher is an Assistant Professor of Psychology at the University of Indianapolis. In her research, she explores stereotypes: how they can hurt us, how we respond to them, and how they can be changed or their effects lessened. She examines how stereotype and social identity threat negatively impact students from underserved, underrepresented, and/or negatively stereotyped groups. In her intervention work with the College Transition Collaborative, she develops, tests, and disseminates insights from social psychological interventions for student success. Kathryn received her B.A. from the University of Kentucky and her Ph.D. from Indiana University.

Dr. Evelyn R. Carter is the Director of Translational Research & Anti-Bias Training in the UCLA Office of Equity, Diversity and Inclusion. Her research examines the factors that shape how people detect racial bias, and her work on identifying successful racial bias confrontation strategies has been funded by the National Science Foundation. Evelyn is passionate about translating social psychological research into evidence-based practices, with an emphasis on increasing awareness about interpersonal and structural discrimination as a way to create truly inclusive environments. Evelyn earned her B.A. from Northwestern University, her M.A. from University of Illinois at Chicago, and her Ph.D. from Indiana University.

Dr. Mary C. Murphy is an Associate Professor of Psychological and Brain Sciences and Associate Vice Provost for Student Diversity and Inclusion at Indiana University. Her research examines how people's social identities interact with different contexts to affect their thoughts, feelings, motivation, and performance. She develops, implements, and evaluates interventions that reduce identity threat for students and co-founded the College Transition Collaborative, a research-practice partnership. Mary earned a B.A. from the University of Texas at Austin and a PhD from Stanford University. She completed an NSF postdoctoral fellowship at Northwestern University, was named a Rising Star by the Association for Psychological Science, and has received over $8 million in grant funding.