

# Leveraging cultural differences to promote educational equality

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This paper theorizes that academic interventions will be maximally effective when they are culturally grounded. Culturally grounded interventions acknowledge cultural differences and validate multiple cultural models in a given context. This review highlights the importance of considering culture in academic interventions and draws upon the culture cycle framework to provide a blueprint for those interested in building more efficacious interventions. Specifically, the paper reviews literature in education and psychology to argue: first, when working-class and racial minority students' cultural models are not valued in mainstream academic domains, these students underperform; and second, many current academic interventions intended to improve working-class and racial minority students' academic outcomes could be further enhanced by cultural grounding.

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Over the past half century, educational disparities (i.e., achievement gaps) rooted in race and social class have posed a persistent problem, limiting racial minority and low-income students' academic opportunities and success [1,2]. To reduce disparities, psychologists have developed interventions that draw upon a variety of social psychological theories concerning motivation, identity, and performance [3–18]. While these efforts provide clear methods for improving academic outcomes for individual students, little is known regarding how to create large-scale systemic change. Building upon decades of intervention work, we argue that *culturally grounded interventions* provide a blueprint for scaling up interventions and creating sustainable change to reduce educational disparities. Culturally grounded interventions first, acknowledge student cultural differences, second, recognize that educational contexts tend to normalize one culture over

others (and thus create cultural mismatches for some students), and third, develop sustainable change by building on the assets and strengths of different cultural ways of being. Like traditional interventions, culturally grounded interventions target diverse populations and psychological processes; however, the primary assertion is that culture shapes individual thoughts, attitudes, behaviors, and motivations. Culturally grounded interventions posit that creating sustainable change necessitates understanding and leveraging cultural differences.

## Culture shapes academic outcomes

Cultural psychology suggests that some of the differences between high-performing (White and/or middle-class<sup>a</sup>) and lower-performing (racial minority and/or working-class) students can be understood through the cultural models students bring to the classroom [19<sup>••</sup>,20<sup>••</sup>,21,22]. For example, racial minority and working-class students' beliefs about the purpose of education and what constitutes being a good student differ from White and middle-class students' conceptualizations [19<sup>••</sup>,23]. These beliefs influence students' relationships with teachers and the ways they engage with academic contexts [23–25,26<sup>•</sup>]. While White and middle-class students are more likely to view education as an opportunity for personal growth and success, racial minority and low-income students are more likely to view education as an opportunity to help their families and communities [19<sup>••</sup>,23]. White and middle-class students are also more likely to speak up and express their opinions, while racial minority and lower-income students are more likely to hold their opinions and defer to authority [27]. These differences in how students engage in academic contexts arise from divergent *cultural models of self*, or beliefs about the right way to be a person. Cultural models of self shape how people view themselves in relation to others and how they understand and respond to their social contexts [27,28<sup>•</sup>,29,30<sup>•</sup>]. White and middle-class students tend to be more familiar with an *independent model of self*, viewing the self as separate from others, self-determining, and driven to promote one's own needs and desires. Racial minority and working-class students, however, tend to be more familiar with an *interdependent model of self*, viewing the self as integrally connected to others, influenced by others' needs and

<sup>a</sup> We use Stephens and colleagues' [22] definition of working-class to refer to people in the lower half of the social class divide and/or people who have not received a four-year college degree and middle-class to refer to people in the upper half of the social class divide and/or people who have received a four-year college degree.

desires, and driven to promote collective well-being [22,28\*,29,30\*].

While differences in students' cultural models of self may seem subtle, they carry significant consequences for the way students are evaluated. Social contexts tend to privilege one model of self over the other [27], conferring advantages to those who endorse the dominant model and disadvantages to those who do not [24,31]. U.S. educational contexts largely privilege independence, contending that 'good' students voice their opinions, question teachers, and follow their intellectual passions [19\*\*,23,32]. These expectations resonate with students from independent cultural backgrounds, but are less familiar for students from interdependent cultural backgrounds, whose families encourage listening to others and deferring to authority figures [19\*\*,25]. Because U.S. schools privilege independence, students from interdependent backgrounds often experience a cultural mismatch in educational settings, and this mismatch contributes to academic underperformance.

For example, Stephens and colleagues [19\*\*] demonstrated that college administrators largely endorse educational motivations rooted in independence. Prior to arriving on campus, Stephens and colleagues found that middle-class college students endorsed the same motivations (i.e., cultural match), while working-class college students were more likely to endorse interdependent motivations (i.e., cultural mismatch). Notably, endorsing independent motivations predicted higher GPA two years later, while endorsing interdependent motivations predicted lower GPA. Similar findings from studies of racial minority elementary school [26\*], middle school [33\*\*], and high school students [34] suggest not only that students' cultural models are integral to their educational experiences, but also that racial minority and low-income students underperform in part because educational contexts do not value their cultural models.

### **Leveraging culture to create sustainable change**

To effectively motivate change, we argue that interventions must not only acknowledge cultural differences, but also give voice to and legitimate diverse cultural models. Specifically, we draw upon the culture cycle framework [27] to offer a blueprint for leveraging cultural differences to improve racial minority and working-class students' academic experiences and outcomes. According to this framework, culture is composed of core cultural ideas, institutions, interactions, and individuals. Each component influences the others (e.g., a community's core cultural ideas are embedded in institutions and social rules for interactions, which in turn shape individuals' thoughts and behaviors) [27,30\*,35]. Thus, one way to create sustainable societal change (e.g., eliminate achievement gaps), is to change how cultural ideas are

represented and endorsed at different levels of the culture cycle [30\*]. For example, working-class students underperform in classrooms that promote self-expression (e.g., hand raising) [36], which reflects independent ideas of what it means to be a 'good' student. Changing classroom rules (institutions) to encourage quiet reflection prior to sharing one's thoughts challenges the independent notion that 'good' students are expressive (ideas). In turn, this change in classroom rules changes the way students behave in the classroom (interactions) and improves working-class students' performance (individuals).

### **Current interventions often focus on individuals and overlook culture**

In practice, many psychological interventions designed to alleviate achievement gaps (e.g. values affirmation, growth mindset, and belonging interventions; [4,5,12]) focus on changing individual students' perspectives or ways of making meaning. For example, growth mindset interventions focus on teaching students that they can 'grow their brains' by working hard. While student-focused approaches offer many advantages (e.g., feasibility and low cost of implementation), these interventions focus relatively little on cultural factors that contribute to underperformance (e.g., deeply rooted norms of independence, stereotypes about intellectual ability, cultural mismatches). We argue that attending to these cultural factors may allow researchers to strengthen and scale up academic interventions to create sustainable change. Indeed, according to the culture cycle, the sustainability of social change depends not upon changing individuals, but upon changing the cultural ideas that produce disparities via their influence on institutions, interactions, and individuals [27]. Because each level of the culture cycle influences the others, changes in institutions, interactions, and individuals can catalyze change at every other level and thus change cultural ideas. To be maximally effective, academic interventions must work to both understand the psychological processes that contribute to educational disparities and change the cultural ideas that fuel inequality (see [26\*,37]). Below we provide examples of interventions that target different levels of the culture cycle to improve racial minority and working-class students' outcomes.

### **Culturally grounded intervention examples**

#### **Individual-level cultural grounding**

Many existing interventions do not change the cultural ideas that shape students' outcomes, but they could be adapted to implement cultural grounding at the individual level. For example, self-affirmation interventions aim to improve academic performance by restoring students' self-worth in educational contexts [5,38,39]. These interventions ask students to write about values that are personally important (versus values that are important to someone else). Covarrubias and colleagues [33\*\*]

theorized that for interdependent students, self-affirmations tailored to invoke the interdependent model of self (i.e., create a cultural match) would be more effective than standard self-affirmations that do not explicitly invoke interdependence. Indeed, Latino college students who received a standard values affirmation intervention (i.e., describing personally important values) performed no better on an academic task than those in the control group. However, Latinos who received an interdependent values affirmation intervention (i.e., describing their families' values) performed better than both the control and standard intervention groups. Furthermore, interdependently-affirmed Latinos performed better than White students, suggesting that culturally grounding self-affirmation interventions may improve intervention efficacy among students from interdependent backgrounds.

### **Institutional-level cultural grounding**

Less common among academic interventions are efforts to change institutional contexts. Stephens and colleagues [19\*\*] demonstrated that culturally grounded institutional-level interventions may have positive effects for marginalized students. Before completing an academic task, middle-class and working-class college students read a welcome letter from their university that emphasized either the university's endorsement of independent values or endorsement of both independent and interdependent values. When reminded of the university's independent values, working-class college students underperformed on the academic task compared to middle-class students. However, working-class students performed as well as middle-class students when the welcome letter included interdependent values. While this intervention did not change the actual university context to make the university as a whole more affirming of multiple cultural models, it suggests that such culturally grounded institutional-level changes may improve academic experiences and performance among racial minority and low-income students. Furthermore, while changing psychological processes at the individual level (e.g., through a brief, one-time intervention) may be less time-intensive, culturally grounded institutional-level changes are likely to have more sustainable, long-term effects for marginalized students [27], whose educational experiences are shaped by repeated cultural obstacles [26\*].

### **Multi-level cultural grounding**

We anticipate that while cultural grounding at the individual or institutional level is likely to produce larger effects compared to standard interventions, culturally grounded interventions that leverage change at multiple levels of the culture cycle are likely to have the biggest effects for marginalized students [37]. For example, rather than focusing only on changing the way students experience academic settings (individual level), multi-level culturally grounded interventions leverage change both among individuals and at higher levels of the culture

cycle, such as teacher–student interactions (interaction level) or school messaging and expectations for students (institution level). One example is Stephens and colleagues' [20\*\*] difference-education intervention, which sought to reduce the social class achievement gap by providing working-class students with culturally-relevant strategies for overcoming college challenges and role models who validated their cultural differences. Incoming freshmen attended a university-affiliated panel during which panelists shared stories of their college struggles and successes (control condition) or explained how these struggles and successes were tied to their social class backgrounds (difference-education condition). Thus, the difference-education condition was culturally grounded because it first, acknowledged social class cultural differences between students, second, recognized that working-class students' struggles often arise from differences between their cultural backgrounds and universities' expectations (cultural mismatch), and third, validated multiple cultural models by conveying that students from different cultural backgrounds could be successful at the university. Furthermore, this intervention leveraged change at both the individual level (by equipping students with culturally-relevant strategies for overcoming academic obstacles) and the institutional level (by validating cultural differences within the university).

This multi-level culturally grounded approach reduced the social class achievement gap. In the control condition, working-class students earned lower year-end GPAs than middle-class students. However, in the difference-education condition, working-class students performed as well as middle-class students. Further analyses revealed that working-class students in the difference-education condition took advantage of more college resources (i.e., interactions level), which in turn led them to earn higher GPAs. Two years after the intervention, working-class students in the difference-education condition showed greater psychological thriving in stressful college situations, [21] suggesting that this multi-level culturally grounded approach conferred lasting effects on students' academic performance.

### **Conclusion and future directions**

While standard interventions have the appeal of helping students generally, many of the psychological processes that contribute to students' academic experiences and performance (e.g., growth mindset [4], belonging [11,12], and self-concept [5]) are tied to their cultural models of self and thus vary depending upon students' cultural backgrounds. Emerging research suggests that when academic interventions leverage cultural differences, racial minority and low-income students benefit both psychologically and academically [19\*\*,20\*\*,21,22,33\*\*]. In some cases, standard interventions may be adapted to include culturally grounded approaches [33\*\*]. In other cases,

leveraging change at higher levels of the culture cycle (e.g., interactions, institutions) [19\*\*,20\*\*] may prove more effective. While further research comparing traditional and culturally grounded approaches is needed, the work reviewed here demonstrates that culturally grounded interventions are possible and suggests that cultural grounding may help researchers expand their methodologies to create sustainable cultural change in education.

## Conflict of interest statement

Nothing declared.

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