Interventions aimed at closing the social class achievement gap: changing individuals, structures, and construals

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Understanding the sources of the social class achievement gap in education is an important step toward ensuring that education serves its purpose as an engine of social mobility. The goal of the current article is to provide a brief overview of the sources of the social class achievement gap as well as interventions aimed at closing this gap. We outline three major sources of the social class achievement gap — individual skills, structural conditions, and people's processes of meaning-making, or construals — and the interventions that target them. While all of these interventions can effect change, we propose that interventions will be most effective when tailored to fit the specific needs of students and the context in which they are delivered.

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Higher education, specifically the attainment of a four-year college degree, has long been one of the primary engines of upward social mobility. Attaining a college degree is often a requirement to gain access to a high paying job, and thus, it is not surprising that those with college degrees can expect lifetime earnings more than double that of those who have only a high school degree [1]. Yet, one's social class background powerfully shapes access to and performance in higher education. Indeed, only 29% of people from working-class backgrounds[a] gain

access to college, compared to 80% of people from middle-class backgrounds [2]. Furthermore, even those students from working-class backgrounds who do gain access to college earn lower GPAs [3] and are nearly four times more likely to drop out after their first year than their counterparts from middle-class backgrounds [4]. These disparities in access to and performance in education are often referred to as the *social class achievement gap*. To combat this inequality, social scientists have identified key sources of the social class achievement gap, and leveraging this knowledge, have developed interventions that seek to close the gap.

In the current article, drawing from research in psychology, education, and economics, we organize the literature on interventions aimed at reducing the social class achievement gap. First, we outline three major sources of the social class achievement gap: individual skills, structural conditions, and people's processes of meaning making, which we refer to here as *construal*. Second, we describe how each of these sources guides interventions aimed at closing the social class achievement gap, focusing, in particular, on the increasing prominence in social psychology of interventions that seek to change construal. We close by proposing that for interventions that change construal to be effective, they must first address disparities in individual skills and structural conditions, and that future intervention approaches should be tailored to fit the specific needs of both students and the context in which the intervention is delivered.

Three sources of the social class achievement gap

There is not one silver bullet cause of the social class achievement gap. Instead, evidence suggests that multiple, intersecting factors interact to produce social class inequality. Research has outlined three common sources of the social class achievement gap that can also be targeted as routes to close the gap. These three sources are individual skills, structural conditions, and the processes of construal that emerge as individuals and structural conditions shape each other over time. Research guided by the individual perspective focuses on social class differences in individual-level skills and abilities, such as self-control or planning skills [5–9].[b] Research guided by the structural perspective focuses on social class differences in environmental-level factors and

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[a] To incorporate diverse interdisciplinary literatures that define social class differently, we use the term *working-class* to refer to contexts on the bottom half of the social class divide, including those where most people have attained less than a four-year college degree or have relatively low incomes or lower-status occupations. *Middle-class* refers to contexts on the top half of the social class divide, including those where most people have attained at least a four-year college degree or have relatively high incomes or higher-status occupations.

[b] Although researchers guided by the individual model often acknowledge the important role of structure, they tend to focus primarily on the role of individual factors (cf. [10]).

material resources, such as access to high-quality schools and teachers [11–14]. Research guided by the construal perspective focuses on how the mutual constitution of individuals and the structures of their environments shape the culture-specific selves that inform how people are likely to construe and therefore respond to the situation [15••,16,17,18••,19]. For example, if a college student from a working-class background construes academic setbacks as an indication that she is not 'college material,' then she may begin to disengage from her coursework.

Interventions aimed at closing the social class achievement gap

Drawing upon the three sources outlined above, researchers have developed interventions aimed at closing the social class achievement gap that focus on targeting these three different sources of inequality (see Table 1).

Interventions that change individuals

Individual interventions start from the idea that students from working-class backgrounds tend to lack the individual skills and abilities that are necessary for academic achievement. Individual interventions therefore tend to assume that equipping students from working-class backgrounds with the necessary skills and abilities (e.g. self-regulation or executive functioning) will be sufficient to reduce the social class achievement gap. Importantly, effective individual interventions tend to target young students, often those in elementary school or even pre-school, because these early years represent a critical period during which students develop key academic skills and abilities [20,21]. By intervening early on, individual interventions aim to address key obstacles to achievement before these obstacles arise, and run the risk of becoming chronic and more resistant to change [22].

Thus, individual interventions have focused on improving a variety of academic skills and abilities in students from working-class backgrounds, ranging from selective attention [23•] to reasoning ability [24] to planning, self-regulation, and executive functioning [6,25]. For example, in one individual intervention focused on improving goal pursuit, students from working-class backgrounds were taught how to engage in a more concrete and effective form of academic goal pursuit. Specifically, they were asked to think through potential obstacles that would prevent them from achieving their academic goal and to create if-then plans to help them better navigate and overcome potential obstacles (e.g. if I get stuck while doing my homework, then I will ask the teacher for help). Students who participated in the intervention had significantly better academic outcomes in terms of GPA, on-time arrival to school, and conduct ratings by teachers compared to students in a control condition [6]. In sum, individual interventions can help to enhance the academic performance of students from working-class backgrounds by boosting individual skills and abilities, such as self-regulation and executive functioning.

Interventions that change structures

Structural interventions start from the idea that students from working-class backgrounds tend to be embedded in environments that do not provide the opportunities and material resources that are necessary for academic achievement. Structural interventions therefore tend to assume that providing students from working-class backgrounds with the necessary material resources and opportunities (e.g. information or financial assistance) will be sufficient to reduce the social class achievement gap. Importantly, effective structural interventions tend to focus on students who already have the individual attributes required to succeed academically: whether by specifically targeting high-achieving students from working-class backgrounds [12,26] or by incentivizing specific behaviors (e.g. reading books) that contribute to academic achievement [27•].

Table 1

Summary of major sources of the social class achievement gap in education — individuals, structures, and construals — and the interventions that target these different sources to close the gap.

Name of perspective	Source of social class achievement gap	Intervention to close social class achievement gap	Representative citations
Individual	Social class differences in students' individual skills and abilities	Improve individual skills and abilities (e.g. self-regulation) of students from working-class backgrounds	Duckworth et al., 2013; Duckworth et al., 2011; Mackey et al., 2011; Neville et al., 2013
Structural	Social class differences in environmental access to resources and opportunities	Improve access to resources and opportunities (e.g. access to high-quality teachers) for students from working-class backgrounds	Castleman and Page, 2015; Darling-Hammond, 2007; Fryer, 2011; Hoxby and Turner, 2013; Ludwig et al., 2013
Construal	Social class differences in ways of understanding (or construing) the self, others, and the world (e.g. construal of academic experience)	Provide students from working-class backgrounds with new ways to construe their environments (e.g. educate them about how their social class backgrounds matter in college)	Harackiewicz et al., 2016; Oyserman et al., 2006; Paunesku et al., 2015; Stephens et al., 2014; Stephens et al., 2015; Tibbetts et al., 2016; Yeager et al., 2016

Structural interventions have provided students from working-class backgrounds with a range of different environmental resources aimed at improving academic achievement, including college application information and application fee waivers [12], financial incentives for academic achievement [27[*]], and external reminders such as personalized text messages [26]. They have also emphasized the importance of safe and enriching home neighborhoods and out-of-school environments [13,28], as well as high-quality schools and teachers [14,29]. For example, in one structural intervention, researchers mailed students from working-class backgrounds information on the college application process, the net costs of different colleges, and college application fee waivers. Students who received this additional information applied to and were accepted at more selective colleges than students in a control condition who did not receive this information [12]. Structural interventions enhance the academic performance of students from working-class backgrounds by supplying access to supportive environments, such as material resources and information.

Interventions that change construal

Interventions that change construal start from the idea that the way in which people make sense of or construe their experience is a critical factor that shapes their academic achievement. Construal interventions therefore tend to assume that, once people have a foundation of the individual skills and structural resources required to succeed, then changing their construal of their experience (e. g. to appreciate differences or to affirm their values) can be an effective way to reduce the achievement gap.

Importantly, interventions that change construal focus on the ways in which selves[c] make sense of or construe their experience. The term *self* refers to the 'me' at the center of an individual's ongoing experience of their environment. Importantly, these selves are not an expression of internal attributes, but are instead culturally shaped — that is, products of an ongoing cycle of mutual constitution through which environments and individuals shape one another [30,31]. These culture-specific selves shape how people construe their experience over time — for example, by providing particular answers to questions such as, 'What am I doing here?' or 'What does it mean to be a good student?' How people answer these questions (i.e. their construals), in turn, guides their behavior [15[**]]. In other words, if a student's construal of a setting does not align with the behaviors required to be effective in that setting, it can hinder motivation, engagement, and, ultimately, academic performance [32–34]. For example, if a student from a working-class background has repeatedly experienced lower-quality schools, teachers who do not recognize her academic potential, and classes that do

not challenge her to fully develop her individual skills, she may be more likely to develop a belief that people like her do not belong in college. In turn, she may be less likely to fully utilize campus resources (e.g. mentors, tutoring), and realize her individual potential, making it more difficult for her to succeed in college.

Thus, to reduce the social class achievement gap, construal interventions tend to focus on providing students from working-class backgrounds with new ways to make sense of or construe their environments. Previous work refers to these types of interventions by different names, including: mindset [35–37], narrative [38], lay theory [39[**]], possible selves [18[**],34,40], social-belonging [41,42], difference-education [43[**],44], values affirmation [45,46], and wise interventions [47[**]]. Importantly, most effective construal interventions have been conducted in contexts where people already have both the individual skills and supportive environments required to be effective (e.g. with undergraduate students entering or currently enrolled in selective colleges) [41,42,43[**],48,49,50].[d]

In the absence of intervention, students from working-class backgrounds are at risk of construing challenges in college as a sign that they are not 'college material.' However, interventions that change students' construal of their experience can interrupt this pernicious cycle of meaning-making and improve the academic outcomes of students from working-class backgrounds. For example, a belongingness intervention sought to change how students from disadvantaged backgrounds (e.g. students from racial and ethnic minority and working-class backgrounds) construed their experience of adversity on campus. Students were provided with a new understanding that feeling a sense of not belonging at the beginning of college is normal and transient. This new way to make sense of their experience buffered them against social identity threat (i.e. the concern that others could view them through the lens of a negative stereotype), increased their social integration on campus, and improved GPA (e.g. [39[**]]).

Another intervention focused on changing construal, a difference-education intervention, aimed to change how students from working-class backgrounds construe their experience of feeling different from other students by exposing them to student stories that highlighted how their social class backgrounds had mattered for their college experience. Specifically, students were taught that their differences or experiences of feeling different in their current environment (1) are *contextual* (i.e. a product of their different backgrounds) and (2) can serve as *assets or strengths* (i.e. not only as obstacles to overcome). This new understanding increased students' empowerment to seek campus resources, and ultimately, their GPA [43[**],44] (SSM Townsend *et al.*, unpublished data). In a

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[c] Construal interventions vary in the extent to which they recognize and address how culture shapes students' selves.

[d] See [39[**]] Study 1 for a notable exception.

values-affirmation intervention, encouraging students from working-class backgrounds to connect their pre-existing core values (e.g. creativity, personal relationships) with their coursework provided them with a new way to construe academic achievement, which in turn, reduced concerns about their backgrounds and improved GPAs [48,49]. Subjective construal interventions foster academic persistence and achievement by providing students from working-class backgrounds with new ways to make sense of and therefore respond to their academic experience.

Integrating interventions that change individuals, structures, and construals

All of the interventions outlined above have been tested and shown to be effective at reducing the social class achievement gap. Social psychologists tend to focus on interventions that change construal because their research is guided by the foundational idea that behavior is the result of the interaction between the person and the situation [19]. However, a critical assumption of many construal interventions is that the necessary individual skills and structural resources are already in place [15••,51,52]. For construal interventions to have enduring effects, we propose that it is first necessary to ensure that students have the skills and structural resources needed to thrive. For example, before the new subjective construal that 'I belong' can translate into academic benefits, students first need to have the skills required to perform well academically. Motivating students to spend more time studying for an exam without knowledge of effective study strategies is unlikely to produce the desired academic benefits (cf. [27•]). Students also need access to the resources that can enable them to persist in academic settings and realize the potential of their academic skills. For example, if an environment does not offer sufficient financial aid to pay for one's classes or required textbooks, providing students with the construal that 'I belong' is unlikely to help them gain access to the resources necessary to succeed. In other words, the changes in meaning-making provided via construal interventions are a necessary but not sufficient step toward enabling students from working-class backgrounds to realize their full academic potential.

While it is possible that a beneficial construal may motivate students to develop their individual skills or lead students to access the resources that are available to them, this proposition should be tested by future research. The only construal interventions that have been effective in populations that lack both individual-level skills and access to material resources have successfully activated resource-seeking behavior that facilitated skill development, and were conducted with younger samples (e.g. middle-schoolers) who were still in relatively early stages of development [18••,53]. Indeed, Oyserman et al. [18••] hypothesized that having academic possible selves (APSs) was not sufficient to motivate academic achievement, and that these APSs needed to be explicitly linked with strategies students

could pursue to improve their academic outcomes. Similarly, Fryer [27•] found that incentives for achieving higher GPAs are ineffective if students do not already know how to enact the strategies required to earn higher GPAs. In other words, providing more motivation, whether it be via the development of an adaptive construal or extrinsic incentives, will not translate into greater academic achievement if not paired with the required skills and strategies. Future research should determine whether and how construal interventions can be utilized effectively in populations lacking skills and resources.

Conclusion

In sum, we suggest the benefits of taking a more holistic approach to reducing the social class achievement gap. Specifically, future interventions can harness best practices from the interventions outlined in this article to more effectively combat social class inequality in the long term. For social psychologists drawn to construal interventions, it is critical to understand how these interventions function in situations in which students do not have the necessary individual skills or structural resources required to advance on a path to success. Then, interventionists will be better equipped to tailor construal interventions to the needs of the students and the context where they are intervening.

Future research should also consider how to best combine individual, structural, and construal interventions. As we argue above, construal interventions are only likely to be effective in populations where both the individual and environmental factors that contribute to academic achievement are already present, or where the individual and/or structural factors can be altered simply by changing construal. Thus, to broaden the usefulness of construal interventions, researchers should design interventions that not only target construal, but also help to improve individual attributes (e.g. by offering opportunities to learn about and practice engaging in self-regulatory behaviors), and create supportive environments (e.g. by providing increased access to information about the college application process). Interventions that target not just one source of the social class achievement gap, but instead target all three have the most promise for reducing social class inequality more broadly.

Conflict of interest statement
Nothing declared.

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Papers of particular interest, published within the period of review, have been highlighted as:

- • of special interest
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