

Research Statement: Understanding and Bridging Cultural Divides in Schools and Workplaces

The United States is suffering from a shortage of highly trained workers. Yet universities, businesses, and communities routinely fail to harness the potential of three of the nation's largest labor pools: women, racial minorities, and working-class individuals. Hundreds of studies document that these groups often fail to perform as well as their middle-class White male counterparts. For example, in higher education, underrepresented racial minorities and students from working-class backgrounds tend to earn lower grades and drop out more often than White and middle-class students, respectively. In business, women ascend to leadership positions less often than men. The media, lay public, and academic research often explain these social group disparities (e.g., between working- and middle-class students) as a product of the essential or fixed characteristics of social groups (e.g., "working-class students have less cognitive ability").

Challenging this essentialist thinking, my research program highlights another significant but largely unrecognized factor that fuels these inequalities: the *cultural divides* between institutions and the social groups that participate in them. Specifically, I study the cultural divide between the independent norms that pervade mainstream U.S. institutions (e.g., "chart your own course," "influence others") and the interdependent norms (e.g., "maintain relationships," "adjust to the situation") common among social groups typically underrepresented in these institutions. By highlighting these cultural divides, my research lays the groundwork for leveraging underrepresented groups' unharnessed potential. Furthermore, when explaining social group disparities, my work demonstrates the benefits of relying on contextual explanations that acknowledge how participating in different cultural contexts can lead people to experience the same institution differently.

Broadly, my theory of cultural divides (Stephens, Fryberg, Markus, Johnson, & Covarrubias, *Journal of Personality and Social Psychology*, 2012; Stephens, Markus, & Fryberg, *Psychological Review*, 2012; Stephens, Markus, & Phillips, *Annual Review of Psychology*, 2014) asserts that inequality is produced when the cultural norms in mainstream institutions do not match the norms prevalent among social groups. Specifically, this theory consists of three key tenets: (a) U.S. institutions tend to promote mainstream, independent cultural norms and exclude interdependent cultural norms common among underrepresented groups; (b) when institutions promote only mainstream norms, they inadvertently fuel inequality by creating barriers to the understanding and performance of underrepresented groups; and (c) institutions can break down these barriers when they help people understand the contextual origins of these divides.

Literatures across disciplines identify a wide range of contextual factors that contribute to social group inequalities, such as the lack of academic preparation or access to financial resources. In the field of social psychology, theories of inequality reveal that underrepresented groups often underperform because they face psychological barriers such as *stereotype threat* (i.e., concern about being viewed through the lens of a negative stereotype) or other forms of bias. My research integrates this literature on stereotype threat with the literature on cultural models of self. By focusing on cultural divides, my

work goes beyond negative stereotypes to highlight how institutional norms (e.g., “express yourself”) that may appear neutral—or even positive—can create barriers for underrepresented groups and produce inequality in the process.

I develop and test this theory using a wide range of methodologies and populations. Although some studies are conducted online, most of my research uses more in-depth and time-intensive methods, including laboratory and field experiments, longitudinal surveys, structured interviews, content analyses of cultural products, and hormonal assays. Furthermore, I target populations that are underrepresented in psychological and organizational research more broadly. Although these efforts often present unique challenges, they make it possible to access and understand the voices of underrepresented groups that are often poorly understood and unheard. Participants in my studies include firefighters, university deans, college students and employees from diverse social class and racial backgrounds, and Hurricane Katrina relief workers and survivors.

My program of research consists of three complementary streams of laboratory and field studies. In my first line of research, conducted before tenure, I characterize the psychological and behavioral differences between working- and middle-class Americans that create the independent-interdependent cultural divide. My second, ongoing line of research examines how the cultural divide between the independent norms in mainstream, middle-class U.S. institutions (e.g., the media, higher education, the workplace) and interdependent norms more common among underrepresented groups (e.g., working-class students) can fuel inequality in schools and workplaces. In my third, ongoing line of research, I design and test a theoretically informed intervention that bridges cultural divides and reduces the inequalities they produce.

1. Characterizing the Social Class Cultural Divide (Before Tenure)

My first line of research characterizes the psychological and behavioral differences between working-class and middle-class Americans that create the independent-interdependent cultural divide. Throughout my research, I use educational attainment as an indicator of social class because research reveals that education drives many of the economic, health, and lifestyle differences associated with social class. Considering that a college education marks one of the largest divides in U.S. culture, I classify adults with at least a four-year college degree as *middle-class* and people who have not attained this degree as *working-class*. In the case of college students, I classify those who have at least one parent with a four-year degree as from a middle-class background and those who have neither parent with a four-year degree as from a working-class background.

My research on the independent-interdependent cultural divide focuses on the act of choice. In the psychological literature, choice is widely assumed to be an act of agency that enables people to establish independence from others. Mainstream U.S. culture is rife with appeals to choice, from advertising (“Choose anything but ordinary,” implores a Camel cigarette ad), to politics (“School choice means better educational opportunity,” claims a school voucher proponent), and even childrearing (“Would you rather behave or

go to bed?” offer millions of weary parents). These appeals assume that choice delivers opportunities to assert independence (e.g., by expressing uniqueness).

My research shows, however, that working-class Americans are more likely than middle-class Americans to understand choice as an act of interdependence. For example, in an interview study, we asked middle-class MBA students and working-class firefighters to describe how they would feel if a friend chose the same car they did. MBA students’ responses were negative, reflecting independent norms for choice. As one respondent said, “I’d be disappointed because my car is no longer unique.” In contrast, reflecting interdependent norms, firefighters responded positively. One replied, “It’s cool he chose the same car. Let’s start a car club!” These divergent cultural norms are also visible in magazine ads. Ads appealing to the middle-class encourage people to make unique choices; for example, Audi sells a sports car with the message, “Never follow.” In contrast, ads designed for the working-class emphasize friends and family; Honda sells a sedan by urging, “Take family time further” (Stephens, Markus, & Townsend, *Journal of Personality and Social Psychology*, 2007). In another set of studies, we also find that working-class Americans are less enthusiastic about the act of choosing and less likely to link it to independence compared to middle-class Americans. For instance, in one study, we find that working-class people more often associate the word *choice* with *difficulty* and *stress*, and less often associate *choice* with *freedom* and *independence* (Stephens, Fryberg, & Markus, *Social and Personality Psychology Science*, 2011).

2. Demonstrating How Cultural Divides Fuel Inequality (Before and After Tenure)

My second, ongoing line of research examines how the independent-interdependent cultural divide fuels inequality by creating barriers to the understanding and performance of underrepresented groups. In particular, my work focusing on the performance consequences of this cultural divide has led to the development of *cultural mismatch theory*. This theory articulates how mainstream U.S. institutions’ focus on independence can undermine the performance of working-class students and employees.

(Mis)understanding Behavior (before tenure). In a first set of studies, we examined how the independent-interdependent cultural divide led observers of Hurricane Katrina to misunderstand the behavior of the survivors who stayed (the “stayers”). In the aftermath of Hurricane Katrina, the mainstream U.S. media and many middle-class Americans asked why the mostly working-class Black survivors “chose” to stay rather than evacuate. Our surveys with the mostly middle-class relief workers revealed that they relied on independent norms to make sense of why people stayed behind: they assumed that any sensible person would take charge, influence the situation, and find a way to evacuate before the storm. They therefore reported that the stayers’ behavior did not make sense, and derogated them as lazy, passive, and hopeless (Stephens, Hamedani, Markus, Bergsieker, & Eloul, *Psych Science*, 2009; Stephens, Fryberg, Markus, & Hamedani, *Journal of Cross Cultural Psychology*, 2013). In stark contrast to observers’ views, however, our interviews with survivors revealed that the stayers understood their own behavior in interdependent terms: caring for and connecting to others, and making the best of the situation. Thus, guided by interdependent norms, relief workers misunderstood

the interdependent cultural norms that guided the working-class stayers' behavior.

In a second set of studies, we focused on how these independent norms can also lead people to misunderstand the sources of gender inequality in the workplace. Specifically, we suggest that an emphasis on independent or “free choice” can conceal the contextual barriers that contribute to gender inequalities. Indeed, after many ambitious, professional women leave the workplace, the media regularly asks why these women choose to leave—or “opt out”— from their professional careers. This focus on independent choice assumes that women's behavior reflects deep-seated personal preferences, rather than reactions to contextual barriers, such as an inflexible or hostile workplace. In one experiment, we found that merely exposing participants to independent norms (i.e., hanging a poster about women “opting out” on the wall) increased participants' belief that opportunities for women and men are equal and that gender discrimination no longer exists (Stephens & Levine, *Psych Science*, 2011). These results demonstrate that this reliance on independent norms can conceal the contextual barriers (e.g., discrimination) that often contribute to inequality. In turn, without recognizing these contextual barriers, people may be less motivated to change discriminatory systems and may maintain inequality in the process (see also Savani, Stephens, & Markus, *Psychological Science*, 2011).

Undermining Performance (before tenure). Independent norms also contribute to the underperformance of working-class college students in U.S. universities. In a survey of college administrators, we found that these universities primarily value norms of independence (e.g., “pave your own path”). In a second survey of incoming college students, we found that these university norms diverge from the interdependent norms (e.g., “give back to community”) that working-class students commonly cite as their motivations for attending college. Finally, we examined the consequences of this cultural mismatch in a set of laboratory experiments in which we manipulated the representation of the university's culture. Representing the university's cultural values as independent (a mismatch with working-class students' motives) increased working-class students' stress (as indexed by cortisol reactivity) and undermined their performance on academic tasks. Conversely, representing the university's cultural values as interdependent (a match with working-class students' motives) led working-class students to perform just as well as their middle-class peers (Stephens, Fryberg et al., 2012; Stephens, Townsend, Markus, & Phillips, *Journal of Experimental Social Psychology*, 2012). Such findings suggest that the independent values that pervade higher education are not class-neutral and can fuel social class disparities in students' experiences and academic performance. They further suggest that including interdependent values in the college culture is one way to reduce these disparities in performance. Together these papers articulate the key tenets of *cultural mismatch theory* and establish it as a common explanation for the underperformance of working-class college students in the social psychological literature.

Building Cultural Mismatch Theory (after tenure). Although I introduced cultural mismatch theory before tenure, I more fully developed and extended the theory in three critical ways after tenure. First, I identified the different elements of culture (i.e., institutional values and practices) that can fuel cultural mismatch. Second, I generalized

the theory to show how it can explain social group disparities in new domains (i.e., the workplace and cross-class interactions). Third, I clarified the processes by which cultural mismatch operates to affect performance (i.e., sense of fit).

In a series of studies led by doctoral student Andrea Dittmann, we extended cultural mismatch theory to include not only institutional values (e.g., suggesting the importance of “paving one’s own path”) but also practices (e.g., asking people to work individually). Across analyses of students’ grades, analyses of a nationally representative survey of student athletes, and well-controlled lab and online experiments, we found robust evidence that working individually creates a cultural mismatch for working-class individuals (Dittmann, Stephens, & Townsend, *Journal of Personality and Social Psychology*, conditional acceptance). For example, across two experiments, we found that when participants were assigned to work individually on a problem-solving task (a mismatch with interdependent norms), working-class participants performed less well than middle-class participants. In contrast, when participants were assigned to work together (a match with interdependent norms), working-class participants performed just as well as—or even better than—their middle-class peers. To understand why these effects occur, we coded participants’ behaviors while they were working together. We found that one reason working together benefits people from working-class contexts is because they are more likely than their middle-class counterparts to engage in effective group processes, such as taking turns. Such findings suggest that the common practice of assessing achievement individually (as is normative for standardized tests, for example) is not class-neutral. They further suggest that assessing achievement in a way that is congruent with interdependent models of self (i.e., working together) is one way to reduce social class disparities in performance.

Further expanding cultural mismatch theory, I have documented its pernicious effects over time and identified one key process by which it operates to affect academic performance. In a longitudinal and a cross-sectional survey, Taylor Phillips (a former doctoral student collaborator), Sarah Townsend, Sebastien Goudeau, and I examined the long-term consequences of cultural mismatch throughout students’ four years in college. Our studies reveal that spending more time in college does not erase—nor even decrease—cultural differences associated with social class. Rather, working-class students’ endorsement of interdependent motives (e.g., give back to community) at the beginning of college persists until the end of college. These interdependent motives, in turn, predict reduced sense of fit in college, lower levels of perceived social status, and worse academic performance (i.e., grades) even at the end of college (Phillips, Stephens, Townsend, & Goudeau, *Journal of Personality and Social Psychology*, in press). Together these studies reveal that one way cultural mismatch can undermine working-class students’ academic performance is by depressing their sense of fit over time.

In an ongoing extension of this work, we have examined how cultural mismatch operates even after students graduate from college and enter professional workplaces (see Stephens, Townsend, & Dittmann, *Current Directions in Psychological Science*, 2019; Stephens, Dittmann, & Townsend, *Handbook of Competence and Motivation*, 2017). In a qualitative study led by Andrea Dittmann, we interviewed 74 employees to examine how

their social class backgrounds relate to their workplace experiences (Dittmann, Stephens, & Townsend, in preparation). The cultural mismatch we had identified among working-class college students persisted as they pursued their careers. Employees from working-class backgrounds were more likely than employees from middle-class backgrounds to struggle with independent tendencies like self-promotion and confidence; at the same time, they demonstrated strengths with interdependent behaviors like perspective-taking. A series of surveys showed evidence consistent with our interviews. For example, in a nationally representative survey of employees from different social class backgrounds, we found that employees from working-class backgrounds report a better workplace experience (e.g., a sense of fit) and a greater desire to stay in their jobs when their organizational cultures focus on working together (Dittmann, Stephens, & Townsend, in preparation).

The Class Divide in Intergroup Interactions (after tenure). In a new area of research, I am developing theories about cultural divides that can emerge in cross-class interactions and fuel social class inequality. In a large longitudinal study led by postdoctoral scholar Rebecca Carey, we tracked the frequency, quality, and consequences of cross-class interactions in university settings over the course of the first semester (Carey, Stephens, Townsend, & Hamedani, under review). We found that both middle-class and working-class students reported far fewer cross-class interactions than would be expected at chance given the diversity of their student bodies. However, when these cross-class interactions occurred, they predicted a greater sense of belonging and better academic performance for working-class students. Together these results suggest that one barrier to working-class students' academic performance may be a lack of interaction with middle-class students. At the same time, crossing this social class cultural divide may be a promising pathway toward improving working-class students' outcomes.

In a related pair of lab experiments, my collaborators and I asked students to anticipate cross-class versus same-class interactions, and examined experiences of threat using both self-report and cardiovascular measures. We found that cross-class (compared to same-class) interactions elicited threat for middle-class students, but not for working-class students (Truong, Townsend, Smallets, & Stephens, under review). These results are theoretically important because they suggest that cross-class interactions function differently from cross-race interactions. Although previous research shows that cross-race interactions tend to elicit threat for both lower- and higher-status racial groups, these results show that cross-class interactions elicit threat only for the higher-status group (i.e., middle-class individuals). Practically, these results suggest that middle-class students may be most likely to avoid cross-class interactions. Thus, encouraging cross-class interactions may require decreasing threat among middle-class students. Overall, this new area of work extends research on intergroup interactions to include social class, and also paves the path toward understanding the unique ways in which cross-class interactions can influence people's experiences and outcomes.

3. Bridging Cultural Divides Reduces Inequality (Before and After Tenure)

My third, ongoing line of research designs and tests theoretically informed interventions that bridge social class divides in university settings. Specifically, my work in this area has focused on developing a novel intervention that we call *difference-education* and establishing its efficacy using diverse methods across settings. This intervention research not only reveals many practical applications, but also makes critical contributions to basic social psychological theories of self, motivation, and performance.

Students' social class and racial-ethnic backgrounds predict their educational experiences, opportunities, and outcomes even after controlling for high school grades and standardized test scores. As a result of the additional academic obstacles they confront in college, working-class and underrepresented racial minority students tend to earn lower grades and drop out more often than middle-class and White college students. The social psychological literature on interventions shows that it is possible to reduce these social group disparities by changing how people make sense of their experiences (see Dittmann & Stephens, *Current Opinion in Psychology*, 2017). Building on this approach, difference-education provides a novel strategy for doing so: helping working-class students to understand the contextual origins of social class divides.

Establishing the Efficacy of Difference-Education (before tenure). In the first intervention of its kind, I tested the possibility of improving working-class students' academic outcomes by helping them understand the contextual origins of their different experiences in college (e.g., not fitting in). In this intervention, incoming college students attended one of two in-person discussion panels: a difference-education panel or a control panel (Stephens, Hamedani, & Destin, *Psychological Science*, 2014). In both conditions, the same socioeconomically diverse senior students told their personal stories of adjusting to college. In the difference-education intervention, panelists' stories communicated a *contextual theory of difference*—an understanding that social group differences (e.g., working-class students face unique challenges) are not essential features of different social groups, but instead a product of participating in different cultural contexts. In the control condition, panelists did not communicate this contextual theory. Evaluating the intervention's effects at the end of students' first year, we found that difference-education significantly reduced the social class achievement gap by improving working-class students' grades (an increase of .25 GPA points).

A Contextual Theory Produces Academic Benefits (after tenure). Although I developed difference-education and initially tested its efficacy before tenure, I developed a novel theory of how difference-education improves working-class students' academic outcomes after tenure (Stephens, Hamedani, & Townsend, *Perspectives on Psychological Science*, 2019; Stephens, Hamedani, & Townsend, *Handbook of Wise Interventions*, in press). This theory has led to the development of a new research agenda, in which I examine the benefits of difference-education across settings, and also identify some of the specific psychological and behavioral processes through which it produces these benefits.

When Difference-Education Produces Benefits (after tenure). In a series of interventions across various delivery methods, educational environments, and social groups, we examined *when* difference-education can be beneficial. Although the benefits from the

initial in-person intervention (Stephens, Hamedani et al., 2014) were promising, the methods for this study were resource-intensive (e.g., training panelists to share their stories). Thus, we developed a more efficient, scalable, online version of the intervention, in which intervention participants read the stories of successful senior students at their university. Based on a follow-up survey at the end of students' first year and grades obtained from the registrar, we found that this online version produced similar GPA benefits among working-class students as the in-person intervention (Townsend, Stephens, Smallets, & Hamedani, *Personality and Social Psychology Bulletin*, 2019). These results suggest that difference-education has potential to be disseminated at scale.

Both the initial in-person and initial online interventions were delivered at elite, private universities. As a next step, we examined whether the benefits of the online version of difference-education would extend to more diverse and accessible university settings. In this study, we delivered the difference-education intervention to a much larger group of college students enrolled in four different university settings, including relatively low-ranking public universities and two-year colleges. Across these settings, which are rarely included in the social psychological literature on interventions, we found that difference-education improved working-class students' grades and rank in their cohort during their first year (Stephens, Carey et al., in preparation). In another related intervention led by doctoral student Hannah Birnbaum, we also found that these academic benefits extend to underrepresented racial minority students, significantly improving their grades during their first two years in college (Birnbaum, Stephens, Townsend, & Hamedani, *Social Psychological and Personality Science*, invited revision). Together, these results suggest that difference-education has the potential to benefit students when using various methods (in person and online), when delivered in diverse educational environments (elite and less elite schools), and when targeting distinct social groups (social class and race).

How Difference-Education Produces Benefits. Drawing on a follow-up laboratory study and various longitudinal surveys, we examined *how* difference-education produces benefits. We theorize that a contextual theory should improve students' academic outcomes through *recursive processes*—changes in students' experiences and behavior that become self-reinforcing and build over time. For example, when working-class students face challenges in college (e.g., difficulty choosing a major), a contextual theory should help them understand that these challenges are likely informed by their backgrounds and prior experiences (e.g., not having college-educated parents) rather than their own deficiency or incompetence. In turn, this new understanding should shape how students interpret the everyday situations they encounter in college (e.g., academic stressors). If a contextual theory guides how students make sense of their experiences, then it should catalyze a cycle of change that yields long-term academic benefits.

In a follow-up laboratory study with the students from the initial in-person intervention, we sought to capture evidence of these recursive processes in students' reactions to stressful college situations. Nearly two years after students had participated in the intervention, we brought them into the lab, presented them with a series of stressful college situations (i.e., a speech, a cognitive task), and assessed their hormonal responses.

Across these academic stressors, we found that working-class participants in the difference-education intervention showed greater physiological thriving in their coping responses (i.e., as indicated by neuroendocrine measures; Stephens, Townsend, Hamedani, Destin, & Manzo, *Psychological Science*, 2015). These findings are consistent with our prediction that a contextual theory shapes how students interpret everyday situations in college.

Using data from both the in-person and online interventions mentioned above, we also examined whether the intervention produced the expected long-term academic benefits. Nearly four years after the initial intervention, we found that working-class students who received a difference-education intervention earned higher grades and were more likely to attain honors than those in the control condition (Townsend, Stephens, & Hamedani, under review). For the first time, these results demonstrate that teaching working-class students a contextual theory of difference can provide long-term academic benefits that persist through graduation.

Together, these data suggest that recursive processes play a key role in sustaining the intervention's benefits over time. Our theory specifies the particular psychological processes (i.e., fit and empowerment) through which these benefits should occur. Specifically, we theorize that difference-education should improve students' academic outcomes by helping them feel like they fit in college and fostering a sense of empowerment. Across the initial in-person and online intervention studies, our results indicate that difference-education improves both fit and empowerment, but only empowerment explains the observed academic benefits. For example, we find that the online intervention (Townsend, Stephens et al., 2019) improved working-class students' grades through psychological empowerment (e.g., a sense of efficacy). Similarly, we find that the in-person intervention (Stephens, Hamedani et al., 2014) improved students' grades by increasing their tendency to take advantage of opportunities on campus, such as seeking help from professors. We view this change in behavior as an indication of behavioral empowerment—or a willingness to take advantage of available resources.

In future work, we will explore other potential processes through which difference-education benefits students. For example, we theorize that a contextual theory not only improves students' academic outcomes, but also their comfort with social group differences. For example, in one of the interventions mentioned above (Townsend, Stephens, & Hamedani, under review), we find that difference-education improves students' intergroup skills (i.e., comfort with other people's social group differences) and intragroup pride (i.e., comfort with their own social group memberships). In other projects, we are also exploring how features of the college environment (e.g., access to academic and financial support) can inform the success of an intervention. In one study, we find initial evidence that social psychological interventions are most likely to improve underrepresented groups' performance when they are delivered in contexts that facilitate students' academic engagement (e.g., by providing ample financial resources; see Dittmann, Birnbaum, Stephens, & Townsend, in preparation).

Conclusion and Future Directions

When left unmarked, cultural divides will produce inefficient and undesirable outcomes for individuals and organizations. My program of research develops and tests a novel theory of cultural divides that provides a blueprint to better understand the cultural sources of and solutions to inequality. By integrating theories of stereotype threat with cultural models of self, my work uncovers how the independent-interdependent cultural divide between mainstream U.S. institutions and members of underrepresented groups can undermine these groups' experiences and performance, and produce inequality in the process. At the same time, my research on interventions demonstrates that these cultural divides are not inevitable. When schools and workplaces take action to bridge these cultural divides, they can more effectively unleash the potential of underrepresented groups. My research reveals one effective strategy for doing so: helping people to understand the contextual origins of these divides.

As I have described in various ongoing projects and in-preparation papers, my current and future work will continue to examine the sources of and solutions to social class, racial-ethnic, and gender divides across various organizational contexts, such as elite professional workplaces (e.g., consulting and law firms). Additionally, I will continue to unpack the precise processes through which interventions can confer psychological benefits to underrepresented social groups, as well as examine additional intergroup outcomes such as comfort interacting across social groups.

In one new area of work, I plan to extend my research on cultural divides in cross-class interactions to develop novel theories about how cross-class interactions produce unique experiences and outcomes. In particular, I will investigate how cross-class interactions produce academic benefits for working-class students (e.g., by providing network ties or cultural capital). In another project, my collaborators and I will explore the benefits of creating opportunities for meaningful cross-class interactions. We will investigate whether cross-class interactions early in college can serve as an effective intervention to improve working-class students' academic engagement and performance.

In another new area of work, extending my intervention research, I plan to examine how understanding difference as a product of contextual factors (e.g., different backgrounds) versus essential features of social groups (e.g., biology) can explain people's divergent reactions to diversity more generally. In particular, might a contextual versus essentialist understanding of difference underpin seemingly intractable racial-ethnic differences in people's preferences for diversity ideologies? We theorize that one reason racial-ethnic minorities tend to prefer multiculturalism as opposed to colorblindness is because they tend to understand difference as having contextual origins, and therefore often regard difference as potentially positive (e.g., a strength or asset).

Through these current and future directions, my program of research will continue to uncover additional strategies to harness the untapped potential of underrepresented social groups. In so doing, my research will also continue to inform ways to create more inclusive and effective schools, workplaces, and communities.