

EFFECTS OF THE WORKING CLASS LABEL: INCREASED AFFECT AND SOCIAL  
CLASS IDENTIFICATION

BY

PETER ONDISH

THESIS

Submitted in partial fulfillment of the requirements  
for the degree of Master of Arts in Psychology  
in the Graduate College of the  
University of Illinois at Urbana-Champaign, 2015

Urbana, Illinois

Master's Committee:

Professor Dov Cohen

Assistant Professor Joey Cheng

**ABSTRACT**

Building on social identity theory and the sociocultural model of the self, we show that relatively lower-class individuals who value their social class identity (as activated by the “working class” label) experience elevated group identification and well-being. First, we found that social class identification significantly predicted self-esteem while controlling for traditional measures of social class (Study 1). Next, when primed with a working class identity, relative to a lower class identity, individuals from relatively lower-class backgrounds showed stronger group identification, endorsed more positive stereotypes about their social class group, and showed less negative affect (Studies 2a and 2b). Implications for conceptualizing social class as a valued group identity and its implications for the social class academic achievement gap are discussed.

**TABLE OF CONTENTS**

CHAPTER 1: INTRODUCTION.....1

CHAPTER 2: STUDY 1.....9

CHAPTER 3: STUDIES 2A AND 2B .....14

CHAPTER 4: GENERAL DISCUSSION .....27

REFERENCES .....30

APPENDIX .....42

## CHAPTER 1 INTRODUCTION

Reducing the American college achievement gap for disadvantaged and lower-class students has been a defining challenge in recent decades (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). Individuals from lower-class backgrounds, despite having sufficient aptitude to qualify for admission at four-year colleges and universities, tend to receive lower grades (Bowen et al., 2005), have higher dropout rates (Pascarella, Pierson, Wolniak, & Terenzini, 2004; Sirin, 2005, Housel & Harvey, 2009), and develop less of the hallmark practices that result in academic success, such as fostering relationships with faculty and advisers (Terenzini et al., 1994). Though past interventions have been effective in reducing this achievement gap (Adler & Snibbe, 2000; Alder & Rehkopf, 2008; Stephens, Hamedani, & Destin, 2014) the divide in educational attainment between people from the top and bottom of the class hierarchy remains (Stephens et al., 2014). Given that educational attainment is a main access point to upward economic mobility (Bowen, Kurzweil, & Tobin, 2005), studies that examine the ways to reduce class disparities in academic achievement may better assist in matching individuals with the jobs and opportunities they are most qualified for.

To effectively reverse these trends and re-establish higher education as an effective portal for social mobility, researchers have been increasingly focused on psychological factors (e.g., motivation, belonging) that contribute to collegiate underachievement (Stewart & Dottolo, 2005; Walton & Cohen, 2007). In particular, much recent research has focused on how cultural differences between lower-class individuals and relatively upper-class collegiate contexts foster an unseen mismatch that undermines lower-class students' academic performance (Stephens,

Fryberg, Markus, Johnson, & Covarrubias, 2012; Stephens, Brannon, Markus, & Nelson, 2015).

Other research has examined how reminders of one's position in the class hierarchy, and the associated threat and disadvantage perceived along with one's lower rank, shapes class disparities in academic achievement (e.g., Croizet & Clare, 1998; Johnson, Richeson, & Finkel, 2011).

### **What Causes the Social Class Academic Achievement Gap in Higher Education?**

The factors that contribute to the reduced academic achievement of first-generation college students are complex and encompass financial, social, and cultural aspects of higher education (Stephens et al., 2013). Consider the financial hurdles faced by those aspiring to higher education, which are comparatively more challenging for those from lower-class backgrounds (Haycock, 2001; Rothstein, 2004). From this perspective, the social class hierarchy works against those without access to the resources necessary to prepare for and facilitate educational success (Astin & Oseguera, 2004). In addition, whereas upper-class individuals tend to have more stable living arrangements, lower-class individuals are more likely to live in neighborhoods without access to high-quality schools and healthy food (Moreland et al., 2002) and are less likely to have family health-care (Kozol, 1991). Upon transitioning into college, students from lower-class backgrounds will more likely come from families with fewer financial resources (Nunez, 2000; Hossler, Schmidt, & Vesper, 1999) and often work one or more jobs to help pay for living expenses and tuition (Phinney & Haas, 2003). Partitioning one's time between school and work often prevents individuals from lower-class backgrounds from fully devoting themselves to their academic pursuits and makes critical stepping-stone opportunities such as unpaid internships a

pragmatically difficult undertaking (Delaney, 2010; Pascarella, Pierson, Wolniak, & Terenzini, 2004).

In addition to these resource differences, the experience of being perceived as lower-class in collegiate institutions can make students feel threatened—that is, anxious about being lower in status than other students at the university (Steele & Aronson, 1988). These experiences of threat, have in some research, a causal association with poorer cognitive functioning on academic tasks, like standardized math and verbal assessments or assessments of executive cognitive functioning (Johnson, Richeson, & Finkel, 2011; c.f. Crozier & Claire, 1998; Spencer & Castano, 2007; Fiske et al., 2002).

In addition to resource disparities and threat-related anxiety, individuals from lower-class environments must contend with a mismatch between the culture they were raised in and the culture prevalent in higher education. Research on the sociocultural model of the self suggests that people from relatively upper- and lower-class backgrounds have unique norms, values, and expectations that they adhere to in their daily lives, socialized by their parents and peer groups (Stephens, Markus, & Fryberg, 2012). Indeed, whereas lower-class individuals are more normatively interdependent and prefer finding similarities with and acting within meaningful groups, relatively upper-class individuals are more normatively independent and prefer standing out and being unique (Snibbe & Markus, 2005). These cultural differences result in a mismatch for lower-class individuals upon reaching higher education, as American colleges and universities tend to overwhelmingly follow relatively upper-class cultural norms that require students to act independently in forging their own path of study (Fryberg & Markus, 2007), to develop their own voice and express their own ideas (Kim, 2003), and often require individuals to work alone in doing so (Savani, Markus, Conner, et al., 2013). In line with this reasoning,

college administrators are more likely to indicate that their university embodies more prototypically upper-class cultural models of self and agency, (e.g., “Develop personal opinions” vs. “Appreciate the opinions of others,”; Stephens et al., 2012).

Thus, one explanation for the barriers that lower-class individuals face to academic achievement is this cultural mismatch. For example, endorsements of relatively interdependent motives for attending college in first generation students, (e.g., give back to the community, family honor) correlate with lower GPA scores during the first and second years of college (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). Moreover, verbal reasoning tasks (anagrams) framed to match the cultural norms of relatively lower-class first generation students reduced a sense of distress in these students, and increased their task performance to levels that matched those of continuing-generation (higher social class) students (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012).

The above research suggests that class-based differences in academic achievement are caused, at least in part, by psychological interpretations of the surrounding social environment. In this research, we build on these insights by examining how positive or negative social class identity might influence the well-being of lower-class students.

### **Social Class as a Group Identity**

Social identity theory states that individuals’ perceptions of the social environment and social relationships are influenced by the extent they identify with important groups to which they belong (Tajfel & Turner, 1986; Tajfel, 1972). Strongly held group identification, such as identification with one’s gender or ethnic group, the theory argues, shifts individual motivations and goals dramatically to align with the interests of the group (Hogg & Mullin, 1999; Mullin &

Hogg, 1999). Goal and motive shifts that occur based on social identity work to increase feelings of belonging and social connection within an identified group (Hogg & Mullin, 1999; Tajfel & Turner, 1986). Thus, identifying with important social groups predicts closeness with others in that group (Hogg & Terry, 2001; Tajfel & Turner, 1986; Tajfel, 1972) and bias and aggression towards outgroup members (Brewer, 1999; Sherif, 1966). Moreover, positive social identity is associated with enhanced individual self-esteem and positive affect (Begen & Turner-Cobb, 2015; Luhtanen & Crocker, 1992; Tajfel, 1979).

Though most of the research on social identity has focused on intergroup processes surrounding race/ethnicity, gender, and political orientation (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978; Brannon & Walton, 2013; Cook, 1985; Dovidio, Gaertner, & Kawakami, 2003; Pettigrew & Tropp, 2006), social class is also an important social identity of individuals across much of the world. Furthermore, although the United States has a relatively brief history compared to other societies, nationally representative panel survey research finds that individuals in the United States do reliably identify with a particular class label, which may be grounded in objective resources measures, education, and occupation (Hout, 2008). In this research, we contend that evaluations of one's own social class identity play a critical role in the well-being and academic achievement of lower- and upper-class individuals. Specifically, social identity theory contends that negative or disadvantaged group identities can be conceptualized as positive and desirable, and used as a source of well-being for low status individuals (Branscombe, Schmitt & Harvey, 1999). For instance, Branscombe et al., (1999) showed that Blacks who imagined potentially discriminatory practices against them, such as being denied a loan or service at a restaurant maintained positive well-being and self-esteem through increased minority group identification in comparison to those with less minority group identification. Thus, low

status individuals turn to group ties and positive in-group evaluations because these positive group identity perceptions are associated with social support--which can buffer individuals from some of the harmful psychological effects of discrimination (e.g., Armenta & Hunt, 2009; Crabtree, Haslam, Postmes, & Haslam, 2010; Ramos, Cassidy, Reicher, Haslam, 2012). Several empirical studies provide support for the positive buffering effects of positive social group identity effects in women (Schmitt, Branscombe, Kobrynowicz, & Owen, 2002), the elderly (Garstka, Schmitt, Branscombe, & Hummert, 2004), international students in the United States (Schmitt, Spears, & Branscombe, 2003), and even among less-traditional group identities, such as those with body piercings (Jetten, Branscombe, Schmitt, & Spears, 2001).

Several lines of reasoning indirectly support the buffering effects of positive in-group identity with respect to social class: Take for example, meta-analyses of links between social class and self-esteem or subjective well-being, which find only weak negative associations with social class, despite lower-class individuals lives being defined by a relative lack of social and economic resources (e.g., Howell & Howell, 2008; Twenge & Campbell, 2002). That lower-class individuals report only small deficits in self-esteem and subjective well-being is potentially indicative of the role of positive group identities in enhancing the well-being of lower-class individuals despite their economic disadvantage. Anecdotes also show a similar pattern: Cultural television shows like *The Blue Collar Comedy Tour*, the popular television show *Dirty Jobs*, and the film *Blue Collar Boys* (2012), all provide positive frameworks for the group identities of relatively lower-class individuals. Drawing from the aforementioned research and contemporary cultural examples, we contest that seeing one's relatively lower-class group as a positive in-group (e.g., "working class") elevates identification, belonging, and well-being.

Specifically, we predict that lower-class individuals that use positive labels to describe their social class in-group will experience enhanced well-being relative to lower-class individuals who choose labels that refer to their in-group's lower status in society. That is, relatively lower-class individuals who describe their in-group as "working class"—a positive label which implies adherence to American ideals of hard work and merit-based achievement—rather than "lower class"—a negative label implying low status—will experience enhanced well-being.

Data indicating the power of category labels to elicit well-being has not been collected with respect to social class, but relatively recent research on mental illness labels is suggestive of our predictions: Labeling a person as mentally ill carries with it a number of negative stereotypes about lower status and a lack of controllability and rationality of one's mind (Hinshaw, 2007). Thus, in response to being labeled with a mental illness, versus a physical illness label, patients tend to withdraw from potentially helpful treatments (Sirey et al., 2001), and observers tend to rate those labeled with mental illness categories as having less human psychological traits (Martinez, Piff, Mendoza-Denton, & Hinshaw, 2011). Aligning with this research, in the present manuscript we contend that in-group class labels that suggest the positive qualities of one's social class in-group (i.e., working class), adhered to by lower-class individuals, will enhance well-being relative to adherence to class labels related to lower relative standing in society (i.e., lower class).

### **The Present Research**

Here, we examine a central hypotheses related to social class identity and well-being across three studies. First, we tested the hypothesis that identification with a desirable social

class identity (working class) predicts higher self-esteem relative to those who identify as lower class in a large national sample (Study 1). Building on this, we then experimentally manipulated social class labels and tested the hypothesis that assigning individuals a positive or negative social class identity label influences affect and group identification through positive group attitudes (Study 2a & 2b). We then discuss how social class identities offer a promising avenue of research for future investigation of the college achievement gap.

## CHAPTER 2

### STUDY 1

In Study 1 we tested our hypothesis that positive social class in-group labels would be associated with enhanced well-being. We tested this hypothesis with a correlational analysis from data collected in a nationally representative panel survey—the General Social Survey (GSS; 2001).

#### Method

**Participants.** Participants were 1165 individuals who participated in the General Social Survey (2001) in 2004. Maintained by the University of Chicago’s National Opinion Research Center, the GSS project is a publicly available national data repository consisting of a wide range of items measuring attitudes and behaviors.

Participants were included in the analysis if they identified as either working class or lower class. The average age of participants in the sample was 41.85 ( $SD = 15.81$ ). The sample was made up of 864 (74.6%) people identified as White, 204 (17.5%) identified as Black, and 97 (8.3%) who identified as either Hispanic or Asian. The sample consisted of 500 (42.9%) males and 665 (57.1%) females. The median household income of the participants was \$30,000 - \$35,000, with 58.4% of participants having completed at most their senior year of high school.

#### Measures.

**Self-esteem.** Respondents indicated their self-esteem based on five questions in the 2004 GSS: (a) “On the whole I am satisfied with myself; (b) “At times I think I am no good at all”; (c) “I am a person of worth at least equal to others”; (d) “I wish I could have more respect for myself”; (e) “I am inclined to feel I am a failure.” These questions were asked on a 4-point

Likert scale from 1 (*strongly agree*) to 4 (*strongly disagree*). Questions were reverse coded where necessary and made into an overall composite variable so that larger numbers represented higher self-esteem (5 item  $\alpha = .71$ ). The overall sample had a mean self-esteem score of 3.18 ( $SD = .51$ ).

***Social Class Identity.*** Social class was measured dichotomously as those who self-identify as “lower-class” or “working-class.” Only these two levels of social class were considered. Of the 1008 responses analyzed, 122 (12.1%) self-identified as lower-class, while 886 (87.9%) identified as working-class.

***Objective Social Class.*** Respondents were asked about their total family income before taxes. Following Hout’s (2004) recommendations, incomes less than \$10,000 were converted into \$10,000 and log transformed to improve skewness (Fischer & Hout, 2011). Occupational prestige scores were derived from earlier surveys that asked respondents to indicate the “social standing” that various occupations had on a scale of 0 to 100 (Smith et al., 2011). If there was a spouse, this was averaged with the respondent’s occupational prestige to create a total measure for the household ( $M = 41.25$ ,  $SD = 11.81$ ). This measure was then standardized. Education was measured as the number of years of schooling by the respondent. If there was a spouse, this was averaged in with respondent’s education to create a total measure for the household ( $M = 12.94$ ,  $SD = 2.32$ ). This measure was then standardized.

***Race.*** Race was measured as a categorical variable for whether the respondent self-identified as Black, White, Latino (Hispanic), or Asian. This categorical variable was turned into three dummy variables, with Whites as the omitted category (Cohen, Cohen, West, & Aiken, 2004). While not indicative of social class per se, race does have caste-like properties in the U.S.: it is a group of individuals identifiable by visual markers (e.g., skin color), that is difficult to

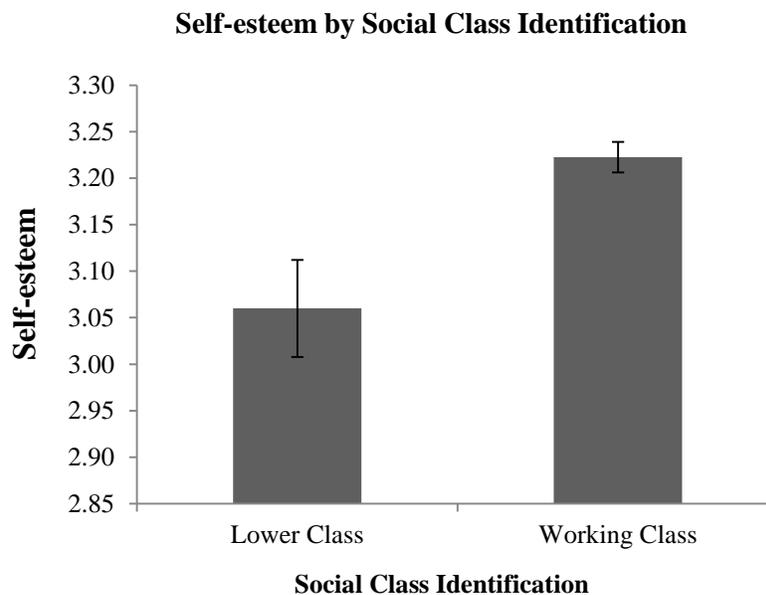
leave and is often tied with certain social roles (Bourdieu, 1979; Dollard, 1957; Lamont, 1992). Thus, racial identification was included to prevent race from conflating the relationship between social class measures and self-esteem.

## Results

Our first hypothesis asserts that individuals from lower-class backgrounds who identify with more positive social class labels will report enhanced well-being. We tested this hypothesis by comparing self-identified lower-class and working-class participant scores on self-esteem using an Analysis of Variance. The analysis yielded significant differences between self-esteem for lower- and working-class identified participants in line with our predictions—those identifying with the more positive label of working class ( $M = 3.22, SD = .50$ ) felt higher in self-esteem than did those subscribing to the lower-class label ( $M = 3.00, SD = .57$ ),  $F(1, 1163) = 26.1, p < .001, \eta^2 = .02, d = .51$ .

Because these results are correlational, we followed up this initial analysis with an Analysis of Covariance that controls for a few confounding variables. It is possible that self-esteem differences between the groups are due to real resource disparities between lower and working class individuals. Supporting this possibility, identified lower-class individuals showed lower levels of income,  $F(1,1047) = 150.46, p < .001, \eta^2 = 0.13, d = -1.15$ , education,  $F(1,1163) = 21.36, p < .001, \eta^2 = 0.02, d = -0.40$ , and occupation status  $F(1,1114) = 25.13, p < .001, \eta^2 = 0.02, d = 0.45$ , relative to their working class counterparts. Thus we controlled for reported income, education, and occupation status in our analysis of self-esteem scores to determine associations with class identity labels over and above objective resources. We also controlled for our dummy coded racial identity variable, given that it is possible that belonging to a lower-

status racial group in society accounts for these class label differences in self-esteem. The ANCOVA analysis again revealed a pattern of results consistent with our hypothesis (see Figure 1): participants labeling themselves as lower class reported lower self-esteem ( $M = 3.06$ ,  $SD = .53$ ) than those choosing the working class label ( $M = 3.22$ ,  $SD = .50$ ),  $F(1,1000) = 8.94$ ,  $p = 0.003$ ,  $\eta^2 = 0.01$ ,  $d = 0.31$ .<sup>1</sup> Thus, it appears that even after resource measures of social class measures have been accounted for, simply identifying as working-class is associated with elevated self-esteem relative to identifying as lower-class.



*Figure 1.* Self-esteem by social class identification when controlling for income, education, job prestige, and race.

---

<sup>1</sup> We also attempted this analysis while additionally controlling for participant age; the effect of social class identification was largely identical,  $F(1,999) = 10.10$ ,  $p = 0.002$ ,  $\eta^2 = 0.01$ ,  $d = .33$

## **Discussion**

Study 1 found correlational support for our hypothesis in a nationally representative panel survey of self-identified working- and lower-class individuals. When controlling for variables traditionally related to social class (e.g. income), as well as race, social class identification predicted self-esteem. In line with social identity theory (Tajfel & Turner, 1986), this suggests that the working-class label may provide individuals with a positive group identity that bolsters self-image.

Study 1 was correlational and thus limited in its interpretation for two reasons. First, social classes encapsulate many cultural dimensions (Fiske, 2011). While we attempted to control for the variables that traditionally define social classes, this does not rule out the possibility other facets of social classes themselves (rather than merely identifying with social class labels) are responsible for the observed differences in self-esteem. Second, it may have been that lower self-esteem resulted in individuals identifying with the lower class label, rather than labels themselves driving self-esteem. In Studies 2a and 2b, we move beyond these limitations and test a causal model by priming relatively lower-class individuals with either the working or lower class label.

### CHAPTER 3 STUDIES 2A AND 2B

Studies 2a and 2b were designed to experimentally test our first hypothesis suggesting that adopting a positive in-group social class label will enhance well-being for relatively lower-class individuals. Importantly, Studies 2a and 2b rely on an experimental paradigm, adapted from past research (Martinez et al., 2011) wherein participants are provided with information that people from their objective class position are either called “lower class” or “working class” in society. Participants then filled out perceptions of their social class group and well-being measures.

We used Studies 2a and 2b to test the mediating role of positive group beliefs as explaining the influence of social class identity labels on well-being. We predicted that a positive group label (working class) would facilitate more positive group attitudes relative to the lower class label. We further predicted that this positive group label (working class) would statistically account for increases in well-being relative to those who receive the lower class label (Tajfel & Turner, 1986). Importantly, because this experiment relies on new methods for manipulating social class labels, we conducted Study 2b—a close replication that relies on the same population, measures, and hypotheses.

#### **Method**

**2a Participants.** Because the nature of social classes and how we interpret them is highly dependent on unique national contexts where individuals are socialized (Grossman & Huynh, 2013), only participants born in the US were recruited. This was done via a pre-study screener where participants indicated their place of birth. In addition, to best investigate the effects of

working class and lower class labels, only those whose parents were without a 4-year college degree were recruited (Snibbe & Markus, 2005; Stephens, Markus, & Townsend, 2012).

403 Mechanical Turk workers participated in the study in exchange for monetary compensation. On average, participants were paid \$6.61/hour for their time. The sample consisted of 216 males (54.0%), 183 females (45.4%), and 4 persons who chose not to identify their gender, with mean age = 35.18, ( $SD = 11.60$ ). In addition, the sample consisted of 17 Native Americans (4.2%), 292 European Americans (72.4%), 30 African Americans (7.4%), 30 Latin Americans (7.4%), 12 Asian Americans (3.0%), and 19 who identified as various other ethnicities. The income distribution was as follows: <\$15,000 per year, 96 (23.8%); \$15,001 – \$25,000 per year, 82 (2.03%); \$25,001 – \$35,000 per year, 90 (22.3%); \$35,001 – \$50,000 per year, 66 (16.3%); \$50,001 – \$75,000 per year, 48 (11.9%); \$75,001 – \$100,000 per year, 12 (3.0%); and \$100,001 – \$150,000 per year, 6 (1.5%), with 3 not specifying.

**2b Participants.** 401 Mechanical Turk workers participated in the study in exchange for monetary compensation; on average, participants were paid \$4.59/hour for their time. The sample consisted of 186 males (46.4%), 215 females (53.6%), with mean age = 35.08,  $SD = 11.81$ . In addition, the sample consisted of 16 Native Americans (4.0%), 259 European Americans (64.4%), 35 African Americans (8.7%), 27 Latin Americans (6.7%), 18 Asian Americans (4.5%), and 44 (11.0%) who identified as various other ethnicities. The income distribution was as follows: <\$15,000 per year, 109 (27.2%); \$15,001 – \$25,000 per year, 83 (20.7%); \$25,001 – \$35,000 per year, 76 (19.0%); \$35,001 – \$50,000 per year, 65 (16.2%); \$50,001 – \$75,000 per year, 42 (10.5%); \$75,001 – \$100,000 per year, 16 (4.0%); and \$100,001 – \$150,000 per year, 6 (1.5%), with 4 choosing not to disclose their income information (1.0%).

As with Study 2a, a screener question was used to only recruit participants from the United States.

**2a & 2b Procedure and Measures.** Participants first read an ostensibly real Yahoo! news article about social classes in America (see Appendix). This particular type of stimuli was chosen because topics surrounding social class in America have recently gained much national attention (Fiske and Markus, 2012), thus providing a convincing avenue for the social class label priming. To ensure the social class discussed in the article felt inclusive to the reader, a statement was inserted which read “While there is some ambiguity as to what ‘Working [Lower] Class means, Working [Lower] class individuals are typically classified as those who come from families where both parents lack a 4-year college degree.” The article and subsequent study measures were administered through the online survey distributor Qualtrics.

After reading the article, participants indicated their group identification using the Inclusion of Other and Self Scale (IOS) (Aron, Aron, & Smollan, 1992) that was adapted to indicate inclusion of one’s social class group in the self. This was a 1-7 scale that asked participants to assess their perceived inclusiveness with the label prime given to them by varying overlap between two circles (overall  $M = 5.01$ ,  $SD = 1.78$ ). In addition to identification, IOS predicts relationship commitment and satisfaction in romantic relationships (Aron et al., 1992). Thus, IOS may additionally predict well-being because it indicates strong positive feelings about one’s social class group, and presumably, intentions to keep that class grouping as part of one’s self-concept. As well, a growing body of research indicates that broadening the self is associated with enhanced personal well-being (Aron & Aron, 1986; Fredrickson, 1998; 2001; Waugh & Fredrickson, 2007).

As a measure of emotional well-being or positive-negative affective balance, Study 2a participants also indicated their positive and negative affect (PANAS) (Watson, Clark, & Tellegen, 1988). The PANAS asks participants to indicate their momentary experience of 10 positive and 10 negative affective states (e.g., upset, alert, proud), on a 5 point Likert scale. Scores are then summed to generate a positive affective index ( $M = 31.94$ ,  $SD = 7.86$ ) and a negative affective index ( $M = 23.61$ ,  $SD = 5.62$ ) ranging from 10 to 50.

Study 2a and 2b participants also filled out several measures of social class group perceptions. Participants indicated their primed groups' perceived stereotype content (Fiske et al., 2002) relating to warmth (tolerance, warmth, being good natured, being sincere; overall  $M = 3.13$ ,  $SD = .69$ ), competence (competence, confidence, independence, intelligence; overall  $M = 2.60$ ,  $SD = .78$ ), status (prestige, economic success, being well-educated; overall  $M = 1.89$ ,  $SD = .72$ ) and perceived competition ("If members of this group get special breaks this is likely to make things more difficult for people like me," "The more power members of this group have, the less power people like me are likely to have," and "Resources that go to members of this group are likely to take away from the resources of people like me"; overall  $M = 1.89$ ,  $SD = .94$ ) on a 7 point Likert scale. We also added items related to Protestant work ethic values, given that these items may be particularly relevant to participants exposed to the working class label. These items included indicating how dependable, hardworking, proud, and resilient their social class group was (combined overall  $M = 3.23$ ,  $SD = .84$ ,  $\alpha = .832$ ). Study procedures, stopping criteria, and exclusion criteria, dependent measures and hypotheses were determined a priori and uploaded onto the Open Science Framework (<https://osf.io/>) before data were collected.

## Results

Studies 2a and 2b were designed to test our central hypothesis using an experimental design. Specifically, we predicted that being assigned a working class label would increase positive beliefs about one's social class group, identification with that group, and emotional well-being, relative to being assigned the lower class label.

**Group Identification.** To test our central prediction, we compared IOS scores for participants exposed to the working class and lower class label primes. In Study 2a, participants primed with the working class label showed more inclusion of their social class group in the self ( $M = 5.21$ ,  $SD = 1.71$ ) than did individuals primed with the lower class label ( $M = 4.82$ ,  $SD = 1.84$ ),  $t(401) = 2.19$ ,  $p = .03$ ,  $d = .21$ ,  $CI_{difference} = [.04, .74]$ , (see Figure 2). In Study 2b, the same pattern emerged: Participants primed with the working class label showed more group identification ( $M = 5.49$ ,  $SD = 1.69$ ) than individuals primed with the lower class label ( $M = 5.01$ ,  $SD = 1.77$ ),  $t(399) = 2.78$ ,  $p = .006$ ,  $d = .28$ ,  $CI_{difference} = [.14, .81]$ , (see Figure 2). Together, these results suggest that relatively lower-class individuals experienced enhanced group identification, operationalized as inclusion of social class in the self, when their social class group was labeled as working class, relative to when it was labeled as lower class.

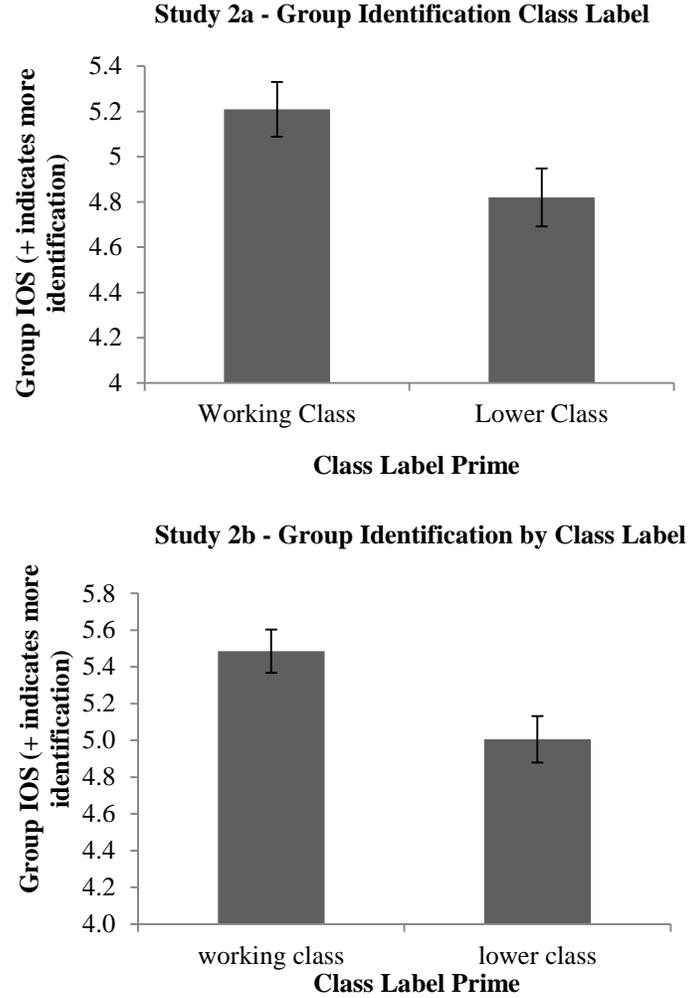


Figure 2. Study 2a and Study 2b identification with social class based on class label prime. Error bars represent standard errors around the mean.

**Affect.** In Study 2a, we also had the opportunity to test our hypothesis about emotional well-being using measures of positive and negative affect. As expected, participants primed with the lower class label showed more negative affect ( $M = 24.24$ ,  $SD = 6.05$ ) than individuals primed with the working class label ( $M = 22.96$ ,  $SD = 5.06$ ),  $t(392) = 2.14$ ,  $p = .033$ ,  $d = .21$ , CI difference:  $[-2.37, -.17]$ . No significant differences in positive affect between working class ( $M =$

32.17  $SD = 7.80$ ), and lower class labels ( $M = 31.71$   $SD = 7.92$ ),  $t(394) = .580$ ,  $p = .562$ ,  $CI_{difference}$ : [-1.09, 2.01], were observed. Overall, the results from Studies 2a and 2b find experimental support for our central hypothesis—positive social class labels increase identification and well-being.

**Positive group perceptions.** We expected that positive group labels would increase well-being because they enhance positive perceptions of one's social class group. To investigate the content associated with differences in affect and group identification, participants were also asked about the perceived stereotype content of their primed social class group. Many of these were taken from Fiske et al.'s (2002) stereotype content model.

In Study 2a, participants primed with the working class label ( $M = 3.255$ ,  $SD = .696$ ) saw their group as significantly more warm than those primed with the lower class label ( $M = 2.99$ ,  $SD = .656$ ),  $t(398) = 3.82$ ,  $p < .001$ ,  $d = .38$ ,  $CI_{difference}$ : [.13, .39]. With regards to social standing, participants primed with the working class label saw their group as a significantly higher in competence ( $M = 2.85$ ,  $SD = .79$ ) vs. ( $M = 2.35$ ,  $SD = .69$ ),  $t(398) = 6.70$ ,  $p < .001$ ,  $d = .66$ ,  $CI_{difference}$ : [.35, .64] and saw their group as significantly higher in status ( $M = 2.05$ ,  $SD = .734$ ) vs. ( $M = 1.73$ ,  $SD = .679$ ),  $t(398) = 4.51$ ,  $p < .001$ ,  $d = .45$ ,  $CI_{difference}$ : [.18, .46]. Similarly, individuals primed with the working class label saw their group as embodying more Protestant work ethic values, measured by resilience and being dependable, hardworking, and proud ( $M = 3.48$ ,  $SD = .80$ ) vs. ( $M = 2.98$ ,  $SD = .81$ ),  $t(400) = 6.27$ ,  $p < .001$ ,  $d = .63$ ,  $CI_{difference}$ : [.35, .66]. Lastly, we also asked about perceived within-group competition, hypothesizing that individuals primed with the working class label would experience members of their social class as being in competition with one another. As predicted, individuals primed with the working class label perceived significantly less competition with other members of one's social class than those

primed with the lower class label ( $M = 1.85$ ,  $SD = .84$ ), vs. ( $M = 2.11$ ,  $SD = 1.01$ )  $t(400) = -2.82$ ,  $p = .005$ ,  $d = -.28$ .,  $CI_{difference}$ : [-.45, -.08], suggesting that in-group cohesion is facilitated by the working class, but not the lower class label.

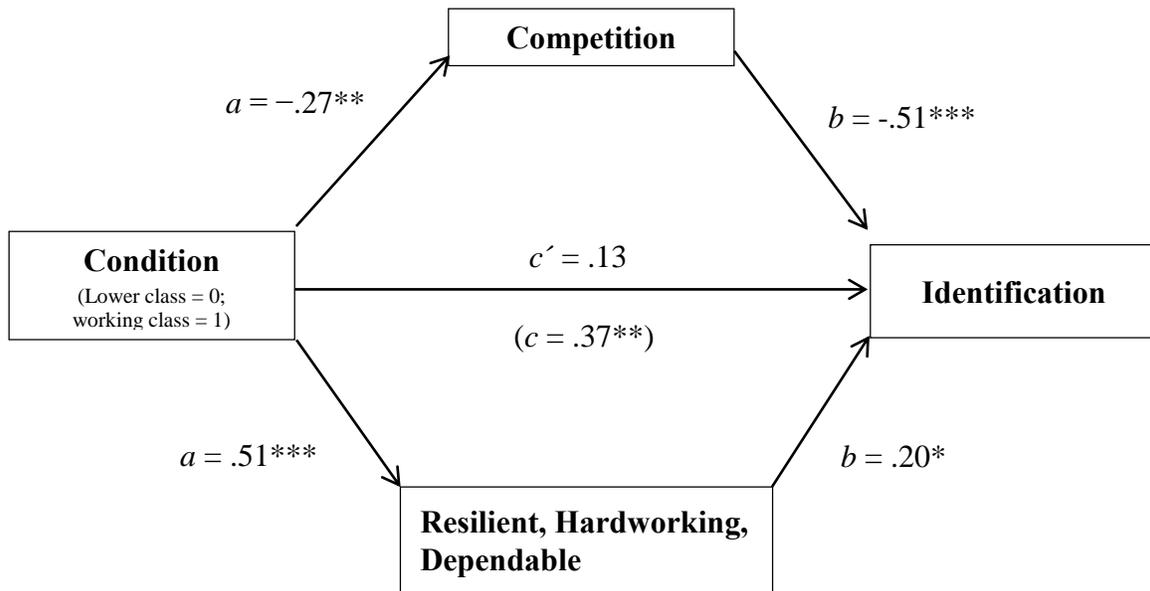
We found a similar pattern of results in Study 2b: Participants primed with the working class label ( $M = 3.21$ ,  $SD = .77$ ) saw their group as significantly more warm than those primed with the lower class label ( $M = 2.86$ ,  $SD = .80$ ),  $t(399) = 4.35$ ,  $p < .001$ ,  $d = .43$ ,  $CI_{difference}$ : [.18, .50]. With regards to social standing, participants primed with the working class label saw their group as significantly higher in competence ( $M = 2.83$ ,  $SD = .79$ ) vs. ( $M = 2.26$ ,  $SD = .77$ ),  $t(399) = 7.40$ ,  $d = .74$ ,  $p < .001$ ,  $CI_{difference}$ : [.42, .73] and status ( $M = 2.21$ ,  $SD = .83$ ) vs. ( $M = 1.84$ ,  $SD = 1.01$ ),  $t(399) = 4.70$ ,  $p < .001$ ,  $d = .47$ ,  $CI_{difference}$ : [.22, .54]. Similarly, individuals primed with the working class label saw their group as embodying more protestant work ethic values, measured by resilience and being dependable, hardworking, and proud ( $M = 3.49$ ,  $SD = .81$ ) vs. ( $M = 3.00$ ,  $SD = .90$ ),  $t(399) = 5.70$ ,  $p < .001$ ,  $d = .57$ ,  $CI_{difference}$ : [.32, .65]. Unlike Study 2a, participants primed with the working class label perceived no differences in competition within one's social class group ( $M = 1.99$ ,  $SD = 1.02$ ) vs. ( $M = 2.03$ ,  $SD = 1.00$ ),  $t(399) = -.373$ ,  $p = .709$ ,  $d = -.37$ ,  $CI_{difference}$ : [-.24, .16].

Our hypothesis asserts that positive social class identity labels increase well-being because they bring to mind positive perceptions of one's social group. (For an overview of all exploratory analyses tested, see the Appendix.) Building on this logic, and the exploratory analysis conducted, we tested a mediation analysis predicting IOS scores with the social class labels manipulation (coded as "1" for working class and "0" for lower class) as the predictor, and group competition perceptions and work ethic as our mediators. Within this model, there was evidence of significant mediation by perceived group competition,  $ab = .14$ ,  $SE = 0.05$ ,  $p = .011$ ,

bias-corrected CI = [0.04, 0.28], and the mean composite of resilient, hardworking, and dependable,  $ab = .11$ ,  $SE = 0.06$ ,  $p = .057$  bias-corrected CI = [0.00, 0.23]. Likewise, there was a significant total mediation effect of the two variables,  $ab = .24$ ,  $SE = 0.08$ ,  $p = .002$ , bias-corrected CI = [0.09, 0.40] (see Figure 3).<sup>2</sup>

---

<sup>2</sup> Arguably however, it may be that individuals who came from working class backgrounds (where both parents lack a 4-year college degree), but who themselves went on to achieve high incomes might not identify with the working class or lower class label. To account for this, we checked to see if our results were limited to those who reported making less than \$50,000 per year. In Study 2a, mediation results were mostly the same; total mediation effect of the two variables,  $ab = .15$ ,  $SE = 0.07$ ,  $p = .03$ , bias-corrected CI = [.02, .30]. However, in Study 2a, the combined path was no longer significant,  $ab = .06$ ,  $SE = 0.07$ ,  $p = .35$ , bias-corrected CI = [-.07, .23]. However, the effect was present in the combined mediation of Study 2a and 2b,  $ab = .10$ ,  $SE = 0.05$ ,  $p = .03$ , bias-corrected CI = [.01, .21]. Admittedly, it is curious that the mediation pathways become somewhat weaker when using only people who are relatively lower-class (based on income). This might be because those making more than \$50,000 per year have more successfully climbed the social ladder and thus more strongly endorse the resilient and hardworking aspects of the working class backgrounds from which they came from.



*Figure 3.* Mediation model predicting group identification from lower and working class conditions and stereotype content associated with 1) perceived group competition and 2) the mean composite of resilient, hard-working, and dependable.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

In Study 2b we used the same mediation model and found there was no evidence of mediation by perceived group competition,  $ab = .01$ ,  $SE = .04$ ,  $p = .710$ , bias-corrected CI = [- .05, .09], and the work ethic composite,  $ab = .05$ ,  $SE = .05$ ,  $p = .251$  bias-corrected CI = [- .03, .17]. For the total indirect mediation effects, means were in line with our predictions, but still not significant,  $ab = .09$ ,  $SE = .06$ ,  $p = .117$ , bias-corrected CI = [- .02, .23], (see Figure 4).

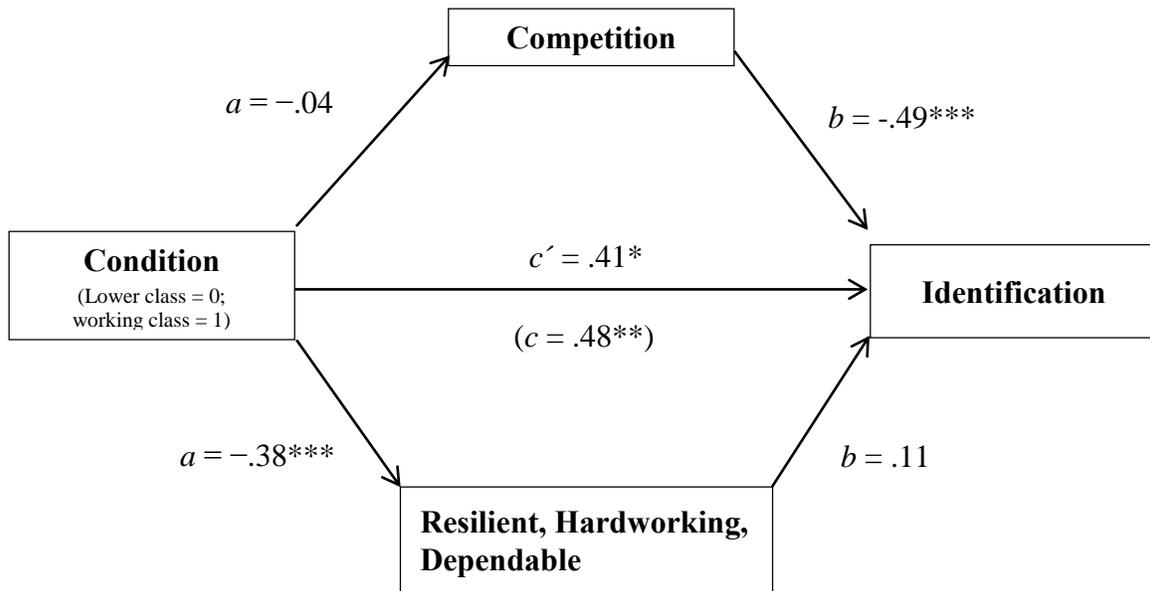


Figure 4. Mediation model predicting group identification from lower and working class conditions and stereotype content associated with warmth and competence.  $c$  = total effect.  $c'$  = direct effect. \*\*\*  $p < .001$ .

However, because the direction of the effects was in line with our predictions, we conducted a combined mediation analysis using the total samples. Within this model, there was evidence of significant mediation by perceived group competition,  $ab = .06$ ,  $SE = .03$ ,  $p = .037$ , bias-corrected  $CI = [.01, .13]$ , and the mean composite of resilient, hardworking, and dependable,  $ab = .08$ ,  $SE = .04$ ,  $p = .027$  bias-corrected  $CI = [.02, .16]$ . Likewise, there was a significant total mediation effect of the two variables,  $ab = .14$ ,  $SE = .05$ ,  $p = .002$ , bias-corrected  $CI = [.06, .25]$  (see Figure 5).

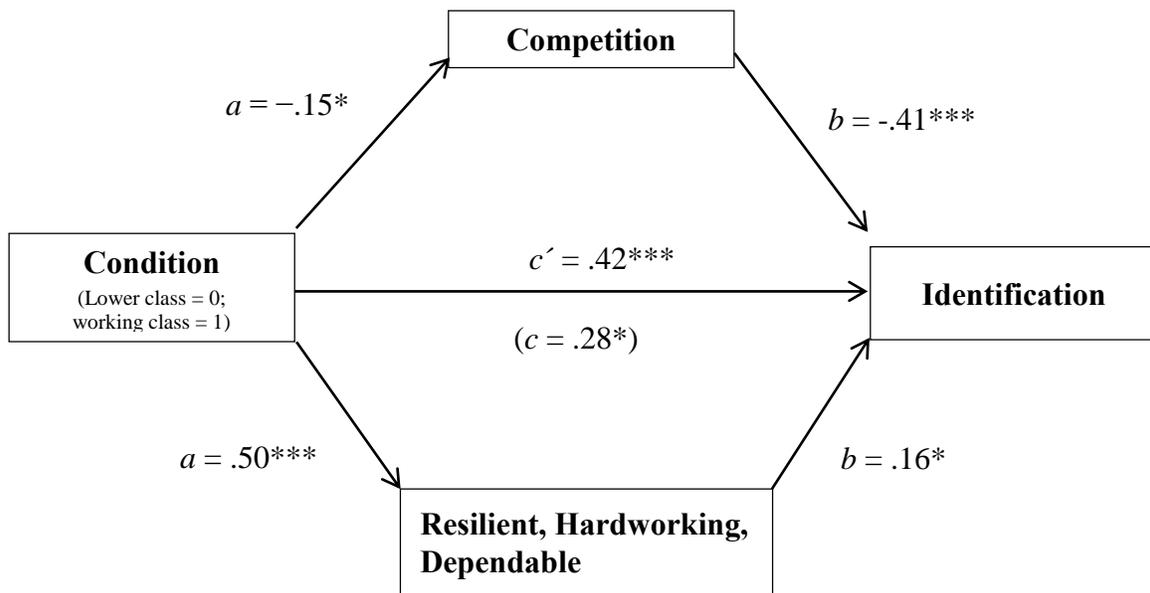


Figure 5. Studies 2a and 2b combined mediation model predicting group identification from lower and working class conditions and stereotype content associated with warmth and competence.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*\*  $p < .001$ .

## Discussion

As predicted, relatively lower-class individuals primed with the working class label exhibited enhanced well-being as measured in terms of including one's social class in the self and negative affect (Study 2a only). Moreover, we established some evidence that positive group perceptions account for this association: Positive social class labels enhance group identification and perhaps well-being because they also reduce within group perceptions of competition and beliefs that one's social class group is hard-working.

Studies 2a and 2b provide consistent evidence of the working class as a relatively positive in-group. Generally speaking, our results suggest that positive associations with this group are mediated in part by positive stereotype content associated with resilience, dependability, and

being hard-working. In addition, thinking of one's group as working class rather than lower-class might attenuate negative perceptions associated with competing for scarce economic resources.

## CHAPTER 4 GENERAL DISCUSSION

Past psychological research has often studied social class as either a hierarchical, rank-based construct, (Johnson, Richeson, & Finkel, 2011; Kraus et al., 2012), or as a culture that imparts normative behaviors, thoughts, and definitions of “how to be” (Snibbe & Markus, 2005). Here, we provide preliminary evidence that social class can also act as a group identity that garners identification and in turn, boosts affect and well-being. In particular, we showed that identification with the working class was mediated by beliefs in positive stereotype content, namely, perceptions of being resilient, hard-working, and dependable. We also found evidence of mediation through perceptions of in-group competition, suggesting that those who identify with the “working class” label see their social class group as being less competitive with each other and more cohesive as a whole. Alternatively, participants who saw their social group as being “lower-class,” experienced their social class as consisting largely of individuals with which they must compete.

The results of these studies offer an important theoretical distinction for those who study social class. Whereas past psychological literature has traditionally treated those who lack a 4-year college degree as being “working class,” we show evidence here of an important distinction in lay settings. While it may be argued that working and lower class individuals mostly perform similar jobs or live in similar conditions, we present three studies that show the working class label captures a valued in-group identity, which in turn, boosts self-esteem, well-being, and group identification.

### **Implications**

Implications for these results are considerable. Recall that social identity theory states that individuals' perceptions of the social environment and social relationships are influenced by their social groups (Tajfel & Turner, 1986; Tajfel, 1972). Furthermore, strongly held group identification, such as identification with one's gender or ethnic group, changes individual motivations and goals dramatically to align with the interests of the group (Hogg & Mullin, 1999; Mullin & Hogg, 1999). These goal and motive shifts mostly occur to facilitate feelings of belonging and social connection within an identified group (Hogg & Mullin, 1999; Tajfel & Turner, 1986). While much past research has investigated the dynamics of intergroup processes in race/ethnicity, gender, and political orientation (for a review, see Pettigrew & Tropp, 2006), there has been no research to date that investigates these processes across social class groups.

Previously in this paper, we laid the foundation for important academic and occupational outcomes associated with the conceptualization of social class as a group identity. We return to that now to suggest implications and avenues for future research. First, identifying with one's social class group, while providing a sense of positive identity that boost self-esteem and well-being, may ironically serve to undermine social mobility. For example, college institutions are widely seen as encapsulating middle-class norms (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012) and thus, relatively lower-class individuals who identify with their social class group may find themselves at odds college institutions from a cognizant, group-processes framework. Second, relatively lower-class individuals who identify with their social class group (i.e., the working class), may align themselves with behaviors and practices typical of their group, for example, occupations. If working class individuals are typically conceptualized as performing certain jobs (e.g., electrician, fire-fighter), they may show elevated preferences for those over the jobs performed by an outgroup (e.g., middle class jobs such as research scientist,

lawyer, etc.). Finally, this may also result in a general lack of desire for upwards social mobility. When individuals from other socially marginalized groups strive to achieve status or prestige in society, (e.g., when a woman strives to become a doctor or lawyer), those individuals may do so without casting off their group identity. However, social class identities put individuals in a unique predicament, because gaining power and status may definition require leaving one's social class group (e.g., becoming middle or upper-class). This may put the valued social class identity of working class individuals at odds with mobility into the middle class.

### **Conclusion**

The psychology of social class is still an emerging area of research. Here, we offer a unique perspective to complement the sociocultural model and show that this perspective offers important implications for conceptualizing social class. Furthermore, the group-identity framework for modern social class offers a myriad of potential testable hypotheses. Understanding how individuals from different social classes broadly conceptualize their social class identity will supply an important piece of the social class puzzle and has considerable potential to help understand and improve income inequality and social mobility in America.

## REFERENCES

- Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist, 49*(1), 15-24.
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, white women. *Health Psychology, 19*(6), 586-592.
- Adler, N. E., & Rehkopf, D. H. (2008). U.S. disparities in health: Descriptions, causes, and mechanisms. *Annual Review of Public Health, 29*, 235–252.
- Adler, N. E., & Snibbe, A. C. (2003). The role of psychosocial processes in explaining the gradient between socioeconomic status and health. *Current Directions in Psychological Science, 12*, 119–123.
- Anderson, C., & Kilduff, G. J. (2009). The pursuit of status in social groups. *Current Directions in Psychological Science, 18*(5), 295-298.
- Aron, A., Aron E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*, 596-612.
- Aronson, E., Blaney, N., Stephan, C., Sikes, J., & Snapp, M. (1978). *The jigsaw classroom*. Beverly Hills, CA: Sage.
- Astin, A. W., & Oseguera, L. (2004). The declining "equity" of American higher education. *Review of Higher Education: Journal of the Association for the Study of Higher Education, 27*(3), 321-341.

- Autor, D. (2011). The polarization of job opportunities in the U.S. labor market: Implications for employment & earnings. *Community Investments*, 23(2), 11-441.
- Banaji, M. R., Hardin, C., & Rothman, A. J. (1993). Implicit stereotyping in person judgment. *Journal of Personality and Social Psychology*, 65(2), 272-281.
- Begen, F. M., & Turner-Cobb, J. (2015). Benefits of belonging: Experimental manipulation of social inclusion to enhance psychological and physiological health parameters. *Psychology & Health*, 30(5), 568-582.
- Bernstein, B. (1974). *Class codes and control. Theoretical studies towards a sociology of language (2nd ed.)*. New York, NY: Schocken Books.
- Bourdieu, P., & Passeron, J. C. (1990). *Reproduction in education, society and culture*. London, England: Sage.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An invitation to reflexive sociology*. Chicago, IL: University of Chicago Press.
- Bowen, W.G., & Bok, D. (1998). *The shape of the river: Long-term consequences of considering race in college and university admissions*. Princeton, NJ: Princeton University Press.
- Bowen, W. G., Kurzweil, M. A., & Tobin, E. M. (2005). *Equity and excellence in American higher education*. Charlottesville, VA: University of Virginia Press.
- Brannon, T. N., & Walton, G. M. (2013). Enacting cultural interests: How intergroup contact reduces prejudice by sparking interest in an out-group's culture. *Psychological Science*, 24(10), 1947-1957.
- Brewer, M. B. (1999). The psychology of prejudice: Ingroup love or outgroup hate? *Journal of Social Issues*, 55(3), 429-444.

- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology, 30*(6), 745-778.
- Burkhauser, R. V., Feng, S., Jenkins, S. P., & Larrimore, J. (2012). Recent trends in top income shares in the United States: reconciling estimates from March CPS and IRS tax return data. *Review of Economics and Statistics, 94* (2), 371-388.
- Cheryan, 2007. Strategies of Belonging: Defending threatened identities. Unpublished Dissertation.
- Cohen, S., Alper, C. M., Doyle, W. J., Adler, N., Treanor, J. J., & Turner, R. B. (2008). Objective and subjective socioeconomic status and susceptibility to the common cold. *Health Psychology, 27*(2), 268-274.
- Cook, S. W. (1985). *Cooperative interaction in multiethnic contexts*. In N. Miller & M. B. Brewer (Eds.), *Groups in contact: The psychology of desegregation* (pp. 281-302). San Diego, CA: Academic Press.
- Covarrubias, R., & Fryberg, S. (2014). Movin' on up (to college): First-generation college students' experiences with family achievement guilt. *Cultural Diversity and Ethnic Minority Psychology*.
- Croizet, J., & Claire, T. (1998). Extending the concept of stereotype and threat to social class: The intellectual underperformance of students from low socioeconomic backgrounds. *Personality and Social Psychology Bulletin, 24*(6), 588-594.
- Delaney, R. (2010). About those unpaid internships. *The American Prospect*. Retrieved from [http://prospect.org/cs/articles?article\\_about\\_those\\_unpaid\\_internships](http://prospect.org/cs/articles?article_about_those_unpaid_internships).

- DiMaggio, P. (2012). Sociological perspectives on the face-to-face enactment of class distinction. *Facing social class: How societal rank influences interaction*. (pp. 15-38). New York, NY: Russell Sage Foundation.
- Dovidio, J. F., Gaertner, S. L., & Kawakami, K. (2003). Intergroup contact: The past, present, and the future. *Group Processes and Intergroup Relations*, 6(1), 5-21.
- Elo, I. T. (2009). Social class differentials in health and mortality: Patterns and explanations in comparative perspective. *Annual Review of Sociology*, 35, 553–572.
- Elsworth, G. R., Harvey-Beavis, A., Ainley, J., & Fabris, S. (1999). Generic interests and school subject choice. *Educational Research and Evaluation*, 5, 290–318.
- Fiske, S. T. (2011). *Envy up, scorn down: How status divides us*. New York, NY: Russell Sage Foundation.
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878-902.
- Fiske, S.T., & Markus, H.R. (Eds.). (2012). *Facing social class: How societal rank influences interaction*. New York, NY: Russell Sage Foundation.
- Freeman, J., (August, 2014). Warren applies the New Buffett Rule. *The Wall Street Journal*.
- Fryberg, S. A., & Markus, H. R. (2007). Cultural models of education in American Indian, Asian American, and European American contexts. *Social Psychology of Education*, 10, 213–246.
- Gaertner, S. L., Mann, J. A., Dovidio, J. F., Murrell, A. J., & Pomare, M. (1990). How does cooperation reduce intergroup bias? *Journal of Personality and Social Psychology*, 59(4), 692-704.

- Galotti, K. M. (1999). Making a "major" real-life decision: College students choosing an academic major. *Journal of Educational Psychology, 91*(2), 379-387.
- Galotti, K. M., Ciner, E., Altenbaumer, H. E., Geerts, H. J., Rupp, A., & Woulfe, J. (2006). Decision-making styles in a real-life decision: Choosing a college major. *Personality and Individual Differences, 41*(4), 629-639.
- Ganzeboom, H.B.G., & Treiman, D.J. (2003). Three internationally standardized measures for comparative research on occupational status. In: Hoffmeyer-Zlotnik JHP and Wolf C (eds) *Advances in Cross-National Comparison: A European Working Book for Demographic and Socio-Economic Variables*. New York: Kluwer Academic, 159–93.
- General Social Survey (GSS). (2001). iPOLL Databank, Roper Center for Public Opinion Research, University of Connecticut.
- Gilovich, T. (1981). Seeing the past in the present: The effect of associations to familiar events on judgments and decisions. *Journal of Personality and Social Psychology, 40*, 797-808.
- Golden, L. (2009). Flexible daily work schedules in U.S. jobs: Formal introductions needed? *Industrial Relations, 48*, 27-54.
- Grossmann, I. & Huynh, A. (2013). Where is the culture in social class? *Psychological Inquiry, 24* (2), 112-119.
- Haycock, K. (2001). Closing the achievement gap. *Educational Leadership, 58*, 6–11.
- Hogg, M. A., & Abrams, D. (1990). Social motivation, self-esteem and social identity. In D. Abrams, & M. A. Hogg (Eds.), *Social identity theory: Constructive and critical advances* (pp. 28–47). New York, NY: Springer-Verlag.

- Hogg, M. A., & Mullin, B. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. *Social identity and social cognition*. (pp. 249-279). Blackwell Publishing, Malden.
- Hogg, M. A., & Terry, D. J. (2001). Social identity theory and organizational processes. In M. A. Hogg & D. J. Terry (Eds.), *Social identity processes in organizational contexts* (pp. 1–12). Philadelphia, PA: Psychology Press.
- Hogg, M. A. (2006). *Social identity theory*. Stanford, CA: Stanford University Press.
- Horn, L., & Nunez, A. (2000). Mapping the road to college: First generation students' math track, planning strategies, and context of support (Report No. NCES 2000–153). Washington, DC: National Center for Education Statistics, U.S. Government Printing Office.
- Hossler, D., Schmit, J., & Vesper, N. (1999). *Going to college: How social, economic, and educational factors influence the decisions students make*. Baltimore, MD: Johns Hopkins University Press.
- Hout, M. (2008). How Class Works in Popular Conception: Most Americans Identify with the Class Their Income, Occupation, and Education Implies for Them. Ch. 2 in *Social Class: How Does It Work?*, edited by Annette Lareau and Dalton Conley. New York, NY: Russell Sage Foundation.
- Jackson, L. A., Sullivan, L. A., Harnish, R., & Hodge, C. N. (1996). Achieving positive social identity: Social mobility, social creativity, and permeability of group boundaries. *Journal of Personality and Social Psychology*, 70(2), 241-254.

- Johns, M., Inzlicht, M., & Schmader, T. (2008). Stereotype Threat and Executive Resource Depletion: Examining the Influence of Emotion Regulation. *Journal of Experimental Psychology. General*, 137(4), 691–705.
- Johnson, S. E., Richeson, J. A., & Finkel, E. J. (2011). Middle class and marginal? socioeconomic status, stigma, and self-regulation at an elite university. *Journal of Personality and Social Psychology*, 100(5), 838-852.
- Judd, C. M., Kenny, D. A., & McClelland, G. H. (2001). Estimating and testing mediation and moderation in within-subject designs. *Psychological Methods*, 6(2), 115-134.
- Kalleberg, A. (2009). Precarious work, insecure workers: *Employment relations in transition. American Sociological Review*, 74, 1-22.
- Kalleberg, A. (2011). *Good jobs, bad jobs*. New York, NY: Russell Sage.
- Karabel, J. 1979. The Failure of American Socialism Reconsidered. *The Socialist Register* 18: 204-207.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110(2), 265-284.
- Killgore, L. (2009). Merit and competition in selective college admissions. *Review of Higher Education: Journal of the Association for the Study of Higher Education*, 32(4), 469-488.
- Kim, H. S. (2002). We talk, therefore we think? A cultural analysis of the effect of talking on thinking. *Journal of Personality and Social Psychology*, 83, 828–842.
- Kozol, J. (1991). *Savage Inequalities: Children in America's Schools*. New York, NY: Crown.
- Kraus, M.W., & Keltner, D. (2009). Signs of socioeconomic status: A thin-slicing approach. *Psychological Science*, 20, 99-106.

Kraus, M. W., Piff, P. K., Mendoza-Denton, R., Rheinschmidt, M. L., & Keltner, D. (2012).

Social class, solipsism, and contextualism: How the rich are different from the poor. *Psychological Review*, *119*(3), 546-572.

Kraus, M. W., & Stephens, N. M. (2012). A road map for an emerging psychology of social class. *Social and Personality Psychology Compass*, *6*(9), 642-656.

Kraus, M. W., Tan, J. J. X., & Tannenbaum, M. B. (2013). The social ladder: A rank-based perspective on social class. *Psychological Inquiry*, *24*, 81-96.

Low, K. S. D., & Rounds, J. (2007). Interest change and continuity from early adolescence to middle adulthood. *International Journal for Educational and Vocational Guidance*, *7*(1), 23-36.

Low, K. S. D., Yoon, M., Roberts, B. W., & Rounds, J. (2005). The stability of vocational interests from early adolescence to middle adulthood: A quantitative review of longitudinal studies. *Psychological Bulletin*, *131*(5), 713-737.

Lahaie, C., Earle, A., & Heymann, J. (2013). An uneven burden: Social disparities in adult caregiving responsibilities, working conditions, and caregiver outcomes. *Research on Aging*, *35*(3), 243-274.

Luhtanen, R. K., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, *18*(3), 302-318.

Markus, H.R., & Kitayama, S. (2003). Culture, self, and the reality of the social. *Psychological Inquiry*, *14*, 277-283.

Morland, K., Wing, S., Roux, A. D., & Poole, G. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventative Medicine*, *22*, 23- 29.

- Mullin, B., & Hogg, M. A. (1999). Motivations for group membership: The role of subjective importance and uncertainty reduction. *Basic and Applied Social Psychology, 21*(2), 91-102.
- Operario, D., Adler, N., Williams, D.R. (2004). Subjective Social Status: Reliability and predictive Utility of Global Health. *Psychology and Health 19*(2): 237-46.
- Paladino, P., & Castelli, L. (2008). On the immediate consequences of intergroup categorization: Activation of approach and avoidance motor behavior toward ingroup and outgroup members. *Personality and Social Psychology Bulletin, 34*(6), 755–768.
- Pascarella, E., Pierson, C., Wolniak, G., & Terenzini, P. (2004). First generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education, 75*, 249–284.
- Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49*, 65-85.
- Pettigrew, T., & Tropp, L. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology, 90*(5), 751–783.
- Phinney, J. S., & Haas, K. (2003). The process of coping among ethnic minority first-first generation college freshmen: A narrative approach. *The Journal of Social Psychology, 143*, 707–726.
- Piketty, T., & Saez, E. (2001). Income inequality in the United States, 1913–1998 (series updated to 2000 available) (working paper no. 8467). (Retrieved from <http://www.nber.org/papers/w8467>) National Bureau of Economic Research.
- Pittinsky, T. L., Shih, M., & Ambady, N. (1999). Identity adaptiveness: Affect across multiple identities. *Journal of Social Issues, 55*(3), 503-518.
- Rothsten, R. (2004). Class and the classroom. *American School Board Journal, 191*, 16–22.

- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg self-esteem scale. *Personality and Social Psychology Bulletin*, 27(2), 151-161.
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, 115(2), 336-356.
- Singh-Manoux, A., Adler, N. E., & Marmot, M. G. (2003). Subjective social status: Its determinants and its association with measures of ill-health in the Whitehall II study. *Social Science & Medicine*, 56(6), 1321-1333.
- Snibbe, A. C., & Markus, H. R. (2005). You can't always get what you want: Educational attainment, agency, and choice. *Journal of Personality and Social Psychology*, 88(4), 703-720.
- Stephan, J. L., Rosenbaum, J. E., & Person, A. E. (2009). Stratification in college entry and completion. *Social Science Research*, 38(3), 572-593.
- 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., Markus, H. R., & Fryberg, S. A. (2012). Social class disparities in health and education: Reducing inequality by applying a sociocultural self model of behavior. *Psychological Review*, 119(4), 723-744.
- Stephens, N. M., Markus, H. R., & Phillips, L. T. (2014). Social class culture cycles: How three gateway contexts shape selves and fuel inequality. *Annual Review of Psychology*, 65, 611-634.

- Stephens, N. M., Brannon, T. N., Markus, H. R., & Nelson, J. E. (2015). Feeling at home in college: Fortifying school-relevant selves to reduce social class disparities in higher education. *Social Issues and Policy Review*, 9(1), 1-24.
- Stewart, A.J., & Dottolo, A.L. (2005). Socialization to the academy: Coping with competing social identities. In G. Downey, J.S. Eccles, & C.M. Chatman (Eds.), *Navigating the future: Social identity, copying and life tasks* (pp. 167-187). New York, NY: Russell Sage.
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information/sur Les Sciences Sociales*, 13(2), 65-93.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33, 47.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1-39.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relations* (pp. 7-24). Chicago: Nelson-Hall.
- Tracey, T. J. G., & Rounds, J. (1996). The spherical representation of vocational interests. *Journal of Vocational Behavior*, 48(1), 3-41.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford and New York: Blackwell.
- US News and World Report <<http://colleges.usnews.rankingsandreviews.com/best-colleges>>.

Walton, G., & Cohen, G.J. (2007). A question of belonging: Race, social fit, and achievement.

*Journal of Personality and Social Psychology*, 92, 82-96.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures

of positive and negative affect: The PANAS scales. *Journal of Personality and Social*.

## APPENDIX

The image shows a screenshot of a Yahoo News article. At the top, there is a navigation bar with links for Home, Mail, News, Sports, Finance, Weather, Games, Groups, Answers, Screen, Flickr, Mobile, and More. Below this is the Yahoo! News logo and a search bar with 'Search News' and 'Search Web' buttons. On the left side, there is a vertical menu with categories like News Home, U.S., World, Politics, Tech, Science, Health, Odd News, Opinion, Local, Dear Abby, Comics, ABC News, Yahoo Originals, and Photos. The main article content is as follows:

## Report: 26% of Americans "Working Class"

By THOMAS BEAUMONT and CATHERINE LUCEY  
8 hours ago

WASHINGTON, DC (AP) Report: American working class population steady at 26%.

The recently published yearly Social Mobility Study conducted by the U.S. Bureau of Labor and Statistics for the year 2013, indicates that 26% of the country is made up of working class Americans, roughly the same as indicated by the study in 2012.

The report is not a good sign for many hopeful American businesses and investors, who were hoping that a change in the population of working class Americans might indicate a pick-up in the U.S. economy, since income disparity is often used as a U.S. social mobility marker.

While there is some dispute as to what exactly "working class" means, working class individuals are typically classified as those who come from families where both parents are without a 4-year college degree.

What is clear though from the report is that people who are from working class families still make up a sizable portion of the American population; something that does not seem to be changing.

Working class individuals make up the force of Americans who more often perform trade work with their hands, the largest and most common occupations include those in construction, manufacturing, and service industries. In addition, some less physically demanding service related positions such as telemarketing are also considered "working class" occupations.

The U.S. Department of Health, U.S. Department of Education, and other government agencies insist that addressing the issue of income inequality is still a major concern. Those in working class households are more likely to be injured while on the job, experience different health related outcomes, and have different life expectancies. Interestingly, working class individuals are less likely to utilize health care services even when insured.

The report also detailed differences in economic potential and geographic mobility. Individuals from working class households on average made a \$23,000 yearly difference between their middle class counterparts, and were 67% more likely to take up jobs near their hometowns.

Similarly, the report finds that children raised in working class households are likely to remain working class as they move into the workforce. Indeed, in 2013 there was very little movement occurring between different social groups in America.

*Figure 6.* Copy of news article used in Study 2a and Study 2b for the “working class” label prime condition. In the “lower class” label prime condition presents the same article but with “lower class” in place of “working class.”

*Study 2a Exploratory Mediation Analyses*

		warmth	Competence	Status	Competition	Proud	Hard working	dependable	Resilient	c	c'
Model 1	a path	.25***	.48***								
	b path	.03	.02							.37*	.35
Model 2	...	.25***			-.27**					.37*	.21
		.10			-.53***						
Model 3	...	.37***							.25***	.39*	.32
		.14							-.03		
Model 4	...	.26***			-.26**			.56***		.35*	.12
		-.07			-.50***			.21			
Model 5	...	.25***						.53***	.39***	.35*	.24
		-.17						.27*	.04		
Model 6	..	.24***			-.28**		.63***	.54***	.37***	.39*	.08
		-.10			-.52***		.15	.12	-.02		

*Table 1.* Exploratory mediation analysis predicting group identification from lower and working class conditions and stereotype content. Column headers represent mediation variables. Values indicated represent unstandardized pathway coefficients. Variables were selected for exploratory analyses based on a correlation matrix. Blanks indicate the variable was not included in the given mediation model.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

## Study 2a Mediations

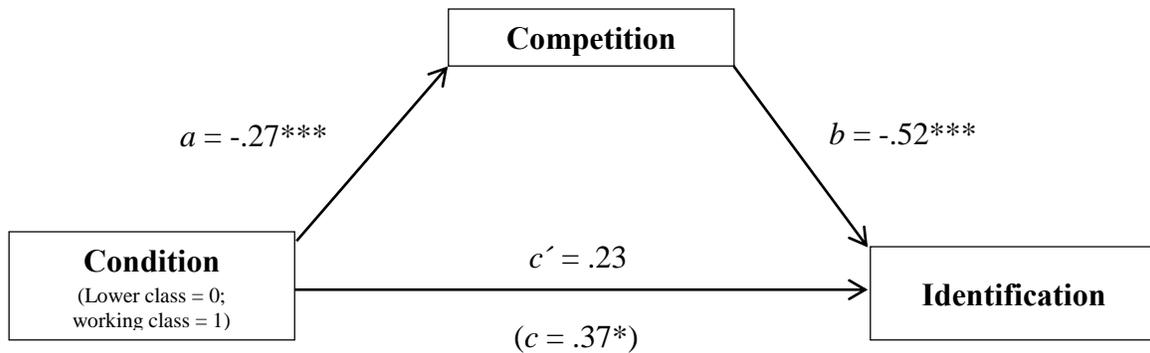


Figure 7. Mediation model predicting group identification from lower and working class conditions and stereotype content associated with group competition.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

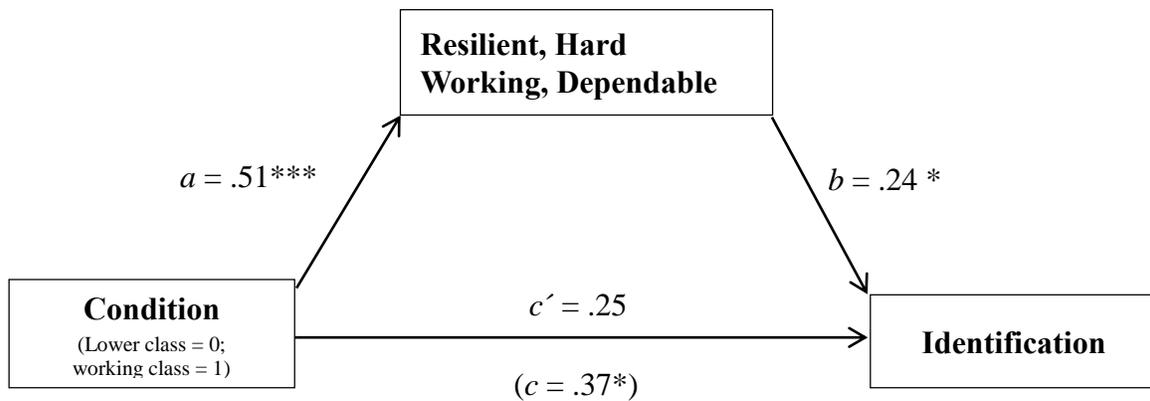


Figure 8. Mediation model predicting group identification from lower and working class conditions and stereotype content associated with the mean composite of resilient, hard-working, and dependable.  $c$  = total effect.  $c'$  = direct effect.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

## Study 2b Mediations

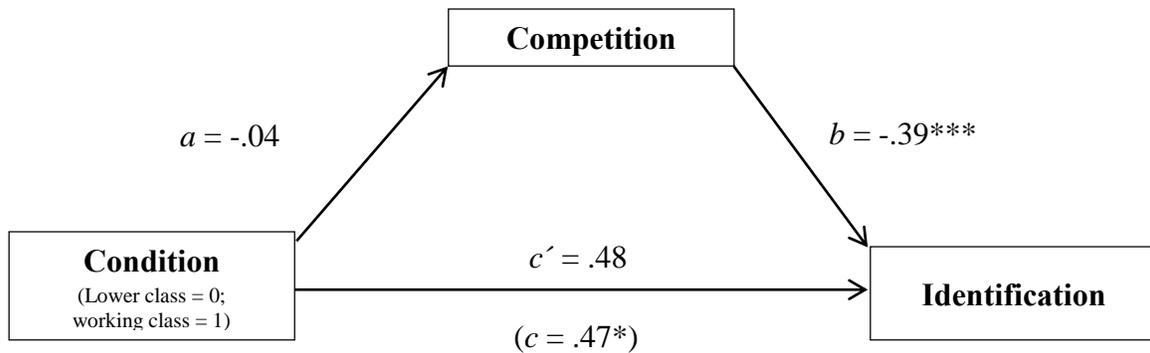


Figure 9. Mediation model predicting group identification from lower and working class conditions and stereotype content associated with group competition.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

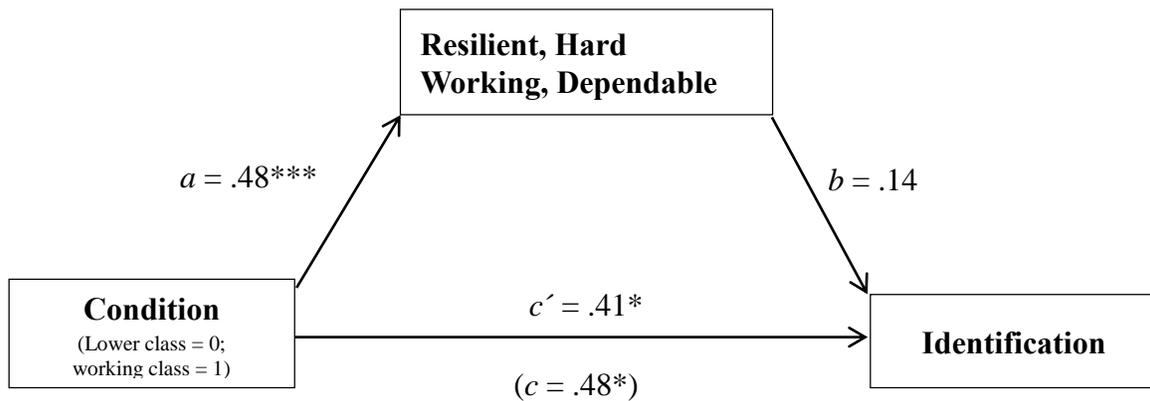


Figure 10. Mediation model predicting group identification from lower and working class conditions and stereotype content associated with the mean composite of resilient, hard-working, and dependable.  $c$  = total effect.  $c'$  = direct effect. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .