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Toward a Psychological Study of Class Consciousness: Development and Validation of a Social Psychological Model

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Abstract

While social class has recently become a prominent topic in social psychological research, much of this effort has focused on the psychological consequences of objective and subjective indices of class (e.g., income, perceived status). This approach sheds light on the consequences of social class itself, but overlooks a construct of central importance in earlier theorizing on class: class consciousness, or the extent to which individuals acknowledge and situate themselves within class relations. The current paper offers a psychological model of class consciousness comprised of five elements: awareness of social class, perceptions of class conflict, beliefs about the permeability of class groups, identification with a class group, and personal experience of being treated as a member of one's class. We offer a measure assessing those central dimensions and assess differences in these dimensions by age, gender, indices of social class, political ideology, and among different class groups. Finally, we offer suggestions for how an awareness of class consciousness may enrich social psychology and ultimately foster political change.

Keywords: social class, inequality, identity, political psychology

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In the wake of the 2008 financial crisis, commentators and politicians have given new attention to the issue of economic inequality. For example, recent work by economists (e.g., [Piketty, 2014](#)) has gone to great lengths to demonstrate that capitalism, at least in its current form, tends to create and perpetuate inequalities. For their part, psychologists have shown a renewed interest in the consequences of social class differences (e.g., [Kraus, Rheinschmidt, & Piff, 2012](#)) and perceptions of wealth distribution (e.g., [Norton & Ariely, 2011](#)).

But despite this new focus on economic inequality, these issues are certainly not new. Comprehensive and influential analyses of the causes and effects of economic inequality were offered nearly 150 years ago by Karl [Marx \(1867/1976\)](#). In the wake of Marx's critique, theorists writing under the Marxist banner (despite their disagreements) have developed a rich theoretical framework for understanding capitalism's economic and cultural effects, as well as its consequences for the psychology of social class.

The current paper attempts to enrich current social psychological understandings of social class with one core theoretical construct derived from the Marxist tradition: the idea of *class consciousness*, or the extent to which individuals acknowledge and situate themselves within class relations. This construct is of central theoretical and political importance: It is only when individuals acknowledge their (typically lower) status within class relations that revolutionary change is possible (Žižek, 2010). In the absence of this consciousness, people tend to see themselves as isolated individuals, and work to improve their status through individual, rather than collective, means (Wright, Taylor, & Moghaddam, 1990).

We begin by offering a theoretical review of this construct with an eye toward developing a model of class consciousness that is amenable to social psychological research. We then present and validate a self-report measure of five unique dimensions of this construct. Given the richness of the Marxist perspective, and the relatively recent development of social psychological interest in social class, we conclude by discussing the ways in which sensitivity to class consciousness can enrich psychological science.

Social Psychological Treatments of Social Class

Most social psychological research on social class conceptualizes class as a matter of relative subjective status (e.g., Piff et al., 2010) or objective indices such as parental education (e.g., Stephens, Markus, & Townsend, 2007), income (e.g., Kraus, Piff, & Keltner, 2009), or relative rank in society (Kraus, Tan, & Tannenbaum, 2013). This burgeoning line of research is invaluable for understanding the consequences of both social perception and objective resources on individual psychology. For example, research finds that individuals of higher (vs. lower) subjective social class are less prosocial (Piff et al., 2010), more likely to commit unethical behaviors (Piff et al., 2012), and less likely to acknowledge situational causes of behavior (Kraus, Piff, & Keltner, 2009).

This research also points to some important discrepancies between objective and subjective indices of social class. For example, people often inflate their subjective class status compared to their objective class standing (Adair, 2001; Evans & Kelley, 2004). These discrepancies between objective and subjective class have important consequences for political behavior: individuals who (subjectively) inflated their social class were significantly more likely to support conservative candidates (Sosnaud, Brady, & Frenk, 2013) and when objective social class was held constant, individuals manipulated to believe they were of higher social class were less supportive of policies aimed at attenuating economic inequality (Brown-Iannuzzi, Lundberg, Kay, & Payne, 2015).

Although this research demonstrates the importance of attending to the psychology of social class, research thus far has largely failed to acknowledge the underlying importance of the ways people *experience* social class. Objective measures of social class (e.g., income) are important and easily assessed, but provide little insight into how individuals understand class or class relations. The study of subjective social class measures perceptions of relative status (certainly an integral component of the awareness of class), but in a limited way. These subjective class measures and manipulations (e.g., Piff et al., 2010) are always at the *personal* level (an individual indicates their own relative status). Hence, these approaches cannot reveal anything about the awareness of collective, *class-based* differences or perceptions of an economic structure in which class groups exist. An individual may feel comparatively wealthy at the personal level, yet still acknowledge that she does not own capital and has little control over her labor. That is, despite felt personal status, an individual may be motivated to improve conditions at the collective level, such as by voting in support of stronger capital gains taxes or participating in a labor union.

One area of research that comes close to the study of class consciousness is research on *relative deprivation* (for a summary, see Smith, Pettigrew, Pippin, & Bialosiewicz, 2012). This research focuses on the awareness that oneself or one's group is unfairly disadvantaged by the distribution of resources. Relative deprivation research focusing on the individual-level falls short of class consciousness for the same reasons as subjective social class: neither sufficiently addresses the extent to which the individual acknowledges and/or situates themselves within class-based disparity. In contrast, research focusing on collective relative deprivation is more amenable to the study of class consciousness, but this literature has predominantly focused on relative deprivation in specific contexts, including racial/ethnic (e.g., Osborne, Sibley, & Sengupta, 2015), gender (e.g., Jackson, 1989), and political groups (e.g., immigrants vs. citizens; Grant, Abrams, Robertson, & Garay, 2015; Scotland vs. England; Abrams & Grant, 2012).

This research on relative deprivation is invaluable to an understanding of the psychology of disparity, yet it leaves out critical elements of class consciousness. For example, to the extent that psychologists have focused on perceptions of unjust resource distribution on the basis of racial or ethnic group membership, this ignores the role of *class*-based disparity which overlaps, but is distinct from, these groups. But even if research were to examine relative deprivation in the context of social class, the perception that one's class group is unfairly disadvantaged leaves out other crucial elements of class consciousness specified in Marxist theory, including identification with a class group or the awareness of social class as a socially structuring phenomenon (reviewed below).

In short, although social psychologists have examined the effects of individual income or parental education (objective) and of perceptions of individual status (subjective), the *experience* of social class as an intergroup and structural phenomenon has received comparatively little attention in psychology. Relative deprivation research in psychology has predominantly focused on localized sites of disparity (e.g., racial/ethnic, political) at the exclusion of social class awareness. This is a striking absence given the long-standing and central importance afforded to class awareness in Marxist theory and research. We turn to this tradition next to explore what social psychologists might gain by attending to Marxist theory.

The Elements of Class Consciousness

The notion of class consciousness can be traced back to Marx's early thinking on capitalism. For example, in *The Poverty of Philosophy* (1847/1999), Marx writes, "The combination of capital has created for this mass (of workers), a common situation, common interests. This mass is thus already a class as against capital, *but not yet for itself*" (p. 189, emphasis added). While the distribution of resources into fewer and fewer hands creates an (objective) group of individuals without capital, this structure does not immediately create awareness that those individuals are members of a class whose collective interests are defined in relation to those who do have capital (i.e., class consciousness). For Marx, class consciousness is an achievement of workers who begin to acknowledge their shared status as laborers and their collective interests in changing labor relations.

Toward a Psychological Approach to Class Consciousness

Subsequent development of the notion of class consciousness owes much to the work of Georg Lukács. Central to class consciousness for Lukács is the recognition that social relations are neither natural nor inevitable (which reflects a 'false consciousness'): rather, they are the artificial construction of individuals with the power to define the norms of social life (Lukács, 1923/1971). Those with the power to determine social relationships (e.g., employers, politicians) have the unique opportunity to create social relations for their benefit (e.g., lower wages, tax cuts for

the wealthy). The economically oppressed can only combat the interests of the ruling class by recognizing the artificial nature of class relations and learning to counteract this construction by pursuing their own (revolutionary) interests.

Although Lukács' understanding of class consciousness is nuanced and has been broadly influential, it must largely be set aside for the purposes of a psychological approach. Lukács (1923/1971) explicitly rejects the notion that class consciousness is a feature of individual psychology: "This analysis establishes right from the start the distance that separates class consciousness from the empirically given, and from the psychologically describable and explicable ideas which men form about their situation in life" (p. 51). Rather, Lukács maintains that class consciousness must be understood as a *collective* phenomenon, arising only to the extent that a class pursues its own (rather than another's) interests (a view many believe Marx originally intended as well; Fantasia, 1995). By this view, a study of class consciousness is the proper purview of historians and social theorists concerned with group behavior.

An alternative perspective on class consciousness proposes that it is psychologically and practically valuable to understand the extent to which individuals situate themselves within structural and historical processes related to their social class.

Gordon Marshall (1983) proposed that sociologists must rethink collective notions of class consciousness in terms of the (conscious) experiences of individuals. Marshall notes that the collective activity of class groups is a function of the awareness of individual members of those class groups. If social scientists are to understand how a class as a whole pursues (or fails to pursue) its interests, they must acknowledge the motives and goals of the individual agents responsible for that pursuit. This approach for understanding individuals and their relationship to broad social structure is more akin to a psychological understanding and has helped to shed light on the political consequences of individual-level class consciousness (Goldthorpe & Marshall, 1992; Travers, 1999).¹ For example, ethnographic studies of class consciousness have helped to illuminate the ways in which British workers understand their class situation (despite their relative financial security) and the extent to which this awareness contributes to frustration with the political landscape of the UK (Devine, 1992).

Independent of this research, social psychologists have explored the motivations behind collective action like the pursuit of group interests, though rarely with a focus on social class specifically. In a systematic review, van Zomeren, Postmes, and Spears (2008) conclude that individuals are more likely to take actions to pursue group interests when they highly identify with a group, perceive a group-based discrepancy as illegitimate, and feel capable of correcting the group-based disparity. For groups based on vocation (e.g., workers vs. managers), perceived injustice is a particularly powerful motivator of collective action. For example, research finds that employees who perceive workplace relationships as unfair are particularly supportive of labor unions (Blader, 2007). This research helps explain when people are likely to take action on behalf of a social class, but it offers only a partial insight into the awareness of class as a social phenomenon. Next, we integrate literature on collective identity with ethnographic insights from sociology to elaborate a more complete social psychological model of class consciousness.

A Social Psychological Model of Class Consciousness

In elaborating a model of class consciousness suitable for social psychological research, we will draw heavily on the ethnographic work of Michael Mann (1973). In particular, he identifies four elements of individual class con-

sciousness: 1) *class totality*, the perception that class has a structuring effect on social life; 2) *class opposition*, the perception that class interests are fundamentally opposed; 3) *class identity*, or identification with a class group; and 4) the extent to which people envision alternative (classless) forms of social organization.

Of these four components, we will set aside the fourth because it does not reflect awareness or consciousness of class *per se*. The extent to which people imagine alternatives to social class is no doubt important to social and political psychologists. However, it is difficult to do justice to the range of possible alternatives to class, particularly when certain Marxist traditions valorize the effort to explicitly *refrain* from defining post-class forms of social organization (Weeks, 2011). Deciding which alternatives to social class merit inclusion in a psychological model of class consciousness (and which do not) risks importing the values of the researcher into the model. Moreover, the particular possibilities that an individual imagines are not essential for understanding how they think about social class as it presently exists in society. We will focus on class consciousness in this latter regard, that is, how individuals think about the existence of social class in society, to offer a narrower and more easily assessed conceptualization of the construct that avoids commitments to any particular form of classless social organization.

Of the three remaining factors, it is notable that each corresponds to a different level of analysis. Class totality refers to perceptions of social *structure* as a whole (i.e., whether class groups actually exist in society). Class opposition focuses on the *intergroup* relations of classes (i.e., whether classes are in conflict or not). Class identity assesses a *personal* level, or the extent to which the individual finds his or her social class meaningful for self-reference. Although these levels are related, perceptions of these levels are fundamentally independent: for example, an individual could believe that classes are in conflict (intergroup) but see himself or herself as outside of that class structure at the personal level. This hierarchical structure captures the rich complexity of the awareness of class at the personal, intergroup, and societal levels and we seek to maintain that richness in our model.

Another prominent early theory of class consciousness is offered in the work of Patricia Gurin (Gurin, Miller, & Gurin, 1980; Miller, Gurin, Gurin, & Malanchuk, 1981), who specifies four elements of group consciousness that hold for class consciousness, as well as gender and race consciousness. The first is *identification* with a class group, in agreement with Mann's taxonomy. The second factor is *power discontent*, or a feeling of group deprivation. Next, there is a *rejection of legitimacy*, or a perception that hierarchies are unjust. Finally, there is *collectivist orientation*, in essence a motivation to take collective action to correct for an unjust distribution of resources.

Gurin's model rightly draws attention to the perceived legitimacy of class hierarchy. As we note in explaining our model below, this is a critical element of class consciousness that is neglected in Mann's taxonomy. But as research on relative deprivation (reviewed above) demonstrates, hierarchies only elicit anger and the motivation to correct for inequality when they are perceived as illegitimate.

Despite the strength of Gurin's model of class consciousness, it is incomplete in two crucial ways. First, it lacks a structural element that is prominent in Mann's taxonomy: the awareness of social class as a socially structuring phenomenon. Gurin's model only addresses intergroup (power discontent, rejection of legitimacy, collectivist orientation) and personal (identification) levels and is thus incomplete.

Secondly, Gurin's fourth factor conflates class consciousness with motivation to take collective action to address inequality, two arguably separate phenomena. Consider the motivation to participate in a labor strike. What if this strike is joined for purely non-class based reasons? For example, conformity to one's social network commonly

motivates participation in political movements (van Stekelenburg, 2013), thus individuals might be motivated to support a strike for a range of reasons (e.g., supporting their friends) that have nothing to do with addressing class-based disparity. In such cases, collective action may address class-based inequality (meeting Lukács' social definition of class consciousness), but an individual's motivations to participate in this action might not reflect class consciousness at the personal level.

Conversely, it is also possible for an individual to experience class consciousness without any motivation to take collective action. A wealthy individual could be aware of the existence of social class and even believe that class differences are fundamentally illegitimate, yet for selfish reasons lack any real motivation to correct for class disparity. Although class consciousness and the motivation to correct for inequality are closely related, it is conceptually problematic to assume that the latter is an element of the former.

Next, we offer a conceptual development of Mann's and Gurin's taxonomies by integrating their theorizing with recent social psychological research on other intergroup processes. Social class is, in many ways, similar to other social groups, such as those based on race or gender. However, there are unique aspects to the nature of class and class relations that call for considerably greater nuance.

Structural awareness — First, a suitable model of class consciousness must acknowledge the extent to which individuals see social class as meaningfully structuring the social world. Following Marx's original understanding and Mann's ethnographic research, a core element of class consciousness is the acknowledgement that economic resources are divided on the basis of class groups, rather than on the basis of individual merits alone. We will refer to this dimension descriptively as **class awareness**, an acknowledgement that class is a socially structuring phenomenon.

Class awareness is a specific form of *group entitativity*, the extent to which groups are perceived as having a social reality (Campbell, 1958). Research on entitativity finds that people vary in the extent to which they see groups of people as meaningfully connected, rather than as isolated individuals (Lickel et al., 2000). In the same way, people may see economic outcomes as distributed to individuals specifically (in which case social class groups may be perceived as a mere fiction), or they may acknowledge that the distribution of resources is in part a function of class groups (in addition to other types of groups, e.g., gender or racial).

Intergroup conflict and boundaries — It is also important to acknowledge the fact that understandings of class relations are an intergroup phenomenon. Building on Lukács's (and Mann's) thinking, we propose a defining element of class consciousness is the recognition that class interests are fundamentally opposed. We will refer to this dimension as **class conflict**.

Perceptions of intergroup conflict have been studied in other domains. For example, perceived competition between groups has been considered as a factor underlying racial prejudice (e.g., Bobo & Hutchings, 1996) and perceptions of intergroup competition form the basis for anti-immigration attitudes (Esses et al., 2001; Esses, Jackson, & Armstrong, 1998). While this dimension of intergroup experience has been acknowledged in the context of racial or ethnic groups, its role in class consciousness remains unexplored.

The notion of inherent conflict is uniquely important in the context of class because, as Lukács noted, those in the upper class wield considerably more social and political power in any conflict between classes. Hence, a

perception of class conflict is, in part, a perception of an unjust social arrangement in which groups compete on politically uneven footing.

In addition to perceptions of class conflict, Gurin's theorizing acknowledges that a full understanding of class consciousness must recognize perceptions of the *legitimacy* of class-based differences. In relationships of social inequality that are sustained without overt oppression, the group in power often denies that outcomes are contingent upon group membership, and instead valorizes individualism as the key factor in social organization (Jackman, 1994). Emphasizing the individual discredits group-based complaints about unfair treatment and undermines collective action for social change, channeling the discontent of the lower classes into personal attempts at social mobility that are less threatening to the existing social system. As Jackman wrote, "The surest method of social control is to induce subordinates to regulate themselves. To that end, the unmediated weapon of choice is ideology" (p. 59, 1994).

In the United States (US), the ideological belief in meritocracy, or the view that resources are distributed due to individual merit, reinforces the value of economic individualism and dissuades individuals from acknowledging group-based factors behind inequality (Hochschild, 1995; Tyler, Boeckmann, Smith, & Huo, 1997). Marxist theory converges on this central idea that ideologies persuade individuals to see their outcomes as a function of *personal*, rather than *collective*, factors and importantly, to see the distribution of resources as inherently justified (Žižek, 1989).

Given the central importance of perceptions of injustice in motivating collective action (e.g., van Zomeren et al., 2004, 2008), perceptions of the (il)legitimacy of social class position are a crucial component for understanding how individuals think about social class. System justification research finds that endorsement of meritocracy legitimizes social inequality by allowing individuals a plausible explanation for why certain individuals or groups receive comparatively fewer resources (e.g., Jost, Pelham, Sheldon, & Sullivan, 2003). Similarly, research on relative deprivation demonstrates that perceived inequalities can be acknowledged without necessarily feeling that the inequality is illegitimate. It is only when individuals feel that they have less than others, and that differences lack a sufficient ideological justification that they elicit anger and thereby motivate reparative action (Leach, Iyer, & Pedersen, 2006).

In this way, class groups are seen as legitimate only to the extent that individuals believe class group membership fluidly responds to an individual's hard work and effort, which implies that mobility between classes is possible for the deserving. In contrast, class consciousness promotes an awareness that class boundaries are illegitimate and that class group membership is largely determined by factors outside the individuals' control. For example, students raised in more interdependent lower class households are systematically disadvantaged in the highly independent college system (e.g., Stephens, Hamedani, & Destin, 2014), a fact that serves to illegitimately undermine mobility from one class to another.

We therefore follow Gurin in proposing that a psychological model of class consciousness must have some factor addressing the perceived legitimacy of class group membership. We refer to this dimension as **class impermeability**, the perception that class boundaries are illegitimate and impermeable (vs. legitimate and permeable).

It should be noted that we have collapsed *legitimacy* and *permeability* into one construct, seemingly in contrast to prior theorizing within social psychology. Social identity theory (SIT; Tajfel & Turner, 1986) infers that a social system may be seen as permeable (i.e., individuals can move up and down the social strata based upon their

own actions) while at the same time being viewed as illegitimate. For example, a worker might be able to secure a promotion at work through personal acquaintance with a manager (permeability), yet they may still view this basis for promotion as illegitimate.

Class-based hierarchies are unique, however, insofar as the presence of impermeable class lines in an ostensibly “meritocratic” society also demonstrates the illegitimacy of the social structure. As theorizing on ideology above illustrates: the perception that class lines are permeable means that there can be no class-based exclusion of resources. In other words, a permeable system is assumed to legitimately distribute resources and outcomes based on individual merit. Any perceived impermeability between classes at the same time reflects skepticism about the legitimizing role of meritocratic ideology.

Our introduction of this second intergroup factor acknowledges the importance of the perceived rigidity of class categories that is not reducible merely to perceived conflict between the groups. Members of conflicting groups (e.g., Democrats vs. Republicans) could still believe that superordinate group identities (e.g., being American; Wenzel, Mummendey, & Waldzus, 2007) allow individual members to “change sides” in the perceived conflict over time. Given the importance of legitimizing ideologies like meritocracy in encouraging perceptions of fluid movement between social class groups, a psychological model of class consciousness must acknowledge perceived impermeability as an additional factor.

Personal identification and experience — In both Mann and Gurin’s conceptions of class consciousness, a central component is seeing oneself as a member of a social class group. Other recent perspectives in education research (Rubin et al., 2014) similarly call for an awareness and attentiveness to subjective self-definition into a class group. However, recognition of class at the structural and intergroup levels need not entail that an individual *identifies* with a class group or its interests. Drawing upon these prior approaches, as well as SIT (Tajfel & Turner, 1986), we propose that **class identification** is a central component of class consciousness. The social groups that people find meaningful are important references for how they define their *personal* selves (Haslam, Ellemers, Reicher, Reynolds, & Schmitt, 2010). Identifying with a social group, such as a social class, generates a feeling of belonging and self-worth related to the group as well as informing perceptions, attitudes, and behaviors based on group norms (Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; Hogg & Reid, 2006). This can have important consequences on how an individual understands and interacts with her social environment as the group’s interests and objectives become central for the individual (Hogg & Reid, 2006; Turner & Oakes, 1997).ⁱⁱ

But identification is only one aspect of individual-level awareness of class structure. Beyond merely seeing oneself as a member of a class group, people may have personal experiences attributable to class structure: they may experience discrimination on the basis of their class (e.g., Cozzarelli, Wilkinson, & Tagler, 2001; Feather, 1974; Lemieux & Pratto, 2003) or feel that others treat them differently because of their standing in society. For example, research shows that students from lower income households who were reminded of that fact subsequently performed worse on a difficult academic task due to stereotype threat (Spencer & Castano, 2007), in much the same way as members of negatively stereotyped gender and racial groups.

Perceptions of differential treatment on the basis of one’s social class are arguably highly related to identification with a class group (Branscombe, Schmitt, & Harvey, 1999), but there are good reasons for treating them as independent constructs. For example, perceptions of gender discrimination attenuated the negative effects of self-esteem threatening information, but only among highly identified women (Hansen & Sassenberg, 2006). Although

the relationships between identification and perceived discrimination are complex (see Schmitt et al., 2014), the two factors are quite independent and worthy of unique attention.

How might this occur in the context of social class? For example, one could feel that one is middle class, but that it has no bearing on how others treat that individual. Alternatively, one could feel that they are treated as lower class, yet not feel that they personally are a member of that group. Thus we argue that the extent to which personal experiences are attributable to class structure is an essential component for understanding how people think about the effects of class in their own life and one that is wholly distinct from class identification. We refer to this construct as **class experience**.

Summary

Combining these five conceptually distinct dimensions of class consciousness, we offer the first integrative psychological model of class consciousness incorporating perceptions of social structure (awareness), class relations (conflict and impermeability), and personal experience with class (identification and experience). In essence, class consciousness comprises the **awareness** of the existence of class groups, recognition of the **conflicting** interests of those groups and a dismissal of the ideological belief that these groups are founded on legitimate systems that allow class to be **permeable**. At the personal level, class consciousness requires **identifying** with one's class group and **experiencing** the social world as a member of that class.

The Current Study

To provide support for our structural model, we constructed and validated the Multidimensional Class Consciousness Scale (MCCS), a self-report measure of class consciousness. Based on our theorizing and on prior ethnographic research, we initially created a pool of items for each class consciousness construct with the exception of identification (for which a previously validated identification measure was used; Luhtanen & Crocker, 1992). We conducted a confirmatory factor analysis to test whether the observed data fit our structural model. We expected that our five factor model would adequately fit the observed data and that no factors would be redundant (i.e., efforts to combine factors would result in significant detriments to model fit).

In addition to this primary goal, we offer an initial, exploratory analysis of the extent to which individual differences on the MCCS vary as a function of demographic variables. We tested the extent to which the five dimensions of class consciousness are predicted by important demographic variables, including income, subjective social class, and political ideology. We also tested for between-group differences among self-identified class groups in our sample (e.g., working class vs. middle class).

Method

Two-hundred fifty-five adults in the US (111 Women, $M_{age} = 33.01$ ($SD = 11.75$), 74% White, 12% Asian, 8% Black, 4% Hispanic, 2% other ethnicity) were recruited through Amazon's Mechanical Turk (MTurk), a website that allows researchers to recruit participants for a financial compensation (Buhrmester, Kwang, & Gosling, 2011). The choice to recruit from MTurk was driven in part by a desire for a more diverse sample than a traditional college student convenience sample (e.g., Casler, Bickel, & Hackett, 2013). Although research consistently shows that the results of MTurk studies are comparable in many ways to more traditional college student samples (e.g.,

Crump, McDonnell, & Gureckis, 2013; Goodman, Cryder, & Cheema, 2013), these samples also tend to be less extraverted and lower in self-esteem overall (Goodman, Cryder, & Cheema, 2013). As with traditional college student samples, participants choose to participate in the study (i.e., they are self-selected) and they may communicate among one another about the study in one of several forums for MTurk workers. We did not anticipate that these factors would have any especially problematic impact on the quality of our data. All participants were paid \$0.50 for their completion of a short survey described that was research on social and political attitudes.

Item Generation and Procedure

For each dimension of class consciousness identified above, we generated an item pool of between seven and nine items. Our rule for generating items was to create as many face valid items of each factor of our theory as we could. From our initial efforts at item generation, candidate items that seemed too similar to others were eliminated after careful discussion among the authors. This process proceeded until each factor had a small pool of indicators that seemed to assess non-overlapping aspects of each dimension (see [Appendix A](#) for a full listing of items). Sample items include:

Awareness: *To understand society, we need to be aware of social class differences.*

Conflict: *As one social class gains wealth, another social class inevitably loses.*

Impermeability: *People who fail to improve their social class have usually not tried hard enough.* (reverse-scored)

Identification: *My social class is an important reflection of who I am.*

Experience: *People in my social class are often treated unfairly by others.*

Throughout these items we referred to specific class groups using the directional terms *upper* and *lower* (following work by social psychologists; Kraus, Rheinschmidt, & Piff, 2012). Although “lower class” may have negative implications for some participants, we expected that American participants would tend to think of class in broadly hierarchical or directional terms (lower, lower middle, middle, upper middle, upper). Additionally, theoretically appropriate labels (e.g., working class vs. owner class; laborer vs. capitalist) would be clearer and potentially avoid any implied valence, but we anticipated that many participants would be unfamiliar with the technical meanings of these labels in Marxist discourse and in some cases may be offended by ostensible endorsement of Marxist categories (see, e.g., the growing use of “Marxist” and “Socialist” as pejoratives by the American right-wing; Roth, 2010).

The online survey presented the items in a fully randomized order and participants rated their agreement with each statement along a Likert scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*).

Following the completion of the MCCS, participants completed a series of demographic items (see [Appendix A](#) for all materials) assessing gender, ethnicity, age, fiscal and social conservatism (1 = *Very liberal*; 9 = *Very conservative*; Fiscal: $M = 4.43$, $SD = 2.22$; Social: $M = 3.69$, $SD = 2.28$). We assessed objective social class (income over eight ranges, following Piff et al., 2010; $M = 3.65$, $SD = 1.84$; (1) Less than \$15,000, $N = 39$; (2) \$15,001 - \$25,000, $N = 34$; (3) \$25,001 - \$35,000, $N = 41$; (4) \$35,001 - \$50,000, $N = 48$; (5) \$50,001 - \$75,000, $N = 39$; (6) \$75,001 - \$100,000, $N = 21$; (7) \$100,001 - \$150,000, $N = 15$, (8) Greater than \$150,000, $N = 4$; NA/Missing, $N = 14$) and subjective social class (using a social ladder measure as in Piff et al., 2010 scored from 1 (*lowest rung*) to 10 (*top rung*); see [Appendix A](#) for all instructions; $M = 5.68$, $SD = 1.81$). Following prior research, these variables were treated as ordinal, reflecting a range of responses.

Finally, we asked participants to identify their social class category. The resulting distribution was as follows: (Poor, $N = 13$; Working Poor, $N = 43$; Working Class, $N = 77$; Middle Class, $N = 99$; Upper Middle Class, $N = 22$; NA/Missing, $N = 1$).

Analysis

Our plan for analysis proceeded in stages. First, we fit a baseline confirmatory model in which each indicator loaded uniquely onto the dimension of class consciousness it was intended to measure (for a parallel exploratory model, see [Appendix B](#)). Given the large number of parameters in our model, we simplified this model through the use of *parceling*, which has been shown to improve the fit of models without any loss of information (see [Little et al., 2002](#)). To the extent that this model fits the observed data closely, we have initial support for the distinctions between the five dimensions of class consciousness specified in our theoretical model.

Going beyond this initial model specification, we next tested specific alternatives to this baseline model. First, we tested the possibility that the model contains redundant factors; that is, factors so similar to others that they could be combined without a loss of information. We predicted that our five factors are distinct and that any attempt to simplify the model would result in significant detriments to model fit. Additionally, we tested the possibility that variation on all five factors could be explained by a single underlying dimension. We did not anticipate that this would be the case: As we have argued above, the elements of class consciousness are conceptually quite distinct. As a result, we did not anticipate that variation in all five dimensions of class consciousness could be expressed as a single latent factor (just as variation in the Big Five personality traits cannot be expressed as a single “Personality” variable; [Ashton et al., 2009](#); [Muncer, 2011](#)).

Finally, we conducted a series of exploratory analyses testing associations between demographic variables and dimensions of class consciousness. First, we conducted a series of analyses in which gender, age, political ideology, and continuous measures of objective and subjective social class were entered as simultaneous predictors of each dimension to test the unique associations between these variables and the dimensions of class consciousness. Finally, we offer a detailed analysis of the extent to which class consciousness factors differ among different self-identified social class groups.

Results

Item Loadings

Because items were constructed to assess each of the theoretically specified dimensions of class consciousness, we opted to forego an exploratory factor analytic approach in favor of a confirmatory approach testing our *a priori* structural model ([Hurley et al., 1997](#)). We modelled all items for each dimension onto unique latent constructs reflecting each aspect of class consciousness. No cross-loadings were permitted to provide a stringent test of the uniqueness of each dimension and latent variances were fixed to 1 for model identification ([Brown, 2006](#)). This initial model fit the data rather poorly (following [Hu & Bentler, 1999](#)), $\chi^2(550) = 1644.45$, RMSEA = .088 (90% CI: .083, .093), CFI = .75, TLI = .73, SRMR = .099.ⁱⁱⁱ

To improve the quality of this model and the psychometric properties of the measure, items that were poorly loading on their specific factor were eliminated from the item pool ($\lambda < .40$; [Ford, MacCallum, & Tait, 1986](#)). This

criterion eliminated one item from the conflict scale (“There is enough wealth in today’s society for people in all social classes to get ahead”). The resulting pool of items (Table 1 for item list) contained between five and eight strongly loading items per factor and all factors were represented (Awareness, $\alpha = .83$; Conflict, $\alpha = .78$; Impermeability, $\alpha = .86$; Identity, $\alpha = .86$; Experience, $\alpha = .89$). The resulting model still had weak fit to the data, $\chi^2 (517) = 1599.78$, RMSEA = .091 (90% CI: .086, .096), CFI = .75, TLI = .73, SRMR = .10.

Table 1

Factor Loadings, Residual Variances, and Intercepts of the Measurement Model by Factor

Item	Loading		Residual		
	Unstandardized (SE)	Standardized	Variance	Intercept	
Awareness ($\alpha = .83$)					
A1	Social class is still an important issue in today’s society	1.10 (.08)	.81	.64	5.42
A2	Social class may exist in some societies, but not this one	.97 (.09)	.70	.99	5.87
A3	Social class no longer matters in today’s society	1.06 (.09)	.69	1.24	5.50
A4	To understand society, we need to be aware of social class differences	.89 (.08)	.64	1.12	5.36
A5	Our society has progressed beyond class labels	1.00 (.10)	.62	1.58	5.33
A6	There is no such thing as “social class”	.79 (.08)	.61	1.02	6.06
A7	There are real differences between social classes in society	.65 (.09)	.45	1.66	5.46
A8	Social class represents real differences between people in society	.66 (.10)	.41	2.18	4.81
Conflict ($\alpha = .78$)					
C1	A wealth difference between social classes represents an unfair society	1.26 (.10)	.75	1.28	4.69
C2	For the lower social classes to gain wealth, the upper social classes have to sacrifice some of theirs	1.23 (.11)	.71	1.46	4.18
C3	As one social class gains wealth, another social class inevitably loses	1.01 (.11)	.59	1.86	4.35
C4	For the rich to increase their wealth, they must exploit the poorer classes	1.07 (.13)	.56	2.52	3.89
C5	There is tension between the lower and upper classes	.81 (.10)	.54	1.56	5.30
C6	The rich can become wealthy without hurting society	.70 (.11)	.42	2.32	3.52

Item		Loading		Residual	
		Unstandardized (SE)	Standardized	Variance	Intercept
Impermeability ($\alpha = .86$)					
I1	There is equal opportunity in today's society for people of all social classes	1.21 (.09)	.77	1.05	4.91
I2	We could all be wealthy if we really tried	1.25 (.10)	.72	1.44	4.85
I3	People who fail to improve their social class have usually not tried hard enough	1.20 (.10)	.72	1.37	4.91
I4	Most people in the lower social classes don't put in enough work or effort	1.07 (.10)	.64	1.65	5.05
I5	Any person who is able and willing to work hard has a good chance of improving their social class	1.00 (.09)	.64	1.42	3.41
I6	It takes a lot more than just hard work and effort to change social classes	.81 (.09)	.56	1.42	5.09
I7	It's very difficult to move out of the social class you are born into	.89 (.10)	.56	1.74	4.40
I8	There is no easy way to change your social class in today's society	.85 (.10)	.53	1.79	4.38
I9	In today's society, most people stay in the social class they grew up in	.64 (.08)	.48	1.34	4.88
Identity ($\alpha = .86$)					
ID1	My social class is an important reflection of who I am	1.46 (.09)	.87	.68	3.28
ID2	My social class is an important part of my self-image	1.43 (.09)	.83	.90	3.57
ID3	My social class is unimportant to my sense of what kind of person I am	1.31 (.10)	.72	1.60	3.55
ID4	My social class has very little to do with how I feel about myself	1.20 (.10)	.69	1.62	3.44
Experience ($\alpha = .89$)					
E1	I have been held back in today's society because of my social class	1.36 (.09)	.83	.86	3.31
E2	I feel like I have been denied opportunities due to my social class	1.47 (.10)	.82	1.09	3.52
E3	People in my social class are often treated unfairly by others	1.36 (.09)	.81	.99	3.81
E4	I feel like I am personally discriminated against because of my social class	1.24 (.09)	.79	.95	3.06
E5	I am not treated unfairly because of my social class	1.30 (.10)	.73	1.47	3.80
E6	People do not treat me differently because of my social class	1.01 (.10)	.60	1.82	3.91
E7	My social class doesn't influence how other people treat me	.86 (.11)	.50	2.18	4.26

Test of Fit

To provide a clearer test of the extent to which our five factor model efficiently accounted for observed variation in the pool of remaining items, we combined items into parcels on the basis of individual item loadings. Following Little et al. (2002), we averaged scores for the highest and lowest loading items first, then the second highest and second lowest, and so on. For factors with uneven numbers of indicators, we averaged the middle three items. Doing so considerably simplifies the number of parameters necessary for the model and preserves statistical power. Given our relatively small sample size for a factor analysis of a scale this size, this was a desirable consequence.

Modelling the five factor model onto the parcels created by this averaging demonstrated appropriate fit to the data, $\chi^2(125) = 306.37$, RMSEA = .078 (90% CI: .065, .086), CFI = .93, TLI = .92, SRMR = .06. Although the initial five factor model assessing each item separately did not demonstrate close fit to the data, simplifying the model through parceling vastly improved the fit to within acceptable criteria.

Within this simplified measurement model, we observed several significant correlations between the dimensions of class consciousness (see Table 2). All paths are significant at $p < .05$, with the exception that identification marginally significantly correlated with awareness of social class ($\Psi = .13$, $p = .08$) and impermeability ($\Psi = -.13$, $p = .07$). It is also notable that identification was negatively, though marginally significantly, correlated with percep-

tions of impermeability. The remaining correlations between factors were relatively strong, reflecting broad coherence between the dimensions of class consciousness. The exception was identification, which correlated weakly to moderately with the conflict and experience factors.

Table 2

Latent Correlations Between the Five Class Consciousness Factors in the Parceled Measurement Model

	Awareness	Conflict	Impermeability	Identity	Experience
Awareness	-	.62***	.57***	.13 [†]	.41***
Conflict		-	.52***	.22**	.50***
Impermeability			-	-.13 [†]	.48***
Identity				-	.27***
Experience					-

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

We tested the possibility that certain factors were redundant by comparing the final measurement model with reduced models that attempted to combine factors. All models attempting to combine latent factors demonstrated a significant loss of model fit (all $\Delta\chi^2 > 172.82$, all $ps < .0001$; see Table 3 for all results). These tests demonstrate that no core dimension of class consciousness can be reduced to any other: the most appropriate model maintains the full five factor structure.

We then fit a comparison model that included a higher-order factor with the five dimensions of class consciousness as indicators, $\chi^2(130) = 350.20$, RMSEA = .082 (90% CI: .071, .092), CFI = .92, TLI = .91, SRMR = .09. A comparison showed that this higher-order model had significantly poorer fit to the data than the model allowing each factor to remain separate, $\Delta\chi^2(5) = 43.83$, $p < .0001$. The factors of class consciousness meaningfully covary, but this test demonstrates that their variation is not reducible to a single underlying construct.

Table 3

Summary of Model Comparisons Between the Full Five Factor Model and All Simplified Models

Alternative Model	$\Delta\chi^2$ from Full Model	df	p
Awareness and Conflict Combined	172.82	4	<.0001
Awareness and Impermeability Combined	246.60	4	<.0001
Awareness and Identity Combined	480.20	4	<.0001
Awareness and Experience Combined	349.01	4	<.0001
Conflict and Impermeability Combined	265.51	4	<.0001
Conflict and Identity Combined	436.60	4	<.0001
Conflict and Experience Combined	289.70	4	<.0001
Impermeability and Identity Combined	506.94	4	<.0001
Impermeability and Experience Combined	448.86	4	<.0001
Identity and Experience Combined	450.43	4	<.0001
Awareness, Conflict, & Impermeability Combined	448.62	7	<.0001
Awareness, Conflict, & Identity Combined	636.23	7	<.0001
Awareness, Conflict, & Experience Combined	533.71	7	<.0001
Awareness, Impermeability, & Identity Combined	749.32	7	<.0001
Awareness, Impermeability, & Experience Combined	662.42	7	<.0001

Alternative Model	$\Delta\chi^2$ from Full Model	df	p
Awareness, Identity, & Experience Combined	795.96	7	<.0001
Conflict, Impermeability, & Identity Combined	762.69	7	<.0001
Conflict, Impermeability, & Experience Combined	662.94	7	<.0001
Conflict, Identity, & Experience Combined	733.27	7	<.0001
Impermeability, Identity, & Experience Combined	924.81	7	<.0001
Awareness, Conflict, Impermeability, & Identity Combined	927.66	9	<.0001
Awareness, Conflict, Impermeability, & Experience Combined	827.41	9	<.0001
Awareness, Conflict, Identity, & Experience Combined	980.62	9	<.0001
Awareness, Impermeability, Identity, & Experience Combined	1132.60	9	<.0001
Conflict, Impermeability, Identity, & Experience Combined	1120.80	9	<.0001
All factors combined	1278.20	10	<.0001

Structural Model

To offer a first exploration of the role of demographic variables in predicting differences on the MCCS, we then estimated a structural model in which gender, age, objective and subjective social class, and fiscal and social conservatism (all included as manifest variables) were allowed to freely covary with the dimensions of class consciousness. A full summary of the correlations can be found in Table 4. To test the unique predictive ability of each variable, we entered these demographic variables as simultaneous predictors of each of the five dimensions of class consciousness.

Table 4

Full Correlation Table Between the Five Class Consciousness Factors and Demographic Variables.

	1	2	3	4	5	6	7	8	9	10	11
1. Awareness	-	.62***	.57***	.13 [†]	.41***	.03	.006	.001	-.14*	-.21**	.26***
2. Conflict		-	.52***	.22**	.50***	-.18**	-.03	-.03	-.17**	-.21**	-.16*
3. Impermeability			-	-.13 [†]	.48***	-.02	.17**	-.16*	-.22**	-.48***	-.40***
4. Identity				-	.27***	-.11	-.06	.16*	.22**	.01	.06
5. Experience					-	-.09	-.002	-.28***	-.38***	-.18**	-.12 [†]
6. Age						-	.13*	-.004	-.03	.11 [†]	.13*
7. Gender							-	.03	.007	-.16*	-.15*
8. Objective Social Class								-	.64***	.09	.04
9. Subjective Social Class									-	.15*	.09
10. Fiscal Conservatism										-	.67***
11. Social Conservatism											-

Note. Gender was coded (0 = Male, 1 = Female).

[†]p < .10. *p < .05. **p < .01. ***p < .001.

It is noteworthy that gender and age had almost no unique effects on any of the class consciousness dimensions (see Table 5 for full results). The only significant effect of these variables was that older adults perceived lower class conflict ($\beta = -.16, p = .01$). We report subsequent results including these variables as covariates to test the unique effects of class and political orientation, but we will not address them further.

Table 5

Estimated Parameters of the Structural Model Regressing Class Consciousness Dimensions Onto Age, Gender, Objective and Subjective Social Class, Fiscal Conservatism, and Social Conservatism

Predictor	Path Estimate		
	Unstandardized (SE)	Standardized	<i>p</i>
Awareness			
Age	.006 (.006)	.06	.26
Gender	-.10 (.14)	-.05	.47
Objective Social Class	.08 (.05)	.14	.11
Subjective Social Class	-.11 (.05)	-.20	.02
Fiscal Conservatism	-.03 (.04)	.06	.52
Social Conservatism	-.10 (.04)	-.23	.01
Conflict			
Age	-.01 (.006)	-.16	.01
Gender	-.08 (.14)	-.04	.54
Objective Social Class	.08 (.05)	.14	.11
Subjective Social Class	-.14 (.05)	-.23	.006
Fiscal Conservatism	-.07 (.04)	-.16	.06
Social Conservatism	-.01 (.04)	.03	.72
Impermeability			
Age	.002 (.006)	.02	.76
Gender	.23 (.14)	.10	.11
Objective Social Class	-.03 (.05)	-.05	.56
Subjective Social Class	-.09 (.05)	-.13	.09
Fiscal Conservatism	-.19 (.04)	-.35	<.001
Social Conservatism	-.07 (.04)	-.14	.07
Identity			
Age	-.009 (.006)	-.10	.13
Gender	-.10 (.14)	-.05	.49
Objective Social Class	.02 (.05)	.04	.63
Subjective Social Class	.11 (.05)	.20	.02
Fiscal Conservatism	-.04 (.04)	-.09	.33
Social Conservatism	.05 (.04)	.10	.24
Experience			
Age	-.008 (.006)	-.09	.15
Gender	-.01 (.14)	-.004	.94
Objective Social Class	-.04 (.05)	-.06	.43
Subjective Social Class	-.20 (.05)	-.33	<.001
Fiscal Conservatism	-.06 (.04)	-.11	.17
Social Conservatism	-.003 (.04)	.005	.95

Note. Gender was coded (0 = *Male*, 1 = *Female*). Model fit was adequate, $\chi^2(203) = 454.10$, $p < .0001$, RMSEA = .07 (90% CI: .061, .078), SRMR = .06, CFI = .91, TLI = .89.

Social Class

Although objective social class (i.e., income) and subjective social class were closely related ($r = .64$, $p < .001$), their associations with class consciousness dimensions were markedly dissimilar (see [Figure 1](#) for a summary).

Controlling for the other predictors, objective social class had no significant associations with any dimension of class consciousness. However, subjective social class was highly predictive of each dimension. Generally, people who felt wealthier (controlling for objective wealth) were less aware of class as a structural phenomenon, perceived less class conflict, saw class boundaries as more permeable, had fewer experiences of being treated as a member of a social class, and yet identified with a social class group more.

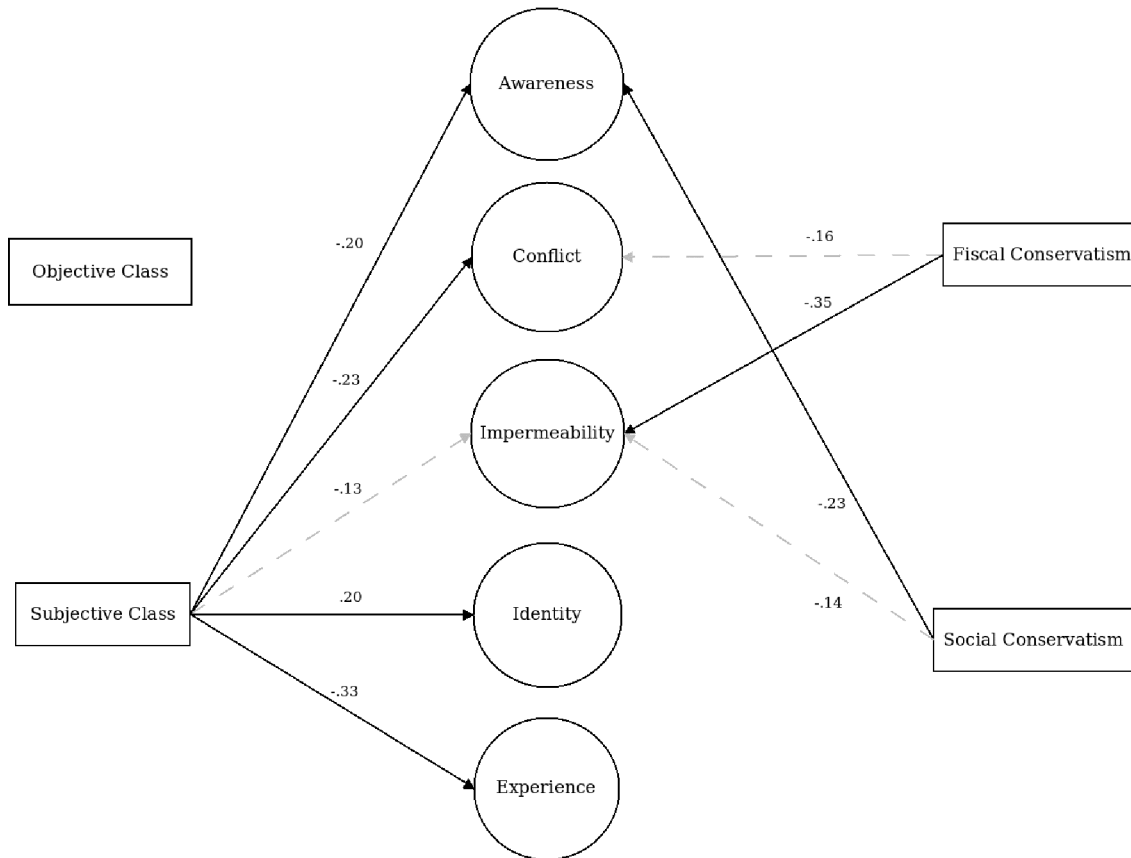


Figure 1. Associations between objective social class, subjective social class, and class consciousness.

Note. Values are standardized path coefficients. Dashed paths are marginally significant at $p < .10$, solid paths are significant at $p < .05$. Age and gender are included in the model but are excluded from the figure for simplicity.

Political Ideology

Similarly, fiscal and social conservatism were closely related ($r = .67, p < .0001$), but these variables showed unique associations with the class consciousness (see Figure 1 for a summary). Both fiscal and social conservatism uniquely predicted decreased perceptions of class impermeability. More fiscally (but not socially) conservative participants were more likely to deny conflict inherent in class relations, consistent with ideological beliefs about the value of employer-employee relations. Additionally, we found that more socially (but not fiscally) conservative participants reported lower class awareness.

Differences by Class Category

Although the distribution of participants by class category was uneven (with the vast majority of participants identifying as Middle or Upper Middle Class), we conducted exploratory analysis of differences in class consciousness between class groups. To do so, we reduced the five class categories into four orthogonal dummy codes and entered them as simultaneous predictors within the structural model. Given that power for these tests would be particularly low given the small sample and that class category would overlap substantially with objective and subjective social class (causing issues with multicollinearity; Cohen, Cohen, West, & Aiken, 2003), we tested only main effects of class category in this analysis.

In fitting this model ($\chi^2 [177] = 380.32$, RMSEA = .067 [90% CI: .057, .076], CFI = .93, TLI = .91, SRMR = .06), we found that some, but not all, dimensions of class consciousness differed as a function of class category (see Figure 2 for a summary of group means). In particular, we found substantial differences in perceptions of impermeability. Although Poor and Working Poor participants did not differ ($p = .20$), those individuals who self-identified as Poor reported greater perceptions of impermeability than those in the Working Class ($p = .008$), Middle Class ($p = .003$), and Upper Middle Class ($p = .008$). Differences between the Working Poor and these upper classes were also significant (vs. Working Class, $p = .04$; vs. Middle Class $p = .008$; vs. Upper Middle Class, $p = .05$). The Working Class, Middle Class, and Upper Middle Class groups were all equivalent ($ps > .54$).

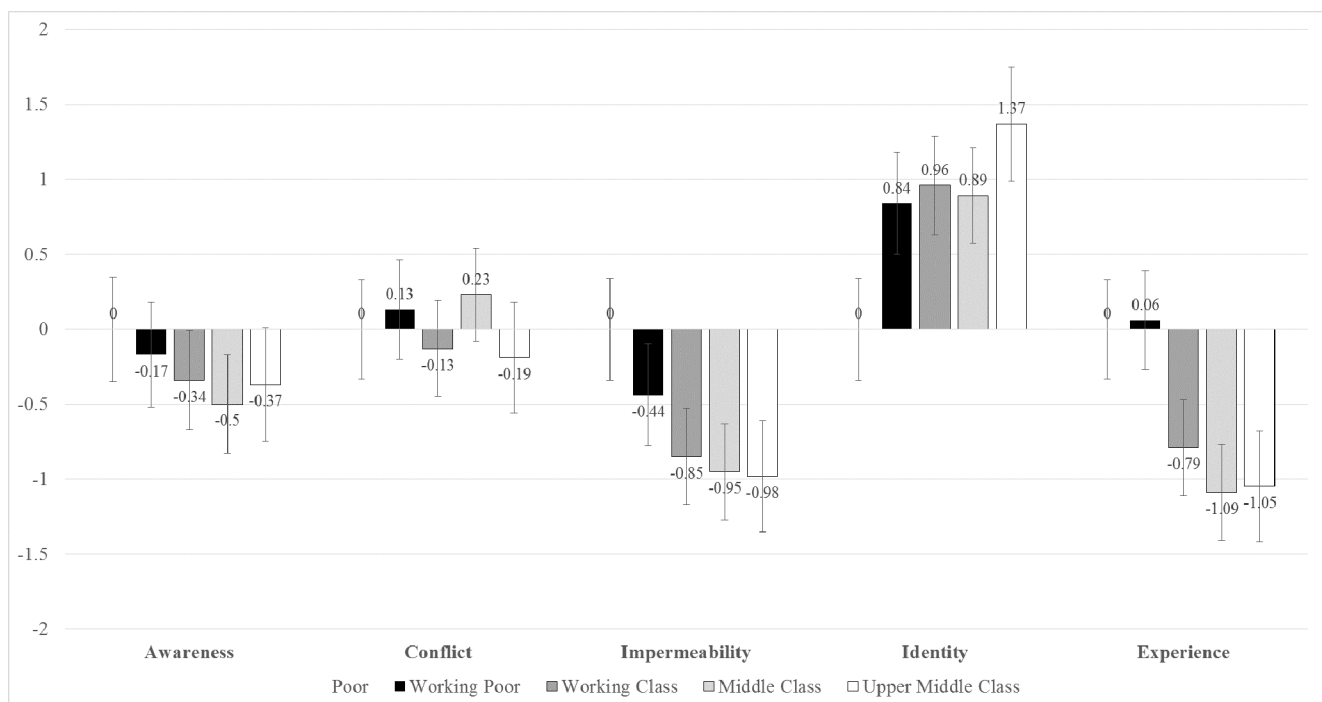


Figure 2. Estimates of class category averages for each dimension of class consciousness.

Note. All intercepts estimated relative to the Poor category (intercept = 0). Error bars reflect standard errors of the estimate.

Similarly, we found class differences in identification. Participants who categorized themselves as Poor were significantly lower in identification than those in the Working Poor ($p = .01$), Working Class ($p = .003$), Middle Class ($p = .005$), and Upper Middle Class ($p < .001$). Those in the Working Poor category were also marginally

less identified than those in the Upper Middle Class ($p = .06$). Additionally, we found that Middle Class participants were less identified than Upper Middle Class participants ($p = .06$).

Finally, we observed large differences between class category groups on class experience. Poor individuals did not differ from those who identified as Working Poor ($p = .85$), and Poor participants reported much greater class experience than those in the Working Class ($p = .01$), Middle Class ($p = .001$), and Upper Middle Class ($p = .005$). Similarly, the Working Poor had greater class experience than the Working Class, Middle Class, and Upper Middle Class (all $ps < .001$). We further found that members of the Working Class reported greater class experience than those in the Middle Class ($p = .06$). No other differences were significant ($ps > .31$). In contrast, we found no differences between categories in class awareness ($ps > .13$) or in perceptions of class conflict ($ps > .47$).

In summary, participants in wealthier classes were overall more likely to see class boundaries as permeable, to identify with class more, and to have had fewer experiences of being treated differently on the basis of their class. In other words, although participants in poorer classes saw class boundaries as more stable and reported more experience being a member of their class, they were less likely to identify with that class overall.

Discussion

In this paper, we have developed a theoretical model of class consciousness comprised of five related, but ultimately distinct, factors. In support of our theoretical reasoning, we developed the Multidimensional Class Consciousness Scale assessing the five dimensions of *class awareness*, *class conflict*, *class impermeability*, *class identification*, and *class experience*. The MCCS was psychometrically sound (i.e., did not present poor model fit) and empirically supported our view that these factors are distinct despite their associations. We believe our theorizing and measure may be a useful starting point as social psychologists develop more nuanced understandings of social class as a collective and structural phenomenon that transcends individual income or perceived status.

These data also allowed a first investigation of some of the predictors of these dimensions of class consciousness. Perhaps most interestingly, we found that subjective social class predicted differences in all aspects of class consciousness, but that objective class did not. Broadly, people with higher perceived status tended to be lower in class awareness, perceived less class conflict, believed class borders to be more permeable, identified with a class group more, and reported fewer class experiences. The fact that higher subjective class predicted greater identification may seem like a peculiar finding. One possibility is that this may be because people who feel lower in status may not wish to identify with a stigmatized social group (i.e., being lower class; Quinn & Chaudoir, 2009; Quinn et al., 2014). The results of our comparisons between class groups within our sample directly support this interpretation, with class identification showing much higher levels among the wealthier classes.

The effects of political ideology were as one might expect: more fiscally conservative participants saw less class conflict and strongly endorsed the ideology of personal mobility (i.e., were lower in class impermeability). Social conservatism, at least among participants recruited from the US, independently predicted decreased impermeability. This is perhaps because of the central role of the mobility narrative in “traditional” US culture (Kluegel & Smith, 1986).

Limitations and Future Directions

Our theorizing offers one inroad into class consciousness for social psychologists, but it is only one initial attempt at a substantial, and largely neglected, phenomenon.

Breadth

The perspective on class consciousness offered in this paper is only one of many. The Marxist tradition has much to say about the nature of class consciousness as well as the institutions and ideologies that conceal class relations. As we noted in the introduction, other theories of class consciousness prioritize certain elements that we chose to exclude from our model: for example, envisioning alternatives to class (Mann, 1973) or motivation to take collective action to address inequality (Gurin et al., 1980). Additionally, we focused on class consciousness as an individual (vs. collective) level phenomenon that is explicit in the minds of survey respondents (vs. implicit or unconscious). To that end, we make no claim that these are the only dimensions of class consciousness. We genuinely hope that others will build upon and enrich the perspective provided in this paper to provide a more interdisciplinary and nuanced understanding of the psychology of social class.

We noted earlier that traditional studies of class consciousness have tended to focus on “consciousness” as a collective acknowledgement of class relations. In this way, the work of theorists such as Lukács has much to say about socio-historical trends in class, but little to say about the individual psychology of class consciousness. Because we have focused solely on class consciousness at this individual level, there remains a pressing need for theoretical and empirical development of conceptual tools for the psychological analysis of class consciousness at both the cultural and intergroup level.

Although we cannot speak to the issue with our current data, we propose that class consciousness at the individual level likely contributes to, and is increased by, class consciousness at the collective level in a mutually constitutive relationship. Group settings (e.g., neighborhoods, workplaces) and behaviors may promote or attenuate class consciousness among group members. By the same token, the class consciousness of individual members can shape the settings and behaviors of groups. To the extent that psychologists are interested in developing research on social class in general and class consciousness specifically, there is a need to explore both processes in this dynamic relationship.

Additionally, the possibility of class consciousness as a collective phenomenon calls for the very real possibility of class consciousness that is unconscious at the individual level. As we noted in the introduction, people sometimes participate in political activities for reasons that may have nothing to do with the cause itself, such as a desire for recognition or social pressure to conform to one’s peers (van Stekelenburg, 2013). In this way, an unwitting or even unwilling participant in a strike or election may further the cause of the working class despite a potential lack of conscious concern about social class. The idea that political resistance can sometimes occur without or even *against* the intentions of an agent has received recent attention in sociology (Hollander & Einwohner, 2004), and this presents an intriguing area for future research that our model simply cannot address.

The relationship between individual and collective class consciousness also suggests a need for more interdisciplinarity surrounding the study of social class. To the extent that class consciousness at the collective level is outside the scope of many psychologists, and class consciousness at the individual level is outside the scope of many sociologists and historians, the end result is that neither approach fully discloses the relationships between these levels. The ethnographic approach to studying class consciousness (as described in the introduction) is one

valuable interdisciplinary approach that takes seriously the connection between personal experience and social structure. We hope that an effective measure of individual-level class consciousness like the MCCS supports further quantitative research that could link individual perceptions to aspects of the social environment (and vice versa).

Stability and Change

We assessed variation in class consciousness at the individual level, but it is unlikely that these individual differences in class consciousness are immutable. Political events and competing rhetoric work to both uncover and conceal the realities of social class in US society (Jackman, 1994). As a result, the salience of class consciousness may subtly shift as political events unfold or as people transition from environments of individualist ideology that mask collective structure (e.g., the college classroom) to other settings that make the realities of class concrete (e.g., a labor union meeting). For example, the 2008 financial crisis and the subsequent financial support for the financial institutions behind the crisis brought class conflict to the fore for many, including reigniting support for Marxism in many eastern European nations (e.g., Voinea & Ion, 2013) and serving as a rallying cry for the Socialist Alternative party in the US (Socialist Alternative, 2008). To the extent that class consciousness can be changed, there is a potential for political transition toward a more class conscious, and ultimately more equal, society.

While at this point we can only speculate on the causes of change in class consciousness, it presents a critical area for future research. There are many potential antecedents of class consciousness: exposure to critical research in sociology and psychology, peer networks, inter-generational transmission from parents to their children, public attention to social class by politicians, or even personal experiences of class discrimination. Critically, these experiences may only increase consciousness in a limited set of dimensions. The experience of class discrimination might, for example, increase class experience and the awareness of class conflict, but have no effects on class identification. In contrast, exposure to abstract Marxist philosophy might increase awareness of class in society, but have no effect on the personal dimensions of class consciousness. Future research should employ a longitudinal approach to assess the consequences of specific experiences for unique aspects of class consciousness.

Identity and Mobility

It may seem peculiar that these data showed a marginally significant negative relationship between social class identification and perceptions of class impermeability (i.e., that those who most highly identified with a class seemed to see class barriers as more permeable). After all, it seems that those who more highly identify with their class group might recognize the limits of mobility between classes. In fact research in social psychology has shown that perceptions of social mobility often decrease group identification: Belief in social mobility decreases perceptions of categorical differences as a determinant of access to resources and increases opposition to affirmative action policies (Bobocel, Son Hing, Davey, Stanley, & Zanna, 1998; Son Hing, Bobocel, & Zanna, 2002), increases the likelihood that negative feedback will be attributed to a lack of personal merit rather than because of discrimination (McCoy & Major, 2007), and increases the likelihood that success is attributed to merit rather than derived from membership in a privileged social group (Schmitt, Ellemers, & Branscombe, 2003). Social mobility beliefs also directly decrease levels of ethnic group identification (Levin, Sidanius, Rabinowitz, & Federico, 1998; Wiley, Deaux, & Hagelskamp, 2012). Given the long line of research on the individuating effects of perceived status mobility, our findings become even more confusing: it seems that perceptions of mobility should predict *decreased*, rather than increased, identification. However, research within sociology may provide an answer to our counter-intuitive effect.

Research on subjective social class perceptions has identified a predominant bias toward a “middle-class” identity in the US (Adair, 2001; Hout, 2008; Kahl & Davis, 1955). For example, when asked to place themselves within one of three social class categories (lower, middle, or upper) over 80% of respondents placed themselves in the middle category (Centers, 1949). Sosnaud and colleagues (2013) concluded that because people in the US exhibit such a discrepant perception between their subjective class position and objective class indicators, the study of social class identity requires a nuanced approach.

It may be that the negative association between increased social class identification and *greater* social mobility reflects the propensity for participants in the US to exhibit a bias toward this middle class identity and its attendant promise of upward mobility. This presents a unique challenge to the study of social class, as people within the US may show a preference for a form of social class identification that *supports* rather than challenges the ideological view that the system is fair and equitable. Since the late 1940s the middle-class has often been used as an ideological symbol for social mobility, such that anyone who tries hard enough can overcome poverty and own their own house in the suburbs (Hochschild, 1995). Therefore, our respondents might have been exhibiting an identification with the middle class that supports this dominant narrative due to their desire to see themselves as better off than their objective economic indicators would suggest. Class consciousness research must tease apart this more status quo justifying form of identification from those forms of identification that might instead motivate collective action in response to a largely impermeable social system (e.g., acknowledging a lower class identity). More research will be needed to fully understand how social class identity, with and without a bias toward the middle class, contributes or hinders social class consciousness as we have conceived it.

Sample

MTurk samples are often diverse and reliable on psychometric standards, but there are limitations to these samples (Buhrmester, Kwang, & Gosling, 2011). For example, workers on MTurk are often younger, more educated, less religious, and more liberal than community samples (Paolacci & Chandler, 2014); limiting the variance in their political attitudes. MTurk workers can also “follow” the investigators they have worked for previously and sign-up for any subsequent studies. Workers who have participated in previous research might be influenced by past experience and exhibit inside knowledge of the construct or response biases (Paolacci & Chandler, 2014). Research on class consciousness should be investigated with non-MTurk samples to test the generalizability of these effects.

Theoretical Importance

We hope to have shed light on an important element of the psychology of social class that has gone neglected in the contemporary social psychological literature. We grant that it is important to understand the direct effects of social class (both objective and subjective) on the individual. However, these approaches focus on variables at the individual level that ignore and indeed suppress the collective and structural aspects of social class consciousness. Our theoretical analysis and new measure might correct for these critical, yet absent, realities of social class.

An acknowledgement of social class (i.e., consciousness) suggests many ways in which the study of social class offers new insights into the study of intergroup phenomena. First, unlike racial and gender groups which are largely grounded in observable differences between people, class groups are often *hidden by* ideologies that promise personal mobility and individual control over outcomes. Although culture offers stereotypes to carve up the social space into racial, gender, and other groups, individualistic norms paper over class differences. There is a need

for research on the personal and situational factors that allow individuals can combat these ideologies to acknowledge social class differences.

Another important distinction between class consciousness and awareness of other social groups is the role of legitimacy in class consciousness. We opted to describe this factor as impermeability—to the extent that class membership is legitimate, it is expected that individuals can change their class group voluntarily with enough hard work and effort. Clearly this is different than perceptions of gender groups for which change is possible (e.g., for transgender individuals), but this change is not grounded in any perceived legitimacy of group membership. Indeed in many cases, reaction to transgender individuals is quite the opposite: a common stereotype is that one's initial gender is "legitimate" but the gender to which one transitions is "false," that is, the transgender individual is somehow "dishonest" with themselves (Gazzola & Morrison, 2014). This presents a stark contrast to social class, for which ideologies legitimize membership into whichever class a person may presently occupy (Jost et al., 2003).

It is also clear that class consciousness does not exist independently of other forms of oppressed group consciousness. Patricia Gurin's research (Gurin et al., 1980) finds similar effects for racial, gender, and class consciousness, for example. Yet, these identities often intersect: due to factors like racial disparity in employment and the gender wage gap, it is likely that individuals may simultaneously occupy intersecting oppressed group identities (e.g., working class and Black). Whether people prioritize one form of awareness over the other, or find ways of acknowledging the unique roles of racial, gender, and class disparity is an important area for future research.

Research on class consciousness also intersects with research on collective action. It may be that collective action for some groups (e.g., racial, gender) is easier to motivate precisely because group boundaries are starker (although not definitive by any stretch: James & Tucker, 2003). In the case of social class groups, ideologies that work to discourage recognition of social class as a group-based phenomenon might undermine efforts at collective action to promote greater equality. By exploring these processes, research on collective action might gain new insights into the demotivating effects of ideology.

Finally, it may be that the study of social class creates important *looping effects*, that is, the study of social class may actually change it (Hacking, 1995). As research on social class develops in psychology and other disciplines, awareness of that research may create class consciousness, or in some cases, increase ideological endorsement to suppress this awareness. Psychologists must be attentive to, and willing to study, the ways in which class consciousness is impacted by the popularization of ongoing research on income inequality. For example, Piketty's *Capital in the Twenty-First Century* was a New York Times bestseller and is the highest selling book from Harvard University Press (Tracy, 2014). What consequences this may have for the political discourse and class-based action generally remains an open, but important, question. Class consciousness provides psychologists a unique case study in the ways in which scientific discourse in psychology, sociology, and economics filters through to popular discussions about class, which ultimately play a crucial role in motivating change.

Practical Importance

The practical significance of class consciousness for political action is fundamental. As noted in the introduction, theorists since Marx have noted that systemic change in class relations can only be affected when working class groups acknowledge and pursue their own interests rather than those of the ruling class.

To the extent that class consciousness contains elements of identification, perceptions of impermeability, and perceived conflict, class consciousness can be considered an important prerequisite for political resistance. According to the psychological model of resistance offered by [Haslam and Reicher \(2012\)](#), group members are likely to resist only when they identify with an oppressed group. Non-identification instead inclines individuals to adopt an apathetic stance that legitimizes and perpetuates the status quo. But identification is not enough to motivate resistance: it is also important that group members see group boundaries as impermeable (i.e., that one cannot leave the oppressed group) and that groups are in a conflictual and illegitimate power relation. Although this theory of resistance has its origins primarily in racial conflict and prison resistance, it has clear implications for social class: class consciousness contains all three prerequisites for motivating class-based resistance to the economic status quo.

It is also clear how capitalist ideologies work directly to counteract these motivating effects of class consciousness. By encouraging individuals to see economic outcomes as the result of personal (rather than collective) factors, the so-called Protestant Work Ethic ([Weber, 1905/1930](#)) and more secular forms of meritocracy ([McCoy & Major, 2007](#)) aim at dismantling identification with a class group and enhancing perceptions of class permeability. A belief in personal economic mobility, such as the pursuit of the “American Dream” of economic success and popularized images of “rags to riches” narratives, erodes awareness of the general stability of class membership by applying a thin veneer of legitimacy.

Class consciousness offers an alternative to this ideology (as it has done for over a century) by acknowledging that economic disparities are grounded in class-based differences in opportunity and resources. Research showing that parental income is one of the best predictors of student test performance ([Croizet, 2008](#)) points to a reality of social class that cannot easily be accommodated within the worldview offered by pro-capitalist ideology. To the extent that class consciousness develops through greater social awareness, ideologies that legitimize inequality diminish.

Critically, this is one area in which social science can have immense political significance. Research on social class offers a clear glimpse into the realities concealed in cultural narratives about the guarantee that hard work ensures success or that any individual can be wealthy with enough effort. The study of class consciousness specifically offers unique insight into the ways that individuals or groups acknowledge realities behind these legitimizing cultural narratives. Should psychologists choose to pursue this path, they can be at the forefront of the effort to enlighten public opinion and policy with the realities of social class that too often are simply silenced out of mainstream discussions of economic inequality.

Conclusion

In this paper, we outlined a conception of class consciousness that draws upon Marxist theory, ethnographic research in sociology, and contemporary social psychological research on the nature of social groups. While social psychologists have recently had much to say about the consequences of social class as an individual-level phenomenon (e.g., household income, perceived status), this approach has neglected the importance of awareness of social class as a structural and intergroup phenomenon. Our approach serves to enrich social psychological theorizing on social class by exploring important social and political attitudes that have largely not been acknowledged in prior research.

To validate our theorizing and facilitate the study of social class, we generated the MCCS, a self-report measure of the five dimensions of class consciousness identified in our model. This scale was psychometrically sound and we found that individual differences in this measure were predicted by a number of important person-level variables such as subjective social class and class group membership. Future research can apply this measurement in other contexts (e.g., experimental or longitudinal studies) to gain more insight into the factors that influence class consciousness. Our theoretical perspective and associated scale offer an initial step in what promises to be an important and novel area for future research.

Critically, we believe the study of class consciousness offers not only many possibilities for scientific discovery, but also important political possibilities. Understanding how individuals perceive social class divisions is imperative for understanding resistance to and support for a range of public policies aimed at addressing class-based inequality. Given this importance, it is perhaps surprising that class consciousness has been largely ignored within psychology. We hope that this paper offers at least a first step toward correcting that absence.

Notes

i) Within the sociological literature, the ethnographic approach to class consciousness is criticized for privileging subjective experiences of class at the exclusion of the collective actions and practices that make these experiences possible (e.g., union meetings, strikes; [Fantasia, 1989](#)). This perspective seeks to return to Lukács' original perspective that class consciousness is a matter of collective action, rather than individual psychology. Our perspective is that class consciousness as experience and class consciousness as activity are likely mutually constitutive ([Shweder, 1999](#)): individual beliefs about class motivate collective action, and collective actions help to legitimize and promote awareness of class as a social phenomenon.

ii) Note that class identification is not merely subjective social class. One's perceived personal status does not reflect an identification with a class group. For example, one could feel relatively poor or wealthy, but identify as a member of the middle class. In this way, subjective social class fails to capture the group-based nature of class identification.

iii) All analyses below rely on the use of structural equation modelling (SEM), a statistical technique for assessing the underlying factor structure that best accounts for observed variation in a set of variables. Models in SEM are summarized by a number of fit indices, reflecting the extent to which certain assumed factor structures accurately capture the observed variation among the variables of a dataset. Four fit indices are commonly reported to provide a broad sense of this accuracy and each has separate criteria for an acceptable fit (see [Hu & Bentler, 1999](#)). The Root Mean Square Error of Approximation (RMSEA) assesses the extent to which a model misrepresents the observed data, with 0 being the theoretical ideal (i.e., a perfect model), .05 reflecting a good fit, and any value below .08 reflecting acceptable fit. The Standardized Root Mean Square Residual (SRMR) reflects the extent to which the covariances in the model differ from those in the full data, and here any value below .10 is considered acceptable. The Comparative Fit Index (CFI) assesses the extent to which the specified model improves upon a baseline model in which observed variables are assumed to be independent: values above .90 are considered to have reasonably good fit. The Tucker-Lewis Index (TLI), also known as the Non-Normed Fit Index (NNFI), is similar to the CFI except that it adjusts for model complexity; again, a value greater than .90 is considered a good degree of fit.

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Appendices

Appendix A

Complete Materials for Study

First we are interested in learning about your understanding of social class in American society. Read each statement below and rate your agreement with the statement by clicking along the scale provided. Remember that your answers will remain completely confidential, so you should feel free to answer openly and honestly.

Awareness

*Social class no longer matters in today's society**

To understand society, we need to be aware of social class differences*

*There is no such thing as "social class"**

*Social class may exist in some societies, but not this one**

*Our society has progressed beyond social class labels**

Social class is still an important issue in today's society*

Social class represents real differences between people in society*

There are real differences between social classes in society*

Conflict

There is tension between the lower and upper classes*

As one social class gains wealth, another social class inevitably loses*

A wealth difference between social classes represents an unfair society *

For the rich to increase their wealth, they must exploit the poorer classes*

For the lower social classes to gain wealth, the upper social classes have to sacrifice some of theirs*

There is enough wealth in today's society for people in all social classes to get ahead

*The rich can become wealthy without hurting the rest of society**

Impermeability

*Most people in the lower social classes don't put in enough work or effort**

*Any person who is able and willing to work hard has a good chance of improving their social class**

*People who fail to improve their social class have usually not tried hard enough**

*We could all be wealthy if we really tried**

*There is equal opportunity in today's society for people of all social classes**

It's very difficult to move out of the social class you are born into*

There is no easy way to change your social class in today's society*

It takes a lot more than just hard work and effort to change social classes*

In today's society, most people stay in the social class they grew up in*

Identification

My social class is an important part of my self-image*

My social class is unimportant to my sense of what kind of person I am*

My social class is an important reflection of who I am*

My social class has very little to do with how I feel about myself*

Experience

I feel like I am personally discriminated against because of my social class*

People in my social class are often treated unfairly by others*

I feel like I have been denied opportunities due to my social class*

I have been held back in today's society because of my social class*

*I am not treated unfairly because of my social class**

*My social class doesn't influence how other people treat me**

*People do not treat me differently because of my social class.**

Note. Respondents rated their agreement with each item on a scale from 1 (*Strongly disagree*) to 7 (*Strongly agree*). Italicized items are reverse-scored.

*Item included in final MCSS.

Finally, we would just like to get a sense of who you are.

Please indicate your gender:

Male

Female

What is your age?

What best describes your ethnic identity?

Asian American

African American

Latino/Hispanic

West Indian

White/Non-Hispanic

Other

Is English your first (native) language?

Yes

No

Specifically with regard to economic issues, and setting social issues aside, how would you describe your political orientation?

1 = Very Conservative

2

3

4

5

6

7

8

9 = Very Liberal

Specifically with regard to social issues, and setting economic issues aside, how would you describe your political orientation?

1 = Very Conservative

2

3

4

5

6

7

8

9 = Very Liberal

What social class category do you feel you belong to? This information is completely anonymous. If you feel uncomfortable answering this question, please just leave it blank.

Poor

Working Poor

- Working Class
- Middle Class
- Upper Middle Class
- Rich

Which best describes your current household income annually? This information is completely anonymous. If you feel uncomfortable answering this question, please just leave it blank.

- Less than \$15,000
- \$15,001 - \$25,000
- \$25,001 - \$35,000
- \$35,001 - \$50,000
- \$50,001 - \$75,000
- \$75,001 - \$100,000
- \$100,001 - \$150,000
- Greater than \$150,000

Think of the ladder below as representing where people stand in the United States with the most wealthy Americans at the top of the ladder and the poorest Americans at the bottom. Where would you place yourself on this ladder relative to others in American society? To indicate, click along the ladder. Clicking once on a rung will highlight that rung, if you wish to change your choice simply click on the highlighted rung again and it will reset.



Appendix B

Exploratory Analysis of Factor Structure

Submitting the final set of items included in the scale to a parallel analysis (Fabrigar & Wegener, 2012; Hayton, Allen, & Scarpello, 2004) revealed that the best fitting exploratory model included six factors. In other words, a six factor model was the most parsimonious model that could account for observed variation at above chance levels (see Appendix B - [Figure B.1](#) for Scree plot).

Because we anticipated that any emergent class consciousness factors would correlate, we employed oblique rotation in this exploratory factor analysis. Oblique (Oblimin) rotation improves the overall factor structure and loadings, but permits non-zero covariances between the factors and is thus more appropriate for the data (Fabrigar & Wegener, 2012). Stricter constraints, as in orthogonal rotation, would be untenable and result in model misspecification.

The resulting model (summarized in Appendix B - Table B1) fit the data reasonably well: Tucker-Lewis Index = .88, RMSEA = .06 (90% CI: .051, .065), BIC = -1368.25. As a quick scan of the loadings reveals, the five factor structure modelled in the confirmatory approach (i.e., on the basis of our theoretical model) is almost perfectly reflected by the patterns of loadings on Factors 1-5 of the exploratory model. Factor 1 reflected predominantly Awareness items (with the exception of Conflict 5). Factor 2 represented the Experience factor. Factor 3 represented Impermeability, although items 7 and 9 also had high loadings on Factor 6. Factor 4 assessed Identity and Factor 5 was Conflict. The additional 6th factor seemed to account for random error in the observed data, as evidenced by the fact that only one item (I7) had a loading above .4 on this factor.

The pattern of observed correlations between the factors specified in the exploratory model was completely consistent with the findings of the confirmatory model (Appendix B - Table B2), including the negative association between Identity and Impermeability. All other correlations were positive, albeit weaker than in the more constrained confirmatory approach (Table 2 of the full paper). Consistent with the view that the sixth factor reflects theoretically uninteresting randomness, we see that it was uncorrelated with all of the factors of class consciousness and that it accounted for a mere 6% of observed variance in the items.

In short, we see that the results of a “bottom-up” or data-driven analysis of our class consciousness scale largely mirrors the findings of our “top-down” or theory-driven approach in the full paper. We did find that there was some support for an additional sixth factor, but given the lack of substantive loadings or correlations with theoretically specified factors, it appears to offer a meaningful improvement in model fit at the cost of being uninterpretable.

References

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Appendix B - Figure B1

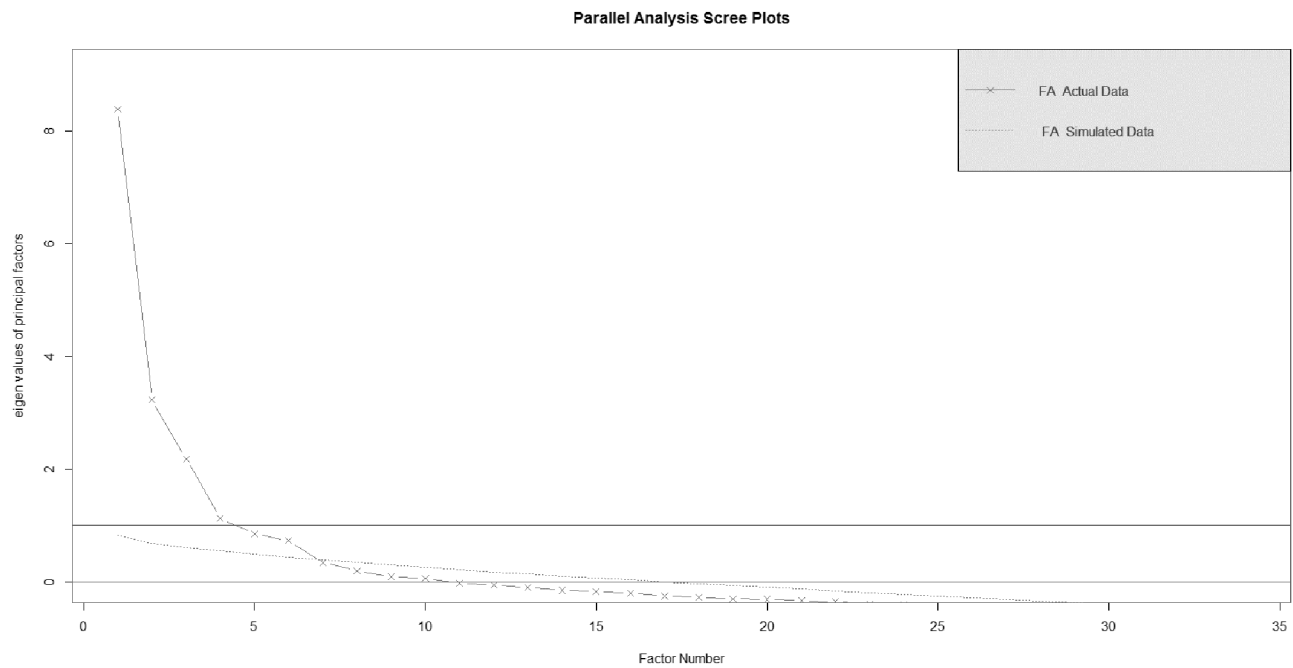


Figure B1. Scree plot of parallel analysis.

Appendix B - Table B1

Table B1

Observed Loadings in the Exploratory Six Factor Model

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
A1	.66	.07	.07	.10	.05	.22
A2	.67	-.09	.13	-.14	.04	-.19
A3	.67	-.03	.04	.12	-.03	.02
A4	.55	.09	.06	.15	-.02	.20
A5	.63	-.02	.14	-.24	.00	-.03
A6	.70	-.13	.07	-.05	.02	-.17
A7	.52	.13	-.21	-.04	.12	.06
A8	.47	.05	-.23	.21	.15	.09
C1	.21	.13	.23	.08	.38	.13
C2	.08	.00	.12	.05	.62	.16
C3	.01	.01	-.07	.06	.76	-.14
C4	-.01	.09	-.09	-.08	.69	.07
C5	.56	.10	-.08	.09	.17	.16
C6	-.11	-.10	.17	-.02	.60	-.08
I1	.33	.06	.53	-.05	.04	.03
I2	.04	-.07	.72	-.12	.01	.09
I3	.02	-.02	.80	.03	.03	-.01
I4	-.03	.01	.80	-.01	.03	-.01

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
I5	-.10	.06	.68	-.01	.06	.02
I6	.22	.12	.34	.09	.04	.33
I7	.13	.27	.27	.00	.10	.46
I8	.00	.15	.36	-.07	.20	.17
I9	.18	.17	.22	.00	.11	.36
ID1	-.01	-.03	-.06	.88	-.05	.09
ID2	-.11	.03	-.02	.83	.03	.09
ID3	.00	-.05	.06	.74	.08	-.13
ID4	.17	.02	-.01	.65	.02	-.21
E1	-.08	.84	-.06	-.09	.10	.09
E2	-.03	.81	.03	-.01	-.02	.12
E3	.06	.79	-.02	-.02	-.02	.12
E4	-.13	.78	.01	.07	.06	-.05
E5	.07	.69	.08	.07	.09	-.37
E6	.32	.54	.09	.12	-.03	-.25
E7	.31	.40	.19	.19	-.05	-.27

Note. Items identified on the basis of codes used in Table 1 of the full paper. Values in bold indicate the loadings of items on theoretically specified factors.

Appendix B - Table B2

Table B2

Summary of the Factor Correlations and Variance Explained in the Exploratory Model

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Factor 1	1.00	.24	.43	.15	.26	-.01
Factor 2		1.00	.24	.24	.41	.09
Factor 3			1.00	-.16	.23	.03
Factor 4				1.00	.13	-.05
Factor 5					1.00	.10
Factor 6						1.00
Proportion of variance explained	.23	.22	.19	.15	.13	.06
Cumulative proportion of variance explained	.23	.46	.65	.80	.94	1.00