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Social Class and Test Performance

From Stereotype Threat to Symbolic Violence and Vice Versa

Jean-Claude Croizet and Mathias Millet

Each year, the profile report issued by the College Board systematically reveals that Scholastic Assessment Test (SAT) scores are strongly related to parental annual income (College Entrance Examination Board, 2009). The very rich get the best scores, the very poor the lowest. This chapter focuses on the ways in which stereotypes that portray the poor as not intelligent impact test achievement. Compared to other literatures on gender or race, research on stereotype threat associated to social class remains largely underdeveloped, albeit consistent. First, we present research on the attitudes and stereotypes that people hold toward those who are poor. Poor people are the victims of a contemptuous stereotype that portray them as unintelligent and lazy. We then review the work that has studied the impact of such negative stereotypes on both achievement and ability testing. Borrowing from work on intersectionality and social reproduction (Bourdieu & Passeron, 1970), we next advocate for conceptualizing socioeconomic status, not as a personal variable, but more as a social process involving power asymmetry in the social structure. We then propose that stereotype threat is the psychological manifestation of a symbolic violence embedded in evaluative settings. We finally suggest that future research should investigate how ideology (stereotypes), institutional practices (evaluative settings), and behavior (performance) work together to recycle power and privilege into individual differences in intellectual merit.

Keywords: Stereotype threat, socioeconomic status, poverty, intelligence, power, symbolic violence

Rich people are not only rich; they are also more intelligent.¹ Research in psychometrics reveals that on average, people who are better off have higher IQs than do the poor (Sirin, 2005; White, 1982). This is old news. Soon after developing the first intelligence test in 1905, Binet discovered that children from affluent neighborhoods had a superior intelligence than their peers living in the poor suburbs.
of Paris (Binet, 1911). Since then, this fact has been repeatedly and consistently observed. This is perhaps the only aspect of this literature that is not controversial. The relationship between socioeconomic status (SES) and Scholastic Assessment Test (SAT) scores for example is particularly illustrative. For a long time, the College Board has claimed that the SAT measures academic skills and not intelligence. Yet, available research indicates that the SAT, in accordance with the spirit of its inventor, still measures “IQ” or intelligence to a large extent (Frey & Dettman, 2004). Figure 12.1 plots the 2009 distribution of SAT scores according to parental income (College Entrance Examination Board, 2009). The graph shows a gradual increase of 10–70 points in SAT scores with each extra $20,000 in parental annual income. This association is strong enough so that a student’s score could actually be guessed based on the car his or her parents drive, something referred to as the “Volvo effect” (Sacks, 1999).

Many explanations have been proposed to account for the fact that the poor have, on average, lower IQs than the rich. Some stress that IQ is the cause of social class. According to the hereditarian view incarnated by Herrnstein and Murray’s _Bell Curve_ (1994), individual and group differences in IQ are mainly a matter of heredity. Rich kids have higher IQs because they inherit smart genes from smarter parents. Opposed to this view, some advocate that IQ is the consequence rather than the cause of social class. Poor kids have a lower IQ because they grow up in environments characterized by strong material deprivation and substandard schooling, which prevents the normal development of their cognitive abilities (Duncan & Brooks-Gunn, 1999). The opposition of these two camps has focused most of the attention on the debate about the social class gap in intelligence. The vividness
of the confrontation has nevertheless overshadowed an implicit, but important, agreement of views between the two positions: Test scores measure intelligence.

In opposition to this postulate, some researchers have argued that test scores are not a valid reflection of individual endowment in intelligence (Davis & Havighurst, 1948). Thus, the relationship between social class and IQ may be more informative of the property of the test itself rather than of the attributes of the test takers. For example, test items can be biased in their content, and being able to identify the Milo’s Venus statue (e.g., The Kaufman Assessment Battery for Children K-ABC, Kaufman & Kaufman, 1983) is more indicative of a child’s familiarity with the white upper middle-class culture than of her intelligence. According to this approach, IQ would predict important outcomes not because it identifies cognitive ability but more simply because it measures acculturation with white middle-class values, which are fundamental to succeed in a white middle-class society. Removing content bias should not only offer a more valid measure of competency, it could also eliminate the gap between the rich and the poor (Eells, Davis, Havighurst, Herrich & Tyler, 1951). Adding to the skepticism about the significance of the class gap in test scores, some research has proposed that the gap could reflect the situational impact of social stereotypes that target people from low socioeconomic backgrounds.

Testing situations are explicitly designed to be “neutral.” Their function is to locate variations in performance only at the individual level. They apparently constitute a perfect implementation of Kelley’s (1967) covariation principle for dispositional attribution: sameness of circumstances—the test situation is the same for all takers, and sameness of stimuli—the test is the same for all and is not biased against certain groups. Literature on stereotype threat, however, reveals a different picture. Indeed, a standard testing situation is saturated with undermining and enhancing ideologies (Adams, Biernat, Branscombe, Crandall, & Wrightsman, 2008) that selectively affect the performance of the poor and the rich and contribute to the test score gap. In this chapter, our goal is to review this literature. We will first present the research that documents the existence of social class stereotypes. Second, we will review the evidence of stereotype threat effects related to social class. We will finally discuss several theoretical issues for future research.

**Stereotypes About Social Class**

Although research on attitudes, prejudice, and stereotypes constitute by far the most productive area of social psychology, psychologists have shown surprisingly little interest in the attitudes and stereotypes toward the poor. Yet, social class is a fundamental determinant of any individual’s life course, and poverty is a pervasive problem in many industrialized countries. In 2008, in the United States, for example, 39.8 million people lived below the federal poverty level (13.2% of the population). Despite this situation, and the fact that poverty has been at the heart of the political debate for decades (welfare, health care, education, etc.; see Bullock, 1995), the literature on prejudice and discrimination against the poor remains marginal (Lott, 2002).
When it is taken into account, class is often just an additional variable in the study of prejudice and discrimination that target other groups (Spencer & Castano, 2007). Until recently, most of the research on the perception of social class had focused almost exclusively on the kind of attributions people make to explain why some are poor (Bullock, 1995; Kluegel & Smith, 1986). Findings consistently reveal that the American Dream is still alive: Individuals believe that social status is earned and that people are responsible for their social standing in society. Research on the attitudes toward the poor is scarce, but available evidence indicates that people expect those who are poor to have lower intellectual ability (Baron, Albright, & Malloy, 1995; Darley & Gross; 1983; Désert, Préaut, & Jung, 2009; Miller, McLaughlin, Haddon, & Chansky 1968; Régner, Huguet, & Monteil, 2002). It is only recently that scholars have systematically investigated the attitudes that young white Americans hold about social class (Cozarelli, Wilkinson, & Tagler, 2001). These researchers showed stereotypes about the poor were largely negative; people from low SES groups were portrayed as being unintelligent, uneducated, unmotivated, and irresponsible. Out of the 39 personality traits used to describe the groups, 38 yielded significant differences unfavorable to the working class. This fact has been captured by research on the stereotype content model, which has demonstrated that the poor form one of the few social groups targeted by a clearly negative (i.e., nonambivalent) stereotype (Fiske, Cuddy, Glick, & Xu, 2002). They are disliked and disrespected, and this attitude is widely spread across cultures (Fiske et al., 2002), even among educated liberals (Brantlinger, 2003). In other words, the poor are the victims of a “contemptuous” prejudice (see Fiske et al., 2002) that portrays them as unintelligent and lazy.

**STEREOTYPE THREAT AND SOCIAL CLASS**

Since the classic research of Steele and Aronson (1995), an important literature has yielded support for the hypothesis that, in standard testing situations, stereotypes of intellectual inferiority can affect intellectual achievement. Once again, although the number of studies examining how social stereotypes undermine performance has skyrocketed, research on stereotype threat and social class is largely underdeveloped.

The first study revealing stereotype threat effect related to social class was conducted in France. Croizet and Claire (1998) asked undergraduates to take a difficult test adapted from the verbal section of the Graduate Record Examination (GRE). Class was determined by parental occupation and education. Students were selected as low SES if their parents never finished high school and were unskilled workers. Students of high SES had parents who had college degrees and held professional occupations. Because there were some concerns about the possibility that the stereotype may not be salient enough, the researchers asked half of the participants before they took the test to indicate the level of their parents’ education. Surprisingly, this salience manipulation had absolutely no impact on intellectual achievement. When participants were informed that the test was a measure of their cognitive ability, students from low socioeconomic backgrounds performed lower than their high SES peers. Yet, when the test was introduced as a simple laboratory exercise,
nondiagnostic of ability, the low SES students performed as well as the others.
Interestingly and congruent with the literature on stereotype threat, high SES
benefited from the diagnostic condition (i.e., a lift effect, see Croizet & Claire,
Surprisingly, some doubts were raised about the generality of this finding. The
argument coined even at the editorial stage was that the social class stereotype threat
effect was a “French” effect because of the classist structure of the French society.
The implicit assumption was that this finding would not be observed in the United
States, where stereotypes about social class are less prevalent. It took several years
for this issue to be settled. Harrison, Stevens, Monty, and Coakley (2006) had white
and non-white college students take difficult math and verbal tests (SAT).
Participants were from lower ($39,000 and under per year), middle ($40,000—
$79,999 per year), or upper classes (over $75,000 per year). For one half of the par-
ticipants, the test was framed to minimize stereotype threat: A study of the cognitive
processes underlying performance. The other participants were informed that they
were about to take a valid measure of math and verbal abilities to investigate the
reasons for the underachievement of the poor in college. Consistent with previous
research, this study demonstrated a stereotype threat effect related to social class on
both verbal and math performance. Students of lower income performed worse on
the task when it was presented as a valid test of their abilities than they did when it
was characterized in a nonthreatening way. Whereas middle-class college students
were unaffected by the manipulation, those from upper-class backgrounds per-
formed better under the diagnostic condition than they did under the nondiagnosis.
Almost at the same time, B. Spencer and Castano (2007) confirmed both
stereotype threat and stereotype lift related to class with another American sample.
Importantly and contrary to Croizet and Claire’s initial finding, these researchers
showed that the mere salience of SES was enough to disrupt performance among
the poor when the task was nondiagnostic, suggesting that there might be some cul-
tural differences about the situational prevalence of class stereotypes in educational
contexts.
Research has also documented the psychological cost of stereotype threat beyond
performance disruption. Indeed, lower -income participants exposed to stereotype
threat report higher test anxiety, lower confidence in their ability to perform, and
lower identification with academic domains (Harrison et al., 2006; Spencer &
Castano, 2007). The literature has also established the generalizability of the phe-

omenon across several tasks: From verbal, math, and English GRE-like tasks (e.g.,
Croizet & Claire, 1998; Harrison et al., 2006) to psychometric tests (Croizet &
Dutrévis, 2004; Désert & al., 2009). Probably one of the most disturbing findings
concerning stereotype threat related to social class is the fact that it affects perfor-
mance on nonverbal IQ tests that were specially developed to limit language bias in
psychometric assessment. Raven’s progressive matrices test (Raven, Raven, & Court,
1988), for example, is often considered as one of the purest measures of intelligence
(i.e., “g,” see Herrnstein & Murray, 1994, p. 273; Snow, Kyllonen & Marshalek,
Yet, research has demonstrated that achievement on such tests is sensitive to stereotype threat that targets the poor (Croizet & Dutrévis, 2004). For example, Désert et al. (2009) showed that children from a low socioeconomic background performed worse on Raven’s test when it was introduced using the standard instructions rather than when it was described as a game. Importantly, this finding was observed among children who were only 6 years old and replicated among 7- to 9-year-old students, suggesting that stereotype threat can affect achievement and therefore students’ life very early on.

**Intersectionality and Stereotype Threat**

Even though research has cleverly demonstrated that even dominant groups can experience stereotype threat, social settings are framed in a way that most of the groups experiencing this predicament are from the bottom of the social hierarchy: blacks, Latinos, the poor, women. Those are the groups targeted by a stereotype of lower intelligence (Fiske et al., 2002). So far, the existence of stereotype threat has been established by focusing on separate identities defined in terms of race, gender, or class. But this approach is limiting because it ignores the fact that individuals usually belong to several categories that overlap and depend on one another.

The concept of *intersectionality*, initially developed by feminist and critical race theorists (e.g., Crenshaw, 1993), explicitly refers to the reality that groups hold multiple statuses in society. Although theoretically neglected, intersectionality may explain certain findings in the stereotype threat literature, like the fact that the debilitating effect of stereotype threat occurs for only certain combinations of identities. For example, in one study, stereotype threat disrupted women’s math performance but only for Mexican American females not white women, something referred to as the “double minority effect” (Gonzales, Blanton, & Williams, 2002). In the same vein, Andreoletti and Lachman (2004) investigated how age stereotypes that depict the elderly as having poor memory affects recall performance. Their results showed that older participants (aged 60 or higher) performed less well when a memory test was characterized as revealing age differences (stereotype condition) than when it was described as a test showing no age difference (counter stereotype condition) or when no reference to the stereotype was made (standard condition). Interestingly, the elderly with higher education (more than a 4-year college degree) were the only ones showing this standard stereotype threat effect. Participants with low education showed memory deficit in both the stereotype and the counterstereotype conditions as compared to the standard condition. The authors’ conclusion was that “education may be a more important factor than age with regard to susceptibility and resilience to memory aging stereotypes” (Andreoletti & Lachman, 2004, p. 145).

Here, we argue that these findings point to the necessity to consider intersectionality. Cumulative lack of power and control may make one more sensitive to the undermining effect of stereotypes in the same way that accumulation of power may
make one more sensitive to the enhancing effect of stereotypes. Therefore, one could predict that some African Americans may experience stereotype threat related to race at a lower level of situational threat when they also happen to be poor and female.

The intersectionality framework has a lot to offer at this level because it questions the implicit but often powerful understanding of identity as a simple demographic individual attribute. It forces theoretical refinement of the predicament associated to social identities (American Psychological Association, Task Force on Socioeconomic Status, 2007). Cole (2009) recently proposed that a systemic consideration of intersectionality would lead researchers to do three things: question the definition of their categories (e.g., who are the elderly in the sample, what gender, what race, what class?); examine the role played by inequality (i.e., power and resources asymmetry); and identify the commonalities between groups (e.g., most groups experiencing stereotype threat have lower status and are excluded from the educational system, whereas those experiencing stereotype lift are the beneficiaries of it). In other words, this approach advocates conceptualizing identity not as a personal variable but more as a social process involving groups’ position in the social structure.

A study carried out by a group of sociologists yielded evidence suggesting that such a shift may have heuristic value. Lovaglia, Lukas, Houser, Thye, and Markowsky (1998) experimentally assigned participants to either a low- or high-status position. Status was randomly determined by left- or right-handedness, which was predicted to be positively or negatively related to the ability required for an upcoming task. This relationship was further justified by a biological rationale invoking the right or left parts of the brain. Participants were informed that they would also later be assigned to different occupations and pay level, based on their status and aptitude score (i.e., supervisors $17 per hour; analysts $8; menials $4.5). Assignment rules were clearly favorable for high-achieving high-status individuals and unfavorable for low-achieving low-status individuals. Participants then took the Raven Progressive Matrices test. Results from three studies revealed that participants’ scores were influenced by their status. Participants who had a higher status (i.e., expectation of higher ability and advantaged by the system) obtained a higher IQ (e.g., 120, Experiment 2) than did those who were randomly assigned to a low status (i.e., who had a reputation of low ability and disadvantaged by the system; IQ = 112). In other words, Lovaglia et al. (1998) revealed that creating a social hierarchy with different status and privilege was enough to induce stereotype threat effects on IQ scores.

The reasons why stereotype threat effects are limited to or magnified by certain combinations of identities (e.g., ethnicity and gender, age and class) therefore deserves further attention. The answer is unlikely to involve the inclusion of more demographic variables. Rather, research on intersectionality proposes a shift in our understanding of the concept of social categories and identities. Instead of informing about the individuals within the groups, social categories define the structural relations that shape individual, social, and institutional practices (Cole, 2009; Markus & Moya, 2010; Zuberi & Bonilla Silva, 2008).
Policy Box

The persistence of the achievement gap between the rich and the poor constitutes one of the biggest challenges for a democratic society committed to equal opportunity. Education serves the important function of selecting individuals based on their sole merit, but research on stereotype threat and social class suggests that the implementation of equality in educational settings is problematic. Testing situations are usually considered to be neutral, but they are actually differently experienced by the rich and the poor. They contribute substantially to the class gap in test scores. Test scores should therefore be considered less an indicator of individual cognitive potential but more as the by-product of educational and social situations. One positive consequence of this finding is that the power of educational situations on performance is more important than usually thought. Research shows that subtle situational changes, notably minimizing the belief that level of achievement reflects intellectual value, generate positive educational outcomes in terms of performance, motivation, and sense of belonging. Because immediate situations are under the control of teachers, such interventions are easy to implement. On the more negative side, this literature questions our commitment to meritocracy because test scores systematically measure something other than individual merit. Therefore, using them to determine who gets ahead in education becomes problematic. Finally, research points out that the process driving these effects is beyond the level of the classroom or the school. Although this should in no way be a reason for inaction, we should also avoid “educationalizing” social problems, looking to the classroom for the key to an issue that is deeply rooted in the wider society.

FROM STEREOTYPE THREAT TO SYMBOLIC VIOLENCE

The move from the person to the situation has been a signature of stereotype threat research from the very discovery of the phenomenon. Early on, stereotype threat was defined as a “threat in the air,” something in the situation, not within the individual (Steele, 1997). According to the initial formulation of the theory, stereotype threat is not a motivational trait of stigmatized individuals; it is a predicament brought into the testing situation by the stereotype. It can be alleviated with subtle situational changes, like altering the presentation of a test. Groups that usually enjoy high status can also experience stereotype threat whenever they are placed in a situation that puts their ability into question (e.g., see Aronson et al. 1999; Leyens, Désert, Croizet, & Darcis, 2000). Yet, such situations are far less frequent in the real world that those encountered by disadvantaged groups.

Indeed, in a given society, situations are not randomly arranged and distributed in space. They are organized across institutions. They are nested with ideology, shaped by history and culture, and enacted daily through institutional practices. In other words, they constitute “intentional worlds” (Adams, 2010; Shweder, 1990). Research has revealed that ideologies that depict certain groups as inferior constitute a crucial element of individuals’ reality in testing situations. But evaluative situations by themselves should not be considered as just a “neutral” environment
permeable to negative stereotypes. Testing situations should also be conceptualized as a social process, historically and culturally situated, that actively contributes to group domination (Croizet, 2010). Research on stereotype threat and stereotype lift has consistently demonstrated that evaluative situations reproduce the status quo. People from high-status groups outperform, while those from low-status groups underperform. We believe that this commonality has been overlooked and should be investigated further (see Cole, 2009). Understanding how situations shape individual construal of reality and performance is essential, but decrypting the social logic of inequality embedded and enacted in evaluative situations appears now unavoidable.

Long-term relations of domination that define class, race, and gender relations are characterized by two important features (Jackman, 1994). They rely heavily on symbolic domination, and they are institutionalized. As pointed out by Max Weber (1914/1978), power relations are also symbolic relations. Throughout history, dominant groups have sought to justify their power by manufacturing ideologies that depict them as superior and entitled to control the dominated groups (Zelditch, 2001). Some authors argued that the notions of “aptitude” and “intelligence” have served to rationalize the domination of the haves over the have-nots (Bisseret, 1974; Bourdieu & Passeron, 1964). For example, the meaning of aptitude evolved during the 19th century from an unstable predisposition totally dependent on the environment to an immutable and inherited trait (Bisseret, 1974). At that time, the French bourgeoisie, who had accessed power after the revolution, was in need of justification for its power over the working class that it had earlier mobilized to overthrow the monarchy in the name of freedom, equality, and brotherhood. It was also an era in which slavery and colonialism had to be made compatible with democracies founded on the idea of equality of men. It is at that time that the concept of intelligence made its appearance to justify the superiority of rich white men (Carson, 2007). Group stereotypes have also played a crucial role in system justification (Jost & Banaji, 2004; Tajfel, 1981). We argue that the idea of intelligence as a stable and individually owned characteristic was also manufactured for that purpose (Croizet, 2010).

Yet, domination would not be efficient without some degree of institutionalization. Institutionalization of domination relieves group members who enjoy high status for having to act individually to benefit from their privilege. Bourdieu and Passeron (1970) proposed that education is an institution that actively contributes to reproduction of the social class structure of society. First, it achieves this function by negating the cultural arbitrariness of educational material and practices that favor certain groups of students (i.e., a group culture is imposed as the only legitimate culture); second, it locates performance not as the outcome of social inequalities and power differentials but as the product of individual differences in talent and merit. Through these two processes, education perpetuates a form of symbolic violence that locates the cause of failure of lower-class students on their personal limitations and the success of the upper middle class, not on privilege and power, but on their individual superiority (Bourdieu & Passeron, 1970).
We propose that an important function of evaluative situations is to perpetrate this symbolic violence. Research on stereotype threat has brought ample evidence documenting the psychological impact of this symbolic violence (Schmader, Johns, & Forbes, 2008). In standard testing situations, low-status group members face symbolic disqualification (Millet & Thin, 2004); they struggle with a suspicion of intellectual inadequacy that creates an imbalance among their self-concept, their group identity, and the intellectual domain. This disqualification triggers emotions, drains cognitive resources, and disrupts performance (Johns, Inzlicht, & Schmader, 2008).

Like intersectionality, the notion of symbolic violence suggests that stereotype threat and lift phenomena related to social class can be conceptualized as the behavioral outcome of power dynamics embedded in the exam situation. Under the cover of explicit equality of treatment (i.e., sameness of exam and time), test situations allow the confrontation of social and structural inequality in a confined environment that “essentializes” or transforms privilege and power into individual merit and talent (Croizet & Guinier, 2010). By perpetrating this symbolic violence on a daily basis, tests and exams play a key role in legitimating and reproducing the current social order. Such issues have a long history in sociology. Stereotype threat research suggests that they are opened to sociopsychological scrutiny as well.

CONCLUSION

In 1911, Alfred Binet was confronted with the fact that the poor scored lower than the rich on his test. After a careful analysis of the available evidence, he concluded that the superiority of the young “bourgeois” was likely due to the language spoken in wealthy families, which, according to him, advantaged them on the test. Almost a century later, the question of why people from low socioeconomic backgrounds underachieve on intellectual tests remains a hotly debated issue. Some recent research scrutinizes prefrontal regions of the brain (Kishiyama, Boyce, Jiminez, Perry, & Knight, 2009), brain size (Rushton & Ankney, 2009), or genes (Posthuma & de Geus, 2006) to identify the cause of lower intelligence. The literature on stereotype threat suggests that part of the answer may reside not within the individual but outside, in the testing situation and in a pervasive cultural ideology that portrays the poor as intellectually inadequate. In this chapter, we have documented this evidence. We have argued that research on stereotype threat and social class would benefit from questioning the so-called neutrality of testing situations a step further. Borrowing from work on intersectionality and social reproduction, we have advocated for conceptualizing SES, not as an individual attribute, but as a social process involving power relations in a social hierarchy. According to this approach, evaluative settings contribute to group domination by perpetrating symbolic violence that organizes the disqualification of low SES people’s sense of self-worth. Stereotype threat research has widely documented how suspicions of inferiority and superiority affect test performance. Still more effort is required to understand how ideology (stereotypes), institutional practices (evaluative settings), and behavior...
(performance) work together to transform power and privilege into individual differences in intellectual merit.

ENDNOTE

1. Throughout this text, the word “intelligence” refers to psychometric intelligence.

References


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