Beliefs about intelligence as a cause of economic inequality and the extent to which educational experience, socioeconomic status, and class-consciousness mediate such beliefs were studied. A purposive sample of 184 advanced Business and Social Science university undergraduates and a sample of urban technical college students responded to a three-part 49-item survey. Section I was designed to measure attitudes towards the explanation of economic inequality as reflected in "The Bell Curve: Intelligence and Class Structure in American Life" (C. Murray and R. Herrnstein, 1994), and section 2 assessed subjects' economic class background and class-consciousness. Results show that, compared to their counterparts, subjects from lower economic class backgrounds, subjects with stronger working class-consciousness, and subjects with educational backgrounds in the social sciences displayed significantly less favorable attitudes toward beliefs promoted in "The Bell Curve." These results are consistent with a number of hypotheses derived from a social conflict and legitimization theory paradigm, which regards views such as those expressed in "The Bell Curve," as sociopolitical ideology serving to legitimize structures of economic inequality. Appendixes contain the survey and a summary of responses by academic major. (Contains 3 tables and 18 references.) (SLD)
Beliefs about Intelligence and the Causes of Economic Inequality:

Opinions on The Bell Curve

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Paper Presented at the Annual Meeting of the
American Educational Research Association
Montreal, Canada 1999
Abstract

The purpose of this paper is to explore beliefs about intelligence as a cause of economic inequality and the extent to which educational experience, socioeconomic status, and class-consciousness mediate such beliefs. A purposive sample of 184 advanced Business and Social Science University undergraduates and a sample of urban Technical College students responded to a three part 49-item survey. Section 1 was designed to measure attitudes towards the explanation of economic inequality as reflected in *The Bell Curve: Intelligence and Class Structure in American Life* (Murray & Herrnstein, 1994) and Section 2 assessed subjects' economic class background and class-consciousness. Results showed that, compared to their counterparts, subjects from lower economic class backgrounds, subjects with stronger working class-consciousness, and subjects with educational backgrounds in social sciences displayed significantly less favorable attitudes toward beliefs promoted in *The Bell Curve*. These results are consistent with a number of hypotheses derived from a social conflict and legitimization theory paradigm, which regards views such as those expressed in *The Bell Curve*, as socio-political ideology serving to legitimize structures of economic inequality.
Beliefs about Intelligence and Economic Inequality: Opinions on *The Bell Curve*

Research on human intelligence continues to generate a substantial amount of controversy. This debate intensified recently when Charles Murray and Richard Herrnstein’s (1994) publication *The Bell Curve: Intelligence and Class Structure in American Life* attempted to support the following conclusions: 1) Intelligence is basically a biologically heritable trait. 2) A general factor intelligence, labeled simply g, exists which permeates all abilities. 3) This g can be summed up in a single linear score—typically an IQ score. 4) Different “races” in America differ enough along genetic lines to account for differences in intelligence.

The authors then wed their social beliefs to their research, concluding that (1) social or educational interventions to improve group intelligence will have little or ephemeral effect; (2) genetic differences in intelligence explain, to a large extent, the different socio-economic status’ that exist in America today; (3) society’s rewards are based on meritocracy in which individuals are naturally rewarded commensurate with their degree of intelligence; (4) identifying said intellectual differences is for the purpose of classification and appropriate occupational direction; and (5) social inequality is the natural result of biological class fate.

Public reception of *The Bell Curve* was swift and positive. Referring to it as “magisterial,” contributors to a *National Review* symposium (cited in, Wieseltier, 1995) proclaimed the book to “confirm ordinary citizens’ reasonable intuition that trying to engineer racial equality in the distribution of occupations and social positions runs against not racist prejudice but nature, which shows no egalitarian distribution of talents.” By the time of it’s review in *Scientific American* (Kamin, 1995), the book had already sold over 400,000 copies.

Attempts to legitimize economic inequality by presenting it as “natural” or caused by biological and racial inequalities and hence beyond political challenge, have a very long history.
going back as far as the “Myth of the mettle,” in Plato’s Republic (for more recent histories see Gould, 1981 and Chase, 1976). The first incarnation of the thesis developed in The Bell Curve, appeared almost thirty years ago in an article entitled “I.Q.” published by Richard Herrnstein in the September 1971 issue of the monthly magazine Atlantic. Comparing the more recent Bell Curve with Herrnstein’s earlier version reveals that there has been virtually no change in the author’s explanation for economic inequality over the ensuing years. Chomsky (1976) published a blistering critique of Herrnstein’s original article exposing its logical fallacies and unsubstantiated assumptions. Since Chomsky’s critique provides the background and rationale for much of our own study, we summarize his analysis briefly here.

According to Chomsky, Murray and Herrnstein’s explanation for inequality can be summed up in the form a syllogism. In their first premise, The Bell Curve authors argue that “differences in mental ability are inherited and that people close in mental ability are more likely to marry and reproduce, so that there will be a tendency toward long-term stratification by mental ability, which Herrnstein takes to be measured by IQ.” Secondly, according to Chomsky, “Herrnstein argues that ‘success’ requires mental ability and that social rewards ‘depend on success.’ This step in the argument embodies two assumptions: first, it is so in fact; and second, it must be so for society to function effectively” (p. 285). On the basis of these assumptions, Herrnstein and Murray conclude that there is a tendency towards a hereditary meritocracy in which economic rewards will be concentrated in groups with higher IQs, hence economic inequality is the natural result of an individual’s biological class fate.

While Chomsky’s critique focused primarily on the logical fallacies and unsubstantiated assumptions in the second premise, other reviewers of The Bell Curve generally focused on exposing the weak and confounded correlation data which has been used as the “factual” basis
for premise one (see for example Kamin, 1995). The recent publication by the American Psychological Association of the book *The Rising Curve: Long-term Gains in IQ and Related Measures*, (Neisser, 1998) has challenged further the factual basis of Murray and Herrnstein's first premise by presenting strong evidence that is completely inconsistent with IQ heritability theory. The evidence known as the "Flynn effect," after researcher James Flynn who discovered the effect, documents IQ gains of 25 points on average on the least culturally loaded test (thought to be the least susceptible to environmental influence) over one generation in twenty countries. Obviously, this finding is entirely inconsistent with the view that IQ differences represent a genetically inherited trait.

In addressing the second premise, Chomsky points out that even granting the factual basis of premise one (which numerous studies have shown is much in doubt), it does not necessarily follow that society must reward its most intellectually talented individuals with increased concentrations of wealth and power. Because a society is presently organized in such a way that it differentially rewards its most intellectually talented individuals does not mean that the society must be organized in that way in order to operate effectively. For example, a society that practiced the social principle "from each according to their ability, to each according to their need," would have a greatly reduced range of economic inequality. One can point to historical and contemporary examples of societies with strong social democratic traditions and a far smaller range of economic inequality than found in the U.S. The assumption that a society's economic rewards must be highly correlated with ability in order for that society to function efficiently is accepted by Murray and Herrnstein a priori in the absence of substantiating evidence. As Chomsky notes, "If this assumption is false and society can be organized more or less in accordance with the socialist dictum, then nothing is left of Herrnstein's argument."
Beliefs about Intelligence

(Except that it will apply to a competitive society in which other factual assumptions must hold).” For Herrnstein’s argument to hold, “…we must assume that people labor only for gain, and that the satisfaction in interesting or socially beneficial work, in work well done, or in the respect shown to such activities is not sufficient ‘gain’ to induce anyone to work” (p. 287). Murray and Herrnstein provide no argument or evidence to support such a claim other than the a priori assumption that differential external rewards are needed as inducements to work. We are asked to accept the claim that CEOs need to be compensated at two to three hundred times the rate of their lowest paid employee in order for their corporations to be run effectively, and that a compensation ratio of 5 or 10 would not work as effectively.

Finally, Chomsky argues that the social utility ranking of occupations is only weakly and possible negatively correlated with economic rewards. In a society where the concentration of wealth and power is high, it its predictable that individuals with abilities useful to the power elite will inevitably receive greater economic rewards for their services (for example, accountants who save corporation millions through tax loopholes, attorneys defending corporations in product liability suits, CEOs increasing corporate profits through plant closings and downsizing, etc.). According to Chomsky, “Unequal distribution of wealth and power will naturally introduce a bias towards greater remuneration for services to the privileged, thereby causing the scale of remuneration to diverge from the scale of social utility in many instances...Given great inequalities of wealth we will expect to find that the ‘gradient of occupation’ by pay is a natural measure of service to wealth and power—to those who can purchase and compel—and only by accident a ‘natural measure of value’” (p. 290).

When a theory of economic inequality such as that promoted in The Bell Curve lacks evidential and logical support, and incorporates among its assumptions the dominant capitalist
ideology, we are naturally led to ask why the theory is taken seriously and what functions it may play in the broader society. An area of sociological research that addresses such questions is known as *legitimation theory*. Within the framework of legitimation theory, the promotion of race and class-based beliefs about intelligence and economic inequality are characterized as a form of socio-political ideology designed to justify elite privilege. Such beliefs are aimed at convincing the general population and non-elites that economic inequality is biologically determined rather than resulting from a particular and modifiable form of economic and social structure. Individuals or groups may come to perceive their lower economic class positions as resulting from an unjust social order and may initiate efforts to change that structure so that it more equitably addresses their interests. Such threats to the present structure of privilege may be avoided by convincing the public that economic inequality is biologically inevitable. (For comprehensive discussions on the role of ideology and propaganda in the justification of policy and privilege see Kerbo, 1983, 372-398; Chomsky, 1989; and Herman and Chomsky, 1988).

Social institutions that play important roles in the process of ideological legitimation include the schools, mass media, and a large number of governmental and quasi-governmental agencies.

From the standpoint of legitimation theory, the production and dissemination of ideology designed to protect the economic interest of those who benefit most, does not necessarily share a uniform or instant acceptance (particularly by those who benefit least). On the contrary, the theory predicts that an individual's judgment of the validity of views such as those promoted by *The Bell Curve* will be determined to some extent by their own economic class position. Specifically subjects coming from backgrounds of economic privilege, legitimized by attributing it to high intellectual ability, would be expected to judge the validity of *The Bell Curve* thesis
more favorably than subjects whose economic disadvantage is attributed to their own immutable biological deficiencies.

Given the long history of the debate over the validity of *The Bell Curve* thesis, it is surprising that few studies have examined public opinion in regard to these views and the relationship between various socioeconomic variables and subjects’ attitudes. The public’s beliefs in this regard are especially relevant given some of the educational and public policy recommendations made by Murray and Herrnstein, such as “...by custodial state we have in mind a more lavish version of the Indian reservation for some substantial minority of the nation’s [less intellectually talented] population, while the rest of America tries to go about it’s business” (Murray and Herrnstein, 1994, p.526).

The present study examined the hypotheses consistent with legitimation theory that agreement with *Bell Curve* ideology will be mediated to some extent by subject’s economic class background and the kinds of educational experiences they have had—since education is partly a matter of indoctrinating students into the dominant ideologies of their fields. Thus, our two primary hypotheses were:

1. Survey respondents coming from higher socioeconomic positions will hold more favorable opinions concerning the validity of the *The Bell Curve* than respondents coming from less advantaged backgrounds.

2. Respondents educated in the social sciences (including education, sociology and psychology) will have less favorable opinions toward *The Bell Curve* thesis than respondents educated in the business sciences.

Several ancillary hypotheses were also of interest. Since *The Bell Curve* asserts that the economic inequality that exists between whites and nonwhites is due to differences in the
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inherited intellectual ability of these groups, rather than to the effects of racism and economic exploitation, legitimation theory would predict that whites would hold a more favorable view of this explanation than nonwhites. Hence we predict that:

3. Respondents who identified their ethnicity as nonwhite would have less favorable attitudes toward the ideas promoted in The Bell Curve than respondents who reported white ethnicity.

Finally, we hypothesized that,

4. Respondents scoring higher on a scale of working class consciousness would view The Bell Curve less favorably than respondents scoring lower on this scale.

5. Respondents identifying themselves as more politically conservative would respond more favorably to The Bell Curve than respondents identifying themselves as more politically progressive.

6. Respondents identifying themselves as more politically progressive would score higher on a scale of working class consciousness than more politically conservative respondents.

Method

Instrument

The data for the study were gathered from a 6-page 49-item questionnaire divided into three parts. Part 1 consisted of 18 items developed by the researchers to measure attitudes towards the explanation of economic inequality as reflected in The Bell Curve. Part 2 consisted of 15 items developed by Eric Olin Wright (1986) as part of a multi-national survey designed to measure individuals' class-consciousness. Part 3 contained a number of demographic questions and portions of Wright's survey designed to assess respondents' socioeconomic status (SES). (See Appendix A for a complete reproduction of the survey questionnaire.) Response scores on part
one were coded in such a way that higher scores represent stronger agreement with *The Bell Curve* conclusions than low scores. Responses on part two were coded in such a way that high scores represent greater working class consciousness whereas low score represent stronger pro-business beliefs (consistent with Wright’s coding scheme).

**Index of Socioeconomic Status (SES)**

Characterization of society’s social and economic structures is both difficult and extremely important for understanding various social phenomena and several reliable and valid measures have been devised (Mueller and Parcel, 1981; Wright and Perrone, 1977; and Hollingshead, 1975). In order to construct a simplified measure of socioeconomic status (SES) for the present study it was decided that an index of SES would be constructed from a number of items the previous research has considered most important. These include the individual’s source of financial support, occupation of the financial supporter, role within the occupation of the financial supporter, self-identified class association, and income. The final index of SES was determined by a weighted summation of the responses to the seven variables listed above. Finally, for most analyses SES scores were divided into three categories (1-6=lower (n=64); 7-9=middle (n=63); and 10-16=upper (n=60)). (See Table 2 for the frequency values of the SES index.)

**Subjects**

A purposive sample of 184 undergraduate students from a large urban university and large urban technical college completed the questionnaire. A total of 69 respondents were nearing the completion of a degree in Business Science, 65 were nearing the completion of a BA in the Social Sciences (primarily Education and Sociology), and 50 respondents, enrolled at an urban technical college, were advanced undergraduate students in non-Business/non-Social Science
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fields. (See Table 1 for a complete composition of the survey sample.) A purposive sampling strategy was used in order to get an approximately equal number of social science and business science students. Students from the urban technical college were sampled in order to include an adequate number of respondents with different educational and working class backgrounds.

A pilot test of the instrument was conducted on 57 advanced nursing students from the same urban technical college. A reliability analysis revealed relatively high alpha coefficients for both the 18 intelligence debate items (.914) and the 15 class-consciousness items (.870). Corrected total item correlations also remained relatively high for all items. To reduce data, a confirmatory factor analysis on the 18 intelligence debate items supported three dimensions of opinion—attitudes toward (1) the genetic heritability of intelligence, (2) the role of intelligence in a meritocracy, and (3) intelligence and its relation to social problems (such as crime). (Refer to appendix B for the factor-coding scheme.)

Results

The results were consistent with both primary hypotheses. Respondents with higher SES scores reported more favorable opinions than lower SES respondents regarding The Bell Curve theory that inherited intelligence is a primary cause of economic inequality ($F_{2,173}=12.36$, $p \leq .001$, with mean scores of 34.5, 38.6 and 40.34 for the low, middle and upper SES groups respectively). A similar pattern of results was obtained for each of the three factor scores measuring belief in the genetic heritability of intelligence ($F_{2,173}=4.6$, $p \leq .01$), the belief that society's social problems are caused by genetically inherited low intelligence ($F_{2,173}=8.83$, $p \leq .0001$), and the belief that economic inequality is the result of a genetically determined meritocracy of talent ($F_{2,173}=5.0$, $p \leq .008$).
In each of these comparisons, respondents coming from higher SES backgrounds held significantly more favorable opinions regarding these views than respondents from middle and lower SES backgrounds. These relationships between SES and opinions concerning the causes of inequality also held within white and non-white ethnic groups considered separately and within each college major considered separately. Thus, the relationship between SES and beliefs about the causes of inequality does not appear to be the result of a concomitant relationship with ethnicity or college major.

Our second primary hypothesis was also supported. Students completing business majors held significantly more positive opinions than social science majors towards the view that inherited intelligence is a major cause of economic inequality ($t_{(132)}=13.203, p<.001$), that low intelligence is a cause of social problems ($t_{(132)}=2.87, p<.005$), and that our unequal economic structure consists of a meritocracy based on an unequal distribution of inherited intellectual ability ($t_{(132)}=3.03, p<.003$). (See table 3 for the means and standard deviations of the intelligence and economic inequality total item score and factor sub-scores for SES index classification and academic major.) No significant effect was found for SES by academic major, thus it was concluded that relationship between major and Bell Curve agreement was not a result of concomitant effect between SES and academic major.

The relationship between subjects' reported ethnicity and opinions toward Bell Curve conclusions was also investigated. Due to small sample size, respondents who reported an Asian/Pacific Islander ($n=4$) ethnicity were omitted from this analysis. Respondents who reported a white ethnicity were placed in one group ($n=152$), and all other respondents were placed into a non-white ethnicity group ($n=28$). It was hypothesized that subjects reporting a non-white ethnicity would be more likely to disagree with Bell Curve conclusions. A significant
effect was found for ethnicity and total item score ($t_{(178)}=8.432$, $p<.004$). As hypothesized, subjects who reported a non-white ethnicity held less favorable opinions toward Bell Curve conclusions than did respondents reporting a white ethnicity. When ethnicity was compared along the three sub-scores, significance was found for the Genetic Heritability score ($t_{(178)}=5.871$, $p<.02$) and the Meritocracy score ($t_{(178)}=4.094$, $p<.05$). The difference on the Social Problem score was very close to significance at the .05 level ($t_{(178)}=3.843$, $p=.052$).

Additional analyses indicated that respondents who held higher working-class consciousness, as measured by Wright's (1986) scale, tended to have more negative opinions concerning the explanation promoted by the authors of The Bell Curve for the causes of economic inequality. As predicted, the working-class consciousness scale correlated $r=-.58$ ($p<.001$) with opinions concerning The Bell Curve theses. In addition, a measure of the respondents' political orientation (with higher scores indicating a more progressive political orientation and lower scores a more conservative orientation) correlated $r=-.31$ ($p<.01$) with opinions concerning Murray and Herrnstein's explanations for economic inequality.

**Discussion**

The results suggest that students' tendency to accept or reject an ideological explanation for the causes of economic inequality is associated with their economic life experience, college major, level of working-class consciousness, and their political orientation. The pattern of results was consistent with the predictions of legitimation theory in that respondents judged the validity of the theory developed in The Bell Curve based on their own economic class experience. The specific direction of the prediction derived from legitimation theory (Kerbo, 1983) and more recent theory of the power of propaganda to compel public consent (Chomsky, 1989, Herman & Chomsky, 1988), is somewhat counterintuitive. One might expect that
respondents from upper middle class backgrounds would be less likely to accept the validity of an ideological or scientifically flawed knowledge claim than working class respondents, because of their greater exposure to higher quality educational resources (e.g. better schools, better educated family members and school mates, stronger educational achievement orientation etc.). However, since legitimation theory regards schools as one important site of ideological indoctrination, it predicts that more and “better” schooling will be positively associated with ideological indoctrination. In addition, students who grow up within the working class may have greater exposure to exploitation based explanations of inequality as well as more direct experience with the structural forces that can produce economic deprivation (such as layoffs, plant closings, etc). This direct evidence in their own life experience may help counter a view that attempts to explain their economic plight in terms of their own immutable biological deficiencies. Conversely, middle and upper class subjects may be less likely to have been exposed to a view that attributes their economic privilege to class exploitation. A theory which argues that the economic rewards of privileged classes results from their own natural abilities or efforts may be more likely to preserve the self-esteem of these groups and hence it is a more appealing explanation than one which views economic gain as the direct result of the loss and economic suffering of others.

While our results were statistically significant and the pattern was theoretically consistent, the size of the associations with SES were rather modest. For example, the \( r^2 \) statistic for the relationship between SES Index Score and the total score reflecting overall opinions towards *The Bell Curve* thesis was .13. Thirteen percent of the variance in opinions was predictable from the SES score. The \( r^2 \) values for the three subscores ranged from .06 to .08. Perhaps these relatively small effects were due to the coarseness of our measures or perhaps they reflect the degree to
which *The Bell Curve* ideology has permeated the public mind at all levels of economic class. All theories of ideology recognize that the dominant ideology, promoted as it is by many of the most powerful and influential resources of the private and public sectors, does frequently come to command public belief (what Antonio Gramsci called ideological hegemony). Ideas such as those expressed in *The Bell Curve* have been around in one form or another for many years and have been given credibility by exposure in the mass media, schoolbooks, and "expert" testimony. Given such extensive exposure, it would not be surprising to find widespread acceptance of such beliefs among the members of all economic strata.

On the other hand, the statistically significant difference between social science and business majors yielded a Cohen's measure of effect size of .63. The mean difference in opinions of these two groups amounted to slightly over six tenths of a standard deviation—a large effect by standards of psychological research. This difference suggests a rather substantial effect of educational major. It is, however, important to note that although we purposefully selected students who were near completion of their college work to maximize saturation in their major, we were unable to collect longitudinal data or data on beginning students. Consequently, we were unable to determine how much of our effect was due to prior differences in the beliefs of students who select different majors and how much might be due to exposure to the major field itself. We suspect that a reasonable interpretation is that our results represent a combination of both effects, but further longitudinal research will be needed to tease these apart. The extent to which students assimilate particular forms of ideology as a result of training in different college major fields is an important question, but one that awaits further research.

Although schools are an important site of ideological indoctrination (witness the ever increasing expression of business interests in the schools), they are also an important site of
potential resistance to indoctrination through their tendencies to encourage the development of
critical, independent minded individuals. Because of the liberating potential of education,
schools have frequently been sites of struggle over curricular content designed to maintain
student thinking within what Chomsky (1988) has referred to as “the bounds of thinkable
thought.” There is a tension in schools between tendencies which promote the dominant
ideology and educational experiences which expose students to widely different viewpoints,
courageing them to critically analyze these views and to arrive at their own independent
conclusions.

Education in its best sense should expand students’ thinking about the causes of the economic
and social conditions in the world and society in which they live—to expand “the bounds of
thinkable thought.” As long as schools are silent about critical theories that challenge existing
views of why poverty exists in our nation alongside extreme wealth, students will continue to be
exposed to the popular myths, stereotypes, and propaganda of the welfare mother and skin-color
based intellectual classifications. Such beliefs, left unchallenged, tend to find a comfortable
rationalizing place in the minds of many middle-class young people who may have little direct
exposure to the hard, material realities of poverty, racism, or working-class life. One important
function of a critical education is to make such students aware of those realities and to engage
them in a critical discussion of the full range of explanations for why such conditions exist.

Working to broaden the range of thinkable thought in our schools will be a difficult task.
Those of us who are committed to the idea that education should include open discussion and
serious study of social justice issues such as poverty and racism, must first understand the
political forces at work which can narrow educational discourse in our schools. For example, a
clear consequence of increased accountability testing (now mandated by almost every state) is
the misuse and subsequent narrowing of curricular content. Teachers express interest in expanding their instruction to include important contemporary social issues but frequently report that state guidelines do not allow time to include such discussion. Furthermore, some states have set arbitrarily high passing scores on high stakes gates tests (referred to as “raising the bar”) and conveyed the spurious impression of massive school failure. For example, the state of Virginia recently announced that 97% of the state’s schools failed it’s new Standards of Learning (SOL) test. According to the march, 1999 issue of *NEA Today*, “Since the SOL tests were first administered in 1998, scores of Virginia teachers have complained of pressure from administrators to dump their curriculum and drill students in SOL test material. Many are doing just that.”

Wisconsin’s public school systems have historically excelled on traditional measures, scoring at the top on ACT and SAT tests, yet the state’s governor has mandated high-stakes gates testing for all high school students. Nationally, students in all ethnic categories are scoring higher on cognitive tests today than their parents of a generation ago (Neisser, 1998) still public schools continue to be portrayed as failures and demand for measures of accountability are increasing. While many supporters may genuinely believe increased gates testing improves educational quality, the net effect of such policies clearly needs to be more carefully considered.

Individuals who share a more progressive vision of education will have to organize in opposition to policies that force our schools to narrow the focus of instruction and the range of social ideas. Further, we should recognize and oppose policies that are transforming our schools from more democratic institutions in which teachers, parents, and community members share in curricular decisions, to top-down authoritarian type institutions modeled on the corporate management style.
References


Hollingshead, A. B. (1975). Four Factor Index of Social Status. Unpublished manuscript, Yale University, New Haven, CT.


Table 1

Composition of the Survey Sample

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Table 2
Composition of Socioeconomic Status (SES) Item Responses (n=184)

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<th>Item</th>
<th>Frequency</th>
<th>Percent</th>
<th>Value</th>
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<tbody>
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<td>1. While you were growing up, who provided most of the financial support in your family?</td>
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<td></td>
<td></td>
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<td>Parent(s)</td>
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<td>95.1</td>
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<tr>
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</tr>
<tr>
<td>2. In general, which of the following best describes the occupation of the person identified above while you were growing up?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing /Industrial</td>
<td>47</td>
<td>25.5</td>
<td>1</td>
</tr>
<tr>
<td>Sales</td>
<td>11</td>
<td>6.0</td>
<td>2</td>
</tr>
<tr>
<td>Governmental/Institutional</td>
<td>99</td>
<td>53.8</td>
<td>3</td>
</tr>
<tr>
<td>Small Business/Entrepreneur</td>
<td>27</td>
<td>14.7</td>
<td>4</td>
</tr>
<tr>
<td>3. When you were growing up with your family, was the person identified above:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self employed</td>
<td>17</td>
<td>9.2</td>
<td>3</td>
</tr>
<tr>
<td>Working for someone else</td>
<td>139</td>
<td>75.5</td>
<td>1</td>
</tr>
<tr>
<td>Both</td>
<td>27</td>
<td>14.7</td>
<td>2</td>
</tr>
<tr>
<td>4. If the individual above was self employed, did she or he:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have paid employees working for them.</td>
<td>28</td>
<td>15.2</td>
<td>3</td>
</tr>
<tr>
<td>Work for her/himself</td>
<td>25</td>
<td>13.6</td>
<td>2</td>
</tr>
<tr>
<td>Not applicable</td>
<td>129</td>
<td>70.1</td>
<td>1</td>
</tr>
<tr>
<td>5. Did the individual specified usually occupy a management /supervisor position while you were growing up?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>95</td>
<td>51.6</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>86</td>
<td>46.7</td>
<td>1</td>
</tr>
<tr>
<td>6. Thinking about your family’s total income from all sources, including your job, estimate your family income before taxes last year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$0-15,000</td>
<td>16</td>
<td>8.7</td>
<td>1</td>
</tr>
<tr>
<td>$15,000-30,000</td>
<td>25</td>
<td>13.6</td>
<td>2</td>
</tr>
<tr>
<td>$30,000-45,000</td>
<td>36</td>
<td>19.6</td>
<td>3</td>
</tr>
<tr>
<td>$45,000-60,000</td>
<td>53</td>
<td>28.8</td>
<td>4</td>
</tr>
<tr>
<td>$60,000 or higher</td>
<td>51</td>
<td>27.7</td>
<td>5</td>
</tr>
<tr>
<td>7. Many people say they belong to the working class, the middle class or the upper middle class. If you had to make a choice, which class would you say you belong to?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td>26</td>
<td>14.1</td>
<td>1</td>
</tr>
<tr>
<td>Middle</td>
<td>24</td>
<td>13.0</td>
<td>3</td>
</tr>
<tr>
<td>Upper Middle</td>
<td>74</td>
<td>40.2</td>
<td>4</td>
</tr>
<tr>
<td>Lower Middle</td>
<td>48</td>
<td>26.1</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 3
Means, Standard Deviations, and Correlation Coefficients of the Intelligence and Economic Inequality Total Item Score and Factor Sub-Scores for SES Index Classification and Academic Major

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Total Item</th>
<th>Genetic</th>
<th>Meritocracy</th>
<th>Social Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>SES Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification 1</td>
<td>64</td>
<td>34.48</td>
<td>6.12</td>
<td>19.67</td>
<td>2.16</td>
</tr>
<tr>
<td>Classification 2</td>
<td>53</td>
<td>38.6</td>
<td>5.05</td>
<td>20.30</td>
<td>2.25</td>
</tr>
<tr>
<td>Classification 3</td>
<td>59</td>
<td>40.34</td>
<td>8.43</td>
<td>20.98</td>
<td>2.74</td>
</tr>
<tr>
<td>Correlation Coeff.</td>
<td>176</td>
<td>(r = .36)</td>
<td>(p \leq .001)</td>
<td>(r = .24)</td>
<td>(p \leq .01)</td>
</tr>
<tr>
<td>Major Business</td>
<td>69</td>
<td>39.81</td>
<td>8.59</td>
<td>20.72</td>
<td>3.02</td>
</tr>
<tr>
<td>Social Sci.</td>
<td>65</td>
<td>35.08</td>
<td>6.24</td>
<td>19.88</td>
<td>1.96</td>
</tr>
</tbody>
</table>

Note: Higher SES index scores denote higher status along the SES variables; higher total item scores and sub-scores correspond to stronger attitudinal agreement toward Bell Curve ideologies.
### Appendix A

Listed below are some opinions that people have given about intelligence and intelligence testing. Using the answer sheet provided, please indicate the degree to which you are in agreement or disagreement with each statement by blackening the letter on the answer sheet corresponding to your opinion or belief concerning each item. Thank you for your responses!

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA=(A)</td>
<td>A=(B)</td>
<td>D=(C)</td>
<td>SD=(D)</td>
</tr>
</tbody>
</table>

1. Intelligence takes on so many different forms that it is impossible to separate people on such a basis.

2. One's level of intelligence is an inborn trait.

3. Tests of intelligence are important for determining the appropriate educational capabilities of a child.

4. Successful groups have been able to define intelligence to their advantage.

5. If properly instructed, one's intelligence can develop throughout life.

6. Intellectual capacity is mainly determined by genetic factors.

7. Every culture has its own way of defining intelligence.

8. Intelligence tests measure differences in educational opportunity rather than differences in innate intelligence.

9. Only individuals of high intelligence should be expected to assume positions of power and responsibility.

10. Parental guidance plays a strong role in developing one's level of intelligence.

11. One's success in life has more to do with one's family economic advantage than one's intelligence level.

12. It is appropriate for a society to reward its most intellectually gifted workers with money and power.

13. Unequal intellectual ability is the primary cause of economic inequality.

14. One reason for poverty is that some people are not intelligent enough to compete in the modern world.

15. Intelligence increases as education and economic opportunity increase.

16. Crime is one side effect of low intelligence.
17. Groups in power have used intelligence tests to justify their privileged status. (A) (B) (C) (D)

18. Poverty is a more important cause of poor school performance than low intelligence. (A) (B) (C) (D)

We would now like you to respond to some opinions people have given about poverty, education and working conditions that currently exist today in the U.S. Again, for each statement use the answer sheet provided to indicate the degree to which you are in agreement or disagreement with each statement.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA=(A)</td>
<td>A=(B)</td>
<td>D=(C)</td>
<td>SD=(D)</td>
</tr>
</tbody>
</table>

19. Corporations benefit owners at the expense of workers and consumers. (A) (B) (C) (D)

20. In any industrial society it will always be necessary to have a division between those experts who make decisions and people who carry out these decisions. (A) (B) (C) (D)

21. During a strike, management should be prohibited by law from hiring workers to take the place of strikers. (A) (B) (C) (D)

22. It is possible for a modern society to run effectively without the profit motive. (A) (B) (C) (D)

23. If given the chance, the non-management employees at the place where you work could run things effectively without bosses. (A) (B) (C) (D)

24. Striking workers are generally justified in physically preventing strikebreakers from entering the place of work. (A) (B) (C) (D)

25. Big corporations have far too much power in American society today. (A) (B) (C) (D)

26. One of the main reasons for poverty is lack of education and job opportunities for the poor. (A) (B) (C) (D)

27. One to the main reasons for poverty is that many poor people simply do not want to work. (A) (B) (C) (D)

28. One of the main reasons for poverty is that the economy is based on private ownership and profits. (A) (B) (C) (D)

29. One of the main reasons for poverty is that in every society some people have to be on the bottom and some on the top. (A) (B) (C) (D)

30. Many people in the United States receive much less income than they deserve. (A) (B) (C) (D)
31. Even if there are abuses by some politicians, the American system of government serves the interests of most Americans.

For the following questions, please check the appropriate response.

32. On education and health, do you think the government should be spending;
(A) A great deal more (B) Somewhat more (C) Present amount
(D) Somewhat less (E) A great deal less

33. Imagine that workers in a major industry are out on strike over working conditions and wages. Which of the following outcomes would you like to see occur?
(A) Workers win their most important demands.
(B) Workers win some of their demands and make some concessions.
(C) Workers win only a few of their demands and make major concessions.
(D) Workers go back to work without winning any of their demands.

Thank you. We would now like you to answer a few questions about yourself. Again, use the answer sheet provided for all your responses. All information provided will remain anonymous.

34. While you were growing up, who provided most of the financial support in your family?
(A) Parent(s) (B) Grandparent(s) (C) Relatives (D) Welfare (E) Self support

35. In general, which of the following best describes the occupation of the person identified above while you were growing up?
(A) Manufacturing /Industrial (B) Sales (C) Governmental/Institutional (D) Small Business/Entrepreneur (E) Other

36. When you were growing up with your family, was the person identified above:
(A) Self employed (B) Working for someone else (C) Both (D) Unknown

37. If the individual above was self employed, did she or he:
(A) Have paid employees working for them.
(B) Work for her/himself.
(C) Not applicable

38. Did the individual specified usually occupy a management/supervisor position while you were growing up?
(A) Yes (B) No

39. Thinking about your family's total income from all sources, including your job, estimate your family income before taxes last year.
(A) $0-15,000 (B) $15,000-30,000 (C) $30,000-45,000 (D) $45,000-60,000 (E) $60,000 or higher
40. Generally speaking, do you consider yourself;
(a) Republican  (B) Democrat  (C) Independent
(D) Conservative/Right-Wing Party (Right to Life, etc.)
(E) Liberal/Progressive/Left-Wing Party (Socialist, etc.)

41. How strongly would you consider your association to the group indicated in
question 40?  (i.e. very strong Republican, moderate Republican, etc.)
(A) Strong  (B) Moderate  (C) Not Very Strong

42. Would you consider your self to be basically politically;
(A) Conservative  (B) Moderate  (C) Liberal  (D) Left-of-Liberal

43. Do you think of yourself as belonging to a particular social class?
(A)Yes  (B) No (C) Don’t know

44. If Yes, which class is that?
(A) Lower/Working
(B) Lower Middle
(C) Middle
(D) Upper Middle
(E) Upper/Wealthy

45. Many people say they belong to the working class, the middle class or the upper
middle class. If you had to make a choice, which class would you say you belong to?
(A) Working  (B) Middle  (C) Upper Middle  (D) Lower Middle  (E) Non-Class

46. What is the highest level of schooling you have completed?
(A) High-school
(B) Some College
(C) College
(D) Some Graduate School
(E) Graduate School

47. What is your current major or general field of study?
(A) Business
(B) Education
(C) Sociology
(D) Psychology
(E) Other/Undecided

48. Do you consider yourself;
(A) White non Hispanic  (B) Black non Hispanic  (C) Hispanic
(D) American Indian or Alaskan Native  (E) Asian or Pacific Islander

49. Your gender?  (A) Male  (B) Female
Appendix B

Item Factors, Means and Standard Deviations by Academic Major.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean/Sd Business</th>
<th>Mean/Sd Social Science</th>
<th>Mean/SD Other Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intelligence takes on so many different forms that it is impossible to separate people on such a basis.</td>
<td>2.17/1.03</td>
<td>1.68/.69</td>
<td>1.98/.59</td>
</tr>
<tr>
<td>2. One’s level of intelligence is an inborn trait.</td>
<td>2.59/.94</td>
<td>2.82/.83</td>
<td>2.66/.92</td>
</tr>
<tr>
<td>3. Tests of intelligence are important for determining the appropriate educational capabilities of a child.</td>
<td>2.45/.93</td>
<td>2.86/1.04</td>
<td>2.38/.81</td>
</tr>
<tr>
<td>4. Successful groups have been able to define intelligence to their advantage.</td>
<td>2.36/.82</td>
<td>2.11/.75</td>
<td>1.82/.66</td>
</tr>
<tr>
<td>5. If properly instructed, one’s intelligence can develop throughout life.</td>
<td>1.61/.91</td>
<td>1.35/.57</td>
<td>1.26/.44</td>
</tr>
<tr>
<td>6. Intellectual capacity is mainly determined by genetic factors.</td>
<td>2.78/.98</td>
<td>2.92/.71</td>
<td>2.60/.99</td>
</tr>
<tr>
<td>7. Every culture has it’s own way of defining intelligence</td>
<td>1.80/.85</td>
<td>1.48/.66</td>
<td>1.92/.83</td>
</tr>
<tr>
<td>8. Intelligence tests measure differences in educational opportunity rather than differences in innate intelligence.</td>
<td>2.25/.85</td>
<td>2.00/.71</td>
<td>2.12/.59</td>
</tr>
<tr>
<td>9. Only individuals of high intelligence should be expected to assume positions of power and responsibility</td>
<td>3.00/1.01</td>
<td>3.37/.67</td>
<td>2.84/.79</td>
</tr>
<tr>
<td>10. Parental guidance plays a strong role in developing one’s level of intelligence.</td>
<td>1.70/.79</td>
<td>1.63/.65</td>
<td>1.48/.61</td>
</tr>
<tr>
<td>11. One’s success in life has more to do with one’s family economic advantage than one’s intelligence level.</td>
<td>2.71/.96</td>
<td>2.60/.93</td>
<td>2.54/.89</td>
</tr>
<tr>
<td>12. It is appropriate for a society to reward it’s most intellectually gifted workers with money and power.</td>
<td>2.65/.87</td>
<td>2.86/1.03</td>
<td>2.76/.72</td>
</tr>
<tr>
<td>13. Unequal intellectual ability is the primary cause of economic inequality.</td>
<td>2.52/.88</td>
<td>3.03/.79</td>
<td>2.72/.73</td>
</tr>
<tr>
<td>14. One reason for poverty is that some people are not intelligent enough to compete in the modern world.</td>
<td>2.90/1.01</td>
<td>3.15/.97</td>
<td>2.92/90</td>
</tr>
<tr>
<td>15. Intelligence increases as education and economic opportunity increase.</td>
<td>2.17/.94</td>
<td>2.26/1.00</td>
<td>2.36/.75</td>
</tr>
<tr>
<td>16. Crime is one side effect of low intelligence.</td>
<td>3.01/1.01</td>
<td>2.92/1.02</td>
<td>2.72/1.11</td>
</tr>
<tr>
<td>17. Groups in power have used intelligence tests to justify their privileged status.</td>
<td>2.35/.84</td>
<td>1.98/.82</td>
<td>1.98/.82</td>
</tr>
<tr>
<td>18. Poverty is a more important cause of poor school performance than low intelligence.</td>
<td>2.32/1.05</td>
<td>1.85/1.03</td>
<td>2.10/.76</td>
</tr>
</tbody>
</table>

Item Category: (1) = Genetic Component (2) = Meritocracy (3) = Social Problems. Strongly Agree = 1; Agree = 2; Disagree = 3; Strongly Disagree = 4.
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Author(s): Eric J. Vanden Berk & Kenneth Woldtke

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