References


BLACK/WHITE IQ DIFFERENCES: DOES AGE MAKE THE DIFFERENCE?

KEN R. VINCENT

University of Houston

Data are presented on racial differences from the norms of the Kaufman Assessment Battery for Children, the recent renorming of the Wechsler Adult Intelligence Scale-Revised, the Stanford-Binet IV, and Raven's Progressive Matrices. The premise of the present article is that, while the one standard deviation IQ difference between Black and White adults has remained constant, IQ differences between Black and White children are declining. These data are discussed in the context of previous studies on possible racial bias of IQ tests, as well as marked changes in educational and economic opportunities that have occurred in the United States in the decades since Jensen's (1969) article.

In the two decades since Arthur Jensen's article "How Much Can We Boost IQ and Scholastic Achievement?" (Jensen, 1969), IQ has been the subject of much controversy in both academic and political circles. Jensen's assertions of the high heritability of IQ with their implication that little could be done in the environmental spectrum to increase intellectual and scholastic achievement among minorities became the subject of considerable research and even more debate. Though his genetic studies could be viewed as disheartening for Whites, who tend to score 10 to 15 points below Asian-Americans (Jensen, 1973, 1980), the bulk of the debate and controversy has focused on the differences between Blacks and Whites, which apparently are less threatening to the White majority.

Much of the literature has focused on the impact of environmental influences on IQ (Gorfinkel, 1983; Sarason, 1973; Scarr & Wienberg, 1976). Another major thrust

Reprint requests should be addressed to Dr. Ken R. Vincent, Psychology Dept., Houston Community College, 22 Waugh Drive, P.O. Box 7849, Houston, TX 77270-7849.
has been to attack IQ tests as biased and as measures of acculturation into affluent White society rather than measures of intellect. Included in the investigation of IQ bias has been the effect of White examiners on the test performance of Black children (Sattler & Gwynne, 1982) and the content of intelligence tests (Williams, 1975). More recently, two investigations have centered on the ability of IQ tests to accomplish what they were created to do, which is to predict academic performance, and most of the findings to date on major intelligence tests generally have confirmed that they predict equally well among Blacks and Whites (Anastasi, 1988; Raven et al., 1986). Also, early research on culture-fair tests, such as Raven’s Progressive Matrices, tended to show the same Black/White IQ differences (Jensen, 1973; Vincent & Cox, 1974). The latter findings are most disconcerting in that the Raven meets the concerns of test critics with regard to cultural bias; the Raven is untimed, may be individually administered as well as group administered, is devoid of language, the instructions can be pantomimed, and the test is remarkably free of anything remotely resembling culturally laden material. Nevertheless, other attempts have been made to devise more culturally fair tests, and this is purported to be one of the advantages of the Kaufman Assessment Battery for Children (K-ABC; Kaufman & Kaufman, 1983). These authors noted that there was only a 7-point difference between Blacks and Whites on the K-ABC, whereas there had been a 16-point difference between Black and White children on the WISC-R normative data from a decade earlier. This article compared the recent re-norming of test instruments and a recent tandem study on the WISC-R and K-ABC in relation to the current status of Black/White IQ differences.

METHOD

The data for recent re-norming of major test instruments provide the data for the bulk of the investigations of Black/White IQ differences, as well as studies that deal with re-analysis of the normative data. Specifically, for this study the normative data for both Raven’s Standard Progressive Matrices (Raven’s SPM) and Coloured Progressive Matrices (Raven CPM) (Raven et al., 1986) are used, as are the normative data for the Kaufman Assessment Battery for Children (K-ABC; Kaufman & Kaufman, 1983). The recent re-norming of the Stanford-Binet IV (SB-IV) is included (Thorndike, Hagen, & Sattler, 1986), as is the re-analysis of the WISC-R by Kaufman and Doppelt (cited in Kaufman & Kaufman, 1983). Additionally, the re-analysis of the norming of the Wechsler Intelligence Scale-Revised by Chastain and Reynolds (cited in Sattler, 1988) is included. These data are contrasted with previous studies that employed the above-mentioned instruments and include Black/White comparisons on Raven’s Coloured Progressive Matrices (Jensen, 1973) and on Raven’s Standard Progressive Matrices (Vincent & Cox, 1974). Data on the Stanford Binet L-M Edition (Baughman & Dahlstrom, 1968, and Terman & Merrill, cited in Matarazzo, 1972) and also the composite of various IQ tests quoted in the original Jensen (1969) article are included. Among recent data, the only non-normative studies included are those of Naglieri and Hill (1986), Naglieri (1986), and Krohn and Lamp (1989). The data of Naglieri and Hill (1986) are useful in that they contrasted 86 pairs of Black and White subjects, both of whom were administered the WISC-R and the K-ABC. The data of Krohn and Lamp (1989) contrast Black and White Head Start children on the K-ABC, Stanford-Binet L-M, and Stanford-Binet IV.

While the above-mentioned list may not be exhaustive, the recent normative studies of the major IQ tests selected are large in sample size and more apt to be representative of the population as a whole because they are stratified samples. The tests in question are the major individually administered IQ tests currently used in the United States plus Raven’s Coloured Progressive Matrices and Standard Progressive Matrices, which were included not only because they can be individually administered and are culture fair, but also because they are the tests most frequently used world-wide.
RESULTS AND DISCUSSION

The data on Black/White IQ test differences in question are presented in Table 1. The most striking comparison is the reported Black IQ difference from the United States mean. Only slightly less striking is the finding on Black/White IQ differences. For adults, both the pre- and post-1980 studies' Black/White IQ differences and Black differences from the U.S. mean as a whole tend to be roughly one standard deviation below the White mean. The same is true for pre-1980 studies of children. The findings are radically different for Black IQ differences from the U.S. mean on studies done with children since 1980. In all of these studies, the Black/White differences are single-digit scores and roughly half of the earlier findings. The same is generally true, but less so, for Black vs. White IQ differences.

The overall trend is a lessening of racial IQ differences in children. Only a 2-point difference was obtained on 2- to 6-year-old children with the K-ABC. The one glaring exception to this downward trend are the data on 2- to 6-year-old children on the Stanford Binet IV. Here we find a more traditional 12-point difference. Why? The results from Krohn and Lamp (1989) appear to indicate that the Stanford-Binet IV is not more culturally biased than the other tests in the battery. However, the Stanford-Binet IV is not the same test for each age group because the Stanford-Binet is composed of 15 separate subtests, only 6 of which run continuously throughout the time span from age 2 through adulthood. Consequently, when younger children are contrasted to older children and adults on the Stanford-Binet IV, the composition of the test batteries is, in fact, different. In the normative study, all tests germane to the age group were given. Another possibility is that the normative data on the Stanford-Binet may be atypical. One reason this is suspected is because Asian and White IQ differences usually are different, with the Asians 10 to 15 points higher than Whites (Jensen, 1973, 1980). In the Stanford-Binet IV sample for 2- to 6-year-olds, mean Asian IQ score was 88 (which corresponds to a 15-point deviation IQ of 89), which is obviously quite a bit lower than that normally reported for this ethnic group. Answers to the above questions will have to wait further data on the Stanford-Binet IV including regression lines for Blacks and Whites on achievement. Among the post-1980 studies on children, the only studies included that were not part of a standardization or re-standardization of a test in question were the studies by Naglieri and Hill (1986), Naglieri (1986), and Krohn and Lamp (1989). The findings of these studies were that there is no significant difference between the IQ scores or the WISC-R, K-ABC, Stanford-Binet IV and the Stanford-Binet L-M for Blacks; in addition, Black/White IQ differences were lessened by half in the Naglieri and Hill study and were nonsignificant in the Krohn and Lamp (1989) study when socioeconomic status (SES) was controlled. While this does not explain racial differences because one's socioeconomic status may be due not only to one's ability, but also to one's access to economic and educational opportunities, it calls into question the idea that one test is less biased than another.

The WISC-R scores reported by Naglieri (1986) and Naglieri and Hill (1986) contrast dramatically with those of the original standardization samples reported by Kaufman and Doppelt (cited in Kaufman & Kaufman, 1983).

Probably most dramatic of all is the difference between performance of adults and children on Raven's Standard Progressive Matrices and Coloured Progressive Matrices compared to the more recent 1986 North American normative and validity studies on the Raven. The data on adults represented an attempt years ago by the author to find a quick culture-fair repudiation of Jensen's claims, but this was not the case, as shown in Table 1, i.e., the 16-point difference between Black and White IQ and a 17-point IQ difference from the U.S. mean. Jensen (1973) reported similar findings in the early seventies in a study that employed Raven's Coloured Progressive Matrices with children. He found Black/White IQ differences for 11-year-olds of 14 points and for 6-year-olds
Table 1
U.S. Black/White IQ Differences

<table>
<thead>
<tr>
<th>Study</th>
<th>Test</th>
<th>Age</th>
<th>Black/White IQ scores</th>
<th>Black/White IQ differences</th>
<th>Black IQ difference from U.S. mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults pre &amp; post 1980</td>
<td>Jensen (1969)</td>
<td>Adult</td>
<td>85/100</td>
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<td>15</td>
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<td>Vincent &amp; Cox (1974)</td>
<td>Adult</td>
<td>83/99</td>
<td>16</td>
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<td>Children pre 1980</td>
<td>Kaufman &amp; Doppelt (1976)</td>
<td>6-16</td>
<td>86/102</td>
<td>16</td>
<td>14</td>
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<tr>
<td></td>
<td>Baughman &amp; Dahlstrom (1968)</td>
<td>5-13</td>
<td>86/101</td>
<td>15</td>
<td>14</td>
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<td></td>
<td>Jensen (1973)</td>
<td>11</td>
<td>82/96</td>
<td>14</td>
<td>18</td>
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<td></td>
<td>Jensen (1973)</td>
<td>6</td>
<td>82/100</td>
<td>18</td>
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<tr>
<td>Children post 1980 (normative studies)</td>
<td>Raven et al. (1986)</td>
<td>Raven's CPM</td>
<td>94/101</td>
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<td>Thorndike et al. (1986)</td>
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<td>SB, L-M</td>
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</tbody>
</table>

*IQs are reported as an M of 100 and SD of 15. Stanford-Binet (SB L-M & SB-IV) data are adjusted accordingly. Raven's Coloured Progressive Matrices (CPM) and Stanford Progressive Matrices (SPM) scores are presented in the context of 1986 U.S. norms.

of 18 points. As can be seen (Table 1) in the Raven’s restandardization, Black/White IQ differences for 12-year-olds are half those previously reported.

Finally, it is worth noting that the recent restandardization of the Wechsler Adult Intelligence Scale-Revised shows roughly one standard deviation difference between Black and White IQs, namely, 14 points (Sattler, 1988).

The most obvious explanation for these findings is that Black/White IQ differences are in a very real sense a barometer of educational and economic opportunity. It appears that lack of early educational and economic opportunity has taken a toll on the Black adult population that still is being reflected in the recent renorming of the WAIS-R and other adult IQ tests. This conclusion should not be surprising, for while it generally is conceded that IQ is malleable in the early years not even the most ardent environmentalist would be optimistic about a significant change in intellectual performance in adulthood and then only with extensive education. In other words, racial inequality has left its mark on Black adults, but the benefit of attempts to improve Blacks' access to equal educational, economic, and environmental opportunity appears to be succeeding. The quarter-century push toward equal opportunity in the United States finally is beginning to show results.
The present study focuses primarily on the recent renorming of major IQ tests and has attempted to show that Black/White IQ differences in young children have been reduced by half in the past decade. Further research needs to be done in this area, and additional confirmation is most likely to be found in the files of school psychologists.

REFERENCES


