

The Conclusions of Scientists Relative to Racial Differences

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The past decade represents a period of considerable growth in our knowledge and understanding of the measurement of mental abilities. Much conflicting evidence has been collected on every fundamental problem that has been attacked, indicating either that the problems were not adequately defined, or that instruments and procedures were invalid, or that the data were improperly interpreted. Indeed, the whole testing movement has been experiencing a period of recovery: extravagant claims and hasty generalizations, made in the early 1920's and in the decade preceding, are being revised or abandoned, and, in a few instances, publicly disavowed.¹

As a result of the Army tests,² psychologists in particular were pretty much of the opinion that the inherent mental inferiority of offspring of immigrant stock to that of the native white American stock, of Negroes and Indians to whites, and of full-blooded Negroes and Indians to mix-blooded Negroes and Indians had been scientifically demonstrated. The psychological literature of the period reported many investigations which were generally interpreted as supporting these hypotheses. During the past decade, however, many studies have been reported in the literature which not only

indicate that the procedures of former studies were questionable, but also presented data which were generally interpreted as refuting these hypotheses.

The main question involved in the problem of racial differences is whether the "obtained" differences found between racial groups represent *actual* differences in native mental ability, or whether such differences are due to other factors such as selection, invalidity of tests, culture variables, and the like. It is the same question that is involved in all types of group comparison such as urban with rural, one geographical section with another, members of one occupational group with another, etc.; except that in the case of Negro-white comparisons each of the problems involved in these group comparisons enters in further to complicate comparisons based upon race.

The general experimental attack upon the problem of Negro-white racial comparison has employed a relatively simple and straight forward setup: (1) A sample of each racial group is selected, presumably representative of each race and equated on the basis of cultural environment; (2) a test or battery of tests purporting to measure intelligence is administered to each sample; and (3) the scores of the two groups are compared in terms of central tendencies and variability to de-

¹ C. C. Brigham, "Intelligence Tests of Immigrant Groups," *Psych. Rev.*, 37: 158-65 (1930).

² R. M. Yerkes, (Ed.), "Psychological Examining in the United States Army," *Mem. Nat. Acad. Sci.*, 15: 1-890 (1921); see also: Selected Bibliography.

termine the amount of difference, if any. The validity of the results of such a set-up is based upon the extent to which at least three factors are controlled: (a) *selection*—that the sample of each racial group is representative of the group as a whole; (b) *elimination of culture variables*—that the cultural background of the two racial groups is the same or not significantly different, and (c) *validity of tests*—that the tests measure what they purport to measure.

Therefore, the determination of the present status of the problem of racial differences would involve a judgment or judgments as to whether investigations on this problem have or have not controlled these factors so that a valid generalization may be arrived at. Thus in view of our broader understanding of mental measurement in general, and in view of the conflicting evidence on the question of racial differences in particular, the writer has attempted to ascertain the status of the problem at the present time, as it may be revealed by a canvass of the scientists who are engaged in this particular field and closely allied fields.

The general procedure employed in ascertaining the present status of the problem of racial differences comprised merely the administration of a brief questionnaire to a group of psycholo-

gists, educationists, and sociologists and anthropologists. The questionnaire was constructed on the assumption that the respondents were familiar with the general literature of the field, and that the respondents' task was that of indicating what generalizations are warranted in the light of the procedures employed and the data obtained.

In the fall of the school year 1929-30, the above-mentioned questionnaire was sent to 100 psychologists, selected largely from the membership list of the 9th International Congress of Psychology; 39 educationists, selected mainly from the membership list of the National Society of College Teachers of Education and comprising a number of educational psychologists; and to 30 sociologists and (cultural) anthropologists who were definitely known to be actively engaged or interested in this field. In fact the entire group of respondents, in the main, comprises scientists who have been in closest contact with the field during the greater part of the past 20 years or more.

A list of the respondents who actually answered the questionnaire, with their institutional connections at the time the questionnaire was administered, is given below:

LIST OF RESPONDENTS WHO ANSWERED QUESTIONNAIRE AND THEIR INSTITUTIONAL CONNECTIONS**

(Psychologists)

1. Floyd H. Allport (Syracuse)
2. Gordon W. Allport (Dartmouth)
3. J. E. Anderson (Minnesota)
4. Ada H. Arlitt (Cincinnati)

5. F. A. Aveling (Univ. of London*)
6. C. H. Bean (La. State)
7. C. E. Benson (New York)
8. Madison Bentley (Cornell)
9. Edwin G. Boring (Harvard)
10. J. W. Bridges (McGill)

** The institutional connections listed are correct as of 1929-30 when the questionnaire was administered. Several changes have been made since that time, and also a few of the respondents are now dead.

* European: A few European psychologists were included from the membership list of the 9th International Congress.

11. Carl C. Brigham (Princeton)
 12. Mary W. Calkins (Wellesley)
 13. E. H. Cameron (Illinois)
 14. Harvey A. Carr (Chicago)
 15. J. E. Coover (Stanford)
 16. S. A. Courtis (Michigan)
 17. Elmer Culler (Illinois)
 18. K. M. Dallenback (Cornell)
 19. J. F. Dashiell (North Carolina)
 20. C. B. Davenport (Carnegie Inst.)
 21. Walter F. Dearborn (Harvard)
 22. Raymond Dodge (Yale)
 23. Knight Dunlap (Johns Hopkins)
 24. U. Ebbecke (Bonn*)
 25. Beatrice Edsell (Univ. of London*)
 26. H. B. English (Antioch)
 27. S. W. Fernberger (Pennsylvania)
 28. F. S. Freeman (Cornell)
 29. T. R. Garth (Denver)
 30. A. I. Gates (Columbia)
 31. A. R. Gilliland (Northwestern)
 32. Kate Gordon (Univ. of Calif., Los Angeles)
 33. C. T. Gray (Texas)
 34. W. T. Heron (Minnesota)
 35. N. D. M. Hirsch (Duke)
 36. H. G. Hotz (Arkansas)
 37. W. S. Hunter (Clark)
 38. A. M. Jordan (North Carolina)
 39. D. Katz (Rostock*)
 40. T. L. Kelley (Stanford)
 41. F. A. Kingsbury (Chicago)
 42. H. L. Koch (Texas)
 43. D. A. Laird (Colgate)
 44. H. S. Langfeld (Princeton)
 45. L. N. Lanier (Vanderbilt)
 46. Mark A. May (Yale)
 47. William McDougall (Duke)
 48. H. Meltzer (Psychiatric Clinic, St. Louis)
 49. F. A. Moss (Geo. Washington)
 50. R. M. Ogden (Cornell)
 51. Jean Piaget (Geneva*)
 52. D. S. Patterson (Minnesota)
 53. F. A. C. Perrin (Texas)
 54. Joseph Peterson (Geo. Peabody)
 55. Henri Pieron (Sorbonne*)
 56. Rudolph Pintner (Columbia)
 57. S. L. Pressey (Ohio State)
 58. C. M. Reinhoel (Arkansas)
 59. M. L. Reymert (Wittenberg)
 60. Peter Sandiford (Toronto)
 61. C. E. Seashore (Iowa)
 62. Mandel Sherman (Child Research Center, Washington, D.C.)
 63. L. M. Terman (Stanford)
 64. R. H. Thouless (Glasgow*)
 65. L. L. Thurstone (Chicago)
 66. H. A. Toops (Ohio State)
 67. M. R. Trabue (North Carolina)
 68. M. S. Viteles (Pennsylvania)
 69. H. C. Warren (Princeton)
 70. Margaret Washburn (Vassar)
 71. Paul V. West (New York)
 72. H. H. Woodrow (Illinois)
 73. R. S. Woodworth (Columbia)
 74. Helen T. Woolley (Columbia)
 75. R. M. Yerkes (Yale)
 76. C. S. Yoakum (Michigan)
 77. P. C. Young (La. State)
- (Educationists)
1. W. C. Bagley (Columbia)
 2. J. F. Bobbitt (Chicago)
 3. F. G. Bonser (Columbia)
 4. W. H. Burnham (Clark)
 5. W. H. Burton (Chicago)
 6. H. E. Burt (Ohio State)
 7. C. E. Chadsey (Illinois)
 8. W. W. Charters (Ohio State)
 9. G. S. Counts (Columbia)
 10. J. O. Creager (New York)
 11. E. P. Cubberley (Stanford)
 12. John Dewey (Columbia)
 13. J. J. Doster (Alabama)
 14. I. N. Edwards (Chicago)
 15. F. C. Ensign (Iowa)
 16. F. N. Freeman (Chicago)
 17. M. E. Haggerty (Minnesota)
 18. C. H. Judd (Chicago)
 19. Wm. H. Kilpatrick (Columbia)
 20. H. D. Kitson (Columbia)
 21. F. O. Kreager (La. State)
 22. E. A. Lincoln (Harvard)
 23. E. L. Morphet (Alabama)
 24. L. A. Pechstein (Cincinnati)
 25. C. C. Peters (Penn State)
 26. B. F. Pittinger (Texas)
 27. F. W. Reeves (Kentucky)
 28. V. M. Sims (Alabama)
 29. David Snedden (Columbia)
 30. P. W. Terry (Alabama)
- (Sociologists and Anthropologists)
1. Franz Boas (Columbia)
 2. E. S. Bogardus (Southern California)
 3. E. W. Burgess (Chicago)

4. Fay Cooper-Cole (Chicago)
5. Jerome Dowd (Oklahoma)
6. Ellsworth Faris (Chicago)
7. Ross L. Finney (Minnesota)
8. Loomis Havemeyer (Yale)
9. E. A. Hooton (Harvard)
10. Carl Kelsey (Pennsylvania)
11. J. M. Mechlin (Dartmouth)
12. R. D. McKenzie (Univ. of Washington)
13. Howard W. Odum (North Carolina)
14. H. A. Miller (Ohio State)
15. Wm. F. Ogburn (Chicago)
16. Robert Redfield (Chicago)
17. E. B. Reuter (Iowa)
18. J. H. Sellin (Pennsylvania)
19. F. G. Speck (Pennsylvania)
20. A. M. Tozzer (Harvard)
21. Donald Young (Pennsylvania)
22. Kimball Young (Wisconsin)

The writer makes no claim that this list of respondents is representative of

unusable replies consisted very largely of regrets from the respondents that they did not feel sufficiently competent to give worth while answers. A summary of the number of questionnaires sent out and of the number and per cent of usable replies received is given in Table I.

In connection with the presentation of the replies, which is to follow, it will aid the reader to keep two points in mind: *first*, since space is limited, and since the replies to four of the questions give an adequate basis for this discussion, the replies to these questions *only* will be presented; *second*, in the presentation of the replies on each question, the question will be

TABLE I
NUMBER OF QUESTIONNAIRES SENT OUT AND THE NUMBER AND PER CENT OF USABLE REPLIES RECEIVED

Group	Number of Questionnaires Sent out	Number of Usable Replies	Per Cent of Usable Replies
Psychologists	100 ¹	77	77%
Educationists	30	22	73
Sociologists and Anthropologists	39	30	77
Total	169	129	76%

all psychologists, educationists, and sociologists and anthropologists, but it is obvious to any one who knows the field that this list undoubtedly includes a very large majority and a representative number of the competent scholars in the field of racial differences.

Despite the fact that the writer made no attempt to follow-up the questionnaire, the response was almost unprecedented. Replies were received from more than 90 per cent of the respondents, and usable replies were received from 76 per cent. The

stated and explained, quantitative analysis of the replies given, comments of the respondents quoted (where all of the comments are not given a random selection will be made), and a generalization drawn on the basis of the data presented.

VALIDATION OF YODER'S SUMMARY

Dale Yoder³ after an analysis of the literature on racial differences concluded that "three distinct view-

³ Dale Yoder, "Present Status of the Question of Racial Differences," *J. Educ. Psych.*, 19: 463-70 (1928).

points" were represented in the current literature on this subject:

The *first* accepts the fact of race superiority and inferiority and is interested in re-stating it, and usually adducing additional evidence to support the thesis.

The *second* viewpoint considers race inferiority possible but not adequately demonstrated, and is usually concerned in balancing arguments for and against the idea.

The *third* is a skeptical group, highly critical of the means used to demonstrate race inferiority and of the results obtained and generally insisting upon racial equality:

"Do These Three Statements Actually Represent the Status of the Problem Among Competent Scholars in the Field?"

It was the purpose of this question to ascertain to what extent the conclusions of Yoder's survey were valid, thus partially defining the present status of the problem of racial differences. A quantitative summary of the replies of our respondents is presented in Table II.

TABLE II

TO WHAT EXTENT DOES YODER'S SUMMARY REPRESENT THE STATUS OF THE PROBLEM OF RACIAL DIFFERENCES?

Group	Represents	Does not Represent
Psychologists	68%	32%
Educationists	82	18
Sociologists and Anthropologists	74	26
Total	72%	28%

It appears from an analysis of the data presented in Table II, as well as the comments accompanying the replies, that Yoder's summary represents fairly adequately the current viewpoints of scholars on the problem of racial differences. Some 72 per cent of the total group of respondents confirm Yoder's summary, while 28 per cent state that the summary is inadequate—the majority suggesting a fourth viewpoint which seems to represent an intermediate stage between Yoder's second and third viewpoints.

"Which Viewpoint Do You Consider Most Valid in the Light of Experimentation to Date?"

Yoder made no attempt to determine the prevalence of the viewpoints among the scholars in the field. Hence, this question represents an attempt at a more exact definition of the status of the problem by a determination of the extent to which competent scholars adjudge each viewpoint to be most valid in the light of experimental investigation. A summary of the data on this point is presented in Table III.

Analysis of the data presented in Table III reveals the following facts:

First, competent scholars in the field of racial differences are almost unanimous in the opinion that, up to the present time, "race superiority and inferiority" have not been experimen-

TABLE III

VIEWPOINT CONSIDERED MOST VALID IN LIGHT OF EXPERIMENTATION

Group	First	Second	Third	Fourth
Psychologists	5%	54%	18%	23%
Educationists	4	44	33	19
Sociologists and Anthropologists		20	65	15
Total	4%	46%	30%	20%

tally demonstrated—only 4 per cent of the respondents indicate that the first viewpoint which “accepts the fact of race superiority and inferiority,” is valid.

Second, 46 per cent of the respondents confirm the second viewpoint which indicates that “race inferiority” has not been demonstrated, but entertains its possibility as a reasonable hypothesis.

Third, 30 per cent of the respondents not only conclude that “race inferior-

same time it is obvious that the replies to this question represent a more specific definition of the present status of the problem than was possible in the preceding question. A quantitative summary of the replies of our respondents to this question is presented in Table IV.

It is probably desirable to defer discussion of these data until after the comments on this question are presented, for they serve as an indispensable background in the interpretation

TABLE IV
CONCLUSIONS FROM RECENT INVESTIGATIONS ON THE RELATIVE INHERENT MENTAL ABILITY OF THE NEGRO

Group	Per Cent Indicating Data Inconclusive	Per Cent Indicating Negro Inferior	Per Cent Indicating Negro Equal
Psychologists	64%	25%	11%
Educationists	61	14	15
Sociologists and Anthropologists	57	5	38
Total	62%	19%	19%

ity” has not been demonstrated, but doubt so seriously that it exists that they insist upon “race equality,” as the most reasonable hypothesis.

Fourth, 20 per cent share a fourth viewpoint which appears to be an intermediate stage between Yoder’s second and third viewpoints.

“DO YOU CONCLUDE FROM RECENT INVESTIGATIONS THAT NEGROES ARE INHERENTLY MENTALLY (INFERIOR TO) OR (EQUAL TO) WHITES?”

It was the obvious purpose of this question to ascertain what interpretation is and should be given to the large amount of conflicting data which have been collected on the relative inherent mental ability of the Negro. At the

of the replies. Thus, at this point, are included all of the comments of the respondents on this question, divided into the three categories indicated in Table IV. It should be observed that the names of the respondents making the comments are not included, for they were assured that the results would be used impersonally.

Comments of Scientists who Conclude that Experimentation has been Inadequate and Results Inconclusive, Showing Neither Inferiority nor Equality

(Psychologists)

I conclude neither. Data have never been produced which adequately evaluate the “inherent” (as distinct from the *acquired*) factor. Intelligence test scores show white subjects to average higher than Negro. This is commonly taken to imply an “inherent” difference. The relative contributions of cul-

tural environment and racial (biological) inheritance have never been evaluated. I think many (myself included) are reluctant to use the terms "racial inferiority" and "racial superiority" to designate the differences referred to, for fear of being understood to imply "inherent" differences, which certainly are not proved.

Impossible to determine, except by long-continued experimentation, whether the actual differences, revealed by tests and achievements, are the result of racial heredity or that of environmental factors such as motivation and early training.

Evidence points toward inferiority but is not conclusive owing to the difficulty of disentangling hereditary and environmental elements. The whole problem is complicated by the difficulty, nay the impossibility, of separating the factors of heredity and environment. When is the environment the same? Only when it affects identically similar organisms, and that is never the case. Even in the more general meaning of the term the environment which seems the same really isn't. Take a colored boy and a white boy sitting together in the same grade of a high school and being instructed by the same teachers. Apparently their educational environments are the same, yet, in New York City, the colored boy goes home to Harlem and the white boy to Washington Heights. The home educational environments of Harlem and Washington Heights are very different. In other words, at present it is impossible to give the Negro and white in the United States the *same* educational opportunity, or any other kind of opportunity for that matter.

Data from tests are not yet free enough from environmental factors.

The difference is due to selection and education.

Don't conclude yet too few data. Within the past 200 years, cultural selection has in Western Europe and America largely replaced the cruder biological selection. Our American culture most unfortunately oper-

ates *directly against* the most intelligent of the Negro. The dysgenic forces, which are strong enough for the white, are even more so for the Negro, especially in the very highest ranges of intelligence.

I think evidence inclines to former, but is inconclusive.

The results point to "inferior" but I do not think they are as yet conclusive.

I feel, and many others agree, that these tests have not been carried out extensively enough to warrant final judgment.

Not yet demonstrated.

Neither. No investigations have gotten at the inherent nature of race fully.

Most of such studies are seriously defective in control.

The evidence has proved neither.

No conclusive evidence for either view as yet. In my own psychological experimental work I think I have discovered what might amount to a general law. There is generally quantitatively and qualitatively greater differences to be found between the individuals of one group than there is between means of two groups, selected as differently as these two races.

No basis for safe judgment.

Data inadequate.

From investigations I conclude that we know next to nothing about the problem. I would describe the present status as one promising recovery from confusion found in earlier studies.

Evidence inconclusive.

I suspend judgment.

I draw neither conclusion. I am not much interested in comparisons of whole races,

but greatly interested in diagnosis and prognosis of aptitude of individuals without regard to race.

Data insufficient for *conclusions*.

Am in doubt: think evidence so far is quite inconclusive.

I wouldn't conclude anything from recent investigations, except that the earlier investigations are all guesses.

Not demonstrated.

There is not sufficient evidence to draw either conclusion.

Data not sufficient. Also depends on your "standard" of inferiority.

Question not sufficiently precise. What does "inherently mentally inferior" mean? What has been shown is that it is practically impossible to discover or to devise any tests which could be called tests of mental ability in which the American Negro does not show a lower *average* than the whites. Whether this would be true if the factor of social status were the same for both races, I do not know.

I believe that there is insufficient evidence for drawing final conclusions concerning this problem. The existence of neither inferiority nor equality has been experimentally demonstrated.

I don't conclude anything. The data aren't adequate. But I do consider certain hypotheses more likely than others. I don't like the word—inferior for what? Why not ask are Negroes different from whites, and if so, in what ways? And why not include emotional make-up?

Results ambiguous—show inferiority but not necessarily inherent inferiority.

Each excels in certain fields. Without doubt the whites excel on objective tests that are built in terms of the white man's

background. If the tests were built in terms of the Negro's civilization, it is conceivable that the reverse might be true.

A Scotch verdict in my own judgment. Races may score and test differently but those differences do not prove one to be inferior. What is basically needed is definite proof of traits which build superiority and then to test for these.

The average intelligence of the Negro is lower than the average for the whites, yet there are many Negroes who are more intelligent than many whites.

I believe in some respects they are inferior and in other respects superior to whites. They are different.

I do not believe there is any such thing as race superiority or inferiority in general, but there are undoubtedly a great many race differences, only a few of which have been adequately investigated as far as I am aware.

I do not think the results of mental testing are sufficiently reliable yet to serve as a basis for sweeping generalizations.

I do not conclude. Negroes make the lower average score on intelligence tests—that is a fact. What that fact means is another question. I would certainly not conclude that it is an expression of an inherent difference as the question states. It does not mean necessarily that they are less intelligent in all respects.

I do not come to any conclusions. We have no criterion of "superiority." If we accept "intelligence" as a criterion, it is as yet inadequately defined, and such evidence as there is, is inconclusive.

The investigations have proved nothing. I am "critical of the means."

I know no proof for either assumption. (Do you mean all African blacks and all whites?)

I have specialized in the field of mental tests and I think that the various applications of these tests to racial groups and the conclusions drawn from them have been overhasty.

(Educationists)

I am coming to the conclusion that it is not safe to say much about racial superiority of inferiority. Such evidence as we have is unsatisfactory. Dr. Loram, in his investigations made among Negro children of Southern Africa some years ago, showed rather conclusively, little bush Negroes whose parents were quite uncivilized, made progress in the common branches comparable in every way to the progress made by children in our larger American cities. His investigation seemed to show that, as they approached puberty, there was a flattening out in the curve of progress in school branches. There is no evidence, however, to show that this flattening out was not due to environmental conditions for these children were living with their parents and only came out of the bush for school. As children approach puberty, many forces operate upon them, some of which might have produced this slowing up of progress in school branches.

On the whole, the scientific experiments made with school children, white and black, have showed that the colored children were rather distinctly less advanced in school work than the white children. But we all know, that as a rule colored children have not had as satisfactory home environment as white children. When we remember that a very short time ago the colored race, as a whole had no educational advantages, we should rather be surprised that the children of today are so nearly equal to the white children in their ability to do school work. I really think there is no satisfactory evidence that the Negro race in America is intellectually inferior to the white race.

My own impressions are that any comparisons made of the intelligence of white people and Negroes will have to be qualified by consideration of the inferior opportunities which the colored people in general have had to secure good training.

Evidence not conclusive. We must equate the environmental factors before it can be answered.

The investigations do not support such an unambiguous conclusion. On intelligence tests Negroes have generally fallen below whites, but most psychologists agree that the reason may well lie in the defects of their *social* background, for it has been very difficult to find groups of Negro children and white children who have had the same social background.

We do not know; the investigations are inconclusive.

Data inconclusive.

I do not believe that inherent inferiority has been proved.

Inferior in certain respects. Superior in other respects.

Evidence is not yet conclusive.

I do not conclude. The data are inadequate.

Don't believe evidence is adequate.

How do you define equality? The central tendencies of the whites are practically always higher. To me the most significant fact is the over-lapping. That shows very clearly that there are no differences worth counting.

Again differences that are not directly comparable.

For each white individual, except possibly in rank of ultimate genius, the Negro race has a parallel in ability. But the proportion of low to high ability may differ.

Inferior in some ways and superior in others.

Tests of various sorts have shown race differences just as they have shown differences between the sexes, *as far as central tendencies or averages go*. On the other hand, there has also been shown tremendous over-lapping in every trait which has been stud-

ied, and it is very clear that the important things for education are not the group differences, but the individual differences.

I think the whole matter of comparable groups needs further attention.

(Sociologists and Anthropologists)

Recent tests indicate that Negroes do rate lower than whites, but they also indicate Negroes in the North rate higher than those in the South. It also appears that mixed bloods have an advantage over pure Negroes but social factors enter here. It is entirely possible that given the same social standing and background the two races would rate equally.

No evidence for inferiority. Can't prove equality on account of social factor.

Every discussion of inferiority or superiority is in my judgment futile, and even worse than futile for it resolves itself into temperamental or racial biases of the disputants much like those of musicians who argue the relative superiority of Beethoven and Tschaikowsky or those of the literary enthusiast who thinks Browning is superior to Tennyson or Wordsworth. This same elusive and unscientific attitude rules where nations or civilizations are debated, as for example the general assumption of the Englishmen that because America and France are different from England therefore they are inferior.

I think *nothing* has been scientifically proved one way or the other.

I don't believe the recent investigations show anything positively about inherited differences.

In a way the whole situation is constantly contradicting itself, and the scientists and intellectuals are not immune from their own paradoxes.

Not convinced in either way.

Can't answer. Am not satisfied with evidence offered.

Not enough evidence to answer this one way or another.

I do not conclude, for the data do not seem to be sufficient yet for a scientific conclusion.

This is not properly stated and cannot be answered yes or no. Superiority and inferiority are *individual* and not *racial* traits. Moreover, they must be delimited with respect to specific *measurable* traits.

I am not able to conclude either way. Racial differences in original nature cannot be demonstrated; they may exist; it is doubtful if such differences can be separated from cultural differences.

I can draw no conclusions from such investigations. Since a race is a physical, hereditarily determined group there is obviously no basis for conclusions on mental racial capacities until as physical entities races have been accurately defined and thoroughly studied. The investigation of their psychological qualities must be subsequent to their physical analysis.

Comments of Scientists Who Conclude that Experimentation Shows that Negroes are Inferior to Whites
(Psychologists)

If any conclusion is warranted, it is as marked. Other (different) experimentation might show otherwise.

Inferior on the average. My conclusion is tentative.

A tendency; and on the average only.

This may be a biased interpretation of gathered data due to my Southern training. Certainly tests show substantial average differences. The catch always is that the previous environments are usually so different.

By "inferior to" I mean as regard our *present* methods of measuring mental ability.

One should not be dogmatic but weight of evidence in favor of inferiority of Negro.

The superiority of certain races in certain mental traits appears to be quite reliably established. ———

Any question of racial superiority or inferiority seems to belong to popular politics and not to science because of the vagueness of the terms. In popular discussion the statement that Negroes are "inferior" seems to imply that they are inferior in all respects and that all Negroes are inferior. This ignores the many independent ways in which racial characteristics might vary, and the fact that all measurable traits show a wide scatter.

The first problem for psychologists is whether the median intelligence of Negroes is lower than that of whites. There seems no satisfactory evidence for intelligence equality although there is some evidence that the difference is less than commonly supposed.

The worst defect of the popular view of the question is its ignoring of scatter. White I.Q.'s range roughly from 50 to 150 with a few above and below those values. Even if Negro I.Q.'s were scattered over a similar curve with a median at 80, there would still be some with I.Q.'s superior to those of all whites except the most gifted. Gault's summary of the American army tests shows 1 in 1,000 Negroes as intelligent as 40 in 1,000 of the most intelligent whites, 7 in 1,000 as intelligent as the best 120 in 1,000 whites. It is unlikely that all this difference is innate but much of it probably is. The important point blurred by discussions of racial inferiority is that the most intelligent Negroes are just as intelligent as equally intelligent whites. There are simply fewer of them. ———

Inferior in some and probably superior in others, e.g., time-sense and music. ———

Believe whites superior in abstract ideas and invention; Negroes in certain social and practical aptitudes. It may be true that individuals of one race differ more than do the means of the two races, but still the races may differ quite significantly. ———

Inferior as to the mental abilities concerned in scholastic successes. Probably superior in some other abilities. ———

Their average performance in tests tends to be lower than that of whites. I believe Peterson finds the difference one of speed mainly. ———

Impartial investigators have done considerable work on the problem; but one or another of the selective factors (diff. in family life, diff. in schooling, selection by migration, etc.), *find their way* into the results. ———

(Educationists)

From the standpoint of average or frequency distributions. There is overlapping of course. ———

In resistance to malaria, superior. In mathematical abilities, inferior. ———

But this means only if I *must* put *all* Negroes against *all* whites. There are probably at present more inferior Negroes than whites. But there are also many superior Negroes. ———

But with very large overlapping and with the evidence not conclusive. I am weighing probabilities. ———

(Sociologists and Anthropologists)

But I doubt if recent investigations settle it. ———

Comments of Scientists who Conclude that Experimentation shows that Negroes are Equal to Whites

(Psychologists)

Research is conducted by the mental tests method by students of the racial problem and I believe them to be inspired by a belief in racial inferiority. I think their conclusions are usually overdrawn, and too broad. Inferiority in mental test scores may only mean inferior cultural incentive and opportunity. Striking exceptions would indicate the reasonableness of the hypothesis of essential equality. ———

I believe they are equal in potential ability, but not on basis of recent investigations. ———

Recent investigations seem to me to fall far short of proving inferiority; and equality seems to me *a priori* probable. ———

(Educationists)

Because of anthropological evidence; because of general evidence regarding the importance of environment in culture.

Though I do not wish to say so too dogmatically. Dixon's arguments appeal to me.

However tests need to be refined and environment eliminated.

I know of no adequate evidence for any great difference.

(Sociologists)

It may be that a large number of individuals among Negroes are below the white average, but that does not make it a racial matter.

The question is hardly fair, but few such questions are. Many Negroes are inferior, some superior.

This is my guess, but the evidence is not conclusive one way or the other.

Analysis of the data in Table IV, as well as the comments which follow, reveals several interesting, if not significant, observations:

First, the data indicate unmistakably that irrespective of group the large majority of the scientists—57 per cent of the sociologists and anthropologists, 61 per cent of the educationists, and 64 per cent of the psychologists—are *definitely* agreed that experimentation to date has not demonstrated that there are any inherent differences between the mental ability of American Negroes and American whites. The reasons for this conclusion are found in an analysis of the comments of the respondents which disclose that the outstanding defect of most of the investigation to date has been lack of control of the factor of environment. The majority point of

view seems best epitomized by the comment of an eminent psychologist who observed that:

Data have never been produced which adequately evaluate the "inherent" (as distinct from the *acquired*) factor. Intelligence-test scores show white subjects to average higher than Negro. This is commonly taken to imply an "inherent" difference. The relative contributions of cultural environment and racial (biological) inheritance have never been evaluated. I think many (myself included) are reluctant to use the terms "racial inferiority" and "racial superiority" to designate the differences referred to, for fear of being understood to imply "inherent" differences which are certainly not proved.

Second, it will be observed that 19 per cent of the respondents—5 per cent of the sociologists and anthropologists, 14 per cent of the educationists, and 25 per cent of the psychologists—indicated that they thought the results of experimentation to date warranted the generalization that the American Negro was inferior to the American white. The reasons for this conclusion are not at all as clear as those of the majority group who concluded that the data did not justify such a generalization. In the first place, while many of the respondents indicated by underscoring that they interpreted experimental results as indicating that the Negro was inferior, yet an analysis of their comments revealed such qualifications as to indicate that they really belonged to the "inconclusive" group. For example, 11 of the 23 respondents in this group so qualified their conclusions as to make them ambiguous, to say the least, and indicate that they probably should have been placed in the "inconclusive" group. Despite this fact, however, it will probably be surpris-

ing to many who are familiar with the scientific literature of 10 or 15 years ago that so few scientists are willing to conclude from present investigation that the American Negro is inherently mentally inferior to the American white.

In the second place, as far as the writer has been able to determine from the unequivocal comments of this group, the justification for the conclusion of "inferiority" rests upon *a priori* rather than upon experimental grounds. The reasoning probably runs something like this: While cultural environment is undoubtedly an important factor in the comparison of groups in mental ability, yet it cannot account for all of the differences found between Negroes and whites; therefore, the residue must be due to a difference in innate ability.

Third, 19 per cent of the respondents—11 per cent of the psychologists, 15 per cent of the educationists, and 38 per cent of the sociologists and anthropologists—indicated that they concluded that the results of experimentation to date justified the generalization that the American Negro was inherently mentally equal to the American white. The reasons for this conclusion are not much, if any, more definite than those of the group that concluded the Negro was inferior. In the first place, it will be observed that only 10 of the 23 scientists made any comments on their replies to this question, and 4 of these were so equivocal that they probably should have been included in the "inconclusive" group. In the second place, on the basis of the unqualified comments, the justification for the conclusion of "equality," as was noted in the case of the conclu-

sion of "inferiority," rests upon *a priori* rather than upon experimental grounds. The argument appears to run something like this: The known effect of cultural environment in the measurement of mental ability so nearly approximates, or exceeds, the "obtained" difference between Negroes and whites that such "obtained" difference, in the absence of definite experimental evidence to the contrary, must logically be ascribed to difference in cultural environments.

THE "MULATTO HYPOTHESIS"

Does experimental evidence support or refute the hypothesis that Negroes of more white blood, are, by virtue of that fact, inherently mentally superior to Negroes of less white blood? The "mulatto hypothesis" is an obvious corollary of the assumption that Negroes are inferior to whites. If this assumption is valid, then it ought to follow that Negroes of less white blood should prove inherently mentally inferior to Negroes of more white blood. Thus, this question approaches the problem of racial differences from a slightly different angle, and, at the same time, provides a check on the answers to the question just discussed.

Table V presents a summary statement of the per cent of respondents who indicated that the experimental evidence supported, or refuted, the "mulatto hypothesis," and of those who indicated that the evidence was inconclusive—neither supporting nor refuting.

Again, it is probably desirable to defer the discussion of these data until the comments of the respondents have been presented. Accordingly, the following comments, grouped into the

TABLE V
DOES EXPERIMENTAL EVIDENCE SUPPORT OR REFUTE THE "MULATTO HYPOTHESIS"?

Groups	Inconclusive	Supports	Refutes
Psychologists	68%	23%	9%
Educationists	65	10	25
Sociologists and Anthropologists	76	—	24
Total	70%	15% ^a	15%

same categories as the captions in Table V, are presented.

Comments of Scientists who Conclude that Experimental Evidence on the "Mulatto Hypothesis" is Inconclusive

(Psychologists)

Again, I think experimental data have thus far failed to separate the factors of (a) congenital endowment and (b) social environment—with the opportunities, motivations, etc., which it provides—sufficiently to permit evaluations of the contribution made by each. If we can't prove the *inherent* superiority (or inferiority) of white vs. Negro, the problem of part-white vs. no-white certainly is even worse off. What is needed, is a series of experimental investigations (if they are possible) similar to the studies of Prof. F. N. Freeman et al. (in 27th Yearbook of Nat. Soc. for Study of Education) on the intelligence testing of foster-children—i.e., those whose early environment is *different* from their heredity.

No one can measure, save very indirectly, mental inheritance. For cases of racial mixture too many things *assumed* constant actually are *not* constant, I fancy.

Environment and opportunity are vital.

Trouble with above questions is that nobody knows how much the existing differences between the races in mental test performances is due to differences in the environment and education of the different races.

This is still (though some data along this line have been gathered, for instance, Garth's work on Indians) a wide-open re-

search question. The social factors are dominant factors, obviously.

There are a few supporting facts, but by no means conclusive. The race problem is mainly a matter of color. Let all colored men suddenly turn white, and let other physical characteristics disappear and the problem would disappear—or let the white men suddenly turn black and the problem would disappear.

The evidence is decidedly inconclusive, being derived under poorly controlled and non-controllable situations.

I don't know of any which have kept the matter of environment under control.

The reports of comparative tests of mentality of Negroes with more or less white blood are too meager in my opinion, to justify any definite conclusion. The theory of statistical probability would indicate that the level of a race mixture would lie between its 2 constituents and that therefore the average mentality of the "mulatto" would lie between the mental averages of the Negro and white. But it is quite possible in biological hybridization to produce a new variety which may prove either greatly superior or greatly inferior to either of its parents. I should want more testing of the "mulatto" mentality than has been done before I can form a definite opinion as to the actual facts.

If the hypothesis is generally sound—it still remains obscure whether the difference is "inherent"—or due to "better" environmental conditions. (There is no conclusive evidence on experimental grounds for inherent mental differences.)

On the face of the returns it seems to be true, but the question of heredity vs. environment is not so easily settled, since the mixed bloods often have an intermediate environment as well.

The evidence for this view comes from various tests on mixed bloods made since the original army statement. They are probably no more reliable than tests in general, all of which suffer seriously from the effect of different cultural backgrounds. Is it not true that Negroes of mixed blood have on the average more favorable environments?

There is experimental evidence which supports and refutes this hypothesis. On the basis of available experimental evidence it can be neither definitely affirmed nor denied.

I object here again to the phrase "mentally superior." (Ferguson and others have shown that Negroes of white blood are more like the typical white man than are those without white blood; but that does not indicate that in certain traits the more Negro blood the greater the ability.)

Evidence is rendered ambiguous by the fact that cross breeding is likely to be selective.

(Educationists)

This question is even more difficult than the others and (the existing data are entirely inadequate).

It is mixed up with the question of the effect of environment and is therefore hard to interpret without more crucial experiments than we have at present.

It is rather commonly accepted among whites that a mixture of white blood tends to account for the superiority of certain individuals. I know of no experimental evidence to support the assumptions.

I doubt if this is true if we could rule out environment.

If whites are superior to Negroes, then this is probably true. In my mind the experimental evidence is not conclusive. Being especially interested in environmental influences, especially home background, and being convinced that it is a potent factor in development, I am skeptical of comparative studies which do not take into consideration this aspect. I would like to see a study made where groups were equated on the basis of environment; superiority of Negroes with white blood might be thus accounted for.

(Sociologists)

Again, adequate scientific studies have not yet been made. The high percentage of Negro leaders who have white blood is popularly interpreted as an explanation of superiority but the facts and their meanings are still subject to conflicting interpretations. More data are needed.

Problem one of cultural adjustment of mixed bloods. So-called experimental evidence is confused because we have no control of cultural factors.

I don't think the evidence is conclusive at all.

There is some evidence (mental tests) but this may be due to social opportunities.

The fact is mulattoes are superior—whether this is due to inheritance or opportunity is a matter of inference from observation. I know of no experimental evidence.

Those with white blood have had less handicap.

There is very little experimental evidence that would give weight to one side or the other. It may be significant that practically all of the Negro leaders have had an appreciable amount of white blood in their veins. This, of course, may mean a good deal or it may mean nothing.

Negroes with white blood have generally had more cultural opportunity than other Negroes.

That mulattoes have, in general, shown themselves to be superior to Negroes without white blood seems established on the basis of tests given. The suitability of these tests may, however, be questioned, nor does evidence exist to show that the "superiority" mentioned is due to the admixture of white blood instead of to more favorable environmental conditions.

No experimental evidence to refute or support, as I know of to consider valid.

I know of no such evidence which can bear analysis.

Am very skeptical of evidence offered. The financial and racial situation is involved.

Comments of Scientists who Conclude that Experimental Evidence Supports the "Mulatto Hypothesis"

(Psychologists)

In general the validity of a function is greatly increased when it is based upon three points instead of two. But of course there are many environmental factors which still make the researches debatable. Researches of J. Peterson and Ferguson bear on this problem. I seem to remember others, but I should have to hunt them up. Even the Army intelligence tests suggest something, in spite of their great unreliability.

On intelligence tests Indians increase their score in proportion to white blood. Same will probably be true of Negroes. An experimental fact. Question of whether inherent mental ability is proportional to amount of white blood is a matter of interpretation or opinion.

Yes, direct and indirect evidence is definitely available—we need more however—Ferguson's pre-war work, the work at Camp Lee during the war, and Joseph Peterson's work since the war demonstrate the existence of a positive correlation between amount of white blood present and intellect. Hunter's work on Indians shows the same thing, for that racial group.

Hirsch's work likewise shows this. Herskovitz's results which seem to be opposed to the trend of evidence is misleading and his conclusions logically fallacious since he was dealing with a highly selected group.

I think some do show it, but the significance is doubtful.

Some experimental evidence does exist for superiority in Negroes of more white blood. Because of poor controls and poor testing methods this difference is thus far only a clue and not a proof.

One of my graduate students found differences in elementary school pupils corresponding to the above differences. He is a Southerner but was a careful scientific minded man.

Nearly all experimental evidence tends in this direction. I think Ferguson's data (From U. of Va.) is fairly convincing. Queer isn't it that all data tend so strongly in this direction?

(Educationists)

I consider the hypothesis pretty well proved. But this is due as much to the presence of Negro blood as to white blood. Hybridization seems in general to make for better stock. There is considerable theoretical reason for expecting that and also much experimental evidence—among plants and lower animals.

Comments of Scientists who Conclude that Experimental Evidence Refutes the "Mulatto Hypothesis"

(Psychologists)

I personally incline to the view that no clear correlation between degree of white blood (as evidenced by certain anthropological traits) and Negro mentality has been shown. My own results on this question show very low and unreliable correlations. This hypothesis does not follow from the assumption of white superiority, unless one assumes wide-spread *unrelated* crossing.

The only experimental evidence that I know of seems to refute the hypothesis.

(Educationists)

The best data on influence of mixed blood have been gathered and summarized by Dr. T. Garth, Professor of Psychology at the University of Denver. He has worked chiefly on Indians but he has scrutinized the literature on Negroes as well.

I venture the opinion that differences in environmental factors are of sufficient weight to account for any demonstrable differences in mental ability of the two groups.

This hypothesis is evidently based upon the assumption that Negroes are inferior to whites. It has no basis unless that assumption can be scientifically proven. The scientific evidence which tends to establish the equality of the two races mentally would tend to *refute* this hypothesis.

(Sociologists)

The superiority appears to be a socially conditioned fact—not a fact of biology. All of the experimental work on lower forms appear to refute the idea, but we must be cautious about drawing human conclusions from the experiments with lower forms.

I consider the evidence of *white blood per se* has nothing to do with the “superior mentality.” It is not the possession of anything obtained by inheritance in the biological sense, but social background which may make those of some white blood “superior.”

Herskovits for treatment of mixed-blood groups from point of view of social opportunity, energy, etc. Evidence, which ways you must know from published investigations.

As much and as little, as there is in support or refutation of the hypotheses of Negro “inferiority.”

Analysis of the data presented in Table V, as well as the comments which follow, indicates very much the same trend as the answers to the question just discussed:

First, it will be observed that 70 per cent of the respondents—65 per cent of the educationists, 68 per cent of the psychologists, and 76 per cent of the sociologists and anthropologists—indicate that the experimental evidence is inconclusive as far as the “mulatto hypothesis” is concerned. Again, the outstanding criticism is that none of the investigations has controlled the factor of cultural environment. The situation is very pointedly summarized by the comment of a respondent who wrote:

Again, I think experimental data have thus far failed to separate the factors of (a) congenital endowment and (b) social environment—with the opportunities, motivations, etc., which it provides—sufficiently to permit evaluations of the contributions made by each. If we can't prove the *inherent* superiority (or inferiority) of white vs. Negro, the problem of part-white vs. no-white certainly is even worse off. . . .

Second, the data indicate that 15 per cent of the respondents—no sociologists and anthropologists, 10 per cent of the educationists, and 23 per cent of the psychologists—conclude that the experimental evidence supports the “mulatto hypothesis.” Again a considerable amount of equivocation is found even in the few comments that were given—so much so, that the majority of the respondents probably should have been included in the “inconclusive” group. Just what the basis of this conclusion is, as judged from the other comments, is not clear except in one instance, which I am certain is unique: “I consider the hy-

pothesis pretty well proved. But this is due as much to the presence of Negro blood as to white blood. Hybridization seems in general to make for better stock. There is considerable theoretical reason for expecting that, and also much experimental evidence—among plants and lower animals.” If there is another recognizable basis, it is probably summarized in the comment that: “Nearly all experimental evidence tends in this direction. . . . Queer isn’t it, that all data tend so strongly in this direction?”

Third, the data also disclose that 15 per cent of the respondents—9 per cent of the psychologists, 24 per cent of the sociologists and anthropologists, and 25 per cent of the educationists—conclude that the experimental evidence refutes the “mulatto hypothesis.” Again, as in the case of the group indicating that the evidence supports the “mulatto hypothesis,” the basis of this conclusion is not very clear, except in one instance: “. . . my own results on this question show very low and unreliable correlations. . . .” In other instances, investigations of various scholars are cited which present evidence interpreted as refuting this hypothesis. In still other instances, the conclusion is based upon logical rather than experimental grounds.

SUMMARY AND CONCLUSIONS

It has been the purpose of this discussion to present the results of an investigation purporting to determine the present status of the problem of racial differences, as it is revealed by a canvass of the scholars who are engaged in this field, and allied fields. The general procedure consisted in the administration of a short question-

naire to a representative group of psychologists, educationists, and sociologists and anthropologists. The generalizations which appear to be warranted are summarized briefly:

First, the data reveal unmistakably that it is the general conclusion of scholars engaged in the field of racial differences and closely allied fields that experimentation to date has neither demonstrated that there are any *inherent* mental differences between American Negroes and American whites, nor corroborated the “mulatto hypothesis”—that Negroes with more white blood are *inherently* mentally different from Negroes with less white blood—which is a fundamental corollary of the racial-difference thesis.

It should be observed, however, that 46 per cent of the scholars while indicating that scientific investigation has not disclosed such differences, yet suggest that lack of adequate evidence at the present time does not mean that such differences are not possible; that 30 per cent of the scholars not only indicate that present evidence has not disclosed such differences, but doubt so seriously that they exist as to insist upon the hypothesis of “equality”; that 20 per cent of the scholars indicate that present investigation has not revealed such differences but are non-committal as to their possibility; and *only* 4 per cent indicate *unequivocally* that experimentation to date reveals any *inherent* mental differences. (Although it will be recalled that while 19 per cent indicated by checking that they thought present experimentation to indicate the Negro to be inferior, yet an analysis of their comments disclosed that at least half

of the 19 per cent did not mean *inherent* inferiority. Thus, it appears that the actual number is nearer 4 per cent than 19 per cent, most certainly not more than 8 or 9 per cent).

Second, the bases of the above conclusion appear to be that: (a) the selection of samples of the two racial groups has always been either inadequate or unrepresentative, or, what is most frequently the case, the character has been unknown; (b) cultural environment either has not been adequately controlled, or has been practically ignored; and (c) the validity of the tests employed has been questionable, or ambiguous.

Third, two small minorities representing extreme and opposing points of view conclude that the data show the American Negro to be "inferior," or "equal," to the American white. In both instances these conclusions are the result of logical inference rather than definite experimental proof. On the one hand, those who conclude that the American Negro is *inherently* mentally "inferior" to the American white appear to arrive at this conclusion on the basis of the following reasoning: Granting that environment does account for *some* of the "obtained" difference between white and Negro groups, it cannot account for *all* of the difference; hence, the residue must be due to an *inherent* racial difference in mental ability. On the other hand, those who conclude that the American Negro is *inherently* mentally "equal" to the American white appear to arrive at this conclusion on the reasoning that: The known effect of cultural environment in the measurement of mental abilities so nearly approximates, or exceeds, the "obtained" dif-

ference between Negroes and whites that such "obtained" differences, in the absence of definite experimental evidence to the contrary, must, by the law of parsimony, if not logically, be ascribed to differences in cultural environment.

The facts which are available at the present time appear to favor the latter view rather than the former. Pintner,⁴ in summarizing the "obtained" differences between American Negroes and American whites, states: "In terms of I.Q., where the white child makes an average score of 100, the Negro child makes an average of 85 or 95." This indicates a *maximum* "obtained" difference of 15 I.Q. points. On the other hand, for example, Burks⁵ points out that: "The maximal contribution of the best home environment to intelligence is apparently 20 I.Q. points, or less, and almost surely lies between 10 and 30 points." Hugh Gordon is reported⁶ to have disclosed in his investigation of Canal Boat children that environment may account for as much as 30 I.Q. points. Freeman⁷ in a study of identical twins reared in widely divergent environments finds as much as 24 I.Q. points difference between them. Thus, it would appear from these and other facts not cited here that the inference that the present "obtained" differences between American Negroes and American whites may be due to environment, because the known effects of environment approximate or exceed them, is on fairly sound ground.

⁴ R. Pintner, *Educational Psychology*, New York: H. Holt (1929), p. 158.

⁵ Barbara Burks, "The Relative Influence of Nature and Nurture Upon Mental Development," *Twenty-Seventh Yearbook, Nat. Soc. Study of Educ.*, (1928). P. 309.

⁶ G. C. Schweinger, *Heredity and Environment*, 1933), p. 286.

⁷ F. N. Freeman (See: Chap. XIII of this volume.)