

# The Difficulty of Escaping Preconceptions in Writing an Article About the Difficulty of Escaping Preconceptions

## Commentary on Hunt and Carlson (2007)

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If not for two major unsupported statements, “Considerations Relating to the Study of Group Differences in Intelligence” would be a superb piece. As it is, Hunt and Carlson (2007, this issue) have written a generally excellent guide to the thorny problem of studying group differences in intelligence. Such an article—sensible, well-written, and balanced—was sorely needed. This is a field that has been an ideological landmine. We are delighted to see a major work of this high caliber, motivated by science rather than ideology, published in *Perspectives on Psychological Science*.

However, we believe there are two major unsupported statements that mar this otherwise excellent article.

### RACE IS NOT A BIOLOGICAL CATEGORY

The first unsupported statement is that “it is sensible to speak of race as a biological category” (p. 196). Hunt and Carlson’s own article contradicts this argument.

The first problem with this statement is that, as Hunt and Carlson point out, race, as a concept, is a “fuzzy one” and has a “continuous nature” (p. 196). So, if we want to be scientifically precise in research on differences among discrete groups, how do we group when the variable is really continuous? If the variable is continuous, how do we devise a metric for assessing whether people are 10% a member of the group, 50% a member, 90% a member, and so on?

Race is not a clear-cut distinction like males versus females, reptiles versus amphibians, or even people with blue eyes versus

people with brown eyes. There is no definitive way to measure who is what.

Of course, there is a societal solution to this problem. In U.S. society, we classify people as Black if they appear to have any Black ancestry at all. For example, the “Black” group in a supposedly scientific study of racial differences will have people of different degrees of skin tones and with other features socially identified with Black ancestry. A group of people with, say, 20% Black ancestry would not be classified as White if their skin tone were closer to white than black. We would still call them Black. There is nothing biological about this classification at all. It reflects the racial implicit theory of a society preoccupied with what it perceives as racial purity, by which people with any of the allegedly impure ancestry are classified as belonging to the impure (marked) group.

The second problem is the relevance of self-identification to racial groupings. The argument regarding self-identification that Hunt and Carlson propose, based on Tang et al. (2005), has a number of embedded assumptions that Hunt and Carlson do not fully face in their discussion. When considered in the context of these assumptions and with regard to other literature (as reviewed in Sternberg, Grigorenko, & Kidd, 2005), the self-identification argument does not support any concept of biological race. Indeed, Tang et al.’s point was that ancient geographic ancestry rather than current residence is associated with self-identification and not that such self-identification provides evidence for the existence of biological race.

Suppose we ask people to sort themselves on the basis of eye color. The agreement of people’s self-classifications with biological genes for eye color would be at least as good as, and probably better than, that for socially-defined race. Does this mean that eye color forms a basis for race? Of course not. It is

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an illogical argument—just as illogical as the argument that people’s socially constructed implicit theories of their racial background form a basis for classifying people into biological races. Certainly, people can accurately sort biological characteristics on the basis of their implicit theories of these characteristics. The fact that they can do so does not mean that characteristics such as eye color, ear-lobe structure (attached or unattached), or skin color are bases for biological races.

The third problem is with biological data that contradict implicit theories. Within groups that our implicit theories would classify as being of the same race, there are sometimes greater differences in the types and frequencies of particular alleles or polymorphisms within genes than are seen between groups that we would classify as being of different races. Hunt and Carlson point to the example of sub-Saharan African and Australian–New Guinea ancestral groups (based on Cavalli-Sforza, Menozzi, & Piazza, 1994). Sternberg et al. (2005) have pointed out that certain differences in genetic groupings within people of the allegedly biological black race in Africa are, in many cases, greater than those between people of supposedly different races in Africa versus the United States. So people who would be socially classified as being of the same race differ more genetically than do people who would be socially classified as being of different races.

The fourth problem is that people in different countries have wildly different labels for the different races. The “White, Black, East Asian, and Latino” implicit theory may be comfortable for those of us in the United States, but it is not a widely used categorization worldwide (see Sternberg et al., 2005, for a brief review of some of the range of categorizations). Of course, it may be that people in the United States just happen to have hit on the correct groupings. However, it is unlikely that the implicit theory underlying this division is better than any other. More likely, our science is being used in support of our own ideology, as it has been in so many places at so many times. As in those other places at other times, the problem is recognizing what we are doing.

It can be hard to let go of one’s cultural preconceptions. Hunt and Carlson’s own data do not support their argument of biological races. As authors, we hope that the day never comes when “race-specific treatments” are “developed for individuals at risk for cognitive conditions, including low intelligence” (p. 197), on the basis of false notions of biological differences between alleged racial groups.

### INTELLIGENCE IS NOT LIMITED TO COGNITIVE ABILITIES

The second unsupported argument in the Hunt and Carlson article is that “extending the term *intelligence* beyond the cognitive area so expands the domain that it becomes an unmanageable concept” (p. 199). This statement, like the previous statement about race, reflects the authors’ socialized level of comfort rather than any scientific fact or principle.

The authors correctly state that scores on tests are useful to the extent that they “measure underlying processes that are of theoretical and/or practical importance . . . or serve as statistical predictors of socially relevant behavior” (p. 199). Let us see where this line of reasoning takes us.

There is strong, growing evidence that constructs of intelligence that go beyond the strictly cognitive meet both of Hunt and Carlson’s relevant criteria. For example, Mayer and Salovey and their colleagues (Mayer, Salovey, Caruso, & Sitarenios, 2003; Salovey & Grewal, 2005) have developed a well-regarded and empirically supported theory of emotional intelligence and have shown that the theory has very good construct validity, particularly in terms of the incremental validity of their emotional intelligence test over conventional cognitive intelligence tests in predicting highly diverse criteria showing adaptive competency, which is generally considered to be the cornerstone of the definition of intelligence (Sternberg & Detterman, 1986). As another example, Sternberg (1997) has developed a theory of successful intelligence, and Sternberg and his colleagues have recently shown that augmenting test batteries with items measuring creative and practical skills can significantly increase prediction of academic performance and decrease differences among (socially defined) ethnic groups (Hedlund, Wilt, Nebel, Ashford, & Sternberg, 2006; Stemler, Grigorenko, Jarvin, & Sternberg, 2006; Sternberg & The Rainbow Project Collaborators, 2006).

One could attempt to argue, as do Hunt and Carlson, that whatever is in test batteries that goes beyond the cognitive either is not intelligence at all or else can be incorporated into the rubric of cognitive intelligence. For example, they argue that our work on practical intelligence in a variety of cultures “is consistent with Cattell’s definition of crystallized intelligence” (p. 200). The problem is that the data do not support this argument. Sternberg et al. (2001) found negative correlations between scores of Kenyan children on tests of practical intelligence and the children’s scores on tests of academic (fluid and crystallized) intelligence. If the tests we used were measuring the crystallized-intelligence construct, one would not expect a negative correlation with another measure of that construct. In other studies, the correlations have been weak or negligible (Sternberg, 2004; Sternberg et al., 2000).

In the end, theory linked to empirical data will determine whether these broader concepts of intelligence are viable, not ex cathedra statements claiming that going beyond the cognitive arena results in intelligence “[becoming] an unmanageable concept” (p. 199).

### CONCLUSION

Hunt and Carlson have written an excellent article full of sensible and practical advice on how to conduct studies of intergroup differences. Our only regret is that the article is marred by two assertions that are not adequately supported by

the scientific data currently available: that races are biological, and that intelligence is strictly cognitive. Neither is adequately supported by empirical data.

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