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ИССЛЕДОВАТЕЛЬСКИЕ ПРАКТИКИ В ДИФФЕРЕНЦИАЛЬНОЙ ПСИХОЛОГИИ: КОММЕНТАРИИ И ИСПРАВЛЕНИЕ К УИНСТОНУ

AuthorID: 821651
ResearcherID: A-2094-2010
ORCID: 0000-0003-2571-1397
ScopusID: 57159855100

ПЕСТА Брайан, PhD
Cleveland State University
(OH 44115, США, Кливленд, e-mail: b.pesta@csuohio.edu)

ORCID: 0000-0003-1433-2869
ScopusID: 57172135800

ФЮРСТ Джон Г.Р., исследователь
Cleveland State University,
(OH 44115, США, Кливленд, e-mail: j.g.fuerst@vikes.csuohio.edu)

SPIN: 5196-9847
AuthorID: 1013259
ResearcherID: L-5422-2017
ScopusID: -57038246900

ШИБАЕВ Владимир Сергеевич, ассистент кафедры философии и юридической психологии
Владивостокский государственный университет экономики и сервиса
(690014, Россия, Владивосток, улица Гоголя, 41, e-mail: Vladimir.Shibaev@vvsu.ru)

Аннотация. В недавно опубликованном комментарии Уинстона [1], который определил «научный расизм» как «использование научных концепций и данных для создания и обоснования идей устойчивой биологической иерархии» [1, с. 425]. Уинстон далее утверждал, что «научный расизм» сохраняется из-за «социальной генеалогии и истории» исследовательской программы, а не потому, что это открытый эмпирический вопрос о том, существуют ли некоторые унаследованные поведенческие различия между этническими и расовыми группами. Наконец, Уинстон назвал одного из нас (Песта Б. Дж.) примером «научного расизма» в статье, посвященной «теории холодных зим». В частности, в статье [2] проверяется, может ли «теория холодных зим» объяснить этно-расовые различия в интеллекте в 50 штатах США. К сожалению, Уинстон неверно охарактеризовал позицию статьи по этому поводу. Поэтому мы пишем здесь, чтобы исправить неверную характеристику и проиллюстрировать, что изучение этно-расовых различий является частью прогрессивной исследовательской программы психологических различий.

Ключевые слова: теория холодных зим, IQ, групповые различия, психологические различия

RESEARCH PRACTICES IN DIFFERENTIAL PSYCHOLOGY: COMMENTS AND A CORRECTION TO WINSTON

PESTA Brian J., PhD
Cleveland State University
(OH 44115, USA, Cleveland, e-mail:: b.pesta@csuohio.edu)
FUERST John G.R., researcher
Cleveland State University
(OH 44115, USA, Cleveland, e-mail: j.g.fuerst@vikes.csuohio.edu)
SHIBAEV Vladimir Sergeevich, assistant at the Department of Philosophy and Legal Psychology,
Vladivostok State University of Economics and Sercvice,
(690014, Russia, 41 Gogolya st., Vladivistok, e-mail: Vladimir.Shibaev@vvsu.ru)

Abstract. In a recently-featured commentary, Winston [1] defined scientific racism as "the use of scientific concepts and data to create and justify ideas of an enduring, biologically based hierarchy" [1, p. 425]. Winston further argued that scientific racism persists because of the "social genealogy and history" of the research program, rather than because it is an open empirical question as to whether some inherited behavioral differences exist between ethnic and racial groups. Finally, Winston called out one of us (BJP) for exemplifying scientific racism in a paper concerning Cold Winter's Theory. Specifically, the article [2] tested whether Cold Winter's Theory could account for race differences in intelligence across the 50 U.S. states. Unfortunately, Winston mischaracterized the article's position on this matter. We therefore write here to correct the mischaracterization, and to illustrate that the study of race differences is part of a progressive research program on psychological differences.

Keywords: Cold Winter's Theory, IQ, group differences, psychological differences

1. INTRODUCTION

We begin by describing our research program. It follows in the tradition of Galton's and Spearman's London School of psychology, now called differential psychology. The goal of differential psychology is "the advancement of psychology as an empirical, quantitative, biological science" and, more specifically, "the measurement and taxonomy of individual differences in human mental abilities and personality traits and the investigation of their nature and nurture…" [3].

Like Galton and Spearman, we concern ourselves both with individual and group differences, and hypothesize that the latter are largely manifestations of aggregations of the former. The groups in question can be social classes, occupational groups, political subdivisions (e.g., states, provinces, or countries), sexes, ethnic and religious or other cultural groups, descent groups, and so on.

We largely focus on differences in cognitive ability, including general cognitive ability, which is often used synonymously with the term "intelligence." The measurement and taxonomy of human intelligence has been a major triumph of differential psychology (and social science in general). It is now well accepted that general intelligence is one of the most important variables in the social sciences, as it strongly predicts numerous academic, economic, occupational, social, and health related outcomes [4, 5, 6]. Moreover, investigation of the environmental

and genetic determinants of general intelligence has now matured [7], and has led to the identification of genetic variants underlying the hereditary component of individual differences [8, 9].

Winston (2020) thus seems to miss the forest for the trees. What he considers "scientific racism" is merely a subtopic in a much larger and ongoing research program: Differential Psychology. Of course, other research in differential psychology was deemed anathema, until it had become accepted. Such was the case with research on the psychometric and genetic basis of individual and social class differences in intelligence [10, 11]. To some extent, it still is the case with regard to research on sex differences in behavior [12]. Although research in this arena is still relatively controversial, research on national, ethnic, and racial group differences is differential psychology's last frontier.

2. RESEARCH METHODOLOGY

Many researchers seem to have trouble with the term "race". However, what should matter is the concept, not what its moniker. As to this, Winsto cites Livingston's [13] influential critique of the concept of race, although we believe he misunderstood Livingston's argument. Livingston [14] did not argue that "race" was irrelevant because there was often continuous variation (something well-recognized by natural historians). Rather, he argued that race in the sense of ancestry group is not useful in the study of human variation because variation is mostly discordant (or uncorrelated) and so not indexed by "common ancestry":

As the number of characters increases it becomes more nearly impossible to determine what the "actual races really are"….. In this way race or common ancestry and migration have been used to explain much of the genetic variability among human populations. Unfortunately such explanations neither accord with our knowledge of population structure and movement of hunters and gathers, nor take into consideration that basic cause of biological variation, natural selection.

[Race] implies something about the evolutionary history of these populations, and it also implies that these populations are similar in whatever characters were used to classify them together because of close common ancestry. It is this implied explanation of whatever genetic variability is used to group populations into races which I consider to be false [14].

As a result, Livingston thought the focus should be on character clines or gradients [15], not common ancestry. In retrospect, it is striking how anti-Darwinian this argument is. After all, Darwin made the point that "propinquity of descent" was "the only known cause of the similarity of organic beings" [16], and he applied this idea to both specific and infraspecific variation. Regardless, in light of the vast amount of research in population genetics, which has confirmed the utility of ancestry [17], Livingston's argument is untenable. In reality, the more data used, the better individuals can be grouped into ancestry-based groups [18, 19]. Moreover, ancestry-inference is now de rigueur in genetically informed research, precisely because of correlated variation and population stratification, that is, allele frequency differences due to systematic ancestry differences [20, 21]. Moreover, a number of ancestry-associated morphological and medical-related traits have now been identified through use of admixture analysis [22, 23, 24, 25].

We doubt few geneticists would argue otherwise. Some, though, have indeed argued that "race" and "ancestry" refer to concepts totally at odds with one another [26], seemingly forgetting that "race" originally meant "lineage" (i.e., descent, ancestry, or pedigree). However, those who reject "race," when not in error like Livingston, simply use the term differently [27]. A biological race, from the perspective of our research program, is a group of individuals who, owing to common ancestry, share distinctive patterns of genetic characters and inherited traits with other members of the same race [28]. Livingston was wrong; there is no question now that one can identify different races or ancestry groups within humanity.

Of course, many terms can be used to describe this general concept: ancestry populations, lineage populations, biogeographic ancestry groups, descent groups, etc. [29]. Semantics aside, the question remains: Does "common ancestry" have utility in the context of differential psychology? The answer is yes. As one example, we showed that in the USA, self-identified racial differences in intelligence were largely explained by genetic ancestry, partially via polygenic score differences [30]. These results line up with the predictions of Jensen's [31] and Rushton and Jensen's [32] hereditarian model, which Winston disdains. Alternatively, the results could be due to confounding owing to population structure [33]. However, whether differences are caused or confounded by genetic differences between members of major ancestry groups, shared ancestry matters. And since ancestry components correlate with both behavioral phenotype and related polygenic scores, the use of ancestry (admixture, principal components, etc.), and so "race" in both Livington's and our sense, is now unavoidable [33].

That said, of course we agree with Livingston that global behavioral variation should also be explored through the lens of character clines and other such concepts (e.g., ecotypes). Differential psychology is an expansive program.

Unlike Winston, Held [34] is circumspect regarding the legitimacy of differential psychology applied to race. The concern is with the "idea of distinct races (as essentialized human subspecies if not subhuman kinds)" [34, p. 12]. We note that much of the idea of race as "essentialized human subspecies" is the product of fake historiography.

Under John Ray and Carl Linnaeus systematics, there was a clear distinction between species, which propagated their form independent of the environment, and varieties, which varied with the environment [35]. Pre-evolutionary species were thought to be "essentialistic" in the way that clonal lines are: they were homogeneous in genetic programs. And they fit Luc Faucher's criteria for biological "essentialism," cited by Held: Members of a species shared homogenous genetic programs which coded for traits; these programs were untransmutable. Given the theological and cosmological commitment to an orderly, creator-designed universe, this view made sense. Otherwise, as Alfred Russel Wallace [36] later recognized, the result is messy transmutation (i.e., evolution).

"Race" in natural history was largely an attempt to deal with the reality of hereditary or "constant" varieties and, ultimately, the effects of evolution. In "Histoire naturelle des fraisiers" [37], Antoine Nicolas Duchesne, who introduced the term, "race," into botany explains:

These metaphysical divisions have become the basis of methods, in Natural History; but we have been forced, in order to avoid confusion, to give them particular denominations; to call kingdoms the great categories of animals and vegetables; classes, families, orders, sections, subordinate divisions or subdivisions; saving the word genera for the latter; and that of species, for the assembling of the individuals produced by each other, no matter how different they may be among themselves; we then called varieties the individuals in which these varieties were observed, by a figure of speech similar to that which has made use of the word species, as we have just seen: when these extraordinary individuals have found themselves producing sorts similar to them, we have also extended to the whole assembly the name of variety, for which we have been forced to add the incompatible attribute of constancy; they have been called constant varieties; it is to this improper denomination that custom has on several occasions substituted the term of race; a term correctly employed by M. de Buffon in the Natural History of Animals, and which requires to be introduced into that of Plants. (Authors' translation)

That is, under the Ray-Linnaeus systematics, there were species and varieties. "Species" were defined by untransmutable, distinguishing features; they were forms

which indefinitely propagated themselves with constancy. "Varieties" were defined by changeable, accidental characters; they were forms which did not produce sorts similar to themselves in new environments. There was originally no conceptual space for the idea of "constant varieties".

Given the systematics, it made sense to infer that hereditary forms represented separate "essentialized" species. In context to humans, this (minority) position was polygenism. "Species" was employed to make this argument. "Race" (and later "subspecies"; [38]) was employed to make space for discussion of infraspecific hereditary variation, which by contrast with specific variation was non-essentialist. More generally, "race," in natural history, was part of a project to understand variation in terms of descent and heredity [39].

3. RESULTS

Where Held is circumspect, Winston argues that differential psychology with respect to race has been discredited by "well-formulated critiques" about the "use of racial categories, brain size measurements, intelligence tests, heritability quotients, and crime statistics." None of the critiques cited were particularly "well-formulated".

Nisbett [40] for example, argued, based on a rather selective review of 20th century studies, that admixture research constitutes direct evidence against Rushton and Jensen's hereditary hypothesis. However, we showed, using self-reported data, phenotype, and modern genetic methods, that the results conform to Rushton and Jensen's prediction [41, 42]; though, we do not consider this direct evidence either way. However, Nisbett at least attempted to address the empirical issues. Most of the other cited authors make irrelevant arguments concerning, for example, the taxonomic status of various human descent groups.

Generally, it is not difficult to explain "the persistence of scientific racism in academic psychology" Winston. "Scientific racism," as Winston calls it, is simply the application of the methods, concepts, and goals of differential psychology to the study of descent and other group differences. Concepts like "heritability," "intelligence," and "genetic ancestry" are well established. The refinements to these concepts over the last century, which Winston laments, is a characteristic of a progressive research program [43]. Since the cause of differences between groups is unresolved [44], the topic is still researched. And it can now also be researched using the same genetic methodology used to study morphological and medical traits. Researchers who would like to see a resolution of the question regarding the nature and nurture of between group differences should work to resolve the empirical questions from within the differential psychology framework.

Predictions from the hereditarianism program have yielded a number of insights into the nature of group differences. To take the case of differences between self-identified racial/ethnic groups in the USA, it has led us, in particular, to investigate the degree of trait heritability and the validity of intelligence related polygenic scores within groups, whether admixture predicts outcomes within self-identified groups, whether group differences in intelligence are measurement invariant and g-loaded, etc. [45]. The predictions which guided this research all came from the debate within differential psychology. Whether Rushton and Jensen's hypothesis is ultimately vindicated, their research program has had more explanatory power than its rivals. Perhaps if an environment-only hypothesis could be formulated so as to make equally clear and fruitful predictions, the hereditarian program would have less appeal.

The motivation for writing this commentary was to correct the record, including Winston's (2020) mischaracterization of Pesta and Poznanski's article. On Page 30, Winston noted:

...this untenable view [Cold Winters Theory] of the late Pleistocene was still employed by

Pesta and Poznanski (2014) in the mainstream journal, Intelligence.

Winston's characterization of this work is unfair at best. Pesta and Poznanski did not "employ" cold winters theory (CWT) to support notions of racial superiority. Quite the opposite. The authors critically evaluated the theory by using the 50 U.S. states as the unit of analysis. If temperature and IQ can covary even within the United States, then Cold Winters (i.e., genetics) must not be the only explanation for the north-south or cold weather geographical patterns observed for intelligence (i.e., higher in the north and in colder climates). This is what was found.

To correct the record on CWT, though, we note it was first introduced by the co-discoverer of evolutionary theory, Alfred Russel Wallace [46]. Winston claims that CWT has been discredited. However, not enough is known about the global distribution of the genetic determinants of intelligence to evaluate if this is so. What is known is that cranial capacity and measured intelligence vary, along a north-south cline, in accordance with the theory [47, 48, 49].

4. CONCLUSION

Presuming one grants that race and ethnic differences in psychometric intelligence exist, why should social science concern itself with them or their causes? That is, who would ever prioritize this area when deciding on a research agenda? A problem with ignoring race and ethnic differences, however, is that we risk not maximizing human well-being for all. Our argument here has three parts. First, the predictive validity of IQ scores is unrivaled (albeit IQ scores are not the only variables that predict). Said differently, the general factor of intelligence is the most powerful variable in social science, when power is defined as prediction accuracy.

Second, many of the variables that IQ correlates with constitute obvious "sub-domains" of human well-being [50]. Examples include education [51], health, occupational status [52] and crime [53]. The well-being sub-domains, though, tend to be strongly intercorrelated themselves. As such, a nexus of intercorrelated variables exist, with each constituting an important component of human well-being. And, for better or worse, IQ scores are a central node in this nexus.

Third, race and ethnicity, for uncertain reasons, are also central nodes in this nexus, with certain minority groups usually falling squarely on the short end of the well-being stick. Ignoring IQ differences between such groups, when they map reasonably well onto well-being differences, seems ostrich like. That is, both IQ scores and race/ethnicity predict levels of well-being. And, race/ethnicity and IQ are correlated. It is possible, then, that race/ethnicity differences in well-being (a critically important issue) are partly influenced by differences in intelligence [54]. It therefore seems rather important for us to disentangle this particular pattern of correlations and their causes. Why would we not want to prioritize this research agenda?

Another concern is that if hereditary differences in traits conducive of well-being (in contemporary societies) exist, but are assumed not to, the result would be paranoia as to the cause of the outcome differences. Such a belief, as Jensen noted, "could generate a kind of social paranoia, a belief that mysterious, hostile forces are operating to cause inequalities in educational and occupational performance, despite all apparent efforts to eliminate prejudice and discrimination - a fertile ground for the generation of frustrations, suspicions and hates." Could this be the situation we currently face within the United States?

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