Confronting Scientific Racism in Psychology: Lessons From Evolutionary Biology and Genetics

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Abstract

Although the APA has taken a strong anti-racism stance, scientific racism continues to be published in psychology journals and scholarly books. Recent articles claim that the folk categories of race are genetically meaningful divisions, and that evolved genetic differences among races and nations are important for explaining immutable differences in cognitive ability, educational attainment, crime, sexual behavior, and wealth; all claims that are opposed by a strong scientific consensus to the contrary. These claims remain a serious source of harm through the naturalization of inequality and through support for the work of racial extremists. Contemporary "racial hereditarian research" (RHR) claims to rest on modern genetics and evolutionary biology, and to draw on their methods, such as Genome Wide Association Studies (GWAS). These new arguments fail to meet the evidentiary and ethical standards of these disciplines for the study of human variation. If psychology adopted standards from genetics and evolutionary biology, the current racial hereditarian work would be ineligible for publication. Actions that the APA can take to deal with scientific racism are described.

Keywords: scientific racism, racial differences, intelligence, ethics, evolutionary biology

Public Significance Statement:

Some Psychologists claim "new evidence" that genes, not racism, are primarily responsible for racial differences in education, income, and incarceration, a claim that is taken up by those promoting racial inequality and White nationalism. This "new evidence" does not meet established scientific and ethical standards of genetics and evolutionary biology. By adopting the standards of genetics and evolutionary biology, psychologists can help eliminate the harm caused by "scientific racism" while preserving academic freedom.

Confronting Scientific Racism in Psychology:
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The APA (2021) *Apology to People of Color* acknowledged the well-documented history of scientific racism in psychology (e.g. Guthrie, 2004; Jackson, 2001, 2005; Richards, 2012; Tucker, 1994, 2002; Winston, 2004, 2022). However, the *Apology* and the *Action Plan* for dismantling systemic racism (APA, 2022) do not address the ongoing production of scientific racism by psychologists and the use of this material to support racist policies and racial extremism. Since 2012, over 350 journal articles and books claim that folk racial classifications are biologically meaningful categories and that racial differences in intelligence test scores, educational attainment, income, and crime partly or even primarily originate from genetic differences between races. Some psychologists claim that the differences between White and Black people are highly resistant to change, and result from evolved differences such as brain size, testosterone, and reproductive strategies produced by natural selection (Lasker et al., 2019; Lynn, 2015; Pesta et al. 2020; Piffer, 2019; Rindermann, 2018; Warne, 2021; Winegard, Winegard, and Boutwell, 2017; Winegard, Winegard & Anomaly, 2020; also see Bird, Jackson, & Winston, 2023a for a bibliography). Skin color and IQ are claimed to correlate as strongly as .92, and "g," rather than colonialism and racism, is used to explain the wealth of nations (e.g. Lynn, 2015). Some articles argue for eugenic measures to prevent the decline of IQ and Western civilization and warn of dangerous immigration from "super-fertile low-IQ non-Western countries" (Nyborg, 2012, p. 118). We refer to this body of work as "racial hereditarian research" or RHR.

In this article, we dispute claims of "value neutrality" for this research. The harm caused by RHR is clear from its use by racial extremists, sometimes directly assisted by psychologists,

to influence social policies regarding immigration, social welfare, criminal justice and diversity, and to preserve the racialized structure of society (see Jackson, 2022b; Panofsky, Dasgupta, and Iturriaga, 2021; Tucker, 2002). RHR has shifted from simple comparisons of Black and White cognitive test scores to genome-wide association studies (GWAS) and the comparison of intelligence scores across nations or in multiracial individuals (e.g., Lasker, et al., 2019; Piffer, 2015; 2019; Rindermann, 2013). We describe unjustified interpretations of GWAS and show how these new hereditarian claims do not meet the conceptual, evidentiary, and ethical standards of human genetics, evolutionary biology, and biological anthropology. Further, we discuss how the APA needs to change editorial practices and ethical standards if the discipline is to responsibly end the production of scientific racism.

We define "scientific racism" as the use of scientific concepts and data to create and justify an enduring, biologically-based racial hierarchy (Winston, 2022). We make no assumptions or imputations that the RHR authors are themselves "racists." The "true" sentiments of authors are irrelevant for assessing damage to Black people. RHR articles appeared most frequently in *Intelligence*, *Personality and Individual Differences,* and *Evolutionary Psychological Sciences* but also in journals created especially for RHR: *Mankind Quarterly*, and new online *OpenPsych* journals (https://openpsych.net; see Panofsky, Dasgupta & Iturriaga 2021). Much of this work builds on the earlier writings of Philippe Rushton (1995), Arthur Jensen (1972), and especially Richard Lynn (1977). The "new" RHR reaches the same conclusions as the racial comparisons of the early 20th century, when these claims were effectively criticized by Black scholars (Jackson, 2005). The subsequent 100 years of serious scientific critique by psychologists, geneticists, evolutionary biologists, anthropologists, and

sociologists has not brought an end to RHR (see Bird, Jackson, & Winston, 2023b for a bibliography of critiques).

The Uses of RHR

RHR psychologists often claim that, as scientists, they simply report facts and do not recommend policy (e.g. Woodley et. al, 2017, p. 95). This is only partly true. While RHR psychologists seldom outline specific policies, they do acknowledge their work could affect society. RHR psychologists hold that, "*It does not promote the interests of society or of science to deny that human populations vary in biologically meaningful ways simply because it makes some people uncomfortable or anxious*" (Winegard, Winegard & Boutwell, 2017, p. 175, emphasis in original). One policy implication is to undercut the motivation for addressing discrimination and racism. For example, Jensen (1972) held that RHR justified cutting efforts addressing inequitable educational outcomes (see also Jackson, 2022a). Like Jensen, contemporary RHR psychologists support creating educational programs designed to meet each group's genetic limitations. "Intelligence researchers emphasize the usefulness of their tests in getting children into the kinds of schools and adults into the kinds of jobs that suit their mental abilities," writes Meisenberg (2019), "knowledge of cognitive ability differences promotes ethical behavior, by understanding and accepting the limitations of those less well endowed by nature" (p. 315). Regarding educational programs tailored to racial/ethnic group capacities, Cofnas (2020) agrees noting, "It is hereditarians who have advocated these programs and environmentalists who have resisted them" (p. 135).

RHR implies that systemic racism is not an important factor in racial inequality: "[W]ere it proved that racial inequalities are due to biology, i.e., that they are *not* the result of discrimination or systemic racism, the most compelling reason to fight these inequalities would

disappear... Ergo, the widespread opinion that hereditarianism is irrelevant for politics is manifestly false" (Sesardic, 2005, pp. 213, 215). RHR psychologists hold that their research could show that the social inequalities of Black Americans substantially result from the natural distribution of racial abilities: "if not all groups have identical distributions of potential, then it is unjust to assume that some people must be blamed for average differences in performance among groups... if hereditarianism is true, then it may be that no one should necessarily be blamed for different average outcomes among groups" (Cofnas, 2020, pp. 133, 140). Some go further, arguing that RHR justifies race-based judgments. For example, Rindermann (2013) allows that when information about a particular job candidate is absent or poor quality and, "the duty to acquire reliable individual level information was not possible to fulfill, it is rational and ethically acceptable, to use information from non-individual categorizations (p. 233)."

Some RHR psychologists prophesize a dire "dysgenic" future. Rindermann (2018) claims that an aging population, immigration into Western countries by inferior cognitive types, and outbreeding of the cognitively gifted by the less gifted, are "three demographic trends....favouring decreasing rather than increasing ability levels" (p. 399). Woodley et al. (2017) argue that group-level selection in the cold weather climates of Europe led to significant cultural advancement because "group-selected traits include high intelligence, altruism, and heroism (Woodley & Figueredo, 2013)" (p. 19). They argue the 19th-century rise of Kipling's "White Man's Burden," which they characterize as "universalistic benevolence." (p. 96), led to the abolition of slavery, extending suffrage to the middle and working classes, poor laws, and legal unionization of workers. "Such noble impulses ultimately lead to dysgenic selective pressures," (p. 97) they conclude. "It should be stressed that despite our emphasis on the health and future of Occidental civilization, the fears about civilizational meltdown expressed in this

study apply to all of humanity." (Woodley et al., 2017, pp. 99-100). Nyborg (2012) decries that the "leading scientists, politicians and intellectuals (Nyborg, 2003; in press) ignored Darwinian principles and started a historically hitherto unheard of voluntary, humanistic, democratic and financed replacement policy, whereby dwindling genetically weakened (Lynn, Harvey, & Nyborg, 2009) sub-fertile Western European populations will rapidly be replaced by more fertile low-IQ non-European immigrants" (p. 124). Concludes Woodley et al. (2017), "the prospects of reviving civilization may be quite dim" (pp. 101-2). These conclusions are not value-free or ideologically neutral.

The dire conclusions and regressive policy implications of current RHR align with those of White nationalist and neo-Nazi communities. In the 1960s, former APA President Henry Garrett and his circle worked directly with segregationists and neo-Nazi activists to preserve a segregated society (Jackson, 2005; Winston, 1998). In the following decades, Hans J. Eysenck and Arthur Jensen gave interviews on race to British and German neo-fascist periodicals (Jackson, 2022a). As documented by Tucker (2002), Philippe Rushton and Glayde Whitney assisted America's leading racist, David Duke, with his autobiography, *My Awakening*. Whitney, a past President of the Behavior Genetics Association, wrote an enthusiastic foreword in which he blamed "Organized Jewry" for suppressing the "truth" about racial differences (Duke, 1998). Rushton and Lynn supported the White nationalist organization, *American Renaissance*, as featured speakers at the annual meetings (Tucker, 2002, pp. 182-188). Discussions of race, crime, intelligence and immigration on the *American Renaissance* and other White nationalist venues such as VDARE contain frequent references to RHR publications and interviews with and contributions by current RHR authors (see Bird, Jackson, & Winston 2023a, Section 3 for specific examples). We have been unable to find any comment on these collaborations in the

RHR literature. Currently, RHR forms a central aspect of alt-right ideology and their radicalization and recruitment strategies in online communities, both in North America and Europe (Dentice, 2018; Dixit, 2022; Panofsky, Dasgupta, and Iturriaga, 2021).

RHR authors who publish in the journal *Intelligence*, such as Richard Lynn, Tatu Vanhanen and Edward Dutton simultaneously publish books on race and heredity with Daniel Friberg's extremist Arktos Media, which is part of a "media empire...in which far-right ideas can now circulate with impunity" (Bures, 2020, p. 50) and White nationalist Richard Spencer's Washington Summit Publishers (see Bird, Jackson, & Winston, 2023a, section 2). Winston (2022) shows how Spencer, who helped organize the 2019 Unite the Right rally in Virginia, worked closely with the evolutionary psychologist, Kevin MacDonald, who argues that Jews evolved a group strategy to dominate and eliminate a White majority in America (e.g. MacDonald, 1998). His work is a revival of early 20th century Jewish conspiracy theories and antisemitic tropes (see Winston 2021). With Richard Lynn on the Editorial Board, Kevin MacDonald edits the *Occidental Quarterly*, a journal that according to the Anti-Defamation League (2013) is "a racist print publication that mimics the look and style of academic journals" and whose content has become increasingly antisemitic under MacDonald's editorship.

RHR authors, such as Edward Dutton and Helmuth Nyborg, who have published in *Intelligence*, contribute to VDARE, an anti-immigration website devoted to keeping America White and promotion of "Great Replacement" ideas (Bird, Jackson, & Winston, 2023a, Section 3). RHR authors have also contributed to the *Unz Review*, an antisemitic website promoting Holocaust denial (Anti-Defamation League, 2018; Jackson & Winston, 2020, p. 9). RHR psychologists point to the *Unz Review* as a reliable source for psychological information (Rindermann et al., 2020, p. 5). The active collaboration of RHR authors shown by these

examples cannot be considered cases of misappropriation or misrepresentation of scientific work, nor can this participation be considered private political activity when RHR psychologists are introduced at White Nationalist meetings with their degrees, affiliations, expertise, and scientific publications (e.g. American Renaissance Conference, 2006).

RHR authors claim that Western Civilization is under dire threat from criminally-inclined people of color. Those who call for radical action to combat this threat draw on RHR psychologists' work. The well-known neo-Nazi discussion board, www.Stormfront.org, has frequent discussions of the racial hereditarian ideas of Michael Woodley (e.g. Stormfront.org, 2018b), Edward Dutton (e.g. Stormfront.org, 2018a), and Richard Lynn (e.g. Stormfront.org, 2022). As one scholar put it, Jensen and Rushton's words "resonate in white nationalist circles; even from the grave" (Dentice, 2018, p. 135). Although RHR authors are not responsible for murder, the 2022 accused Buffalo mass shooter cited the work of Woodley, Rushton, Lynn, and Jensen for justification of his actions in the manifesto he posted before killing 10 Black people on May 14, 2022 (Dixit, 2022; Jackson, 2022b). The convicted shooter also cited work on the heritability of intelligence and other characteristics, including work from mainstream genetics. Geneticists who were cited in the manifesto specifically condemned this misuse and called for action in the scientific community to prevent "weaponization" of genetics (Carlson, et al., 2022). In contrast, the official statement of the APA on the Buffalo shooting (Worrell, 2022) made reference to racism, hatred, and the need for gun control, but not the role of science in providing support for the shooter's ideas.

RHR material must be viewed as carrying very serious risks and deserves careful evaluation by the highest scientific standards. Psychologists have suggested higher standards for

"socially relevant topics" (e.g. Hunt & Carlson, 2007). We argue that standards for RHR must be informed by standards from evolutionary biology and genetics as well as psychology.

Standards of Evidence

Racial hereditarian researchers appeal to the empirical strength of their work, deriving from its foundations in evolutionary biology and genetics, and condemn concerns over harm and misuse as a moralizing distraction from scientific progress. For example, Rushton, Jensen, and Lynn invoked natural selection as the core cause of racial genetic differences in complex social traits like intelligence, violence and criminality, economic productivity, and self-control(e.g.; Rushton & Jensen, 2005; Lynn, 2015) and foregrounded their purported novel predictions from evolutionary theory as a chief advantage over competing environmental hypotheses. While RHR psychologists claim to embed their work in biology, RHR is pseudo-quantitative analysis, which only appears to be grounded in the advanced quantitative methods of genetics and evolution. In fact, it bears no resemblance to those sciences. This pseudo-quantitativeness manifests in 1) RHR's failure to engage with the methods and standards of mainstream evolutionary biology to identify adaptive evolution and 2) ignoring the challenges, acknowledged by geneticists, of connecting genotype and phenotype arising from statistical confounding in correlation analyses and gene/ environment interactions (GxE).

A notable commonality among RHR theories is that race differences in favored cognitive and behavioral traits were all the result of adaptive evolution after populations left Africa so the migrants could survive the challenges of navigating their new, variable, and colder environment outside of Africa. Meanwhile, populations that remained in Africa experienced no such selective pressures. This "cold weather" theory has no grounding in evolutionary biology (Bird, 2021).

Identifying and explaining how organisms adapt to their environment via evolution by natural selection is a challenging goal in Darwinian evolution. As natural selection is necessary for adaptive evolution, and it can be estimated and measured based on quantitative and population genetic theory, evolutionary biology devoted substantial effort over the subsequent decades to model and measure natural selection to support adaptive hypotheses, especially local adaptation within species (Barrett and Hoekstra, 2011; Pigliucci and Kaplan, 2000). The core of these approaches compares patterns of observed genetic variation to predictions from neutral genetic drift to statistically reject genetic drift as an explanation for the observed data. Researchers have a trove of methods to identify regions of the genome exhibiting signals of natural selection on individual genes or polygenic selection that acts on a large number of genes of small effect (Stephan, 2016). This methodology has been central to evolutionary biology for decades but ignored in RHR.

Identifying natural selection is only one part of identifying adaptations. Rigorously identifying adaptations requires elucidating additional functional information necessary to trace the relationships between genetic variants, traits, and fitness. The probative obligations to establish an adaptation are high: 1) Individual/geographic variation of a trait needs to have a genetic basis. 2) A trait must influence fitness (reproductive success). 3) The biologist must explicate the mechanism that explains the correlation between the trait and fitness "in the wild." 4) Experimental manipulation of the selective environment or the trait itself must confirm the adaptive hypothesis of #2. (Sinervo & Basalo, 1996, 150).

Although researchers may not always be able to achieve all these conditions, each is important for supporting various evolutionary claims. Without evidence of selection, adaptive hypotheses are unlikely to hold true and without connecting fitness to a trait, it cannot be ruled

out that a trait is changing because it is genetically or physiologically correlated with another trait that is the actual target of adaptation, a problem widely known to evolutionary biologists (Barrett and Hoekstra, 2011). Even when signs of natural selection and Sinervo & Basalo's conditions are met, conclusive evidence might not be possible, as the historic reason for selection can differ from current functions. Importantly, genomics analyses showing selection also require similar experimental testing of adaptive hypotheses (Barrett and Hoekstra, 2011). The reason why such high standards exist in evolutionary biology is the recognition of the extreme difficulty in distinguishing between neutral and adaptive evolution and choosing from competing adaptive hypotheses. These standards may be largely unknown to psychologists, but are increasingly important as interdisciplinary work that merges psychology and genomics becomes more common.

When arguing for adaptive racial differences in intelligence owing to natural selection, Rushton, Jensen, or Lynn never shouldered the required evidentiary burdens of evolutionary biology. For example, Rushton (1995) applied a verbal model of Life History Theory (LHT), a quantitative model in ecology about the tradeoffs species face balancing investments in reproduction with available resources, to encompass cognitive and behavioral traits in racial groups in humans. By simply reporting tables of racial differences in brain size, penis length, or national crime rates he claimed support for his evolutionary theory which argued Black people evolved to be less intelligent, have more children, and take poorer care of them compared to White people. Beyond the vulgar racism, evolutionary scientists that discuss Rushton's work, and more recent variations of LHT derived from his work that reach similar conclusions, emphasize it is almost entirely disconnected from the evolutionary and ecological theory it claims to build upon (Graves, 2002; Nettle and Franeknhuis, 2020; Sear, 2020; Stearns &

Rodriguez, 2020; see also, section 2). Others have challenged both theoretical and empirical claims about the predictions and relevance of these life history strategies to individual and group differences in human behavioral traits, especially in the context of RHR (Sear, 2020; Zietsch & Sidari, 2019; see also Bird, Jackson, & Winston, 2023b). Indeed, demographic models grounded in evolutionary theory show that, contrary to Rushton's contention that selection pushed human races into different life-history strategies, selection on human life history actually acts in a remarkably similar manner across global human population (Jones, 2009).

Richard Lynn collected IQ scores from samples in hundreds of nations around the world and interpreted them as the intelligence of those nations, and the cognitive difference between continental or racial groups. He took the correlation between these national IQ scores and crime or economic development as evidence of the genetic and evolutionary nature of these global differences. Despite minor changes in each published work, Lynn and his co-authors continue to use "race" as a framework upon which the data were analyzed (Lynn & Vanhanen, 2012, p. 115). Scholars have criticized Lynn's and subsequent datasets for extensive sampling and measurement bias (see Sear, 2022 and references therein) and concerns with interpreting national IQ as a measure of cognitive ability and their suitability for evolutionary studies (Wicherts & Wilhelm, 2007; Wicherts, Borsboom, & Dolan, 2010).

Psychologists and biologists diligently criticized and documented flaws in Lynn's work, such as inadequate sampling, inappropriate racial categories, misrepresentation of past research, misuse of heritability quotients, misreporting of crime statistics, misuse of "r/K" selection, neglect of contrary findings, and more (see Bird, Jackson, & Winston, 2023b). Rushton's former department at Western University formally disavowed his work and labeled it as "racist" ("Dr. Philippe Rushton," 2020) and journals have retracted his publications for their racism and

scientific flaws (Marcus, 2021). Similarly, use of Lynn's data led to a retraction in *Psychological Sciences* in 2020 (Clark et al., 2020) and the European Human Behavior and Evolution Association (2022) deemed Lynn's data as unsound and unacceptable for publication.

Contemporary RHR psychologists still fail to shoulder the required evidentiary burdens of evolutionary biology. RHR psychologists still regularly treat race as a biological category. RHR holds that Self Identified Race and Ethnicity (SIRE) maps onto "continental population," hence believe they are justified in using SIRE as a proxy for genetic ancestry and interpreting genetic ancestry as race: "some individuals consistently group with other individuals [genetically] in ways that largely conform to common sense racial classifications" (Winegard, Winegard, and Anomaly, 2020, p. 3; see also Kirkegaard et al, 2019 and Warne, 2021). Such claims are rejected by quantitative evolutionary analyses which show that models of racial taxonomy do not accurately fit patterns of human genetic diversity. By forcing human variation into racial categories, one is actually using a model that assumes independent evolution and equal divergence of all human populations. These assumptions are at odds with the true, nested relationship of populations caused by serial-founder events during the Out of Africa expansion. Using this inaccurate racial model results in an overestimation of genetic variation outside of Africa and underestimation of genetic variation within Africa (Long et al., 2009; Hunley, Cabana, and Long, 2016). The genetic clusters produced by computational programs implicitly assume the same kind of evolutionary independence and equal divergence. While programs may produce an arbitrary, pre-selected number of genetic clusters, these do not accurately describe human variation or evolution. Human geneticists are unambiguously resolute that SIRE and genetic ancestry are not interchangeable and should not be conflated (Lewis et al. 2022; see also Bird, Jackson, & Winston, 2023b, Section 2).

RHR authors believe they have a new tool for their adaptationist hypotheses with "Genome-wide Association Studies" (GWAS), which correlate hundreds of thousands of variable individual DNA base pairs, called single-nucleotide polymorphisms (SNPs) with measured phenotypic differences of a trait of interest in a population. Recent practice in genetic and social science research is to sum together the predicted effects of SNPs identified by GWAS to create what is called a polygenic score (PGS), a single value representing the predicted additive genetic value for a trait. Despite the gleam of complex and new genetic technology, GWAS and PGS are at their core correlative analyses from linear models. Since experimental manipulation cannot, and should not, be done on humans, mainstream geneticists and evolutionary biologists pay careful attention to how these methods suffer from statistical confounding which affects the accuracy and reliability of these methods.

Recent work has shown that GWAS methodology can and does produce systematic biases when applied to samples distinct from the original study population (Mostafavi et al., 2020; Ding et al., 2022). Results suggest this is partly due to the fact humans are not randomized in their environments, called population structure, which can cause spurious correlations between genotype and phenotype. This is best embodied by the "chopstick gene" example (Lander and Schork, 1994): If a GWAS would be done on chopstick use the analysis would identify genetic variants, but they would have nothing to do with chopstick skills and instead be those that happened to differ in frequency between East Asia and the rest of the world. Researchers thought this issue was previously addressed in GWAS studies, but it has returned with how population structure can lead to systematic biases in polygenic scores (Rosenberg et al., 2019; Bird, 2021). Additional work has identified that inherited environmental advantages like wealth and home, neighborhood, or school quality, can also bias GWAS estimates of genetic effects as well

(Nivard et al., 2022). Some combination of these sources of bias, as well as other factors like gene-by-environment interactions, particularly affect analyses of natural selection (Rosenberg et al. 2019; Bird, 2021). Therefore, researchers know they cannot simply interpret differences in polygenic scores as evidence of selection or a reliable indicator of phenotypic differences without addressing these concerns (Rosenberg et al., 2019; Harpak and Przeworski, 2021).

RHR diverges with mainstream evolutionary biology and genetics, by paying little mind to these concerns. In two studies, Piffer (2015; 2019) uses polygenic scores across the world and national IQ scores from Lynn and Vanhanen (2012) of countries to identify natural selection based on their correlation. Despite appearing to be highly technical work, however, the studies are more of the pseudo-quantitative approach that is emblematic of RHR. Piffer made no attempt to address the systematic biases in polygenic scores meaning the difference in polygenic scores cannot be interpreted as only representing genetic differences. Additionally, Piffer eschews formal tests for selection and offers mere correlations between polygenic scores and a measured trait. Proper evidence for natural selection derives from statistical tests that model expected genetic and/or phenotypic differences under neutral evolutionary scenarios and compares observed patterns to this null model of neutral evolution. Results like Piffer's that look at polygenic scores and their correlations cannot be reliably interpreted as evidence of selection, or even as evidence that IQ differences between countries are genetic, let alone the RHR contention that such differences resist environmental change (Rosenberg et al. 2019). Indeed, Bird (2021) formally tested for divergent natural selection on cognitive traits between African and European populations using an approach that reduces these methodological biases and found no evidence for natural selection on these traits. The approach used by RHR psychologists leads to a "false-

positive," resulting in a wrongful inference that natural selection made Africans and Europeans cognitively different without applying any rigorous evolutionary methods to test for selection.

A further example of the recent genomics-fueled pseudo-quantitative RHR is admixture correlation studies. This approach estimates the correlation between the proportion of genetic ancestry (e.g. % of the genome categorized as European ancestry using genetic markers) to a phenotype, such as performance on a cognitive test battery. Lasker et al., (2019) recently used admixture correlation to claim that over 60% of the racial gap in IQ scores can be explained by genetic differences, explicitly affirming earlier claims by Rushton and Jensen (2005). But Lasker is inattentive to the problems of statistical confounding and gene-by-environment interactions net (GxE). In much of biology, experimental manipulation can separate genetic and environmental effects, when that is not possible, biologists recognize the limitations of even the most careful analysis and study design from correlational data. Because correlations between overall genomic ancestry and a trait do not identify causal genes they are only meaningfully interpretable if there are no environmental variables that change in parallel with differences in ancestry or if such factors are sufficiently controlled by covariates in linear regression (Dries, 2009). When this is not the case, researchers cannot tell if a correlation between ancestry and a trait is due to a true association or other variables that are associated with both ancestry and the outcome variable. In terms of GxE, because both environmental and genomic backgrounds matter for a phenotype, even if genes make a large contribution to a difference in one environmental context, it does not mean they will make a difference in another environmental context, or genes may have an entirely different role. Correlations with ancestry provide no information about gene-environment interactions or how trait values might change in other environments, therefore no evidence that racial IQ gaps are genetic or intransigent can be taken from admixture studies.

In their analysis, Lasker et al., (2019) do not sufficiently address the problems of statistical confounding. They only included the SES variable of parental education; however, we know that, due to historical and contemporary effects of racism, Black individuals on average experience far greater social, economic, and health-related hardships that reverberate through extended families and will therefore correlate with genetic ancestry and be difficult to statistically control for in models. These include factors known to affect cognitive and academic performance like wealth inequality in immediate and extended families, school quality, residential segregation, and toxin exposure (Nisbett, 2009; Toney and Hamilton, 2022; Reardon et al., 2019; Bravo et al., 2022) and produce significant potential for confounding from these measured and unmeasured nongenetic factors (Dries 2009). Disadvantages tend to be highly concentrated and segregated within locations (Lichter et al., 2012), meaning even including covariates for regional deprivation like counties or census tracts may not address this confound. While Lasker et al., (2019) use a skin color covariate to try to rule out colorism (prejudice favoring lighter skin tones) as a confound to the IQ-ancestry correlation, the skin color data is not directly measured but rather predicted from the genotype data using an unreliable method for admixed populations (Carratto et al., 2019). As such, the skin color covariate is a noisy proxy of a genetic prediction that is already an imperfect proxy of actual skin color (Beleza et al., 2013) and is not a sufficient control for colorism and ignores other racialization markers that may confound trait correlations with ancestry. Lasker et al. (2019) ignore the issue of GxE and the issues it poses to RHR conclusions. Although they claim a causal interpretation of the ancestry-IQ correlation is supported by using an education PGS as a covariate; the systematic biases of PGS in admixed individuals make this claim untenable (Bitarello and Mathieson, 2020). At every step, confounding looms.

These examples highlight several concrete cases where RHR analyses result in misleading conclusions. By falling short of common scientific standards of genetics and evolutionary biology, RHR work 1). Misrepresents life-history theory and patterns of selection on life-history across human populations, 2). Continues the use of critically deficient datasets, 3). Misrepresents the diversity and evolutionary relationships of human populations through the use of racial taxonomies, 4). Misinterpret spurious "chopstick gene" population structure signals for evidence of selection or phenotypic difference, and 5). Overinterprets ancestry-trait and PGS-trait correlations by underplaying the confounding effect of gene-environment interplay. Despite the veneer of modern science, RHR psychologists' recent efforts merely repeat discredited racist ideas of a century ago. The issue is truly one of scientific standards; if psychology embraced the scientific practices of evolutionary biology and genetics, current forms of RHR would not be publishable in reputable scholarly journals.

Ethical Standards and Racial Hereditarian Research

RHR authors argue that knowledge *qua* knowledge cannot be immoral by ignoring the history of oppression and describe the topic of hereditary racial differences as "socially sensitive" rather than harmful (e.g. Gottfredson, 2012, p. 221). That the study of race and race differences is value-free and faces no special scrutiny is at odds with the ethical standards found in human and medical genetics and biological anthropology in which the ethics of the study of human genetic variation are central. The Human Genome Project (HGP) allocated 3% of its $3 billion budget to ethical and social aspects of the Project. The American Society for Human Genetics holds that past abuses of human genetics to "justify abhorrent practices such as forced sterilizations, restrictions on reproductive freedom, loss of access to medical services, political retribution, loss of immigration status, and genocide" means that "At every stage of the research

process, researchers in genetics and genomics should be sensitive to these potential abuses of their research and make efforts to prevent them" (American Society for Human Genetics Executive Board, 2020, p. 379). The Executive Committee of the American Association of Anthropological Genetics (2020), The American Association of Biological Anthropologists (2019) and the Society for the Study of Evolution (Shaw, 2020) all take similar ethical stands regarding past and present harms of their research.

Geneticists' research reflects their social responsibility in two related ways. First, answering an empirical question must be ethically justified *prior* to conducting research. The National Research Council (1997) established that the "most basic starting point for all ethical analyses of genetic-variation research [is] defining a hypothesis and determining the benefit of knowing whether it is true" and that "for projects that are not able to specify goals in sufficient detail to quantify risks and benefits reasonably, the worst-case scenario should be assumed: the benefits will be at the lowest anticipated level, and the risks at the highest" (pp. 59-60).

Second, human geneticists are expected to be clear about how they define and use terms that could be interpreted as racial, such as "population," "race," or "ethnicity." Ethical research design in the study of human variation demands clarity about why "race" is in the research design and how racial terms are defined. The International Committee of Medical Journal Editors, which sets publication guidelines in over 500 medical journals, demands that "Authors should define how they determined race or ethnicity and justify their relevance.... Race and ethnicity are social and not biological constructs; authors should interpret results associated with race and ethnicity in that context" (International Committee of Medical Journal Editors, 2022, p. 16).

Further, RHR conflicts with APA guidelines and policies. The APA *Framework for Equity, Diversity, and Inclusion* (2021) aims for advancing equity and access are completely at odds with the RHR explanation of inequity as the result of the natural distribution of talent rather than racism (e. g. Warne, 2021). RHR also conflicts with the APA *Guidelines on Race and Ethnicity in Psychology,* where editors are to require authors to "consider the implications of the findings for underrepresented racial and ethnic groups; and requesting reviewers to evaluate the degree to which research findings reinforce racial or ethnic stereotypes of superiority/inferiority and the possible contributions of bias in the research methods" (APA, 2019 p. 28). These APA "guidelines" are aspirational recommendations and are not mandatory for psychologists. Changing these guidelines into *standards* which would be mandatory for journal editors to follow would facilitate the careful evaluation of scientific racism. Implementation would require editors to provide reviewers with clear policy statements and information on journals created specifically to promote a racial hierarchy, such as *Mankind Quarterly* (see Jackson, 2005) or the *OpenPysch* journals.

The APA (2017) *Ethical Principles* are not equipped to deal with RHR in at least three ways. First, assisting White Nationalist groups would appear to conflict with General Principle E: *"Respect for People's Rights and Dignity* which requires that psychologists try to eliminate biases based on race and ethnicity from their work and "do not knowingly participate in or condone activities of others based upon such prejudices." However, the General Principles are not mandatory ethical practices, and cannot be used as the basis of sanctions (APA, 2017, p. 3). Second, Ethical *Standard* 3.04 "Avoiding Harm," would be relevant to RHR, but this standard generally refers to harm to research participants, patients, students, or clients, and not to the public. As Teo (2015) noted, the APA code does not address how the inferences made in a

publication may constitute "epistemological violence" and therefore harm groups constructed as inferior or problematic. Third, using data collected from Black participants to demonstrate their alleged inferiority raises critical issues of informed consent, given that participants might reasonably have refused to help such efforts, but the harm might not be obvious to participants at the time of consent. Secondary use of genomic databases for new questions complicates consent even further, but this problem is not addressed in the APA standards. Unauthorized uses of genomic databases are serious ethical issues, and may violate funding agency guidelines, as exemplified by a recent case involving RHR authors (Standifer, 2022).

Assisting racial extremists in a scientific or professional capacity should be an explicit violation of APA ethics. Private citizens are free to promote their political views, but scientists, as members of scholarly and professional societies, act under professional standards. Henry Garrett's work to overturn the *Brown* decision, Philippe Rushton's assistance to David Duke, and Richard Lynn's use of White Nationalist Richard Spencer as a publisher are clearly cases where these psychologists acted as psychologists distributing psychological research, and not as private citizens (Jackson, 2022a). Prohibiting assistance to racial extremists is not a restriction of academic freedom. In contrast to "free speech," an essential feature of academic freedom is the enforcement by peers of the highest ethical and epistemological standards of responsible science.

APA (2017) Ethical Standard 1.01 requires that: "If psychologists learn of misuse or misrepresentation of their work, they take reasonable steps to correct or minimize the misuse or misrepresentation" (p. 4). However, we know of no case in the past 50 years where RHR psychologists corrected the use of their work. For example, psychologists did not condemn Wade's (2014) best-selling *A Troublesome Inheritance* and it was cited as a scholarly source in the journal *Evolutionary Psychological Science* by Winegard, et al., (2017). By contrast, more

than 140 population geneticists condemned the book's misrepresentation of results from population genetics (Coop, Eisen & Nielsen, 2014). The APA should monitor and publicly condemn the use of psychological research by racial extremists and repudiate false claims of RHR psychologists. Giangrande and Turkheimer's (2022) condemnation of Pesta et al. (2020) exemplifies the scholarly repudiations we recommend as does a recent retraction of work based on Lynn and Vanhannen's (2012) database (Clark, et al., 2020). The vast majority of RHR is not published by the APA or by APA members. Therefore, the APA should convene a task force with other publishers and organizations to provide common guidelines for evaluating scientific racism, to be used by Institutional Review Boards, funding agencies, and journal editors.

Caveats and Cautions

First, we are not claiming evolutionary biology and genetics have solved the problem of questionable research practices related to race, genetics, and evolution. "Race" is used in those fields in confusing and inconsistent ways (Jackson, 2022c, pp. 17-18). However, researchers in these fields are transparent that there is a problem and are proactively developing institutional norms and standards to diminish these cases (NASEM, 2023). High profile cases of contentious interpretations of evolutionary data and RHR-like claims have occurred in genetics. The genes ASPM and *Microcephalin* were at one point prominently claimed by some biologists to show that non-Africans experienced selection on alleles of these genes that were claimed to promote higher intelligence and larger brains, but rigorous reanalysis from others in the field quickly showed that indicators of selection were more likely false-positives and that the alleles did not appear to influence intelligence or brain size at all (Richardson, 2011 and references therein). More importantly, there were attempts to integrate the lessons learned from this episode into new methodological and ethical norms in the field (Barrett and Hoekstra, 2011; Vitti et al., 2012). In

other words, we believe that these fields have established community norms that promote self-reflection, self-governance, and self-correction and should be emulated in psychology. While this approach is not a panacea for ending scientific racism, it is a productive general framework to navigate controversies when they arise.

Second, we are not suggesting a set of epistemological standards that transcend actual scientific practices to demarcate "science" from "pseudoscience." There is a long history of the futility of such efforts. However, we do claim that if RHR researchers make claims about human evolution and human genetics then the proper standards by which to evaluate their claims are the standards of those fields. We do not suggest that these standards can be applied in any simple or formulaic manner to allow us to separate "good" from "bad" science. Nor do we underestimate the challenges involved in peer review of RHR. Given that RHR authors have published their work in a number of fields, greatly enhanced levels of interdisciplinary cooperation will be needed. If RHR submissions are rejected on the basis of articulated evidentiary, epistemological, and ethical standards, such decisions would not constitute censorship, but would instead exemplify sound scholarly practices.

Third, the ways in which RHR draws on non-racial mainstream research in behavior genetics and genomics for support, especially twin studies, estimates of heritability and increasingly GWAS, pose special challenges. We caution against blanket categorization of the work used to support RHR as part of the RHR program. The relationship between RHR and behavioral genetics is especially complex. Mainstream behavior geneticists have been both supporters and critics of RHR and RHR researchers also produce non-racial behavior genetics research. Psychology urgently needs careful examination of how and why behavior genetics research is particularly vulnerable to co-option in support of racism.

Fourth, we acknowledge that terrorists and violent racists will continue to misappropriate any sort of evidence they mistakenly believe supports their actions, even when such work does not address race. The broad potential for misuse should not elide the point that scientists have an obligation and responsibility to society. Human geneticists and evolutionary biologists view racist appropriation of science with alarm, speak out against it, and work to correct public misunderstanding (Coop, Eisen, & Nielsen, 2014; Carlson et al., 2022). By contrast, RHR researchers wash their hands of any responsibility for their research seemingly inciting violent actions or any other kind of misappropriation (Carl, 2023). The proper scientific attitude demands that researchers are responsible for their research, both in how the research is conducted and how it is taken up in the larger society that supports scientific inquiry.

Conclusion

RHR proponents often assert that *no racial inferiority* is implied by claims of evolved smaller brains, lower intelligence, and greater propensity for violence in people of African descent, and therefore such claims are not "racist" (see Carl, 2019, p. 271; Gottfredson, 2013). In this view, a scientific hypothesis or racial "facts" can never be "racist," even if such hypotheses revive the most pernicious stereotypes of Black male sexuality and criminality (e.g. Rushton, 1995; Lynn, 2013). RHR's claimed "new facts" regarding racial admixture and intelligence are a revival of the discredited early 20th century claim of damage to the White gene pool from racial interbreeding (see Richards, 2012). Contrary to Haier (2020), the judgment of racism in RHR does not assume malice or racism in the authors. The racism lies in the claims of the RHR program as a whole, the selection and formulation of its research questions, and the history of its use to prop up racist social orders, often by RHR psychologists themselves.

The persistence of RHR is entangled with larger issues of economic oppression, Eurocentrism, and coloniality that are beyond our paper's scope. We focused here on the lessons from evolutionary biology and genetics for confronting RHR. Scientists who study human genetic variation and evolutionary history agree on the harm of RHR and the need for stringent scientific and ethical evaluation of racial claims (Bird, Jackson, & Winston, 2023b, section 2). Tragically, attempts to monitor and condemn modern scientific racism have been and will be met with cries of ideological corruption of science, left-wing and Marxist bias, political correctness, censorship, and threats to free speech (e.g. Cofnas, 2020). Since the Civil Rights Era, those promoting ideas of permanent Black intellectual and moral inferiority have decried a mythical, powerful taboo that banned discussions of race while simultaneously publishing these claims in hundreds of articles, books, and chapters (Jackson & Winston, 2021). We do not propose a "ban," but a stronger application of relevant and existing scientific and ethical standards from the relevant disciplines to evaluate long-discredited, scientifically unworthy, and socially pernicious claims. The critical goal of "dismantling racism" must include the scientific racism in Psychology's own journals, a disgrace that has lasted over 120 years.

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