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Do We Overemphasize the Role of Culture in the Behavior of Racial/Ethnic Minorities? Evidence of a Cultural (Mis)Attribution Bias in American Psychology

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Although culture influences all human beings, there is an assumption in American psychology that culture matters more for members of certain groups. This article identifies and provides evidence of the cultural (mis)attribution bias: a tendency to overemphasize the role of culture in the behavior of racial/ethnic minorities, and to underemphasize it in the behavior of Whites. Two studies investigated the presence of this bias with an examination of a decade of peer reviewed research conducted in the United States (N = 434 articles), and an experiment and a survey with psychology professors in the United States (N = 361 psychologists). Archival analyses revealed differences in the composition of samples used in studies examining cultural or noncultural psychological phenomena. We also find evidence to suggest that psychologists in the United States favor cultural explanations over psychological explanations when considering the behavior and cognition of racial/ethnic minorities, whereas the opposite pattern emerged in reference to Whites. The scientific ramifications of this phenomenon, as well as alternatives to overcome it, are discussed in detail.

Keywords: bias, culture, ethnicity, race, cultural (mis)attribution bias

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The crucial role of culture in shaping human behavior and cognition has received increased attention in the last decade (A. B. Cohen, 2009; Kitayama & Uskul, 2011). However, despite widespread agreement about the psychological significance of culture, several authors have argued that American psychology frequently associates culture with racial/ ethnic minorities more than Whites (Betancourt & López, 1993). This claim, to our knowledge, has yet to be tested

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through an examination of the research literature or an assessment of the opinion and assumptions of research psychologists. In this article, we provide evidence of a cultural (mis)attribution bias in American psychology: the tendency to see racial/ethnic minorities as members of a group whose traits, beliefs, and behaviors are shaped primarily by culture, and to perceive the White racial/ethnic majority as autonomous and independent actors who are instead largely influenced by psychological processes. Because this bias rests on assumptions about human behavior that are not supported by evidence and may lead to differential treatment of members of specific social groups, it constrains psychologists' explanations of behavior and cognition. In two studies, we investigated the presence of this bias in psychological research in the United States using archival, experimental, and correlational methods.

¹ By American psychology, we refer to the collective enterprise of psychologists working in universities in the United States-regardless of their race/ethnicity and nationality—conducting research with samples more commonly located in the United States, and usually publishing research in U.S.-based journals (see Arnett, 2008).



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Why All Humans Beings Are Cultural Beings

We define culture as an integrated constellation of practices, symbols, values, and ideals that are constructed and shared by a community, transmitted from one generation to the next, constantly renegotiated and subject to change, and operating at the individual and societal level (Adams & Markus, 2004; A. B. Cohen, 2009; Kitayama & Uskul, 2011; Tomasello, 1999). Individuals are permeated by culture through direct and indirect engagement and everyday implicit or explicit exposure to cultural institutions, practices, values, and tools (Adams & Markus, 2004). Thus, culture becomes part of the individual through social learning by continuous participation in family and community activities, shaping the way people think about the world, their social roles, language, and developmental goals (Causadias, 2013). The dual nature of culture—the fact that it operates both at the societal (i.e., interpersonal, social, group, institutional) and individual levels is not always recognized in American psychology, as many researchers tend to emphasize its social dimension. Conversely, psychological processes, such as personality, are commonly approached as individual-level processes, despite evidence that personality and culture are inextricable (see Diener, Oishi, & Lucas, 2003). Thus, in this article, we discuss how culture is commonly treated as a societal-level process, and personality as an individual-level process, although we recognize that they operate simultaneously at both levels.

In the same way that all human beings have culture, they are also in possession of ethnicity and race, as these three concepts are intimately related. Race involves a cultural system of classifying individuals who share phenotypic

characteristics into groups, the generalizations and stereotypes that result from this grouping, and the explicit or implicit social hierarchy in which these groups are arranged (Hartigan, 2015). Ethnicity signifies participation in groupspecific practices, and a sense of identity and belonging based on common culture, including national origin, traditions, and language (Golash-Boza, 2016). Although *cultural contents* vary across ethnic groups, higher order *cultural categories* are universal (Norenzayan & Heine, 2005). For instance, ethnic groups may differ on the language they speak, but the use and structure of language is universal (Chomsky, 2014). In fact, the few cases in which humans are not deeply shaped by culture, like the case of feral children, are so exceptional that they have captured popular imagination and scientific interest (Candland, 1995).

Culture, ethnicity, and race are closely related for several reasons. First, race and ethnicity are often used as proxies for cultural processes and are employed as explanations for group differences. Many studies impute observed differences between groups to culture simply based on individuals' categorization as members of an ethnic or racial group, ignoring other important sources of variation (Causadias, 2013). Second, they are often used interchangeably in the research literature. It has been argued that race and culture are "conceptually confounded and empirically conflated" (Quintana et al., 2006, p. 1131). Third, even when they are distinguished, they are often discussed together in professional guidelines for American psychologists (American Psychological Association [APA], 2003), special issues (e.g., Quintana et al., 2006), and handbooks (e.g., Sewell, 2008). Fourth, they are part of a closely knit nomological network (e.g., Cronbach & Meehl, 1955). Race and ethnicity are theoretically embedded in the overarching concept of culture, as both terms include processes (e.g., socialization) and outcomes (e.g., identity) that are subcomponents of cultural transmission and development (Causadias, 2013). For these reasons, we consider ethnicity and race as part of the broader concept of culture.

The Cultural (Mis)Attribution Bias

Despite evidence that culture is a defining feature of the human species, there is a propensity in American psychology to consider racial/ethnic minority groups as "more cultural" than the dominant group. This is exemplified by the cultural (mis)attribution bias: the tendency to see racial/ethnic minorities as members of a group and cultural beings whose traits and behaviors are shaped by cultural processes, but less by psychological processes, and, second, to perceive Whites (e.g., European Americans) as individual actors whose traits and behaviors are shaped by psychological processes, but determined less by cultural influences.

We employ the term racial/ethnic minorities (henceforth, "minorities") to signify membership into any non-White



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cultural groups in the United States, including, but not limited to, African Americans, Asian Americans, Hispanic or Latinos, Native Americans, and Pacific Islanders. However, this term has important limitations, as its focus on numerical representation risks trivializing historical and structural dynamics of power and marginalization to simple demographics and descriptive normativity, in which the essential quality of the numerical majority is that it is more common, representative, and legitimate. The emphasis on numerical representation can sanitize the experience of minorities, unwittingly supporting a standard of normativity that ignores marginalization and social stratification (Adams, 2014). Thus, we use the term "minority" not only to represent its demographic dimension but also to convey the power asymmetries of racial relations in the United States (see Burton, Bonilla-Silva, Ray, Buckelew, & Hordge Freeman, 2010).

American psychology may unwittingly support essentialist understandings of minority groups and a White-centered perspective, a historically dominant paradigm within the social sciences of which the cultural (mis)attribution bias may be but one manifestation. The cultural (mis)attribution bias can be understood as the privileging of White members of society as individuals with unique characteristics, while stereotyping the behavior of minorities as both homogeneous and exotic (Feagin, 2013). By classifying individuals into two groups (Whites and minorities), this paradigm imputes essential qualities to each (individual vs. cultural), presenting them as a natural standard of human experience or as a set of "basic" psychological phenomena (Adams, Dobles, Gómez, Kurtiş, & Molina, 2015). Minorities are often taken as tokens of their culture, expected to talk about

and represent it, whereas Whites are not (see Mignolo, 2009).²

The cultural (mis)attribution bias reinforces the notion that the behavior of Whites is normative, value-neutral, natural, and, therefore, a prototypical manifestation of "normal" modes of human experience—a standard against which all other modes of psychological functioning should be compared. Thus, minority difference or deviation from the White standard is understood as an expression of deficiency (Cauce, Coronado, & Watson, 1998). Not surprisingly, individuals implicitly associate Whites more strongly with the national category "American" than African and Asian Americans, suggesting that minorities are somehow represented as less American because of their cultural distinction (Devos & Banaji, 2005).

The cultural (mis)attribution bias has several methodological and theoretical implications for American psychology. As cultural processes are privileged in explanations of minorities' behavior, less attention is given to psychological processes when studying them (Betancourt & López, 1993). Less emphasis is placed on how cultural processes influence Whites because psychological processes dominate prevailing explanations of their behavior. Cultural processes impact Whites as well as minority groups, albeit in ways that are frequently less understood, accepted, or investigated (Spencer, 2006). The assumption that psychological processes are less important, and cultural processes are more important, in shaping the behavior of minorities versus Whites is not founded on cumulative empirical evidence. For example, recent meta-analyses reveal no evidence that personality or cognition differ in relevance for the behavior of Whites or minorities, likely because limited research with minority samples restricts tests of ethnicity as a moderator (see Connor-Smith & Flachsbart, 2007; DeChurch & Mesmer-Magnus, 2010). Similarly, we are unaware of meta-analytic evidence indicating that culture is more influential for minorities than it is for Whites, in part because cultural studies³ on Whites remain scarce (Smith & Silva, 2011; Yoon et al., 2013).

Psychological research on minorities in the United States frequently overstates the importance of cultural processes, in part, because even if these processes are not measured directly, there is an implicit assumption that "cultural differences" are the main source of ethnic group differences (Matsumoto, Grissom, & Dinnel, 2001). Other times, re-

² The cultural (mis)attribution bias is consistent with several conceptual frameworks, including the White racial frame (Feagin, 2013), the cultural deviance model (Cauce, Coronado, & Watson, 1998), and the coloniality of knowledge (Adams, 2014). Although here we discuss some of their premises, a detailed examination of each of them goes beyond the scope and aims of this article.

³ Cultural studies refer to investigations within the multiple traditions of psychology on the cultural nature of behavior and cognition, including, but not limited to, cultural psychology, cross-cultural psychology, and indigenous psychology (see Shweder, 2000).



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searchers hold the belief that minority groups in the United States are less individualistic than Whites, even when metaanalyses have revealed that African Americans are more individualistic than Whites (see Oyserman, Coon, & Kemmelmeier, 2002). This evidence suggests that within-group similarities and between-groups differences are often exaggerated in cultural research and that there is larger withingroup variation than between-groups variation in most psychological traits (Adams & Markus, 2004).

The implications of this bias for psychological science are both systematic and profound; we might create a distorted appreciation of human behavior and cognition by implicitly ascribing culture to one group and not the other, without any empirical or conceptual justification. Because what we know about individual-level psychological processes among minorities remains limited, this problem challenges the external validity of psychology (see Sue, 1999). Our goal is to evaluate the empirical support for these assertions.

The Present Research

In this article, we investigate the cultural (mis)attribution bias in American psychology in two studies. In Study 1, we conducted an analysis of articles published in four premier APA and one Association for Psychological Science (APS) journal over the course of a 10-year period (2005–2014) to examine whether there is a larger percentage of minorities in studies of culture, while there is a lower percentage in noncultural research in psychology conducted in the United States. In Study 2A, we conducted an experiment with a sample of psychologists working in universities in the United States to test whether their judgments of the appro-

priateness of sample composition (White vs. minority) vary depending on whether that sample is used to study cultural or noncultural psychological phenomena. In Study 2B, we administered a survey to the same psychologists to test the degree to which they subscribed to the idea that the behavior of Whites is more influenced by psychological processes, whereas cultural processes can better explain the behavior of minorities.

Testing the cultural (mis)attribution bias among both minority and White psychologists in the United States is critical to distinguish it from other well-documented intergroup processes (see Hewstone, Rubin, & Willis, 2002). If minorities perceive Whites to be more strongly influenced by cultural processes than psychological processes, and Whites do the same for minorities, this would be consistent with in-group favoritism, because members of both groups perceive the in-group in a normatively more favorable light than the out-group (e.g., Brewer, 1979). However, if both minorities and Whites consider minorities more cultural than Whites in the American context, we may have identified a novel psychological phenomenon. Thus, Study 2A and 2B examine if these effects are moderated by self-reported ethnicity.

Study 1: Journal Analysis

As stated in the introduction, we consider ethnicity and race as part of the broader concept of culture. For this reason, in Study 1 we selected a sample of studies focused on culture, ethnicity, and race conducted in the United States in the last decade and compared them with a randomly selected sample of non-culture, ethnicity, and race comparison studies conducted in the United States, as well as to the national ethnic distribution of the United States. Our first research question was the following: To what degree do studies of culture, ethnicity, and race differ from comparison studies?

Hypothesis 1: Studies of culture, ethnicity, and race will have a higher percentage of minority participants than comparison studies.

Our second research question was as follows: To what degree does the sample composition found in each set of studies deviate from what would be expected from a random sample drawn from the US population?

Hypothesis 2: In contrast with the ethnic distribution of the United States, studies of culture, ethnicity, and race will have a higher percentage of minorities in their samples, whereas comparison studies will have a lower percentage.

Procedure and Measures

We reviewed all research articles focused on culture, ethnicity, and race published in five premier empirical jour-

nals published by the APA—Journal of Personality and Social Psychology (JPSP), Journal of Consulting and Clinical Psychology (JCCP), Journal of Experimental Psychology—General (JEP-G), and Journal of Abnormal Psychology (JAP)—and the APS—Psychological Science (PS). This provides a comprehensive overview because it surveys the flagship journals in some of its major areas of study, including social (JPSP), clinical (JCCP), experimental (JEP-G), abnormal (JAP), and general (PS) psychology. This method has been successfully used previously (Arnett, 2008).

Because the focus of this article is on the present state of the field, the journal analysis was on a recent 10-year period (2005–2014). To identify research articles that centered on culture, ethnicity, and race, we selected all studies in which these terms appeared in the title, abstract, or keywords. The title summarizes the central idea of the manuscript, and the abstract is a comprehensive summary of the manuscript and "can be the most important single paragraph in an article" (APA, 2009, p. 26). Keywords list the core concepts and are crucial in enabling scientists to identify and retrieve articles from databases. In sum, the title, abstract, and keywords offer a reliable method to identify research on culture, ethnicity, and race.

Each article was coded for the presence of the terms culture, ethnicity, and/or race. The eligibility criteria for the articles were that the study: (a) included the target terms in the title, abstract, and/or keywords; (b) reported empirical research with human subjects; (c) appeared in the journals in the selected time frame; and d) was completely conducted in the United States. This does not guarantee that authors or participants are American citizens, but that such studies often reflect practices and values prevalent in American academic institutions. Over 90% of all contributors, samples, and editorial leadership of premier APA journals are American (Arnett, 2008). The study exclusion criteria were (a) meta-analyses, reviews, editorials, theoretical papers, or commentaries; (b) retracted papers; (c) studies conducted with animal subjects; (d) studies that employed "race" in the title, abstract, and keywords, but with a different meaning (e.g., the race model: Bissett & Logan, 2014); and (e) studies with samples collected outside the United States. A total of 217 articles that followed these criteria composed the culture, ethnicity, and race group.

Next, we assembled a comparison group of articles that followed the same inclusion and exclusion criteria, with the only difference being that they did not include culture, ethnicity, and/or race in the title, abstract, and/or keywords. The goal of assembling a comparison group was to be able to contrast the ethnic composition of articles focused on culture, ethnicity, and race with the ethnic composition of articles in which these were not prominent themes. For each article of the culture, ethnicity, and race group, we randomly selected a "twin" article

from the same journal, year, and issue using a random number generator (www.random.org). We identified 217 articles for the non-culture-ethnicity-race group.

For every article, we coded the percentage of minority participants by calculating the total proportion of non-White participants in each study, including African American, American Indian, Asian American, Latino or Hispanic, and others (i.e., multiracial, biracial, other).

Results and Discussion

We used independent samples t tests to examine mean differences in the sample composition between groups (Hypothesis 1). Results showed differences of large magnitude, as studies in the culture, ethnicity, and race group had a significantly higher percentage of minorities (44%) than studies in the non-culture-ethnicity-race group (31%), t(276) = 3.84, p < .001, d = .47. Next, we compared the sample composition in studies from the culture, ethnicity, and race group, studies from the nonculture, ethnicity, and race group, and the national ethnic distribution of the United States in 2010 (36% minorities; Humes, Jones, & Ramirez, 2011), using a chi-square goodness-of-fit test with census data as our population parameters (Hypothesis 2). Compared with the U.S. population, studies in the culture, ethnicity, and race group overrepresented minorities, $\chi^2(1, N = 172) = 5.00, p =$.03. Studies in the non-culture-ethnicity-race group reflecting mainstream psychological research conducted in the United States were not different from the U.S. distribution, $\chi^2(1, N = 106) = 1.55, p = .21$ (see Figure 1). Groups differed in terms of patterns of missing data on the ethnic composition of the sample⁴: The culture, ethnicity, and race group had 22% missing, whereas the non-culture-ethnicity-race group had 51% missing. In sum, these findings support the notion that psychologists tend to target minority samples disproportionally more than White samples when they study culture. In contrast with the ethnic distribution of the United States, studies of culture have a higher percentage of minorities in their samples. However, noncultural psychological studies do not differ from the U.S. population in terms of minority composition.

Study 2: Experiment and Survey With Psychologists

In addition to the archival evidence for the cultural (mis)attribution bias provided by Study 1, we sought more direct evidence of psychologists' methodological assumptions about the appropriateness of the composition of samples used for

⁴ The ethnic distribution of the sample was coded missing if it was ambiguous (e.g., "non-Black participants"), vague (e.g., "mostly Caucasian," "predominantly White"), or simply not reported.

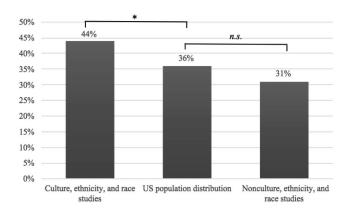


Figure 1. Percentage of racial/ethnic minority participants in studies of culture, ethnicity, and race selected from 2005–2014, U.S. population distribution, and randomly selected comparison articles not focused on culture, ethnicity, and race from 2005–2014. $ns = \text{nonsignificant} \ (p > .05)$. * p < .05.

studies focused on culture versus studies on individual processes. We also pursued more direct evidence that the cultural (mis)attribution bias influences assumptions and beliefs about the relative contribution of cultural and psychological processes in explaining the behavior of minorities or Whites. To do so, we conducted an experiment (Study 2A) and administered a survey (Study 2B) to a sample of psychological scientists. For both studies, we examined whether responses were moderated by the ethnicity of the psychologists to establish if both groups perceived minorities as more cultural—which would support the cultural (mis)attribution bias—or whether each group perceived the out-group as more cultural—which would support a more general intergroup bias.

To recruit psychologists for Study 2, we contacted faculty employed in the psychology departments of the top 100 research universities from the U.S. News & World Report (2016) rankings. For each department, we conducted a Google search with the university name and the term "psychology" to find the school's main psychology program website. We identified all faculty members that were fulltime, tenured, or tenure-track professors in the contact list. We excluded all research professors, lecturers, adjunct professors, emeriti professors, postdoctorates, graduate students, and staff from the contact list. Individuals that fit the inclusion criteria were sent e-mails with links to the study. The institutional review board from the first author's university approved Studies 2A and 2B. We contacted a total of 2,497 psychologists, of which 361 completed an Internetbased experimental task in Qualtrics (124 females, 184 males, one undisclosed; 45% 50 years or older; 81% White, 19% minority). We obtained a response rate of 12%, which is within the recommended threshold of 10% to 25% for web-based surveys (see Sauermann & Roach, 2013). All experimental stimuli, instructions, and measures included in the experiment and survey are available in the online supplemental materials. Our hypotheses and our analytical strategy were preregistered with Open Science Framework on June 8, 2016.

Study 2A: Experiment With Psychologists

Study 2A used a single independent variable design in which sample composition was manipulated between-subjects separately for two different research proposals—one focusing on cultural processes and the other focusing on psychological processes. Our first research question was as follows: To what extent do psychologists in the United States value a sample composed of minorities as more appropriate for a research study on culture?

Hypothesis 2A.1: Psychologists will rate more favorably a sample composed of minorities (vs. Whites) for a research study examining cultural processes, and this effect would not be moderated by ethnic self-identification of psychologists (White vs. minority).

Our second question was as follows: To what degree do psychologists value a sample composed of Whites as more appropriate for psychological research?

Hypothesis 2A.2: Psychologists will rate more favorably a sample composed of White (vs. minorities) for a research study examining psychological processes, and this effect would not be moderated by psychologists' ethnicity.

Procedure and measures. At the start of the experiment, psychologists were asked to evaluate two "research proposals by a team of American psychologists." Each research proposal was presented separately and included a brief description of the purpose of the study, sample size and composition, and measures. Psychologists were provided with instructions to "review the information below carefully." Proposal 1 (i.e., cultural study) was described as focused on "how culture influences behavior and cognition. In particular, their proposed study is designed to examine how values, beliefs, and norms among members of particular communities influence how individuals perceive others and behave in social situations." Proposal 2 (i.e., noncultural study), in contrast, was described as focused on "how personality influences emotion regulation. In particular, their proposed study is designed to examine how personality characteristics influence emotion regulation." Psychologists completed responses to both studies in random order and they were randomly assigned to one of two conditions within each study: all White or all minority sample. Thus, the composition of the sample described within each research study was randomly determined and manipulated between subjects to either include only Whites or minori-

⁵ Fifty-one psychologists completed both experimental tasks but did not complete the entire survey. We retain these individuals for Study 2A analyses but do not include them in the analyses reported in Study 2B.

ties. The order of presentation was also randomized. The information contained within the Cultural and Noncultural studies only varied as a function of our manipulation of the sample composition. Analyses were conducted to determine within-study differences on the judgments of the appropriateness of the sample (Whites vs. minorities), not between studies. At the end of each research study, psychologists were asked to answer questions about its proposed research, design, and sample composition. We focused on their response to the following question: "The ethnic and racial composition of the sample selected for the proposed research questions is appropriate." Responses were given on a Likert-type scale ranging from 1 to 5, with 1 being strongly disagree and 5 being strongly agree. Variables were recoded to run from 0 to 1 to ease interpretation and comparison of effect sizes.

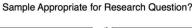
Results and discussion. To test Hypotheses 2A.1 and 2A.2, we used ordinary least squares to regress the dependent variable onto (a) a dummy variable for condition assignment (0 = sample composed of minorities, 1 = sample composed of Whites) and, for subsequent analyses, its interaction with (b) ethnic self-identification of the respondent. For these analyses, psychologists who identified as non-Latino Caucasians were classified as White, and all other psychologists who identified as members of other subgroups were classified as minorities. Analyses were conducted separately for the cultural study (M = .41, SD = .23) and the noncultural study (M = .44, SD = .23).

First, we evaluated whether the sample composition differentially influenced judgments of the appropriateness of a sample of Whites or minorities in Cultural and Noncultural Studies without constraints. These results yield clear support for our main hypothesis (cultural study, b=-.15,95% CI [-.19,-.10], p<.001, d=.68; noncultural study, b=.13,95% CI [.08,.17], p<.001, d=.59). Second, we tested the extent to which the effect of sample composition is moderated by psychologists' self-identification (White vs. minority). This model includes the main effect of ethnic

identification, the main effect of sample composition, and the interaction term. The interaction term was not significant for any of the models (cultural study, b=.06,95% CI [-.04,.17], p=.22; noncultural study, b=-.03,95% CI [-.13,.07], p=.72). The main effect of ethnic self-identification was not significant for any model (cultural study, b=-.001,95% CI [-.08,.08], p=.97; noncultural study, b=.02,95% CI [-.06,.10], p=.62). The main effect of sample composition was significant for both the cultural study (b=-.17,95% CI [-.22,-.11], p<.001, d=.59) and noncultural study (b=.07,95% CI [.02,.13], p<.01, d=.41), even after controlling for ethnic self-identification.

These results indicate that psychologists described a sample composed of minorities (vs. Whites) as *more* appropriate for the study of cultural processes. But this pattern of results switched direction for the study of an individual psychological process (i.e., effect of personality on emotion regulation), such that psychologists described a sample composed of Whites (vs. minorities) as *more* appropriate. Figure 2 is a graphical representation of the main effect of condition, collapsed across White and minority psychologists, on this dependent variable.

However, when psychologists were asked if "the proposed research questions are interesting," there were no observed differences within Cultural and Noncultural studies as a function of sample composition, nor was the interaction term significant (p=.15). This suggests that sample composition does not promote perceived differences in the value of specific research questions, but in the perceived appropriateness of the sample selected to answer such questions. Together, these findings support our hypothesis that psychologists would rate more favorably a sample composed of minorities for a cultural study, but rate less favorably this kind of sample for a noncultural study, even though sample composition did not influence perceptions of the value of the research itself. The fact that both White and minority psychologists subscribed to these views provides



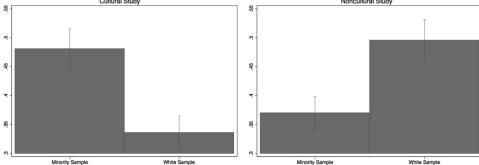


Figure 2. Psychologists' evaluation of the suitability of the sample composition depending on the topic. Bars represent 95% confidence intervals.

support for the cultural (mis)attribution bias and distinguishes this phenomenon from general intergroup biases in which in-group members are assessed in more favorable ways than members of out-groups (Hewstone et al., 2002).

Study 2B: Survey With Psychologists

Following the experiment, psychologists completed a survey with questions that examined the cultural (mis)attribution bias. Our first research question was as follows: To what extent do psychologists support the idea that psychological processes (i.e., personality, cognitive factors) are more influential than cultural processes (i.e., group membership and social identity; culture, ethnicity, and race) in shaping the behavior of Whites than minorities?

Hypothesis 2B.1: Psychologists will indicate that psychological processes are more influential in shaping the behavior of Whites than minorities, and this effect will not be moderated by the ethnic self-identification of psychologists (White vs. minority).

Our second research question was the following: To what extent do psychologists support the idea that cultural processes (i.e., culture, ethnicity, and race; group membership and social identity) are more influential in shaping the behavior of minorities than Whites?

Hypothesis 2B.2: Psychologists will indicate that cultural processes are more influential than psychological processes in shaping the behavior of minorities than Whites, and that this effect will not be moderated by psychologists' ethnicity.

Our third research question was the following: How do psychologists perceive other psychologists' assumptions about the influence of culture for minorities and Whites? *Hypothesis* 2*B.3:* Psychologists will indicate that other psychologists believe psychological processes are more important for Whites, whereas cultural processes are more important for minorities, and this effect will not be moderated by psychologists' ethnicity.

Procedure and measures. After psychologists completed the experimental task, they were asked to respond to a series of questions designed to measure the extent to which they believe that two psychological processes (personality and cognitive factors) and two cultural processes (group membership and social identity, and culture, ethnicity, and race) each influence the behavior of Whites or minorities. Items were blocked by reference group and presented in random order to minimize social desirability or spillover effects in responding. Psychologists were then asked to report the extent to which other psychologists believe each of these factors influence the behavior of Whites or minorities. Responses were given on a Likerttype scale ranging from 1 to 5, with 1 being strongly disagree and 5 being strongly agree. Variables were recoded to run from 0 to 1 to ease interpretation and comparison of effect sizes.

Results and discussion. Tables reporting additional results appear in the online supplemental materials. To evaluate the three hypotheses, a repeated measures ANOVA was conducted, with judgments of the relative influence of each factor as separate dependent variables and question reference group (Whites vs. minorities) as a within-subject factor. To test Hypothesis 2B.1, we first examined whether psychologists indicate that psychological processes are less influential in shaping the behavior of Whites, compared with minorities, without any covariates in the model (see Figure 3). This analysis indicates that psychologists believe

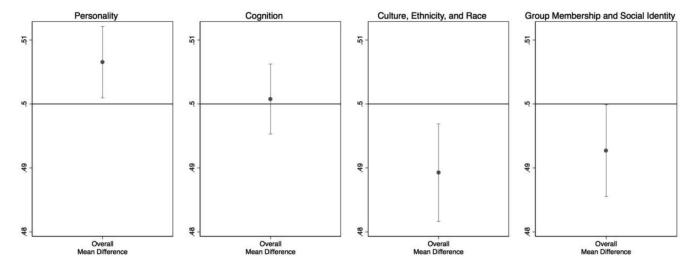


Figure 3. Mean difference (Whites vs. racial/ethnic minorities) in psychologists' self-reported belief regarding the role of different processes on behavior. Error bars represent 95% confidence intervals. 0.5 represents no difference in judgments; higher values represent higher values for Whites versus minorities.

that personality, F(324) = 5.32, p = .02, d = .26, but not cognitive factors (p = .78), was more influential for the behavior of Whites (vs. minorities). We also examined whether psychologists indicated that cultural processes are more influential in shaping the behavior of minorities than Whites (Hypothesis 2B.2). Both White and minority psychologists reported that culture, ethnicity, and race, F(324) = 7.69, p = .006, d = .15, and group membership and social identity, F(324) = 4.00, p = .046, d = .05, are more influential on the behavior of minorities (vs. Whites).

Next, we tested the model while controlling for the main effect of psychologists' ethnic self-identification. For this analysis, within-subject differences indicated that psychologists believed that personality, F(323) = 3.82, p = .051, d = .22, but not cognitive factors (p = .88), are more influential for the behavior of Whites (vs. minorities). After controlling for ethnic self-identification, White and minority psychologists reported that culture, ethnicity, and race, F(324) = 10.63, p = .001, d = .36, and group membership and social identity, F(324) = 3.58, p = .059, d = .21, are more influential on the behavior of minorities (vs. Whites). There were no differences in the paired dependent variables as a function of psychologists' ethnic self-identification for personality, F(323) = .001, p = .98, cognition, F(323) = .001.02, p = .88, group membership and social identity, F(323) = .128, p = .72, and culture, ethnicity, and race, F(323) = 2.89, p = .09.

Finally, to test Hypothesis 2B.3, we examined whether psychologists reported that *other* psychologists believe psychological processes are more important predictors of behavior for Whites, whereas cultural processes are more important determinants of behavior for minorities, without

including ethnic self-identification as a covariate (see Figure 4). Psychologists reported that other psychologists believe that personality, F(324) = 43.88, p < .001, d = .26, and cognition, F(324) = 32.76, p < .001, d = .23, are *more* influential for Whites (vs. minorities), but that group membership and social identity, F(324) = 60.92, p < .001, d = .38, and culture, ethnicity, and race, F(324) = 80.77, p < .001, d = .51, are more influential for minorities (vs. Whites).

We tested the model with ethnic self-identification as a covariate. For this analysis, within-subject differences indicate that psychologists reported that other psychologists believe that personality, F(323) = 42.17, p < .001, d = .72, and cognition, F(323) = 33.37, p < .001, d = .64, are more influential for Whites (vs. minorities), and that group membership and social identity, F(324) = 42.98, p < .001, d =.73), and culture, race, and ethnicity, F(324) = 82.42, p <.001, d = 1.01, are more influential for minorities (vs. Whites). Ethnic self-identification did not significantly account for this within-subject effect for personality, F(324) =2.50, p = .12, cognitive factors, F(324) = 2.83, p = .09, or group membership and social identity, F(324) = .04, p =.85. The only instance of significant moderating effects of ethnic self-identification was on reports of how other psychologists perceive the influence of culture, ethnicity, and race on minorities (vs. Whites), F(324) = 6.64, p = .01. White psychologists, t(247) = -7.15, p < .001, d = .43, and minority psychologists, t(77) = -5.58, p < .001, d =.76, reported that other psychologists believe that culture, ethnicity, and race more strongly influence the behavior of minorities (vs. Whites). Although all respondents reported that other psychologists believe that culture, ethnicity, and

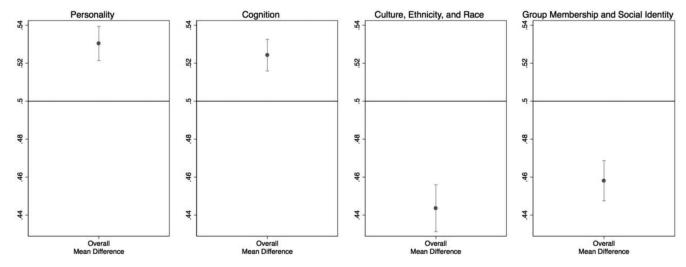


Figure 4. Mean difference (Whites vs. racial/ethnic minorities) in psychologists' perceptions of other psychologists belief regarding the role of different processes on behavior. Error bars represent 95% confidence intervals. 0.5 represents no difference in judgments; higher values represent higher values for Whites versus racial/ethnic minorities.

race matters more for minorities than Whites, the effect size was larger for minority psychologists.

In sum, we obtained evidence that both White and minority psychologists who participated in this study overemphasize the role of culture, and underattribute the role of psychological processes, in shaping the behavior of minorities. This provides further empirical support for the assertion that psychologists in the United States tend to associate culture most closely with minorities but less with Whites (Betancourt & López, 1993).

General Discussion

In this article, we examined the cultural (mis)attribution bias in two studies, through an analysis of the last decade of research published in five premier psychological journals, and with an experiment and a survey of a sample of psychologists. The results from the two studies provide converging empirical evidence of the cultural (mis)attribution bias. Study 1 showed that studies in the culture, ethnicity, and race group had higher percentages of minorities than studies in the non-culture-ethnicity-race group. Compared with U.S. population estimates, studies in the culture, ethnicity, and race group conducted in the United States had a higher percentage of minorities (vs. Whites) than expected. These findings support the notion that, notwithstanding the growing awareness regarding the importance of culture among behavioral scientists, its study still occupies a secondary place in mainstream psychology, as it is often associated with marginal or exotic groups and thought to contribute little to understanding basic psychological processes (Betancourt & López, 1993).

Study 2A showed that both White and minority psychologists rated more favorably a sample composed of minorities (vs. Whites) for the study of culture, and less favorably a sample composed of minorities (vs. Whites) for the noncultural study. Study 2B showed that both White and minority psychologists reported that personality is more influential for the behavior of Whites (vs. minorities), and culture, ethnicity, and race are more influential on the behavior of minorities (vs. Whites), after controlling for psychologists' ethnic identification. Both White and minority psychologists reported that other psychologists believe that personality and cognitive factors are less influential, but that group membership and social identity and culture, ethnicity, and race are more influential, in the behavior of minorities (vs. Whites). That these responses were observed across both groups of psychologists supports the notion that the cultural (mis)attribution bias is not merely a function of intergroup favoritism. Moreover, we found that the cultural (mis)attribution bias is not the result of perceived differences in the value and importance of cultural versus noncultural research questions, but in the value of the appropriateness of the ethnicity of the samples in cultural versus noncultural studies.

However, not all effects were consistent with our hypotheses. Psychologists did not believe cognition was more important for Whites (vs. minorities), and group membership and social identity were only seen as marginally more influential in the behavior of minorities (vs. Whites). Also, we found no differences in the percentage of minorities in the non-culture-ethnicity-race group (31%) and the U.S. ethnic distribution (36%), suggesting that minorities are approaching numerical representation in mainstream psychological research. This finding should be interpreted cautiously because more than half of these studies did not provide precise information about the ethnic composition of their samples. For example, many studies simply reported that their sample was "predominantly White." We encourage researchers to report the exact ethnic composition of their samples in future studies.

The cultural (mis)attribution bias has negative consequences for the psychological sciences. It compromises the external validity of noncultural psychology because what we know about minorities remains restricted or distorted (Sue, 1999). Ultimately, by overemphasizing the role of culture, we might reinforce rigid and essentialist views of minorities (Adams & Markus, 2004) that may dehumanize them by denying their individuality and the fact that they are agents with unique characteristics, not simply group members that wholeheartedly subscribe to, and are defined by, their heritage culture. At the same time, it negates that Whites are also cultural beings and that cultural processes including cultural values, ideologies, and religious beliefsalso shape their perceptions and behavior in meaningful ways. The cultural (mis)attribution bias situates White behavior as the gold standard of human experience against which all other groups should be compared. When minorities depart from this norm, they are considered deviant and deficient (Cauce et al., 1998). To overcome this, more research is needed that investigates cultural variation within groups (e.g., differences among Asian American groups, such as Chinese Americans vs. Korean Americans), betweenminority groups (e.g., Asian Americans vs. African Americans), between minority and majority groups (e.g., Asian Americans vs. Whites), and using multiple-group comparisons (e.g., Asian Americans vs. Latinos vs. Whites). More generally, our argument is not that the study of cultural influences on minorities is problematic, misguided, or flawed, but that biased assumptions about the relative influence of cultural processes unduly constrain the examination of these phenomena to minority samples. Thus, we encourage more research on cultural influences on Whites, as well as psychological processes among minorities, as both are equally worthy of investigation.

Indeed, the cultural (mis)attribution bias threatens the generalizability of research in cultural psychology because

we remain deprived of knowledge about how culture contributes to the behavior of Whites. Although we know about differences between Whites and other groups, we need more investigations on within-White group similarities and differences in terms of culture. Although there is outstanding psychological research on cultural processes among Whites (see D. Cohen & Nisbett, 1994), and increasing recognition of variation among Northern and Southern Whites in terms of honor, face, and dignity (see Leung & Cohen, 2011), this nonetheless remains an underdeveloped area of study. More research is needed to understand how cultural processes affect health and well-being among Whites, considering recent evidence suggesting that some White communities are increasingly experiencing growing adversity. This is particularly the case among rural Whites without college education, who have trouble dealing with rapid cultural changes (Hochschild, 2016), unemployment, and rising mortality rates (Case & Deaton, 2017).

Although this study has several strengths, it is not without limitations. First, we only sampled one decade of research and only selected five high-impact journals, limiting the scope of our findings. Our review excluded premier journals in developmental, educational, counseling, and industrial/ organizational psychology. Future studies should sample a larger number of outlets that cover other disciplines in psychology and examine broader periods of time. Also, publication bias may play a role in the pattern of results found on Study 1, because editors in mainstream journals may be more likely to reject papers that use only minorities than papers that use only a White sample, as they may see the former as more threatening to generalizability. Also, the range of cultural studies in psychology is quite vast and may not be encapsulated by looking for the terms "culture," "ethnicity," and "race" in titles, abstracts, and keywords. For this reason, future investigations should pursue alternative methods to clarify these associations. Also, we collapsed all minority groups together, which restricts our knowledge of the extent to which the cultural (mis)attribution bias varies across minority groups. For instance, some researchers may differentially emphasize ethnicity among Latinos, culture among Asian Americans, or race among African Americans. If such a trend takes place in psychological research, more nuanced and targeted future work on the cultural (mis)attribution bias is needed.

In addition, despite our efforts to collect a large sample for Studies 2A and 2B, we obtained a modest response rate for the experiment and survey among psychologists, which could increase measurement error and lead to instability in our estimates. Although we do not believe that nonresponding systematically contributed to the observed pattern of results, future studies should attempt to replicate these findings with additional samples of psychological scientists (e.g., developmentalists) and with other social scientists (e.g., anthropologists, economists, sociologists). Finally, we

focused exclusively on American psychology. Future studies should investigate whether the cultural (mis)attribution bias is also present among psychologists in other regions with different academic traditions.

Despite these challenges, we are confident that this article offers critical evidence highlighting a very consequential and previously unexamined phenomenon, with clear implications for psychological science. Indeed, we interpret this pattern of evidence as consistent with a broader bias in which the psychological functioning of nonprototypical members of society are perceived to be the product of culture. More generally, we believe that this cultural (mis)attribution bias can unduly influence laypeople's perception of both Whites and minorities—with potentially important implications for intergroup dynamics (e.g., Bobo, Kluegel, & Smith, 1997) and the psychological motivations underpinning causal attributions (e.g., Kruglanski, 1990). However, the current study did not seek to identify the conditions under which, the individuals for whom, or the psychological mechanisms by which the cultural (mis)attribution bias may (or may not) influence perceptions and behavior. Future research is needed to better understand the cause and consequences of this bias, and to distinguish it from and relate it to more general intergroup phenomenon. Moreover, this study raises other questions: Do people in general, not only psychologists, engage in the cultural (mis) attribution bias? How is this bias related to stereotypes and prejudices documented in psychological research, including stereotypic explanatory bias, intergroup prejudice, and foreigner objectification (see Fiske, 2000)?

Our primary goal in this current set of studies was to test for the presence of unsubstantiated assumptions among psychologists regarding the relative influence of culture for human behavior and to document its impact on the published literature. Although we maintain that the cultural (mis)attribution bias can shape the theoretical assumptions and constrain the questions pursued by researchers, we also recognize that there are other potential factors that may contribute to the biased representation of minorities in the composition of samples used in psychological research. To test for culture, ethnicity, and race differences, researchers must recruit adequately sized comparison groups to retain sufficient levels of statistical power, which may lead to the oversampling of minority participants, relative to what would be expected for a sample randomly drawn from the population. Although this explanation may account for the higher percentage of minorities in cultural studies relative to the general population, it does not clearly explain why minorities would be sampled more relative to Whites in cultural studies. Because researchers utilizing undergraduate students as participants may more easily access and recruit White samples, one might expect these individuals to be recruited more often in most psychological studies, not only relative to other ethnic and racial groups within the same sample, but compared with the U.S. population more generally. Thus, we recognize the many practical and methodological challenges associated with recruiting large and diverse samples for psychological research. However, it is important for psychologists to make an effort to conduct studies with representative samples of different minority groups. Our hope is that with improved awareness of the implications of cultural (mis)attribution bias for theory and research, psychologists can minimize the extent to which implicit assumptions and attributions about the cause of behavior constrains their work.

We believe that all humans are cultural beings because "culture is not a distal force that gets applied on top of basic experience. Instead, culture is also a proximal process of grounding or sense-making that is 'basic' in its own right" (Adams & Markus, 2004, p. 357). Although the subjective dimension of culture—attitudes, beliefs, values—has been strongly emphasized in cultural research (Triandis, 1972), it tends to reduce cultural processes to superficial, secondary processes that inform, occur, or influence basic processes (Bruner, 1990), whereas, in fact, "culture resides in the everyday worlds that condition basic experience in the first place . . . it's not limited to values, beliefs, or ideas about reality, but includes differences in reality itself" (Adams & Markus, 2004, p. 343). Culture is not something that some groups do or have, but an essential dimension of what we are and how we came to be human beings. At the same time, all human beings are individuals in possession of a distinctive configuration of psychological traits that makes them unique. The recognition of these assertions is uncontroversial, as Whites and minorities are members of the same species. American psychology can benefit greatly from its acknowledgment.

References

- Adams, G. (2014). Decolonizing methods: African studies and qualitative research. *Journal of Social and Personal Relationships*, *31*, 467–474. http://dx.doi.org/10.1177/0265407514521765
- Adams, G., Dobles, I., Gŏmez, L. H., Kurtiş, T., & Molina, L. E. (2015). Decolonizing psychological science: Introduction to the special thematic section. *Journal of Social and Political Psychology*, 3, 213–238. http:// dx.doi.org/10.5964/jspp.v3i1.564
- Adams, G., & Markus, H. R. (2004). Toward a conception of culture suitable for a social psychology of culture. In M. Schaller & C. S. Crandall (Eds.), *Psychological foundations of culture* (pp. 335–360). Mahwah, NJ: Erlbaum.
- American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice and organizational change for psychologists. *American Psychologist*, *58*, 377–402. http://dx.doi.org/10.1037/0003-066X.58.5.377
- American Psychological Association. (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author.
- Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist*, 63, 602–614. http://dx.doi.org/10.1037/0003-066X.63.7.602

- Betancourt, H., & López, S. R. (1993). The study of culture, ethnicity, and race in American psychology. *American Psychologist*, 48, 629–637. http://dx.doi.org/10.1037/0003-066X.48.6.629
- Bissett, P. G., & Logan, G. D. (2014). Selective stopping? Maybe not. Journal of Experimental Psychology: General, 143, 455–472. http://dx.doi.org/10.1037/a0032122
- Bobo, L., Kluegel, J. R., & Smith, R. A. (1997). Laissez-faire racism: The crystallization of a kinder, gentler, antiblack ideology. In S. A. Tuch & J. K. Martin (Eds.), Racial attitudes in the 1990s: Continuity and Change (pp. 23–25). Westport, CT: Praeger Publishers.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, *86*, 307–324. http://dx.doi.org/10.1037/0033-2909.86.2.307
- Bruner, J. (1990). Acts of meaning. Cambridge, MA: Harvard University Press.
- Burton, L. M., Bonilla-Silva, E., Ray, V., Buckelew, R., & Hordge Freeman, E. (2010). Critical race theories, colorism, and the decade's research on families of color. *Journal of Marriage and Family*, 72, 440–459. http://dx.doi.org/10.1111/j.1741-3737.2010.00712.x
- Candland, D. K. (1995). Feral children and clever animals: Reflections on human nature. New York, NY: Oxford University Press.
- Case, A., & Deaton, A. (2017). Mortality and morbidity in the 21st century. Brookings Papers on Economic Activity Conference Drafts, March 23–24, 2017. Retrieved from https://www.brookings.edu/wp-content/ uploads/2017/03/6_casedeaton.pdf
- Cauce, A. M., Coronado, N., & Watson, J. (1998). Conceptual, methodological, and statistical issues in culturally competent research. In M. Hernandez & M. R. Isaacs (Eds.), *Promoting cultural competence in children's mental health services* (pp. 305–329). Baltimore, MD: Brookes.
- Causadias, J. M. (2013). A roadmap for the integration of culture into developmental psychopathology. *Development and Psychopathology*, 25, 1375–1398. http://dx.doi.org/10.1017/S0954579413000679
- Chomsky, N. (2014). Aspects of the theory of syntax (Vol. 11). Cambridge, MA: MIT Press.
- Cohen, A. B. (2009). Many forms of culture. American Psychologist, 64, 194–204. http://dx.doi.org/10.1037/a0015308
- Cohen, D., & Nisbett, R. E. (1994). Self-protection and the culture of honor: Explaining southern violence. *Personality and Social Psychology Bulletin*, 20, 551–567. http://dx.doi.org/10.1177/0146167294205012
- Connor-Smith, J. K., & Flachsbart, C. (2007). Relations between personality and coping: A meta-analysis. *Journal of Personality and Social Psychology*, 93, 1080–1107. http://dx.doi.org/10.1037/0022-3514.93.6
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281–302. http://dx.doi.org/10.1037/ h0040957
- DeChurch, L. A., & Mesmer-Magnus, J. R. (2010). The cognitive underpinnings of effective teamwork: A meta-analysis. *Journal of Applied Psychology*, 95, 32–53. http://dx.doi.org/10.1037/a0017328
- Devos, T., & Banaji, M. R. (2005). American = White? *Journal of Personality and Social Psychology*, 88, 447–466. http://dx.doi.org/10.1037/0022-3514.88.3.447
- Diener, E., Oishi, S., & Lucas, R. E. (2003). Personality, culture, and subjective well-being: Emotional and cognitive evaluations of life. Annual Review of Psychology, 54, 403–425. http://dx.doi.org/10.1146/ annurev.psych.54.101601.145056
- Feagin, J. (2013). The white racial frame: Centuries of racial framing and counter-framing (2nd ed.). New York, NY: Routledge.
- Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: Evolution, culture, mind, and brain. *European Journal of Social Psychology*, 30, 299–322. http://dx.doi.org/10.1002/(SICI)1099-0992(200005/06)30:3<299::AID-EJSP2>3.0.CO;2-F

- Golash-Boza, T. M. (2016). Race & racisms: A critical approach. New York, NY: Oxford University Press.
- Hartigan, J. (2015). Race in the 21st century: Ethnographic approaches. New York, NY: Oxford University Press.
- Hewstone, M., Rubin, M., & Willis, H. (2002). Intergroup bias. Annual Review of Psychology, 53, 575–604. http://dx.doi.org/10.1146/annurev .psych.53.100901.135109
- Hochschild, A. R. (2016). Strangers in their own land: Anger and mourning on the American Right. New York, NY: The New Press.
- Humes, K., Jones, N. A., & Ramirez, R. R. (2011). Overview of race and Hispanic origin. U.S. Department of Commerce, Economics and Statistics Administration. Washington, DC: U. S. Census Bureau. Retrieved from http://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf
- Kitayama, S., & Uskul, A. K. (2011). Culture, mind, and the brain: Current evidence and future directions. *Annual Review of Psychology*, 62, 419– 449. http://dx.doi.org/10.1146/annurev-psych-120709-145357
- Kruglanski, A. W. (1990). Motivations for judging and knowing: Implications for causal attribution. In E. T. Higgins & R. M. Sorrentino (Eds.), The handbook of motivation and cognition: Foundations of social behavior (Vol. 2, pp. 333–368). New York, NY: Guilford Press.
- Leung, A. K. Y., & Cohen, D. (2011). Within- and between-culture variation: Individual differences and the cultural logics of honor, face, and dignity cultures. *Journal of Personality and Social Psychology*, 100, 507–526. http://dx.doi.org/10.1037/a0022151
- Matsumoto, D., Grissom, R. J., & Dinnel, D. L. (2001). Do betweenculture differences really mean that people are different? A look at some measures of cultural effect size. *Journal of Cross-Cultural Psychology*, 32, 478–490. http://dx.doi.org/10.1177/0022022101032004007
- Mignolo, W. D. (2009). Epistemic disobedience, independent thought, and decolonial freedom. *Theory, Culture & Society*, 26, 159–181. http://dx .doi.org/10.1177/0263276409349275
- Norenzayan, A., & Heine, S. J. (2005). Psychological universals: What are they and how can we know? *Psychological Bulletin, 131,* 763–784. http://dx.doi.org/10.1037/0033-2909.131.5.763
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–72. http://dx.doi.org/ 10.1037/0033-2909.128.1.3

- Quintana, S. M., Aboud, F. E., Chao, R. K., Contreras-Grau, J., Cross, W. E., Hudley, C., . . . Vietze, D. L. (2006). Race, ethnicity, and culture in child development: Contemporary research and future directions. Child Development, 77, 1129–1141. http://dx.doi.org/10.1111/j.1467-8624.2006.00951.x
- Sauermann, H., & Roach, M. (2013). Increasing web survey response rates in innovation research: An experimental study of static and dynamic contact design features. *Research Policy*, 42, 273–286. http://dx.doi.org/ 10.1016/j.respol.2012.05.003
- Sewell, H. (2008). Working with ethnicity, race and culture in mental health: A handbook for practitioners. London, UK: Jessica Kingsley.
- Shweder, R. A. (2000). The psychology of practice and the practice of the three psychologies. *Asian Journal of Social Psychology*, 3, 207–222. http://dx.doi.org/10.1111/1467-839X.00065
- Smith, T. B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, 58, 42–60. http://dx.doi.org/10.1037/a0021528
- Spencer, M. B. (2006). Revisiting the 1990 special issue on minority children: An editorial perspective 15 years later. *Child Development*, 77, 1149–1154. http://dx.doi.org/10.1111/j.1467-8624.2006.00925.x
- Sue, S. (1999). Science, ethnicity, and bias: Where have we gone wrong? American Psychologist, 54, 1070–1077. http://dx.doi.org/10.1037/0003-066X.54.12.1070
- Tomasello, M. (1999). The cultural origins of human cognition. Cambridge, MA: Harvard University Press.
- Triandis, H. C. (1972). The analysis of subjective culture. New York, NY: Wiley.
- U.S. News & World Report. (2016). National universities rankings. Retrieved from http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities/data
- Yoon, E., Chang, C. T., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., ... Gomes, A. M. (2013). A meta-analysis of acculturation/enculturation and mental health. *Journal of Counseling Psychology*, 60, 15–30. http:// dx.doi.org/10.1037/a0030652

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