ORIGINAL ARTICLE

Is Mainstream Psychological Research "Womanless" and "Raceless"? An Updated Analysis

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Abstract In the late 20th century, mainstream psychological research was accused of being "womanless" and "raceless" by excluding women and members of racial-ethnic minority groups and by interpreting their experiences as deviant from White male norms. The present article provides an updated analysis of the state of psychological research by examining research published in 2007 in eight prominent journals across four subdisciplines (N=255). Two types of data were examined: (1) gender and racial-ethnic representation at the levels of editor, senior author, and participant, and (2) the presence of biased assumptions in reporting tendencies. Representation was interpreted in relation to relevant baselines drawn from U.S. data. Women and members of racial-ethnic minority groups do not appear to be underrepresented as editors in mainstream psychology. However, women continue to be underrepresented as senior authors, and members of racial-ethnic minority groups continue to be underrepresented as research participants. Furthermore, studies using predominately male or White samples (vs. female or racial-ethnic minority samples) were less likely to indicate participant gender or race-ethnicity in the title and marginally less likely to provide a rationale for including participants of only one social group, consistent with the notion that reporting tendencies within mainstream psychological research continue to reflect assumptions that men and Whites are more typical members of the category "human" than are women and racial-ethnic minorities. These findings indicate that mainstream psychology has not yet reached social equity and that efforts to increase diversity and decrease subtle biases should continue to be supported and funded.

Introduction

Mainstream psychology has been accused of being "womanless" (Crawford and Marecek 1989, p. 149) and "raceless" (Graham 1992, p. 629) by failing to acknowledge that social categories are embedded within hierarchical systems of power and privilege that consequently shape psychological experience. The failure to recognize the influence of social realities on thoughts, feelings, and behavior contributed to a "womanless" and "raceless" psychology through two primary means. First, women and members of racial-ethnic minority groups were excluded from basic research on the premise that the experiences of men and Whites were representative of the default human experience (Crawford and Marecek 1989; Grady 1981; Guthrie 1976; McHugh et al. 1986). Second, when women and members of racial-ethnic minority groups were included in research, conclusions were interpreted from a comparative framework that viewed their behavior as deviant and problematic in comparison to the behavior of men and Whites (Crawford and Marecek 1989; Graham 1992; Korchin 1980; McLoyd and Randolph 1985; Shields 1975; Tavris 1993; Richards 1997).

Full inclusion of all social groups is crucial to the legitimacy, relevance, and progress of psychological science, and so it is important to provide updated analyses of representation in psychological research. As such, the current work examines the extent to which the two issues described above—the underrepresentation of women and members of racial-ethnic

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minority groups across the research process and assumptions of White male normativity—are still present in mainstream psychological research in the early 21st century. In particular, I examine over 250 articles published in 2007 in prominent psychology journals to answer the following research questions: (1) Do women and members of racial-ethnic minority groups continue to be underrepresented as editors, senior authors, and participants in mainstream psychological research? and (2) Do the reporting tendencies within mainstream psychological research continue to reflect assumptions that men and Whites are more typical members of the category "human" than are women and members of racial-ethnic minority groups? By answering these questions, the current research aims to identify areas where improvement is needed. I begin by reviewing the representation of women and members of racial-ethnic minority groups in mainstream psychological research during the 20th century, as well as efforts to increase diversity within the field of psychology. I then set forth testable hypotheses.

Before continuing, it is important to distinguish between *race* and *ethnicity*. There has been much confusion and controversy over the use and meanings of these terms (APA 2003; Fish 1995; Helms 1996; Helms and Talleyrand 1997; Markus 2008; Phinney 1996; Yee et al. 1993). The use of these terms in the present paper reflects the definitions provided by Moya and Markus (2010). Based on their definitions, categorizing people as a *racial* group acknowledges the history of unequal power and status relations that have resulted from the "negative inequality-producing process [of] doing race" (Moya and Markus 2010, p. 23). Categorizing people as an *ethnic* group acknowledges the "positive identity-generating process [of] doing ethnicity" that can serve as a source of pride, belonging, and motivation (Moya and Markus 2010, pp. 23–24). Therefore, I use both terms—along with the term *minority*—conjointly in the phrase *racial-ethnic minority* to acknowledge the presence of both of these processes in the lives of people belonging to groups that have been historically disadvantaged and targets of prejudice and discrimination, including people who identify as Native American, Alaska Native, Asian, Pacific Islander, Black, African American, Hispanic, and/or Latina(o). Importantly, the use of the word *race* (and its related grammatical forms) does not in any way imply that there are essential or biological bases for assigning people to particular groups, but rather reflects the social construction and powerful presence of such groupings in society.

Lack of Representation

From the beginning of the formal study of psychology to at least the latter part of the 20th century, women and members of racial-ethnic minority groups have been underrepresented in psychological research (Shields 1975; Crawford and Marecek 1989; Graham 1992). The title of a historical analysis of race in psychological research points out that *Even the Rat was White* (Guthrie 1976; see also Grady 1981). Ignoring the influence of social realities on thoughts, feelings, and behavior allowed researchers to investigate so-called basic and universal psychological processes without considerations of contextual variables such as gender, race, or ethnicity (Lee 1994; Markus 2008; McHugh et al. 1986; Norenzayan and Heine 2005; Parlee 1979; Riger 1992; Rozin 2001; Sue 1999). Because Whites and men were considered to be the default category representative of all humans, research on basic processes was best understood from the study of Whites and men; women and members of racial-ethnic minority groups were viewed as deviations from the White male norm, and their psychological experiences were viewed as particular cases of human psychological functioning (Crawford and Marecek 1989; Grady 1981; Graham 1992; McHugh et al. 1986; Reid 1993; Reid and Kelly 1994; Riger 1992; Tavris 1993). As such, the experiences of women and members of racial-ethnic minority groups were largely ignored and viewed as unworthy of study. As a case in point, only 33% of participants in the 1950s and 60s were women (Holmes and Jorgenson 1971; see also Carlson and Carlson 1960; Peay 1976), and less than 6% of research articles in the 1970s and 80s were devoted to the study of racial-ethnic minority issues (Behl et al. 2001; Graham 1992; Liang et al. 2009; Ponterotto 1988; Santos de Barona 1993). Women and members of racial-ethnic minority groups were also underrepresented as faculty members, researchers, and editors late into the 20th century. Women comprised only 13% of editors and 22% of authors across 14 APA journals in 1982 (White 1985), and members of racial-ethnic minority groups comprised only 11% of full-time faculty in psychology departments in 1992 (Norcross et al. 2005).

Diversity representation across the research process is important because the social contexts in which people experience the world influence the central variables of interest to psychologists (Adams et al. 2008; Major and O'Brien 2005; Markus 2008; Norenzayan and Heine 2005; Plaut 2010; Reid 1993). Specifically, research shows that one's social position within the social hierarchy (e.g., gender and racial-ethnic group membership) influences attitudes, thoughts, feelings, behavior, and performance. Awareness of negative stereotypes about a stigmatized social group (e.g., women, African Americans), for example, affects performance differently for members of the stigmatized versus dominant group; it impairs performance among members of the stigmatized group (Spencer et al. 1999; Steele and Aronson 1995) but enhances performance among members of the dominant group (e.g., men, Whites; Walton and Cohen 2003). Additionally, people interact with the world through gendered and racialized bodies, and the world interacts with them based on those characteristics. Gender and racial stereotypes, for example, can lead people to behave in ways that elicit stereotype-confirming behavior from

members of the stereotyped group (Snyder et al. 1977; Word et al. 1974). At the same time, people avoid behaving in ways that deviate from stereotypic expectations to avoid punishment from others (e.g., social exclusion, physical violence, harassment; Rudman and Fairchild 2004). Such behavioral outcomes cannot be fully understood without recognizing the social context in which they occur. Importantly, these processes influence the behavior, thoughts, and feelings of members of both stigmatized and dominant groups (e.g., Fine et al. 1997; Vandello et al. 2008). Because there is no such thing as a neutral, ahistorical, asocial person, it is crucial to include diverse participant samples in mainstream psychological research.

Diversity representation at the researcher and editor levels is also important because knowledge is situationally constructed and dependent on, shaped by, and constrained by one's location in the social hierarchy (Haraway 1988; Harding 1993; Jagger 2004). Different social locations provide different perspectives and experiences from which to ask questions, interpret results, and draw conclusions. Indeed, demographics and background characteristics of psychology researchers predict the topics they study and the conclusions they draw (see Unger 1983). The production of knowledge is limited to the extent that it is produced by and relies on data from people who have similar experiences and perspectives of the world. The fact that people producing psychological knowledge have historically mostly been male and White and that they have failed to accurately represent and understand the experiences of women and members of racial-ethnic minority groups has contributed to accusations of psychology as being "womanless" and "raceless".

Assumptions of White, Male Normativity

When women and members of racial-ethnic minority groups have been included in mainstream psychological research, their behaviors, thoughts, and feelings have often been interpreted from a comparative framework that assumes that Whites and men are the normative standard to which all other groups should be compared (Crawford and Marecek 1989; Hegarty and Buechel 2006; Riger 1992; Shields 1975; Tavris 1993; Richards 1997). Research using racial-ethnic minority participants, for example, has typically included White participants as control groups in what has been called "race comparative" research (McLoyd and Randolph 1985, p. 82; see also Graham 1992; Korchin 1980). Research using only White participants, however, has not required racial-ethnic minority control groups (Graham 1992; Reid and Kelly 1994; Korchin 1980; Sue 1999). This "race comparative" research serves to ignore within-group variation and reinforces the concept that non-White behavior is deviant.

The notion that women and members of racial-ethnic minority groups are deviant from the White male norm has also been reinforced through the reporting and interpretation of results. For example, studies using only male participants (vs. only female participants) were less likely to indicate participant gender in the title and more likely to generalize results to the gender group not under investigation (Ader and Johnson 1994; Holmes and Jorgenson 1971; Schwabacher 1972). These tendencies normalize the experiences of men and marginalize the experiences of women.

This comparative framework has developed within an independent model of the self that views the self as autonomous and independent of contextual factors (Markus 2008). As such, psychological research has at times failed to recognize the influence of social context on behavior, thoughts, and feelings (Landrine 1995; McHugh et al. 1986; Norenzayan and Heine 2005; Plaut 2010; Reid and Kelly 1994; Reid 1993; Riger 1992; Rozin 2001; Sue 1999; Tavris 1993). As observed by Parlee (1979, p. 131): "Concepts, environments, social interactions are all simplified by methods which lift them out of their contexts, stripping them of the very complexity that characterizes them in the real world." The influence of factors that co-vary with social categories, including historical circumstance, structural barriers, access to resources, and acceptance by the majority group, have been largely ignored within this model of the independent self. Some researchers, for example, have assumed that racial differences in performance on intelligence tests are due to the biological inferiority of racial-ethnic minority groups and the superiority of Whites, thereby ignoring important contextual factors (Guthrie 1976; Pickren 2009). These interpretations fail to recognize that social categories are not biologically determined but rather are socially constructed within particular historical, political, and economic circumstances (Fish 1995; Haney Lopez 2000; Helms and Talleyrand 1997; Markus 2008; Plaut 2010; Smedley and Smedley 2005).

In sum, the underrepresentation of women and members of racial-ethnic minority groups across the research process, the presence of androcentric and ethnocentric assumptions that conflated maleness and Whiteness with humanity, and the failure to recognize the influence of one's social location on psychological experience contributed to a "womanless" and "raceless" psychology. These practices, however, were not met without resistance.

Efforts to Increase Diversity, Reduce Bias

In light of criticisms of psychology as being "womanless" and "raceless", there have been efforts to increase diversity in psychology and reduce bias in research. The American Psychological Association (APA) established, for example, the Committee for Women in Psychology in 1974, the Office of Ethnic Minority Affairs in 1979, and the Commission on Ethnic Minority Recruitment, Retention, and Training in 1994 to increase diversity representation. In addition, numerous guidelines have been published by APA and others to help

researchers avoid androcentric and ethnocentric biases (e.g., APA 2003, 2010; Denmark et al. 1988; Graham 1992; Hall 1997; Helms et al. 2005; Hyde 1994; McHugh et al. 1986; Phinney 1996).

The progress of gender and racial-ethnic representation in psychological research since the implementation of APA's diversity initiatives has been examined in multiple studies. These studies have examined representation in terms of both the quantity (e.g., inclusion of women and members of racial-ethnic minority groups as participants, authors, and editors) and quality (e.g., content and methodological rigor) of published research. In terms of quantity, the number of female editors, senior authors, and participants in mainstream psychological research have increased since the 1970s (Ader and Johnson 1994; Delgado-Romero et al. 2005; Gannon et al. 1992; Hegarty and Buechel 2006; Teghtsoonian 1974; White 1985). The proportion of racial-ethnic minority editors and the proportion of articles focused on racial-ethnic minority issues have also increased in some subdisciplines (e.g., child maltreatment, social, and counseling psychology; Behl et al. 2001; Hunt et al. 2000; Liang et al. 2009; Ponterotto 1988).

Although the increases in representation are encouraging, findings also indicate that women and members of racial-ethnic minority groups continue to be strikingly underrepresented. In mainstream APA journals, for instance, women comprised less than 15% of editors in 1982 (White 1985) and less than 40% of senior authors between 1985 and 1994 (Hegarty and Buechel 2006). Members of racial-ethnic minority groups comprised less than 12% of editors in 1984 (Ponterotto 1988). In addition, the proportion of research focusing on racial-ethnic minority issues actually decreased in mainstream journals from 1970 to 1990 (Graham 1992; Santos de Barona 1993). Only 6% of articles published in mainstream APA journals in the 1990s focused on racial-ethnic minority issues (Nagayama Hall and Maramba 2001), and less than 15% of articles published in specialty journals did so (e.g., feminist, community, counseling, social, child maltreatment, health, applied, and clinical psychology journals; Behl et al. 2001; Case and Smith 2000; Hunt et al. 2000; Iwamasa et al. 2002; Liang et al. 2009; Loo et al. 1988; Park et al. 1998; Reid and Kelly 1994).

Diversity representation has been assessed not only in terms of quantity but also in terms of the quality of psychological research, including tendencies to report participant demographics. The reporting of participant gender and race-ethnicity in mainstream psychology journals has increased over the years, with approximately 80–90% of articles reporting gender and 50–60% of articles reporting race-ethnicity in the 1990s (Behl et al. 2001; Case and Smith 2000; Gannon et al. 1992; Delgado-Romero et al. 2005; Munley et al. 2002; Park et al. 1998). In addition, at least two-thirds of studies focusing on racial-ethnic minority groups have lacked methodological rigor by failing to consider confounding variables, such as participant socioeconomic status and experimenter

race-ethnicity (Graham 1992; Ponterotto 1988). Moreover, although gender bias decreased in mainstream psychological research from 1970 to 1990, considerable bias was still present in 1990 (Gannon et al. 1992), and women continue to be "the effect to be explained" when accounting for gender differences (Hegarty and Buechel 2006, p. 382). Women and members of racial-ethnic minority groups are also more likely to be included in studies examining stereotypic topics (e.g., interpersonal attraction, drug use, poverty) than general topics (Liang et al. 2009; McKenna and Kessler 1977; Reid and Kelly 1994).

Together, reviews of the quantity and quality of psychological research suggest that although the representation of women and members of racial-ethnic minority groups has increased since the implementation of APA diversity initiatives, it is still far from reaching equity. Given that most of these studies reviewed research published in the 1980s and 1990s, the purpose of the present work is to provide an updated analysis of the state of any such improvements. In other words, where does mainstream psychological research stand more recently in terms of the representation of women and members of racial-ethnic minority groups and the presence of biased assumptions?

Overview of Present Research

The present research examines the extent to which mainstream psychology can still be considered "womanless" and "raceless" by investigating two key factors: (1) the representation of women and members of racial-ethnic minority groups as editors, senior authors, and participants, and (2) the prevalence of biased assumptions that consider White and male experience as normative. I examine these factors in a sample of 255 empirical articles published in 2007 in two prominent journals from each of four diverse areas of psychology—developmental, social, clinical, and biopsychology. This method of using prominent journals across diverse subdisciplines is similar to the methods used in previous reviews of mainstream psychological research (e.g., Ader and Johnson 1994; Arnett 2008; Gannon et al. 1992; Graham 1992; Hegarty and Buechel 2006; Munley et al. 2002; Nagayama Hall and Maramba 2001; Santos de Barona 1993; Teghtsoonian 1974; White 1985). Most of the subdisciplines and journals used in the present analyses have also been used in these previous analyses.

The representation of women and members of racial-ethnic minority groups across the research process was examined by analyzing the gender and racial-ethnic composition of those making publishing decisions (i.e., chief and associate editors), those responsible for generating new knowledge (i.e., senior authors of publications), and those whose responses were used as a basis for drawing conclusions (i.e., research participants). For the purposes of this paper, representation is interpreted in terms of the available

pool from which to draw editors, authors, and participants. That is, gender and racial-ethnic compositions of editors are compared to the compositions of tenured psychology faculty members (i.e., associate and full professors) at U.S. universities in 2007 for each subdiscipline; the gender and racial-ethnic composition of senior authors are compared to the compositions of people who earned a doctoral degree in either developmental, social, clinical, or biopsychology from U.S. universities within the last 33 years (i.e., between 1975 and 2007); and the gender and racial-ethnic compositions of participants are compared to the U.S. population.

Faculty and doctorate recipients from U.S. universities (as opposed to universities in other countries) are used as the baseline comparison for editors and authors because the present data as well as other recent analyses show that the majority of editors and authors of mainstream psychology research are based at U.S. universities (Arnett 2008). Indeed, 62% of senior authors and 83% of editors of the mainstream journals included in the present analysis were affiliated with U.S. institutions. Similarly, the U.S. population is used as the baseline comparison for participants because the present data and other recent analyses show that Americans constitute the majority of samples in mainstream psychological research (Arnett 2008). Although mainstream psychology's bias toward U.S. contexts is problematic in and of itself (Arnett 2008), it does not detract from the present analysis because the aim of this paper is to examine mainstream psychological research, which currently happens to be research conducted primarily within U.S. contexts.

The second key factor I examine is the extent to which men and Whites are normalized in research. That is, I examine the extent to which the experiences of men and Whites are assumed to be universally applicable to all social groups whereas the experiences of marginalized groups are assumed to be specific and particular to only those social groups under investigation. These assumptions contribute to a "womanless" and "raceless" psychology by hiding White and male privilege, ignoring the social context of White and male experience, and subordinating the experiences of women and members of racial-ethnic minority groups.

The presence of biased assumptions that consider male and White experience as normative was examined in two ways. First, I compared the reporting tendencies of articles that used only women or only racial-ethnic minority participants to the reporting tendencies of articles that used only men or only White participants. Second, to provide a broader scope of the presence of biased assumptions, I examined the relationship between the gender and racial-ethnic composition of participants and the reporting tendencies of all examined articles.

Hypotheses

Hypothesis 1: Women and members of racial-ethnic minority groups continue to be underrepresented as chief and associate editors

Even though reviews conducted in the 1990s indicated an upward trend for the representation of women and members of racial-ethnic minority groups, and additional diversity initiatives have been implemented since the time of those reviews (e.g., the inaugural meeting of the National Multicultural Conference and Summit in 1999), there is reason to believe that women and members of racial-ethnic minority groups remain underrepresented as editors of mainstream psychology journals. Indeed, recent recommendations put forth by the Task Force on Enhancing Diversity suggest that the field of psychology still has much room for improvement in regards to achieving equity (APA, Office of Ethnic Minority Affairs 2005, 2008). Racial-ethnic minority faculty, for example, continue to experience unreceptive and cold climates in psychology departments (Vasquez et al. 2006), and women continue to experience barriers to promotion in academia (Hornig 2003; Quinn 2010). These obstacles may limit women's and racial-ethnic minorities' opportunities for editor positions. Moreover, change put forth by diversity initiatives can be slow and difficult to implement and can inspire backlash from members of dominant groups that impedes progress (APA, Office of Ethnic Minority Affairs 2005). In other words, the impact of recently-implemented diversity initiatives may not be felt for many years. For these reasons, I predict that women and members of racial-ethnic minority groups continue to be underrepresented as chief and associate editors of mainstream psychology journals, as compared to the pool from which to draw editors.

Hypothesis 2: Women and members of racial-ethnic minority groups continue to be underrepresented as senior authors

The cold climate experienced by members of racial-ethnic minority groups (Vasquez et al. 2006) may not only create barriers to positions of editorship, but may also impede one's ability to publish. For example, cold climates can hamper success and lead to dissatisfaction among new faculty (Menges and Associates 1999; Rice et al. 2000; see also McKay et al. 2007). In addition, cold climates can threaten one's social identity and can lead to a lower sense of belonging and impaired performance (Adams et al. 2008; Steele 1997; Walton and Cohen 2007). Therefore, I predict that members of racial-ethnic minority groups continue to be underrepresented as senior authors. I predict that women too are underrepresented as senior authors, given that women are more likely than their male counterparts to occupy positions that provide less time

and resources for conducting research (e.g., lecturer positions, non-academic positions; APA, Center for Workforce Studies 2007; Ceci and Williams 2011).

Hypothesis 3: Members of racial-ethnic minority groups continue to be underrepresented as research participants

Past reviews indicated a downward trend for research focused on racial-ethnic minority issues (e.g., Graham 1992), and I presume it unlikely that this trend has reversed within the last 15 years to the extent that members of racial-ethnic minority groups are no longer underrepresented in psychology research. Therefore, I predict that members of racial-ethnic minority groups continue to be underrepresented as research participants, compared to the pool from which to draw participants.

Hypothesis 4: Women are unequally represented as participants

In contrast to Hypothesis 3, the prediction concerning the representation of women as participants is less clear. On the one hand, women may actually be over-represented as participants. An increasing reliance on psychology subject pools for participant recruitment (Henry 2008) may have produced an over-representation of women participants, given that women make up over two-thirds of psychology undergraduate students (National Science Foundation 2009). On the other hand, women may be underrepresented as participants. Biases still exist that assume men are more representative of humans than are women (Hegarty and Buechel 2006); such biases may limit the extent to which women are recruited for participation in mainstream psychology research. I therefore test a two-tailed hypothesis predicting that women are unequally represented as participants.

Hypothesis 5: Assumptions of male and white normativity continue to be present in psychology research

Assumptions of male and White normativity are subtle forms of bias that are difficult to detect in disaggregate form. Because this bias is subtle, it is likely to go unnoticed and uncorrected. As a result, I expect to find these biased assumptions of normativity present in psychology research articles. Specifically, I predict that research using samples of only men or Whites (vs. research using samples of only women or members of racial-ethnic minority groups) will be: less likely to mention participant gender or race-ethnicity in the title or abstract; less likely to provide a rationale for using only one social group; less likely to discuss gender or race-ethnicity in the discussion section; and less likely to limit the generalization of results to the sample studied. In addition, I predict a negative correlation between these reporting tendencies

and the percentage of participants who identify as male or White.

Method

Journal Selection

Journals were chosen based on their prominence in publishing empirical research within each subdiscipline, consistent with the methodology of previous reviews (e.g., Ader and Johnson 1994; Arnett 2008; Gannon et al. 1992; Graham 1992; Hegarty and Buechel 2006; Munley et al. 2002; Nagayama Hall and Maramba 2001; Santos de Barona 1993; Teghtsoonian 1974; White 1985). Prominence was determined from the citation data reported in the Thomson-Reuters Journal Citation Reports (Institute for Scientific Information 2007). Because relying solely on journal impact factors to determine prominence can be problematic (Moed and van Leeuwen 1996; Opthof 1997), I used multiple citation indicators in addition to the impact factor, including the five-year impact factor, immediacy index, cited half-life, Eigenfactor score, and article influence score (for calculation methods, see Bergstrom 2007; Institute for Scientific Information 2007; and West et al. 2010). Journals within each subdiscipline were rank-ordered across these variables, and the top two journals from each subdiscipline were included in the present analyses. These journals include: *Developmental Psychology* (*DP*), *Child Development* (*CD*), *Journal of Experimental Social Psychology* (*JESP*), *Journal of Personality and Social Psychology* (*JPSP*), *Journal of Abnormal Psychology* (*JAP*), *Journal of Consulting and Clinical Psychology* (*JCCP*), *Psychophysiology* (*PP*), and *Journal of Cognitive Neuroscience* (*JCN*).

Because the purpose of the present investigation was to provide an updated analysis of the state of psychological research published in prominent outlets, analyses focused on the two most recent issues at the time of data collection. Thus, articles reporting original research with human participants published in the last two issues of the year 2007 were examined for each journal, yielding a total sample of 255 articles. Two issues, rather than one, from each journal were analyzed in order to increase the sample size for each journal. The current research aimed to provide a snapshot of the state of psychology research rather than examine longitudinal trends, and so concurrent issues rather than issues from separate time periods were chosen for analyses. The use of concurrent issues has the advantage of reducing cohort effects, limiting the likelihood of encountering the same author in multiple cases, and allowed for consistent editors across the two issues for each journal. Review articles, theoretical articles, animal research articles, and meta-analysis articles were excluded.

Gender and Racial-Ethnic Information for Editors and Senior Authors

Gender and racial-ethnic information for chief and associate editors and senior authors were obtained either through direct email contact or through email contact with the editor's or author's collaborators. Email respondents indicated their (or their collaborator's) gender and racial-ethnic identity using open-ended responses. In cases where there was no email response, gender and race-ethnicity were determined by viewing photographs on departmental websites. Because the present research was concerned with the representation of historically disadvantaged and underrepresented racial-ethnic groups, racial-ethnic identity responses were coded as either racial-ethnic minority or non-minority. Racial-ethnic minority responses included: Native American, Alaska Native, Asian, Pacific Islander, Black, African American, Hispanic, Latina (o), Middle-Eastern, and bi- or multi- racial-ethnic. Non-minority responses included: White, Caucasian, and of European descent. Gender information was missing for 0% of the editors and 2% of the authors. Racial-ethnic information was missing for 4% of editors and 11% of authors. The percentages of female and racial-ethnic minority editors and authors were calculated using available data; missing data were excluded.

Gender and Racial-Ethnic Information for Participants

Gender and racial-ethnic information for participants was obtained directly from the research articles. Of the 255 articles analyzed, only 86.3% ($n=220$) reported participant gender and only 52.2% ($n=133$) reported participant race-ethnicity. The gender composition of participants was calculated by averaging together the percentage of women participants in each article. The racial-ethnic composition of participants was calculated by averaging together the percentage of participants from each racial-ethnic group for each article (i.e., Native American or Alaskan Native; Asian or Pacific Islander; Black or African American; Hispanic or Latina(o); and White or Caucasian).

Coding Articles for Biased Assumptions

Articles were coded (using a binary yes/no coding system) for whether (a) participant gender or race-ethnicity was acknowledged in the title and/or abstract, (b) a rationale for using participants of the same gender or race-ethnicity was provided, (c) gender or race-ethnicity was discussed as a factor in the discussion section, and (d) results were limited to the social group under investigation. Table 1 provides the coding criteria for each category.

Two undergraduate research assistants and I coded all articles on all variables. To establish inter-rater reliability, we coded approximately 5% of the articles and then thoroughly

discussed any discrepancies and clarified issues related to the coding instructions. As shown in the right column of Table 1, inter-rater reliability for each variable was acceptable. Where disagreements existed, I carefully reanalyzed the discrepant items and found for all items either evidence of the presence of the variable or evidence for the cause of the false alarm.

Results

Gender and Racial-Ethnic Composition of Editors

Hypothesis 1 (i.e., Women and members of racial-ethnic minority groups will continue to be underrepresented as chief and associate editors) was tested by comparing the gender and racial-ethnic composition of chief and associate editors to the gender and racial-ethnic compositions of tenured U.S. psychology faculty, as reported by the APA Center for Workforce Studies (2007), using Chi-Square analyses (see the left side of Table 2). Contrary to Hypothesis 1, members of racial-ethnic minority groups do not appear to be underrepresented as chief and associate editors as compared to the racial-ethnic composition of tenured U.S. psychology faculty. Women also do not appear to be underrepresented as chief and associate editors as compared to the gender composition of tenured U.S. psychology faculty.

Gender and Racial-Ethnic Composition of Senior Authors

Hypothesis 2 (i.e., Women and members of racial-ethnic minority groups will continue to be underrepresented as senior authors) was tested by comparing the gender and racial-ethnic composition of senior authors to the gender and racial-ethnic composition of people who earned a doctoral degree in either developmental, social, clinical, or biopsychology from U.S. universities between 1975 and 2007, as reported by the APA Center for Workforce Studies (2010), using Chi-Square analyses (see the right side of Table 2). Contrary to Hypothesis 2, members of racial-ethnic minority groups do not appear to be underrepresented as senior authors as compared to the racial-ethnic composition of psychology doctorate recipients. Women, however, were underrepresented as senior authors as compared to the gender composition of psychology doctorate recipients, consistent with Hypothesis 2.

Racial-Ethnic Composition of Participants

Hypothesis 3 (i.e., Members of racial-ethnic minority groups will continue to be underrepresented as research participants) was tested by comparing the racial-ethnic composition of participants to the racial-ethnic composition of the U.S. population for each racial-ethnic group, as reported by the U.S.

Table 1 Coding criteria and inter-rater reliability for Hypothesis 5

Coding Category	Coding Criteria	Examples of articles coded as "yes"	Examples of articles coded as "no"	Fleiss' Kappa Coefficient	
				Gender	Race-Ethnicity
Indicated participant gender or race-ethnicity in the title	Coded affirmatively if the title referenced the gender or race-ethnicity of the target group of investigation. The mere presence of words related to gender or race-ethnicity were not considered as acknowledging participant gender or race-ethnicity.	"Insidious dangers of benevolent sexism: Consequences for women's performance"	"Role taking in online 'classrooms': What adolescents are learning about race and ethnicity"	.85	.87
Indicated participant gender or race-ethnicity in the abstract	Same as above, but applied to the abstract rather than title	"…The authors compared the emotional reactions…of depressed and nondepressed European Americans and Asian Americans of East Asian descent to sad and amusing films…"	"…Event-related brain potentials were recorded as participants made race and emotion categorization judgments of Black and White men posing either happy, angry, or neutral expressions…"	.76	.74
Provided a rationale for using members of a particular social group	Coded affirmatively if the authors provided any rationale, regardless of legitimacy. The rationale had to be explicitly stated rather than implied.	"Because of the limited number of Blacks, it was not possible to test a sample of Black children." "The current study involved only female participants and confederates in order to eliminate the possibility that status differences between the genders might complicate social influence processes" "Community violence tends disproportionately to affect young, ethnic-minority men of modest socioeconomic status…This characterization aptly reflected the composition of our sample…"	N/A	.93	.91
Discussed gender or race-ethnicity as a factor in the discussion section	Coded affirmatively if, in the discussion section, the authors discussed how the gender or race-ethnicity of the sample may have influenced results	"Being more dominantly aggressive than girls…boys were more often the bullies." "… it is possible that the sex and racial composition of the groups did not contribute over and above these individual and group effects."	N/A	.76	.70
Limited the generalizability of findings to the gender or racial-ethnic group under investigation	Coded affirmatively if the authors provided statements indicating that results of the study cannot be generalized to other social groups	"…it is critical for future research on adolescent childbearing to collect more information on fathers…" "…it will be important to examine differences in the effects of different types of anger regulation as a function of participants' age, gender, and culture…" "…because our sample consisted primarily of young, male, Hispanic survivors of community violence, our results may not generalize to other populations."	N/A	.87	.89

Census Bureau (2009), using one-sample *t*-tests (see Table 3). Data were transformed using the arcsine transformation before analyses were conducted (Zar 1999). Consistent with Hypothesis 3, people who identified as Native American/Alaska

Table 2 Percentage (and number) of editors and authors, as compared to faculty and doctorate recipients, who identify as racial-ethnic minority, and separately, as women

	Editor Comparison			Author Comparison		
	Chief & Assoc. Eds.	Faculty Members[a]	X^2	Senior Authors	Doctorate Recipients 1975–2007[b]	X^2
Racial-ethnic minority	10.5 (10)	10.5 (230)	.00	15.6 (35)	12.3 (6,221)	2.21
Women	36.4 (36)	39.4 (877)	.37	49.6 (124)	59.3 (31,716)	9.81**

Values are based on available data. Missing data were excluded. Numbers in parentheses represent number of people who identify as racial-ethnic minority (top row) and number of women (bottom row).

[a] Data obtained from APA Center for Workforce Studies (2007).

[b] Data obtained from APA Center for Workforce Studies (2010).

**p<.01.

Native, Black/African American, or Hispanic/Latina(o) were underrepresented as participants as compared to the racial-ethnic composition of the U.S. population. People who identified as Asian/Pacific Islander, however, were marginally overrepresented as participants as compared to the U.S. population. In addition, people who identified as White/Caucasian were not significantly overrepresented in the average sample.

Gender Composition of Participants

Hypothesis 4 (i.e., Women will be unequally represented as participants) was tested by comparing the average percentage of female participants in each article to the percentage of women in the U.S. population using a one-sample t-test. Data were transformed using the arcsine transformation before analyses were conducted (Zar 1999). Results suggest a slight overrepresentation of female participants ($M=$ 54.7%, $SD=$19.13) as compared to the U.S. population (50.9%; U.S. Census Bureau 2009), t (219)=2.25, $p<.03$.

The Presence of Biased Assumptions

Hypothesis 5 (i.e., Assumptions of male and White normativity will continue to be present in psychology research) was

tested in two ways. First, the reporting tendencies of articles that included only male participants were compared to the reporting tendencies of articles that included only female participants using Chi-Square analyses. Due to the small number of articles that included participants of a single racial-ethnic group, I was unable to perform parallel Chi-Square analyses comparing the reporting tendencies of articles that included only White participants to those that included only racial-ethnic minority participants, although I do provide descriptive statistics. Second, the relationship between the gender and racial-ethnic composition of participants and the reporting tendencies of articles was examined.

Presence of Male Normativity

Results partially supported the hypothesis that assumptions of male normativity are prevalent in research articles. As indicated in Table 4, articles using samples that included only men (vs. those including only women) were less likely to indicate participant gender in the article title and marginally less likely to provide a rationale for using participants of only one gender. There was also a non-significant tendency for articles using samples of only men (vs. only women) to inappropriately generalize results to the group not studied and to not

Table 3 Mean racial-ethnic composition of participants per article

Racial-ethnic composition	Test value [a]	df	M (SD)	t
Percent White or Caucasian	66.0	116	66.78 (28.52)	1.04
Percent Racial-Ethnic Minority	34.0	114	32.46 (28.17)	−1.27
Percent Native American or Alaska Native	.8	114	.59 (3.45)	−8.99**
Percent Asian or Pacific Islander	4.4	114	7.22 (16.58)	1.66*
Percent Black or African American	12.3	114	10.21 (16.54)	−5.38**
Percent Hispanic or Latina(o)	15.1	115	8.31 (17.30)	−8.17**

Analyses were conducted after transforming the data using the arcsine transformation (Zar 1999). Mean number of participants per article was 831.

[a] Test values are based on the racial-ethnic composition of the U.S. population (U.S. Census Bureau 2009).

*p<.10. **p<.01.

Table 4 Percentage (and number) of single-gender articles providing certain information

	Participant Gender		X^2 (df=1)
	Female (n=10)	Male (n=9)	
Indicated participant gender in the title	50.0 (5)	.0 (0)	6.11*
Indicated participant gender in the abstract	50.0 (5)	55.6 (5)	.06
Provided rationale for using only one gender	80.0 (8)	33.3 (3)	4.23**
Discussed gender as a factor in the discussion section	40.0 (4)	11.1 (1)	2.04
Limited generalizability to gender under investigation	60.0 (6)	22.2 (2)	2.77

Fisher's Exact Test was used in cases where any cell had less than five counts.

**p<.06. *p<.03.

discuss gender as a factor in the discussion section. The likelihood of indicating participant gender in the abstract, however, did not vary according to the gender of participants.

I also examined the relationship between the percentage of male participants and reporting tendencies for all articles that reported participant gender (N=220). Replicating the results above, the greater the percentage of male participants in a study, the less likely the authors were to indicate participant gender in the title (r=−.19, p<.01) and to provide a rationale for using participants of a particular gender (r=−.13, p<.05). The percentage of male participants was not, however, related to the tendency to indicate participant gender in the abstract (r=.11, p=.11), to discuss gender as a factor in the discussion section (r=−.01, p=.89), or to generalize results to all social groups (r=−.12, p=.08).

Presence of White Normativity

Of the 15 articles that used samples comprised of participants who identify with the same racial-ethnic group, 11 articles used samples comprised only of people who identified as White or Caucasian. The remaining four articles used samples comprised of people who identified as either Chinese, Hispanic/Latina(o), Japanese, or Punjabi Sikh. These four articles were grouped together as representing research that used samples comprised of people who identified with a racial-ethnic minority group.

The descriptive statistics for the two types of articles are presented in Table 5. Although the small sample size did not allow for statistical testing, all percentages are in the predicted direction. Strikingly, none of the articles using samples comprised of people identified as White (n=11) indicated the race-ethnicity of participants in the title, whereas three of the four articles using samples composed of people identified with a racial-ethnic minority group did.

I also examined the relationship between the percentage of White participants and reporting tendencies for all articles that reported participant race-ethnicity (N=117). Consistent with Hypothesis 5, the greater the percentage of White participants in a study, the less likely the authors were to indicate participant ethnicity in the title (r=−.41, p<.001) and abstract (r=−.40, p<.001), to provide a rationale for using participants of a particular racial-ethnic group (r=−.22, p=.02), and to discuss ethnicity as a factor in the discussion section (r=−.24, p<.001). The percentage of people included in a study who identified as White was not, however, significantly related to the tendency to generalize results to all social groups (r=−.15, p=.11).

Discussion

Two primary hypotheses guided the current research. First, it was predicted that women and members of racial-ethnic minority groups continue to be underrepresented as editors, senior authors, and (among members of racial-ethnic minority

Table 5 Percentage (and number) of single race-ethnicity articles providing certain information

	Participant Race-Ethnicity	
	Minority (n=4)	White (n=11)
Indicated participant race-ethnicity in the title	75.0 (3)	.0 (0)
Indicated participant race-ethnicity in the abstract	100.0 (4)	27.3 (3)
Provided rationale for using only one racial-ethnic group	100.0 (4)	45.5 (5)
Discussed race-ethnicity as a factor in the discussion section	75.0 (3)	27.3 (3)
Limited generalizability to group under investigation	75.0 (3)	27.3 (3)

Minority groups include: Chinese, Hispanic/Latina(o), Japanese, and Punjabi Sikh.

groups, but not necessarily women as a group) participants in mainstream psychological research. Second, it was predicted that biased assumptions that consider male and White experience as normative continue to pervade mainstream psychological research. As discussed below, results partially support these hypotheses.

Representation Across the Research Process

Senior Authors and Editors

Contrary to hypotheses, members of racial-ethnic minority groups do not appear to be underrepresented as senior authors or editors as compared to the pool from which to draw authors and editors. In other words, once in positions that afford opportunities to become authors and editors (e.g., doctorate recipients, tenured faculty members), members of racial-ethnic minority groups are just as likely as members of racial-ethnic majority groups to actually become authors and editors. The pathway to becoming a doctorate recipient, however, still seems to contain barriers for members of racial-ethnic minority groups. Only 12.3% of people who earned a psychology doctoral degree between 1975 and 2007 identify with a racial-ethnic minority group (APA, Center for Workforce Studies 2010), which is less than half the percentage of people in the U.S. population who identify with a racial-ethnic minority group (34%; U.S. Census Bureau 2009). It could be argued that the underrepresentation of members of racial-ethnic minority groups in psychology doctoral programs reflects historical barriers to higher education more generally. However, approximately 19% of bachelor degree recipients between 1975 and 2007 identify with a racial-ethnic minority group (National Science Foundation, Division of Science Resources Statistics 2010), which is well above the percentage of psychology doctorate recipients who identify with a racial-ethnic minority group. These figures indicate the need for continued efforts to (a) dismantle barriers to higher education and (b) recruit and retain members of racial-ethnic minority groups into psychology.

Partially supporting predictions, women appear to be underrepresented as senior authors but not as editors, as compared to the pool from which to draw authors and editors. These results suggests that, on the one hand, once in positions that afford opportunities to become authors (e.g., doctorate recipients), women are less likely than their male counterparts to actually become authors. On the other hand, once in positions that afford opportunities to become editors (e.g., tenured faculty member), women are just as likely as men to actually become editors of mainstream psychology journals. The pathway to becoming a tenured faculty member, however, still seems to contain barriers for women. Only 49% of tenure-track psychology professors in 2007 were women, which is well below the percentage of psychology doctorate recipients between 1975 and 2007 who were women (59.3%) (APA, Center for

Workforce Studies 2007, 2010). This discrepancy between doctorate recipients and tenure-track faculty may indicate the need for significant institutional changes in the academy that better serve the needs of women (Park 1996).

Unfortunately, the data do not offer clear explanations for why women are underrepresented as authors. It is possible that female psychology doctorate recipients are less likely than male psychology doctorate recipients to pursue research-oriented careers, both within and outside of academia, which limits the likelihood of publishing in top mainstream journals. Even within academia, women tend to occupy faculty positions that provide less time and resources for conducting research (e.g., lecturer positions, positions at teaching-oriented institutions), which limits the likelihood of publication. Indeed, women represent 70% ($n=58$) of lecturers but only 33% ($n=455$) of full professors in psychology (APA, Center for Workforce Studies 2007). Although these gender distributions may help explain why women are underrepresented as authors, the origins of the gender discrepancy remain unclear. Investigations into the causes of and remedies for the underrepresentation of women as authors are important avenues for future research.

Participants

Results indicated that, consistent with hypotheses, women are unequally represented as participants and, in particular, are over-represented. This pattern may reflect researchers' reliance on undergraduate psychology subject pools for participant recruitment (Henry 2008), which consist primarily of women (National Science Foundation 2009). Indeed, in the current data, the use of undergraduate student samples was related to the percentage of women in the sample ($r=.34$, $p<.001$, $N=218$).

Additionally, results generally supported the prediction that members of racial-ethnic minority groups continue to be underrepresented as participants. In particular, people who identify as American Indian/Alaska Native, Black/African American, or Hispanic/Latina(o) American continue to be underrepresented as research participants in mainstream psychology research. These results imply that continued efforts are needed to include diverse samples of research participants, which is important for uncovering erroneous assumptions and inappropriate generalizations and for furthering our understanding of psychological processes.

Research with more diverse samples, authors, and editors may be represented in journals other than the mainstream journals examined here, such as applied journals and special issues (Graham 1992; Liang et al. 2009; Nagayama Hall and Maramba 2001). It must be noted, however, that the journals examined in the present work publish highly cited basic research in psychology from which subsequent theories and applied research are based. Limiting the diversity of samples, authors, and editors within research published in the most highly cited journals limits the theories and subsequent work

that such research inspires. Of course, research published in specialty journals is often basic research of great theoretical relevance. However, specialty journals tend to have lower impact factors than do the premier mainstream journals (Nagayama Hall and Maramba 2001). Given that impact factors indicate the extent to which journal articles are cited in subsequent research, it can be inferred that specialty journals tend to have less influence on the field as a whole than do prestigious mainstream journals, such as those examined here. In addition, relegating research pertinent to the experiences of women and members of racial-ethnic minority groups to specialty journals (while simultaneously presenting research based on male and White experience as normative in mainstream journals) marginalizes women and members of racial-ethnic minority groups and suggests that their experiences are deviant and non-normative (Reid and Kelly 1994). This practice reinforces the assumption that topics relevant to White men are more important and represent more basic phenomena than topics related to women and members of racial-ethnic minority groups, which are assumed to be more specialized (Denmark et al. 1988; McHugh et al. 1986).

There are, of course, practical challenges for recruiting racially and ethnically diverse samples. Researchers may need to forego convenience samples and go beyond the ivory towers in order to recruit racially and ethnically diverse samples. Sample recruitment can be time consuming and costly, however, and may thus require appropriate funding and support. In addition, members of racial-ethnic minority groups may be unwilling to participate in research, especially if their group has had negative experiences with research in the past (e.g., the unethical treatment of African Americans during the Tuskegee syphilis experiment; see also Smith 1999). These practical challenges, among others, must be addressed in order to increase the racial-ethnic diversity of research samples. Diverse experiences need to be included in psychological research in order to uncover erroneous assumptions and inappropriate generalizations and to further our understanding of psychological processes.

Reporting Rates

The reporting of participant demographics in psychological research needs improvement. Whereas the reporting of participant gender has reached relatively high percentages (86.3% in the current analysis), the reporting of participant race-ethnicity is lacking (only 52.3% in the current analysis). These reporting rates are comparable to the reporting rates found by others in regard to gender (e.g., Gannon et al. 1992) and race-ethnicity (e.g., Behl et al. 2001). In other words, the reporting of participant demographics does not seem to have improved over the years. To increase reporting rates of participant demographics, it may be useful for journals to explicitly state in their instructions to authors that the inclusion of participant demographics is necessary for submissions. Of the journals

examined here, the two journals that included such a statement in their instructions (DP and JCCP) were also the two journals that had high rates for reporting participant gender (>86%, $n=$ 60) and race-ethnicity (>82%, $n=57$). These variables are necessary for assessing the representativeness of psychological research and the generalizability of findings. Experiences vary across social groups due to existing social structures and power relations, and these differing experiences influence behavior, thoughts, and feelings. Recognizing participants' social locations and considering how those social locations may influence the variables under investigation is important to the progress of psychological science.

Importantly, social groups are not homogenous entities but rather are heterogeneous in terms of gender, race-ethnicity, social class, geographical location, sexual orientation, disability, age, etc. These intersecting identities also need to be reported to the extent that they are theoretically relevant to the psychological phenomena under investigation. Attending to within-group variation helps break down stereotypes and can provide richer knowledge by illuminating underlying mechanisms that influence psychological processes (Phinney 1996). For example, race-ethnicity and socioeconomic status are often confounded, and so it is important to report socioeconomic status along with racial-ethnic information in order to disentangle the effects of race-ethnicity and socioeconomic status (Graham 1992). Only 32% of the articles examined here, however, reported both race-ethnicity and socioeconomic information. Ignoring differences between and within social locations renders disadvantaged social groups and their experiences invisible and conceals the privilege experienced by dominant social groups.

The low reporting rates of participant demographics may be due to the dominant methodological paradigm guiding psychological research by promoting the investigation of so-called basic processes that presumably transcend contexts of gender, ethnicity, and social class (Lee 1994; Markus 2008; McHugh et al. 1986; Norenzayan and Heine 2005; Parlee 1979; Riger 1992; Rozin 2001; Sue 1999). These contexts, however, are socially constructed (Fish 1995; Haney Lopez 2000; Helms and Talleyrand 1997; Markus 2008; Smedley and Smedley 2005) and must thus be recognized as potentially influencing social processes and psychological phenomena (Adams et al. 2008; Hunt et al. 2000; Landrine 1995; Markus 2008; McHugh et al. 1986; Parlee 1979; Phinney 1996; Plaut 2010; Reid 1993; Reid and Kelly 1994; Riger 1992; Tavris 1993). Ignoring these contextual variables sets the stage for perpetuating androcentric and ethnocentric theories by assuming similar experiences and meanings across different social locations. In particular, as detailed below, reporting tendencies in research articles continue to assume that the experiences of men and Whites represent the default human experience without considerations of how their specific social location in a privileged dominant group can influence psychological processes and phenomena.

Prevalence of White, Male Normative Assumptions

Consistent with predictions, the reporting tendencies within mainstream psychological research reflect assumptions that men and Whites are more typical members of the category "human" than are women and members of racial-ethnic minority groups. These results suggest that White and male participants are considered to be raceless and genderless and that race-ethnicity and gender have no influence on the behavior and cognitions of White or male participants. This notion promotes racial-ethnic and gender disparities by rendering White male privilege invisible and by othering and marginalizing non-White and non-male groups. The prevalence of male and White normativity in psychological science limits the extent to which mainstream psychology can be considered truly inclusive of women and members of racial-ethnic minority groups.

In light of these findings, continued efforts are needed to reduce biased assumptions that marginalize women and members of racial-ethnic minority groups. In particular, careful attention must be paid to the reporting and discussion of gender and race-ethnicity in studies using participants of the same social group, particularly when that social group is privileged (e.g., Whites, men). Articles using participants of the same gender or racial-ethnic group should always indicate participant gender and race-ethnicity in the title and abstract to avoid misrepresentations of data. Furthermore, not providing a rationale for limiting the sample to men or Whites implies that these social groups are normative and need no explanation, whereas women and members of racial-ethnic minority groups are different and need to be explained (see also Hegarty and Buechel 2006). Rationales should thus always be included when using participants of the same social group.

Limitations

There are some limitations to the current work. One limitation is that only two journals from only four subdisciplines were analyzed, and so results may be applicable only to those particular journals and subdisciplines. However, the subdisciplines and journals were chosen based on their apparent representativeness of mainstream psychology; that is, the subdisciplines were chosen based on their relative size in the field (constituting 50% of all psychology doctoral degrees in the U.S.; APA, Center for Workforce Studies 2010), and the journals were chosen based on their prominence within each subdiscipline. Still, analysis of other subdisciplines and journals may yield different results, and future research should investigate the representation of women and members of racial-ethnic minority groups and the presence of normative assumptions in other subdisciplines.

Another limitation is that the research examined articles published in 2007, and so the results may no longer be relevant for today. There are a few reasons, however, to expect that substantial change has not yet occurred. First, many of the trends reported here are similar to trends reported almost two decades ago. For example, Graham (1992) reported the underrepresentation of African Americans in research conducted in 1970–1990, and Ader and Johnson (1994) reported the presence of male normativity in research conducted in 1990. Given that these trends do not seem to have disappeared over the course of nearly two decades, it is unlikely that they have disappeared since 2007. Second, there have been new diversity initiatives set forth within the last few years, including the establishment of two task forces in 2005 to enhance diversity and to implement multicultural guidelines (APA, Office of Ethnic Minority Affairs 2005, 2008). The presence of these diversity initiatives implies that issues of representation have not yet been resolved, and I would expect these initiatives to affect change over the course of many years, not just a few years. Change is, unfortunately, difficult and slow (APA, Office of Ethnic Minority Affairs 2005). Third, the mission statements and policies of the journals examined here have changed little since 2007. Notably, *DP* and *JCCP* remain the only journals that explicitly state in the instructions to authors to report participant demographics. It is thus unlikely that articles published today would vary considerably from articles published in 2007.

A final limitation to the current work is that analyses at the intersection of gender and race-ethnicity were not included. Unfortunately, the gender and racial-ethnic information available for faculty, doctorate recipients, and participants did not allow for intersectional analyses because the available data did not cross gender and race-ethnicity. Intersectional analyses are important because the meaning of one's social location varies according to other social dimensions that intersect to create distinctive social realities (Collins 1990; Crenshaw 1995; Spelman 1988; Shields 2008). For example, racial-ethnic minority women experience qualitatively different forms of oppression compared to White women and racial-ethnic minority men (e.g., Cortina et al. 2002). It is important for data to be collected at the intersection of gender and race-ethnicity so that future research can examine trends that vary across gender and across race-ethnicity. Such analyses are crucial for fully understanding the state of gender and racial-ethnic representation within psychology and for developing recommendations and interventions.

Conclusion

Mainstream psychology has not yet reached social equity, and women and members of racial-ethnic minority groups continue to be marginalized within the field. The dearth of diversity within mainstream psychology and the continued acceptance of Whites' and men's experiences as the normative standard only serve to hinder scientific progress. Full inclusion of all

social groups is crucial for the progress of psychological science and for enhancing the relevance of psychological research. The recognition of biased assumptions and other obstacles are an important first step toward increasing diversity, and efforts to achieve diversity representation should continue to be supported and funded.

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