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Polyculturalism and Sexist Attitudes: Believing Cultures are Dynamic Relates to Lower Sexism

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Abstract

In cultural contexts in which sexist beliefs are considered traditional, shifts toward gender equality represent an example of cultural change. Polyculturalism is defined as the belief that cultures change constantly through different racial and ethnic groups' interactions, influences, and exchanges with each other and, therefore, are dynamic and socially constructed rather than static. Thus, polyculturalism may involve openness to cultural change and, thereby, would be expected to be associated with lower sexist attitudes. Four studies (both cross-sectional and longitudinal) with undergraduate and community samples in the Northeastern United States tested whether endorsement of polyculturalism is inversely associated with sexism, above and beyond potentially confounding belief systems. Across studies, for both women and men, endorsement of polyculturalism was associated with lower sexist attitudes for two classes of sexism measures: (a) attitudes toward the rights and roles of women and (b) ambivalent sexist attitudes toward women. Associations remained significant while controlling for potentially confounding variables (colorblindness, conservatism, egalitarianism, gender and ethnic identity, gender and race essentialism, multiculturalism, right-wing authoritarianism, and social dominance orientation). Greater openness to criticizing one's culture mediated polyculturalism's association with attitudes toward the rights and roles of women but not with ambivalent sexist attitudes toward women. Studying polyculturalism may provide unique insights into sexism, and more work is needed to understand the mechanisms involved.

Keywords

authoritarianism; beliefs; cultural dynamics; cultural sensitivity; dominance; egalitarianism; gender; human sex differences; multiculturalism; openness; polyculturalism; self-concept; sex role attitudes; sexism

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Important gains in numerous countries toward gender equality demonstrate that gender-related cultural beliefs, roles, and policies can be challenged and altered. In cultural contexts in which sexist beliefs are considered traditional, shifts toward gender equality represent an example of cultural change and highlight that openness to cultural change may contribute to reducing sexism. Cultural psychologists, along with cross-disciplinary scholars, are increasingly examining cultures as complex, dynamic processes rather than as static, stable, and separate entities (Chiu & Hong, 2006, 2007; Hong, Morris, Chiu, & Benet-Martinez, 2000). The purpose of our studies is to explore this linkage between individuals' beliefs about the dynamics of culture (polyculturalism) and endorsement of sexism.

Understanding what factors contribute to sexist attitudes remains an important area of inquiry in the United States and worldwide because women continue to face overt and covert gender bias and discrimination in various domains, including being paid less than men, being underrepresented in fields such as engineering, and experiencing sexual harassment (Diekman, Brown, Johnston, & Clark, 2010; Pratto & Walker, 2004; Settles, 2004; Settles, Harrell, Buchanan, & Yap, 2011). Further, experiences with sexism have many negative social, psychological, academic, career, and health consequences (Pratto & Walker, 2004; Rosenthal & Levy, 2010b; Settles, 2004; Swim, Aikin, Hall, & Hunter, 1995; Vernet, Vala, Amâncio, & Butera, 2009). At the same time, there have been important gains for women toward equality (e.g., gaining the right to vote, serving in combat missions, and being increasingly represented in high-powered and leadership positions), which demonstrate that cultural beliefs and policies can be changed by public outcries and changing societal roles (Diekman, Eagly, Mladinic, & Ferreira, 2005; Vernet et al., 2009). Such gains highlight the importance of studying not only cultural change itself but also individuals' beliefs about cultural change (polyculturalism) for understanding sexism.

Consistent with the increasing emphasis in recent research on cultures as dynamic and changing, Rosenthal and Levy (2010a, 2012, 2013) have examined endorsement of polyculturalism, defined as the belief that different racial and ethnic groups are constantly interacting and influencing each other's cultures. This work in psychology on polyculturalism as a belief was built on the work of historians Kelley (1999) and Prashad (2001, 2003) who introduced polyculturalism by writing about historical evidence of the ways that racial and ethnic groups have interacted and influenced each other's cultures throughout history. To test polyculturalism from a psychological perspective, Rosenthal and Levy (2010a, 2012) developed an individual difference measure of endorsement of polyculturalism. They found that among racially/ethnically diverse samples, polyculturalism was associated with more positive attitudes toward people from other racial/ethnic backgrounds and racial/ethnic diversity, even while controlling for other potentially confounding beliefs.

In some of his work, Prashad (2001) suggested a potential link between endorsement of polyculturalism and lower sexism. Prashad (2001) argued that in cultural contexts in which sexist or other oppressive beliefs are considered traditional, viewing cultures as separate and static may serve to justify or maintain those sexist beliefs (also see McKerl, 2007). Specifically, Prashad (2001, p. xi) writes that if we misunderstand the history of cultures and believe that cultures are separate, static, and belong solely to individual racial/ethnic groups,

then “We’d have to accept homophobia and sexism, class cruelty and racism, all in the service of being respectful to someone’s perverse definition of a culture.” Believing that cultures are separate and do not change over time may reduce openness to possible cultural change and increase the desire to preserve what are perceived as “traditional” parts of one’s culture, even if beliefs in a cultural context include unchallenged discrimination, such as toward women. However, polyculturalism—a belief that cultures interact, influence each other, and thereby change over time—may relate to increased openness to cultural change and responsiveness to criticisms of or calls for change in some elements of a culture that are oppressive of groups like women. And, because of this potential increased openness to cultural change and criticism of some elements of a culture, we expect polyculturalism to be associated with lower sexism.

Across several decades of research on sexism, sexist attitudes have been operationalized with a variety of measures. We draw on the integrative framework recently outlined by Moradi and Parent (2013) to focus on and distinguish between two classes of sexism measures that have been used extensively and represent two key aspects of sexist attitudes in the United States: (a) attitudes toward the rights and roles of women and men and (b) ambivalent sexist attitudes toward women and men. Attitudes toward equal rights and the roles and responsibilities of women and men involve attitudes about whether women and men should be treated equally and given equal opportunities as well as attitudes about the types of relationship, family, career, or societal roles and responsibilities to which women versus men should conform. This class of attitudes is central to understanding sexism by representing a range of sexist attitudes, and, therefore, it has the largest number of measures created in past work. Thus, we operationalize this class of attitudes with multiple measures to build on past work, capitalize on strengths, and mitigate limitations across measures and encompass the range of attitudes included in this class.

Specifically, we employed the Attitudes Toward Women Scale (Spence & Helmreich, 1972), which measures attitudes about the roles to which women should conform in romantic relationships, families, communities, and their careers. The Attitudes Toward Women Scale is regarded as the most widely used measure of rights and roles, although it is criticized for shortcomings such as its inability to differentiate between modern and traditional sexism and more liberal attitudes (see Moradi & Parent, 2013). To address this limitation, we also use Swim, Aikin, Hall, and Hunter’s (1995) separate measures of modern and old-fashioned sexism, which assess denial of continued sexist discrimination in society and resentment or antagonism toward women’s demands for equal rights (modern) as well as more traditional beliefs about the roles women and men should assume and the intellectual abilities of women (old-fashioned). Given the importance of modern sexism to understanding current sexist attitudes, we also examine the neosexism measure—which, similar to the modern sexism scale, measures denial of continued sexist discrimination in society and resentment or antagonism toward women’s demands for equal rights as well as societal efforts to create more gender equality (Tougas, Brown, Beaton, & Joly, 1995). Finally, to fully capture this larger class of sexism measures, we examine a measure of attitudes toward feminism and women’s rights, which in particular assesses support for feminist movements and women’s rights to gender equality in the public sphere—such as in politics, careers, and education (Vernet et al., 2009).

Turning to the second general class of sexist attitudes, ambivalent sexist attitudes toward women are comprised of both hostile and benevolent sexist attitudes—two forms of sexist attitudes thought to work together to subordinate women (see Glick & Fiske, 2011). Hostile sexism involves blatant prejudicial and hostile attitudes toward women who assume nontraditional roles or claim to experience discrimination. Benevolent sexism involves stereotyping women in a way that some may think of "positively" but relates to paternalistic expectations that women need to be taken care of and protected by men. Ambivalent sexist attitudes toward women have been widely assessed in the United States, as well as internationally, using Glick and Fiske's (1996) Ambivalent Sexism Inventory, comprising measures of both hostile and benevolent sexism. Because of its wide use and because it is the main measure within this class of sexism measures, we used it in the current investigation.

Building on the past work and theory reviewed, we aimed to test several hypotheses: (a) individual differences in endorsement of polyculturalism are inversely associated with individual differences in sexist attitudes across two classes of sexism measures (attitudes toward the rights and roles of women and ambivalent sexist attitudes toward women), even while controlling for other relevant and potentially confounding beliefs; (b) these associations between polyculturalism and sexist attitudes are consistent across women and men; and (c) openness to criticizing one's culture mediates the associations between polyculturalism and sexist attitudes. Additionally, because correlates of sexist attitudes are often studied separately for women and men (Glick & Fiske, 1996; Tougas et al., 1995; Vernet et al., 2009) and past research has found mean gender differences in sexist attitudes (Glick & Fiske, 1996; Spence & Hahn, 1997), in addition to testing gender as a potential moderator of the associations between polyculturalism and sexist attitudes, we also test for mean gender differences in each study. Table 1 provides a summary of the four studies.

Study 1

To test in Study 1 whether polyculturalism has a unique association with sexism, we examined the associations of polyculturalism with established measures of attitudes toward the rights and roles of women (neosexism, attitudes toward women, and attitudes toward feminism and women's rights), while controlling for five potentially confounding variables (authoritarianism, both race and gender essentialism, and both ethnic and gender identity). Right-wing authoritarianism (RWA) involves submission to traditional, established, and legitimized authorities in society, hostility toward those who go against those authorities, and being highly conventional (Altemeyer, 1988). RWA has a long history of being related to negative attitudes toward women (Christopher & Mull, 2006; Sibley, Wilson, & Duckitt, 2007), and prior work has shown RWA to be negatively associated with polyculturalism (Rosenthal & Levy, 2012). In our first study, we controlled for RWA to test that RWA is not a confounding variable in the relationship between polyculturalism and sexism.

Essentialism—which is generally a belief that social categories are fixed, inherent, and unchanging entities—has long been theorized to be related to negative attitudes toward marginalized groups including women, and it is positively related to RWA (Haslam, Rothschild, & Ernst, 2002; see Allport, 1954). Past work has a used a variety of measures of

essentialism, including a general measure (Haslam et al., 2002), although essentialism measures specific to particular groups (e.g., about race) tend to be better predictors of prejudice toward those groups (Haslam & Levy, 2006; No et al., 2008). Therefore, we included both a gender essentialism measure and a race essentialism measure, expecting polyculturalism to explain unique variance in sexism after controlling for both.

We also included a measure of ethnic identity attachment (affective commitment or belonging to one's ethnic group) and behavioral involvement (extent of engagement in behaviors related to one's ethnic group; see Ashmore, Deaux, & McLaughlin-Volpe, 2004, for fuller description of dimensions of collective identity). Because ethnic identity has been found in past work to be related to beliefs about racial/ethnic groups and diversity (Verkuyten, 2005), it could be relevant to endorsement of polyculturalism or openness to criticizing one's own culture and thus work as a potential confounding variable. Additionally, we controlled for gender identity importance (subjective amount of importance given to gender identity in one's overall sense of self) and attachment (affective commitment or belonging to one's gender group) because gender identity has been found to play an important role in gender-related beliefs and behaviors (Settles, 2004, 2006).

Method

Participants and Procedure—A total of 171 (107 women, 64 men; M_{age} = 19.91, standard deviation [*SD*] = 3.15, range = 18–49) undergraduates (82 Asian, 63 White, 12 Latino, 6 Black American, and 8 Other or Multiracial/ethnic; 118 born in the United States, 53 born outside the United States; 160 straight/heterosexual, 2 gay/lesbian, 5 bisexual, 4 refused) in Psychology classes at a mid-sized public university in the Northeastern United States completed an online survey. This survey was part of the department's online Mass Testing survey and so Introduction to Psychology students were given the option by the department to participate in the overall Mass Testing survey in exchange for credit toward their subject pool participation requirement.

For all studies, measures are described in the order presented to participants, and the items of measures with more than 1 item were averaged to create composite scores. Table 2 displays means, *SD*s, and Cronbach's αs for all measures in all studies.

Polyculturalism—Participants completed a 5-item measure, rated from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of polyculturalism (e.g., "Different cultural groups impact one another, even if people in those groups are not completely aware of the impact"; Rosenthal & Levy, 2012). All items were designed to be neutral in valence by not focusing on positive or negative aspects of interactions between groups. Across four studies (Rosenthal & Levy, 2012), factor analyses with polyculturalism, multiculturalism, colorblindness, and assimilation (belief that members of non-dominant cultural groups should conform to the dominant culture) found polyculturalism to be a distinct factor. In terms of validity, across studies, scores on this measure of polyculturalism have yielded negative associations with social dominance orientation (SDO), conservatism, and RWA as well as yielded positive associations with multiculturalism (Rosenthal & Levy, 2012;

Rosenthal, Levy, & Moss, 2012). It has also demonstrated good internal consistency reliability across studies (αs > .80).

RWA—Participants completed an established 8-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of RWA (e.g., "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs"; Sibley, Harding, Perry, Asbrock, & Duckitt, 2010) that includes items drawn from the original 30-item measure of RWA (Altemeyer, 1996). Past work has found good internal consistency reliability for this 8-item version (α > .70), and in terms of validity, it has been positively associated with SDO and negatively associated with openness to experience—similar to the longer version of RWA (Sibley et al., 2010).

Race and Gender Essentialism—Participants completed the 4 subscale items assessing race essentialism, using ratings from 1 (*Strongly disagree*) to 6 (*Strongly agree*), from the 8-item lay theory of race scale (e.g., "To a large extent, a person's race biologically determines his or her abilities and traits"; No et al., 2008), which has good internal consistency reliability (αs > .80) and in terms of validity has been positively associated with other measures of essentialism and entity theory (No et al., 2008). This measure of race essentialism was modified for our study to create a 4-item measure, using ratings from 1 (*Strongly disagree*) to 6 (*Strongly agree*), of gender essentialism (e.g., "To a large extent, a person's gender biologically determines his or her abilities and traits").

Ethnic Identity Attachment and Behavioral Involvement—Participants completed an established 6-item measure, using ratings from 1 (*Strongly disagree*) to 5 (*Strongly agree*) of ethnic identity that assesses ethnic identity attachment and behavioral involvement (e.g., "I have a strong sense of belonging to my own ethnic/racial group"; Phinney & Ong, 2007). Past work has found good internal consistency reliability (α > .80), and in terms of validity, this measure has been positively associated with longer measures of ethnic identity (Phinney & Ong, 2007).

Gender Identity Importance and Attachment—Participants completed an established 8-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of gender identity, which assesses gender identity importance and attachment (e.g., "I have a strong sense of belonging to other people of my gender"; Settles, Jellison, & Pratt-Hyatt, 2009). Past work has found good internal consistency reliability (αs > .70), and it was developed based on the Sellers, Rowley, Chavous, Shelton, and Smith's (1997) Multidimensional Inventory of Black Identity centrality subscale (Settles et al., 2009).

Neosexism—Participants completed an established 11-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of neosexism (e.g., "Discrimination against women in the labor force is no longer a problem in the United States"; Tougas et al., 1995). Past work has found good internal consistency reliability (α > .70), and in terms of validity, this measure has been positively associated with old-fashioned sexism and negatively associated with reactions to affirmative action for women (Tougas et al., 1995).

Attitudes Toward Women—Participants completed an established 15-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of negative attitudes toward women (e.g., "Women should worry less about their rights and more about becoming good wives and mothers"; Spence & Hahn, 1997). Past work has found good internal consistency reliability ($\alpha > .80$), and in terms of validity, this measure has been positively associated with longer versions of the same measure (Spence & Hahn, 1997).

Attitudes Toward Feminism and Women's Rights—Participants completed an established 8-item measure, using ratings from 1 (*Not at all*) to 13 (*Completely*), of attitudes toward feminism and women's rights (e.g., "Do you think you are in favor of equal wages for men and women?"; Vernet et al., 2009). Past experimental work using these items as outcomes has found sufficient internal consistency reliability ($\alpha > .60$; Vernet et al., 2009).

Results and Discussion

Table 3 displays results of regression analyses as well as bivariate correlations of all variables with the three outcome measures of sexism. We conducted regression analyses—including polyculturalism, RWA, race and gender essentialism, ethnic identity attachment and behavioral involvement, and gender identity importance and attachment as simultaneous predictors—and with neosexism, attitudes toward women, and attitudes toward feminism and women's rights as outcomes. Polyculturalism was associated with lower neosexism, less negative attitudes toward women, and more positive attitudes toward feminism and women's rights. Also, RWA and gender essentialism were positively associated with neosexism and negative attitudes toward women, and ethnic identity attachment and behavioral involvement was negatively associated with neosexism and negative attitudes toward women as well as positively associated with positive attitudes toward feminism and women's rights. The results of our first study support our hypothesis that polyculturalism is associated with lower sexist attitudes (across different measures of rights and roles) while controlling for potentially confounding variables.

Using *t*-tests, we found that as expected, women reported lower neosexism, $t(169) = -3.15$, $p = .002$, less negative attitudes toward women, $t(169) = 3.57$, $p < .001$, and more positive attitudes toward feminism and women's rights than men did, $t(169) = 3.66$, $p < .001$. Women also reported greater RWA than men did, $t(169) = 2.23$, $p = .027$. Because of these gender differences, we tested whether controlling for gender (dummy coded as 1 = *woman* and 0 = *man*) changed the results of the regression analyses, and it did not, supporting our contention that despite gender differences in sexism, the associations of polyculturalism with these measures are independent of those gender differences. We also used moderator regression analyses to test whether gender moderated polyculturalism's associations with sexism, with the interaction term between gender (dummy coded: 1 = *woman* and 0 = *man*) and polyculturalism (centered around mean) included in the model, in addition to the main effects of gender and polyculturalism (see Frazier, Tix, & Barron, 2004). These analyses revealed that gender did not moderate the associations of polyculturalism with the three measures of sexism, supporting our conclusion that these associations are consistent across women and men.

Study 2

In Study 2, we aimed to build on and extend the findings of Study 1 by examining the associations of polyculturalism with other established measures of attitudes toward the rights and roles of women (modern and old-fashioned sexism) and by testing whether openness to criticizing one's culture mediates those associations in a diverse undergraduate sample. Although colorblindness (belief in ignoring group identities and recognizing commonalities across all human beings and/or treating all people as unique individuals) and multiculturalism (belief in importance of recognizing group identities and differences between groups) are not established predictors of sexism, polyculturalism has roots in the same literature as these beliefs. Thus, we aimed to test whether endorsement of polyculturalism is associated with sexist attitudes above and beyond these other beliefs and, in doing so, controlled for them (Rosenthal & Levy, 2010a).

The measures of multiculturalism and colorblindness included in our second study have been used in past research on polyculturalism and measure endorsement of these beliefs with neutral valence, that is, without positive or negative framing. Polyculturalism tends to positively correlate with multiculturalism and have inconsistent (mostly nonsignificant, some positive) associations with colorblindness (Rosenthal & Levy, 2012; Rosenthal et al., 2012). Despite these associations, polyculturalism has consistently been related to intergroup attitudes while controlling for multiculturalism and colorblindness, and it has been found to be a distinct belief from these others in factor analyses (Rosenthal & Levy, 2012; Rosenthal et al., 2012).

Method

Participants and Procedure—A total of 265 (157 women, 108 men; M_{age} = 19.09, *SD* = 2.10, range = 19–41) undergraduates (106 White, 103 Asian, 21 Latino, 19 Black American, and 16 Other or Multiracial/ethnic; 203 born in the United States, 62 born outside the United States) in Introduction to Psychology classes at a mid-sized public university in the Northeastern United States completed an online survey. This survey was part of the department's online Mass Testing survey, and Introduction to Psychology students were given the option to participate in the overall Mass Testing survey in exchange for credit toward their subject pool participation requirement. Polyculturalism was measured the same way as in Study 1.

Multiculturalism—Participants completed a 5-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of multiculturalism (e.g., "There are differences between racial and ethnic groups, which are important to recognize"; Rosenthal et al., 2012; Rosenthal & Levy, 2012). Multiculturalism has been defined and measured in different ways in different studies. This measure assesses the form of multiculturalism involving a belief in recognizing differences among racial and ethnic groups, and all items are framed neutrally (Rosenthal & Levy, 2010a). Past work has found good internal consistency reliability (αs > .70), and in terms of validity, this measure has been positively associated with polyculturalism as well as interest in and appreciation for diversity (Rosenthal & Levy, 2012).

Colorblindness—Participants completed a 5-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of colorblindness (e.g., "All human beings are individuals and therefore race and ethnicity are not important"; Rosenthal et al., 2012; Rosenthal & Levy, 2012). Colorblindness has also been defined and measured in different ways in different studies. This measure assesses multiple forms of colorblindness, including beliefs in attending to unique individuals' qualities as well as commonalities across groups, and all items are framed neutrally (Rosenthal & Levy, 2010a). Past work has found good internal consistency reliability (αs > .70), and in terms of validity, this measure has been negatively associated with multiculturalism (Rosenthal & Levy, 2012).

Openness to Criticizing One's Culture—Participants completed a 3-item measure, using ratings from 1 (*Strongly disagree*) to 7 (*Strongly agree*), of openness to criticizing one's culture (e.g., "Although my culture's traditions are important to me, I think that it is okay for people to criticize traditions that might be unfair or discriminate against some groups of people [e.g., traditions that discriminate against women]"; Rosenthal et al., 2012). Past work has found sufficient internal consistency reliability (αs ≥ .60), and in terms of validity, this measure has been positively associated with endorsement of polyculturalism and negatively associated with sexual prejudice (Rosenthal et al., 2012).

Modern Sexism—Participants completed an established 8-item measure, using ratings from 1 (*Strongly disagree*) to 5 (*Strongly agree*), of modern sexism (e.g., "Discrimination against women is no longer a problem in the United States"; Swim et al., 1995). Past work has found good internal consistency reliability (αs ≥ .70), and in terms of validity, this measure has been negatively associated with humanitarianism-egalitarianism (Swim et al., 1995).

Old-Fashioned Sexism—Participants completed an established and validated 5-item measure, using ratings from 1 (*Strongly disagree*) to 5 (*Strongly agree*), of old-fashioned sexism (e.g., "Women are generally not as smart as men"; Swim et al., 1995). Past work has found sufficient internal consistency reliability (αs ≥ .60), and in terms of validity, this measure has been negatively associated with humanitarianism-egalitarianism (Swim et al., 1995).

Results and Discussion

Table 4 displays results of regression analyses as well as bivariate correlations of all variables with both modern and old-fashioned sexism. We conducted two regression analyses to examine the associations of polyculturalism with modern and old-fashioned sexism, controlling for multiculturalism and colorblindness. Consistent with hypotheses, polyculturalism was the only variable associated with lower modern and old-fashioned sexism.

Next, we used bootstrap analyses (MEDIATE macro; Preacher & Hayes, 2008) to test if openness to criticizing one's culture mediates the association of polyculturalism with the class of sexist attitudes focused on rights and roles of women, represented with the modern and old-fashioned sexism measures. In these analyses, there is evidence of mediation if the

confidence intervals (CIs) for the estimated indirect effect do not include zero. With the same controls as in the regression analyses, bootstrap analyses indicated significant mediation for both old-fashioned sexism (Indirect Effect $B = -.04$, standard error [*SE*] = .02, 95% CI: [−.08, −.01]), and modern sexism (Indirect Effect $B = -.03$, $SE = .01$, 95% CI: [−.06, −.01]). Results support the hypothesis that openness to criticizing one's culture mediates the associations of polyculturalism with modern and old-fashioned sexism.

Furthermore, *t*-tests revealed that, as expected, men reported greater modern, $t(263) = -2.46$, $p = .014$, and old-fashioned, $t(263) = -5.23$, $p < .001$, sexism than women did. Using the same methods as used in Study 1, we found that controlling for gender did not change the results of the regression analyses, and gender did not moderate the associations of polyculturalism with modern or old-fashioned sexism.

Study 3

With Study 3, we sought to extend Study 1's and Study 2's findings using a community sample of adults and other established measures of both classes of sexism (attitudes toward feminism and women's rights for attitudes toward rights and roles of women; hostile and benevolent sexism for ambivalent attitudes toward women). We tested openness to criticizing one's culture as a mediator. Multiculturalism and colorblindness are beliefs that have been conceptualized and measured in different ways by different researchers, and there are different forms of these beliefs that have been identified in the literature (see Rosenthal & Levy, 2010a, for description of measures and forms of colorblindness and multiculturalism). Thus, to more thoroughly address the hypothesized uniqueness of polyculturalism, we included additional measures of multiculturalism and colorblindness in our third study as well as both measures used in Study 2.

These added measures of multiculturalism and colorblindness (taken from Ryan, Hunt, Weible, Peterson, & Casas, 2007) are framed positively in the sense that they assess the extent to which people believe that taking one of these perspectives can improve intergroup relations. The additional measure of colorblindness addresses aspects about unique individuals' qualities and commonalities across groups, similar to the measure from Study 2, but the additional measure of multiculturalism addresses aspects about unique contributions of racial and ethnic groups in addition to important differences between groups, which is the sole aspect addressed by the measure from Study 2. Furthermore, SDO (support for group hierarchy and social inequalities) and conservatism (belief in keeping traditional aspects of society, most often associated with right-wing beliefs in the United States in contrast to more liberal or left-wing beliefs) have been found to be positively associated with sexism (Christopher & Mull, 2006; Pratto, Sidanius, Stallworth, & Malle, 1994) and negatively associated with polyculturalism (Rosenthal & Levy, 2012; Rosenthal et al., 2012). We therefore controlled for SDO and conservatism as potentially confounding variables. Finally, we controlled for ethnic identity attachment and behavioral involvement.

Method

Participants and Procedure—A total of 142 (75 women, 67 men; $M_{age} = 29.58$, $SD = 11.59$, range = 18–67) adults (81 White, 15 Latino, 13 Black, 11 Asian American, and 22

Other or Multiracial/ethnic; 141 born in the United States, 27 outside the United States, 1 refused; 120 straight/heterosexual, 5 gay/lesbian, 5 bisexual, 12 refused) from numerous towns in Long Island and New York City, New York, completed anonymous surveys in public places (e.g., train stations, malls, parks) and were offered a candy bar for their participation. Participants in public places were approached and asked if they wanted to participate in a short survey about their own attitudes, and if they were interested, they gave consent before participation. The survey included three measures used in our previous studies: polyculturalism (from Study 1 appeared first in the survey), openness to criticizing one's culture (from Study 2 followed our measure of ethnic identity), and attitudes toward feminism and women's rights (from Study 1 appeared last).

Multiculturalism—Participants completed the same multiculturalism measure from Study 2. In addition, participants completed another established 4-item measure of multiculturalism, using a scale from 1 (*not likely*) to 7 (*likely to improve relations between groups*). This measure assesses multiple forms of multiculturalism, including beliefs in recognizing differences between racial/ethnic groups and appreciating societal contributions of different racial/ethnic groups. Also, items in this measure are framed positively and focus on the extent to which people believe that adopting this belief can improve intergroup relations. Participants rate the extent to which they feel each stated strategy would improve intergroup relations in the United States (e.g., "Emphasizing the importance of appreciating group differences between ethnic groups"; Ryan et al., 2007). Past work has found good internal consistency reliability ($\alpha > .70$). In terms of validity, this measure has been positively associated with other measures of multiculturalism, as well as polyculturalism and interest in and appreciation for diversity, and it has been negatively associated with assimilation and SDO (Rosenthal & Levy, 2012; Ryan et al., 2007).

Colorblindness—Participants completed the same colorblindness measure from Study 2. In addition, participants completed another established 4-item measure of colorblindness, using a scale from 1 (*not likely*) to 7 (*likely to improve relations between groups*). This measure, similar to the measure of colorblindness from Study 2, assesses multiple forms of colorblindness, including beliefs in attending to unique qualities of individuals and commonalities across racial/ethnic groups. Items in this measure are framed positively and focus on the extent to which people believe that adopting this belief can improve intergroup relations. Participants rate the extent to which they feel each stated strategy would improve intergroup relations in the United States (e.g., "Recognizing that all people are basically the same regardless of their ethnicity"; Ryan et al., 2007). Past work has found sufficient internal consistency reliability ($\alpha s > .60$), and in terms of validity, this measure has been negatively associated with social dominance orientation (Rosenthal & Levy, 2012; Ryan et al., 2007).

Social Dominance Orientation—Participants completed an established 16-item measure of SDO, or support for social inequality (e.g., "It's OK if some groups have more of a chance in life than others"; Pratto et al., 1994), using a scale from −3 (*Very negative*) to 3 (*Very positive*). Past work has found good internal consistency reliability ($\alpha s \geq .80$), and in terms of validity, this measure has been positively associated with RWA, racism,

nationalism, and sexism as well as negatively associated with interest in and appreciation for diversity (Pratto et al., 1994; Rosenthal & Levy, 2012).

Conservatism—Using a scale from 1 (*Very liberal*) to 7 (*Very conservative*), participants completed an established, 3-item measure of conservatism on which people were asked to rate their views on three types of issues: "foreign," "economic," and "social" (Pratto et al., 1994). Past work has found sufficient internal consistency reliability (αs ≥ .60), and in terms of validity, this measure has been positively associated with SDO and sexual prejudice (Pratto et al., 1994; Rosenthal et al., 2012).

Ethnic Identity Attachment and Behavioral Involvement—Participants completed an established 12-item measure of ethnic identity attachment and behavioral involvement (e.g., "I have a strong sense of belonging to my own ethnic/racial group"; Roberts et al., 1999), using a scale from 1 (*Strongly disagree*) to 4 (*Strongly agree)*. Past work has found good internal consistency reliability (αs ≥ .80), and in terms of validity, this measure has been positively associated with longer versions of the same measure as well as with self-esteem and optimism (Roberts et al., 1999).

Hostile Sexism—Participants completed an established 11-item measure of hostile sexism from the Ambivalent Sexism Inventory (e.g., "Women seek to gain power by getting control over men"; Glick & Fiske, 1996), using a scale from 0 (*Disagree strongly*) to 5 (*Agree strongly*). Past work has found good internal consistency reliability (αs ≥ .80), and in terms of validity, this measure has been positively associated with many other measures of sexism as well as negatively associated with recognition of discrimination of women (Glick & Fiske, 1996).

Benevolent Sexism—Participants completed an established and validated 11-item measure of benevolent sexism from the Ambivalent Sexism Inventory (e.g., "Women should be cherished and protected by men"; Glick & Fiske, 1996), using a scale from 0 (*Disagree strongly*) to 5 (*Agree strongly*). Past work has found good internal consistency reliability (αs ≥ .70), and in terms of validity, this measure has been positively associated with many other measures of sexism as well as with recognition of discrimination of women (Glick & Fiske, 1996).

Results and Discussion

Table 5 displays results of regression analyses as well as bivariate correlations of all variables with the three sexism measures. We conducted regression analyses, including polyculturalism, multiculturalism (two different measures), colorblindness (two different measures), SDO, conservatism, and ethnic identity attachment and behavioral involvement as simultaneous predictors and with hostile sexism, benevolent sexism, and attitudes toward feminism and women's rights as three outcomes. Polyculturalism was associated with lower hostile and benevolent sexism as well as more support for feminism and women's rights. Also, the measure of multiculturalism focused on group differences (Rosenthal & Levy, 2012) was positively associated and the measure of multiculturalism focused on group differences and contributions of groups (Ryan et al., 2007) was negatively associated with

benevolent sexism; SDO was positively associated with hostile sexism and negatively associated with positive attitudes toward feminism and women's rights; conservatism was negatively associated with positive attitudes toward feminism and women's rights; and ethnic identity attachment and behavioral involvement was positively associated with hostile and benevolent sexism. Thus, these results extend Study 1's and Study 2's findings from college students to a community sample, supporting the associations of polyculturalism with the two classes of sexism measures.

Next, we used the same type of bootstrap analyses as in Study 1 to test our hypothesis that openness to criticizing one's culture would mediate the association of polyculturalism with sexism. With the same controls as in the regression analyses, the bootstrap analyses did not support mediation for hostile sexism (Indirect Effect $B = .02$, $SE = .02$, 95% CI: [−.06, .02]) or benevolent sexism (Indirect Effect $B = .00$, $SE = .02$, 95% CI: [−.04, .03]). But, as hypothesized, the bootstrap analysis for attitudes toward feminism and women's right indicated significant mediation (Indirect Effect $B = .11$, $SE = .07$, 95% CI: [.01, .26]). Thus far, our results support that openness to criticizing one's culture mediates the association of polyculturalism with sexism—but only for attitudes toward the rights and roles of women, not for ambivalent sexist attitudes toward women. Future work is needed to explore what other mechanisms may be involved in these associations and why openness to criticizing one's culture is only a mediator for attitudes toward the rights and roles of women.

Using *t*-tests, we found that as expected, women reported more positive attitudes toward feminism and women's rights than men did, $t(140) = 4.36$, $p < .001$. Using the same methods as in Study 1, we found that controlling for gender did not change the results of the regression or mediation analyses, and gender did not moderate the associations of polyculturalism with the three measures of sexism.

Study 4

Although Studies 1, 2, and 3 consistently showed an association of polyculturalism with lower sexism, all were cross-sectional. In Study 4, we used a longitudinal design with data across two time points, separated by about 1 year, to test if polyculturalism predicts sexist attitudes *prospectively*. In our previous studies, we controlled for RWA and SDO, which tend to relate to more negative intergroup attitudes. In our final study, we control for egalitarianism (a distinct general belief that all people and groups should be treated equally in society). Egalitarianism has been positively associated with intergroup attitudes (Katz & Hass, 1988; Leaper & Brown, 2008; Pratto et al., 1994), that is, in the opposite direction as the negative associations of RWA and SDO. Again, we controlled for ethnic and gender identity importance and attachment.

Method

Participants and Procedure—A total of 489 (274 women, 215 men; $M_{age} = 17.66$, $SD = 0.61$, range = 16–21 at Time 1) entering undergraduates (212 Asian, 189 White, 36 Latino, 28 Black American, and 24 Other or Multiracial/ethnic; 380 born in the United States, 109 born outside the United States; 41 lower class, 140 lower middle class, 213 middle class, 94 upper middle class, 1 wealthy) at a mid-sized public university in the Northeastern United

States completed both a paper-and-pencil survey during their orientation session (before Fall classes began: Time 1) and a follow-up online survey toward the end of the Fall semester of their second year (over 1 year later: Time 2). In the follow-up survey, the first 400 participants to respond were given US$10 each, and all participants were entered into a raffle to win one of 10 cash prizes, each worth US$100. During students' orientation sessions, they were invited to participate in a study, and if they were interested, they gave consent before completing the survey. For the follow-up survey, participants were contacted by e-mail with a link to the online survey.

As in previous studies, the first measure in the Time 1 survey was polyculturalism, but this time using a rating scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*). The last measure in the Time 2 survey was the 5-item subscale focused on denial of continued discrimination from the Modern Sexism Scale, using a rating scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*; Swim et al., 1995).

Egalitarianism—At Time 2, participants completed an established 6-item measure of egalitarianism (e.g., "Everyone should be treated equally because we are all human"; Levy, West, Ramírez, & Karafantis, 2006, adapted from Katz & Hass, 1988), using a rating scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*). Past work has found sufficient internal consistency reliability ($\alpha s \geq .60$), and in terms of validity, this measure has been negatively associated with SDO (Levy et al., 2006).

Ethnic and Gender Identity Importance and Attachment—At Time 2, because of constraints on the length of the survey, participants completed only 2 items chosen for being representative of Study 1's and Study 2's measures for capturing ethnic identity importance and attachment: "I have a strong sense of belonging to my own ethnic/racial group" and "My race/ethnicity is an important part of who I am" (Phinney & Ong, 2007). Similarly, we selected only 2 items from Study 3 to assess gender identity importance and attachment: "I have a strong sense of belonging to other people of my gender" and "My gender is an important part of who I am" (Settles et al., 2009). The two sets of items paralleled each other, and all items were rated on a scale ranging from 1 (*Strongly disagree*) to 6 (*Strongly agree*).

Results and Discussion

Table 6 displays the results of the regression analysis as well as bivariate correlations of all variables with the measure of modern sexism. We conducted a regression analysis, including polyculturalism at Time 1, and egalitarianism, ethnic identity importance and attachment, and gender identity importance and attachment at Time 2 as simultaneous predictors, and with modern sexism at Time 2 as the outcome. Polyculturalism at Time 1 was the only variable associated with lower modern sexism at Time 2 (over 1 year later). These findings corroborate the findings of Studies 1, 2, and 3, showing the consistent association between polyculturalism and lower sexist attitudes. This final study's important and novel contribution is in providing longitudinal evidence of polyculturalism predicting modern sexism over 1 year later. These findings come closer to providing evidence of the direction of effects over time, even when controlling for other potentially confounding variables.

Using *t*-tests, we found that, as expected, women reported lower modern sexism than men did, $t(487) = 4.37$, $p < .001$. Women reported greater egalitarianism, $t(487) = 2.26$, $p = .024$, greater gender identity importance and attachment, $t(487) = 2.49$, $p = .013$, and greater ethnic identity importance and attachment, $t(487) = 2.34$, p .020, than men did. Using the same methods as in Study 1, we found that controlling for gender did not change the results of the regression analysis, and gender did not moderate the association.

General Discussion

Polyculturalism is the belief that different racial and ethnic groups have interacted and influenced each other's cultures over time and continue to do so today, and therefore, it involves understanding that cultures constantly change and are modifiable. Thus, we hypothesized that in cultural contexts in which sexist beliefs are viewed as traditional, endorsement of polyculturalism may lead people to be more open to cultural change and criticism of elements of their own culture that may discriminate against women. This hypothesis was supported across four studies (three cross-sectional and one longitudinal) with racially/ethnically diverse undergraduate students and community adults in the Northeastern United States. We consistently found that polyculturalism relates to lower sexist attitudes—for both women and men as well as across two classes of sexism measures: (a) attitudes toward the rights and roles of women and (b) ambivalent sexist attitudes toward women (see Moradi & Parent, 2013).

Furthermore, in our longitudinal study (Study 4), endorsement of polyculturalism predicted lower modern sexism about 1 year later. Studies 2 and 3 also suggest that greater openness to criticizing one's culture mediates the association of polyculturalism with sexism measures of attitudes toward rights and roles of women but not measures of ambivalent attitudes toward women. Given that polyculturalism is relatively newly studied in the intergroup relations literature, our results importantly supported the hypothesis that polyculturalism accounts for unique variance in sexism, even when controlling for relevant and potentially confounding variables (including colorblindness, conservatism, egalitarianism, gender and ethnic identity, gender and race essentialism, multiculturalism, right-wing authoritarianism, and SDO).

Our findings add to a growing body of work supporting that studying polyculturalism contributes to an understanding of intergroup attitudes. Past research has found that polyculturalism has unique associations with positive attitudes toward people from other racial/ethnic backgrounds and racial/ethnic diversity (Rosenthal & Levy, 2012) as well as attitudes toward gay men and lesbian women (Rosenthal et al., 2012). The current studies report the first known evidence that polyculturalism is associated with sexist attitudes. Taken together, these and prior findings suggest that the more people see dynamic connections among racial and ethnic groups' cultures and understand that cultures change constantly because of their mutual influences, the more positive social attitudes they have (Kelley, 1999; Prashad, 2001; Rosenthal & Levy, 2010a). Like scientists, many lay perceivers recognize that cultures are not static, separate entities but instead are changing and connected to each other, and this understanding is related to more positive social attitudes. The paradigm shift to embracing culture as a dynamic process has deepened our

understanding of culture (Chiu & Hong, 2006, 2007; Hong et al., 2000), and studying polyculturalism demonstrates that individuals' beliefs about cultures have implications for their social attitudes.

Limitations and Future Directions

Given that research on cultural dynamics is flourishing, it is important for future work to examine origins and facilitators of belief in polyculturalism to improve our understanding of how polyculturalism emerges and how it is fostered or challenged in everyday life. Although Study 4 presents longitudinal evidence of the association of polyculturalism with sexism, a limitation of our work is that polyculturalism was not examined across multiple time points, leaving unanswered (a) the question of whether endorsement tends to be stable or changes over time and (b) what the implications of potential changes in endorsement are for intergroup attitudes. Another limitation is that none of our studies experimentally manipulated polyculturalism, leaving unanswered questions about the causality of effects. Similarly, it is difficult to draw conclusions about mediation in cross-sectional studies. More longitudinal work with multiple measurements of polyculturalism and openness to criticizing one's culture over time as well as experimental work is needed to clarify the causal direction of the associations of polyculturalism with sexism and other attitudes as well as mediators. Also, we did not examine the types of coursework and extracurricular activities with which students were involved, which could have an influence on endorsement of polyculturalism as well as sexist attitudes (e.g., Yoder, Fischer, Kahn, & Groden, 2007). Future work may want to examine if courses in women's/gender studies, ethnic studies, sociology, or history (or other fields) influence these beliefs and attitudes over time.

Although past work has demonstrated polyculturalism's association with positive intergroup attitudes among adults across different regions of the United States (Rosenthal & Levy, 2012; Rosenthal et al., 2012), it remains important to test these associations in other samples, both across the United States and in other countries. The current studies were all conducted in the Northeastern United States (in fairly racially/ethnically diverse locations), only one involved a non-student sample, and all the student samples (undergraduate and graduate) were from the same university—points limiting the generalizability of our conclusions. Moreover, it seems intuitive to study polyculturalism across cultures because polyculturalism itself emphasizes cross-cultural contact, interactions, and influences. In the first known cross-cultural examination of polyculturalism, there is evidence that people in the Philippines—a country with a deeply diverse history—endorse polyculturalism and that it is associated with more positive attitudes toward people from other countries as well as immigrants to the Philippines (Bernardo, Rosenthal, & Levy, 2013).

Mechanisms involved in the associations of polyculturalism with sexist attitudes also require further investigation. Our hypothesis that openness to criticizing one's culture mediates the association of polyculturalism with sexism was only supported for multiple measures of attitudes toward the rights and roles of women but not for ambivalent sexist attitudes toward women. Future work should continue to examine mechanisms in the association between polyculturalism and sexism and explore why mechanisms might be different for different classes of sexist attitudes. As highlighted by Moradi and Parent (2013), ambivalent attitudes

toward women and men are a main class of sexism measures, and thus focusing on possible mediators of the association of polyculturalism with ambivalent attitudes and why mechanisms would be different from those for attitudes toward the rights and roles of women are important future areas of inquiry.

Another important limitation of our work is that we only tested openness to criticizing one's own culture with one measure. Any weaknesses of the particular measure of openness to criticizing one's culture used in our studies may prevent a full understanding of how this mechanism operates; for example, this measure may not be able to tease apart the importance of people's culture to themselves versus whether they believe it is acceptable to criticize their own culture. Future longitudinal work that examines endorsement of polyculturalism, other potential mediators or measures of the same mediator, and outcomes over time may be particularly helpful in illuminating the processes involved in the relationship between polyculturalism and intergroup attitudes. Additionally, we used the same, neutral measure of endorsement of polyculturalism. For example, it is unknown whether a measure of polyculturalism focusing on only positive or only negative intergroup interactions and influences would have the same or different associations with intergroup attitudes, which is important for future work to explore.

We also tested if gender moderates the association of polyculturalism with sexism and found it did not. These findings, along with the findings from other studies, suggest polyculturalism is a belief with far-reaching implications not only for particular groups. However, the current studies did not test other potential sociodemographic or other moderators. Future work may want to continue to explore potential moderators, to understand if this association is consistent across all groups of people or not. Finally, most measures in the current investigation potentially elicit bias in response due to social desirability. Although variance in sexism measures due to social desirability is likely accounted for by many of the control variables examined, future work should control for social desirability.

Practice Implications

Our preliminary findings suggest that discussions of polyculturalism and cultural change may be useful for activists, policy-makers, and educators as well as for developers of programs and interventions in education, work, clinical, or other settings that are designed to reduce sexist attitudes and move toward gender equality. These discussions of polyculturalism, for example, might focus on multiple examples of polyculturalism throughout history and in contemporary culture and emphasize cultural change and evolution that are tailored to the intended audiences (Rosenthal & Levy, 2010a). Almost any topic being covered for any audience can incorporate discussion about how different racial/ethnic groups have influenced each other, various cultural practices and beliefs, or different elements of society because there are examples of polycultural influences all around us. Likewise, clinicians consulting with clients who are facing issues surrounding sexism might fruitfully integrate discussions of polyculturalism and cultural change, using examples that are tailored to the client's needs and concerns.

With the audience in mind, it is important to be sensitive and aware that discussions of polyculturalism and cultural change could potentially make some people to feel defensive about their culture or upset about negative past or present cultural influences, such as oppression that has led to cultural influence (e.g., slavery). Although in the context of sexism, cultural change in the United States, for example, has generally led to positive changes, it can be important to recognize and discuss that cultural influence and change can also happen in negative contexts. Our work on polyculturalism has not simply focused on positive examples of cultural change. Thus, it is recommended that discussions include many examples of polyculturalism and cultural change from the past and present and with predictions for the future, especially with increasing globalization. Overall, findings from the current investigation highlight that, in aiming to reduce or address issues of sexism in any applied setting, simply targeting sexism itself may not be sufficient because other beliefs, such as polyculturalism, can also play a positive role and therefore may help in addressing sexism.

Conclusion

Because cultural social psychologists, along with cross-disciplinary researchers, have increasingly demonstrated that cultures are not static entities, recent work on polyculturalism demonstrates that many people endorse that racial and ethnic groups have interacted and influenced each other's cultures over time. The present set of studies reports that, for both women and men, greater endorsement of polyculturalism is associated with lower sexism across measures of attitudes toward rights and roles of women as well as ambivalent attitudes toward women—while controlling for other potentially confounding beliefs. Our results also support that greater openness to criticizing one's own culture mediates the association of polyculturalism with sexism—but only for attitudes toward the rights and roles of women not for ambivalent sexist attitudes toward women. Taken together, studying beliefs about cultural dynamics, including polyculturalism, may help to improve our understanding of intergroup attitudes.

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Table 1

Summary of Four Studies.

Sample	Design	Sexism Measures	Control Measures	Mediator Included?	Summary of Main Results
			Study 1		
171 Undergraduate students	Cross-sectional	11-Item neosexism; 15-Item attitudes toward women; 8-Item attitudes toward feminism and women's rights	8-Item right-wing authoritarianism; 4-Item race essentialism; 4-Item gender essentialism; 6-Item ethnic identity attachment and behavioral involvement; 8-Item gender identity importance and attachment	No	Polyculturalism significantly associated with lower neosexism and negative attitudes toward women as well as more positive attitudes toward feminism and women's rights
			Study 2		
265 Undergraduate students	Cross-sectional	8-Item modern sexism; 5-Item old-fashioned sexism	5-Item multiculturalism (neutral; group differences); 5-Item colorblindness (neutral; unique individuals and commonalities)	Yes	Polyculturalism significantly associated with lower modern and old-fashioned sexism; openness to criticizing one's culture significant mediator of associations of polyculturalism with modern and old-fashioned sexism
			Study 3		
142 Community adults	Cross-sectional	11-Item hostile sexism; 11-Item benevolent sexism; 8-Item attitudes toward feminism and women's rights	5-Item multiculturalism (neutral; group differences); 4-Item multiculturalism (positive; group differences and contributions); 5-Item colorblindness (neutral; unique individuals and commonalities); 4-Item colorblindness (positive; unique individuals and commonalities); 16-Item social dominance orientation; 3-Item conservatism; 12-Item ethnic identity attachment and behavioral involvement	Yes	Polyculturalism significantly associated with lower hostile and benevolent sexism as well as more positive attitudes toward feminism and women's rights; openness to criticizing one's culture significant mediator of association of polyculturalism with attitudes toward feminism and women's rights but not significant mediator of associations of polyculturalism with hostile or benevolent sexism
			Study 4		
489 Undergraduate students	Longitudinal	5-Item modern sexism (items focused on denial of continued discrimination)	6-Item egalitarianism; 2-Item ethnic identity importance and attachment; 2-Item gender identity importance and attachment	No	Polyculturalism significantly prospectively associated with lower modern sexism approximately 1 year later

Table 2

Means, Standard Deviations, and Cronbach's αs for All Measures Across Studies.

Variable: Study	Scale Range	α	Overall, *M (SD)*	Women, *M (SD)*	Men, *M (SD)*
Predictors					
Polyculturalism					
Study 1	1–7	.83	5.43 (0.76)	5.46 (0.80)$_a$	5.40 (0.70)$_a$
Study 2	1–7	.91	5.63 (0.90)	5.65 (0.88)$_a$	5.62 (0.93)$_a$
Study 3	1–7	.92	5.76 (l.25)	5.87 (l.0l)$_a$	5.63 (l.47)$_a$
Study 4	1–6	.90	4.96 (0.68)	5.0l (0.68)$_a$	4.90 (0.67)$_a$
Right-wing authoritarianism: Study 1	1–7	.77	3.19 (0.93)	3.32 (0.98)$_a$	2.99 (0.83)$_b$
Race essentialism: Study 1	1–6	.73	3.09 (0.90)	3.07 (0.9l)$_a$	3.l4 (0.90)$_a$
Gender essentialism: Study 1	1–6	.80	3.18 (l.02)	3.l4 (0.97)$_a$	3.25 (l.09)$_a$
Ethnic identity					
Study 1 (6-item attachment and behavioral involvement)	1–5	.92	3.36 (0.95)	3.44 (0.97)$_a$	3.23 (0.89)$_a$
Study 3 (12-item attachment and behavioral involvement)	1–4	.92	2.60 (0.82)	2.62 (0.76)$_a$	2.58 (0.88)$_a$
Study 4 (2-item importance and attachment)	1–6	.87	4.14 (l.34)	4.27 (l.26)$_a$	3.98 (l.43)$_b$
Gender identity					
Study 1 (8-item importance and attachment)	1–7	.82	3.95 (1.05)	3.96 (l.04)$_a$	3.93 (l.08)$_a$
Study 4 (2-item importance and attachment)	1–6	.78	4.42 (l.l9)	4.54 (l.05)$_a$	4.27 (l.32)$_b$
Multiculturalism (neutral; group differences; Rosenthal & Levy, 2012)					
Study 2	1–7	.85	5.48 (0.90)	5.43 (0.86)$_a$	5.44 (0.96)$_a$
Study 3	1–7	.82	5.88 (0.99)	5.86 (0.98)$_a$	5.90 (l.0l)$_a$
Colorblindness (neutral; unique individuals and commonalities; Rosenthal & Levy)					
Study 2	1–7	.87	3.54 (l.40)	3.57 (l.4l)$_a$	3.49 (l.37)$_a$
Study 3	1–7	.91	3.44 (l.83)	3.42 (l.82)$_a$	3.47 (l.97)$_a$
Multiculturalism (positive; group differences and contributions; Ryan et al., 2007)					
Study 3	1–7	.88	5.45 (l.54)	5.64 (l.39)$_a$	5.25 (l.67)$_a$
Colorblindness (positive; unique individuals and commonalities; Ryan et al., 2007)					
Study 3	1–7	.75	4.83 (1.61)	4.69 (l.75)$_a$	4.98 (l.42)$_a$
Social dominance					
Orientation: Study 3	−3 to +3	.96	−1.60 (l.38)	− l.74(l.34)$_a$	− l.43(l.42)$_a$
Conservatism: Study 3	1–7	.93	3.55 (l.73)	3.32 (l.67)$_a$	3.8l (l.76)$_a$
Egalitarianism: Study 4	1–6	.88	4.89 (0.9l)	4.96 (0.84)$_a$	4.77 (0.98)$_b$
Mediator					
Openness to criticizing one's culture					
Study 2	1–7	.74	5.l5 (l.l8)	5.ll (l.22)$_a$	5.21 (1.13)$_a$
Study 3	1–7	.78	5.41 (1.41)	5.45 (1.33)$_a$	5.35 (1.49)$_a$
Sexism outcomes					
Neosexism: Study 1	1–7	.79	2.85 (0.83)	2.70 (0.78)$_a$	3.11 (0.86)$_b$

Variable: Study	Scale Range	α	Overall, *M (SD)*	Women, *M (SD)*	Men, *M (SD)*
Negative attitudes toward women: Study 1	1–7	.82	2.70 (0.79)	$2.54\ (0.75)_a$	$2.97\ (0.79)_b$
Attitudes toward feminism and women's rights					
Study 1	1–13	.84	10.06 (1.88)	$10.46\ (1.72)_a$	$9.41\ (1.96)_b$
Study 3	1–13	.91	9.71 (2.81)	$10.64\ (1.45)_a$	$8.68\ (2.84)_b$
Modern sexism:					
Study 2 (8-item)	1–5	.60	2.67 (0.49)	$2.61\ (0.48)_a$	$2.76\ (0.49)_b$
Study 4 (5-item)	1–6		3.15 (0.94)	$2.99\ (0.93)_a$	$3.36\ (0.92)_b$
O1d-fashioned sexism: Study 2	1–5	.65	1.89 (0.67)	$1.72\ (0.63)_a$	$2.14\ (0.66)_b$
Hosti1e sexism: Study 3	0–5	.84	2.23 (1.04)	$2.08\ (0.96)_a$	$2.40\ (1.11)_a$
Benevo1ent sexism: Study 3	0–5	.81	2.39 (1.01)	$2.35\ (1.09)_a$	$2.44\ (0.91)_a$

Note: *SD* = standard deviation. Subscripts indicate significant gender differences on measures. Means for women and men that share a subscript 1etter were not significant1y different; means for women and men that have different subscript 1etters were significant1y different.

Table 3

Results of Regression Analyses and Bivariate Correlations for Study 1.

	Neosexism				Negative Attitudes Toward Women				Attitudes Toward Feminism and Women's Rights			
	R^2 (F)	β (t)	p	r (p)	R^2 (F)	β (t)	p	r (p)	R^2 (F)	β (t)	p	r (p)
Model	.25 (−9.32)		<.001		.30 (11.61)		<.001		.14 (4.41)		<.001	
Polyculturalism		−.15 (−2.11)	.036	−.20 (.009)		−.17 (−2.57)	.011	−.26 (.001)		.15 (1.97)	.050	.17 (.023)
Right-wing authoritarianism		.20 (−2.71)	.007	.32 (<.001)		.33 (4.48)	<.001	.44 (<.001)		−.14 (−1.72)	.087	−.21 (.007)
Race essentialism		.12 (−1.13)	.260	.31 (<.001)		−.00 (−0.03)	.979	.31 (<.001)		−.05 (−0.39)	.695	−.16 (.035)
Gender essentialism		.25 (−2.42)	.017	.33 (<.001)		.24 (2.44)	.016	.34 (<.001)		−.19 (−1.75)	.083	−.19 (.014)
Ethnic identity attachment and behavioral involvement		−.24 (−3.48)	.001	−.19 (.013)		−.19 (−2.83)	.005	−.12 (.129)		.20 (2.65)	.009	.17 (.023)
Gender identity importance and attachment		−.12 (−1.51)	.134	.06 (.475)		.02 (−0.32)	.751	.18 (.020)		.15 (1.79)	.075	.04 (.575)

Note. $N = 171$. βs are standardized regression coefficients and *rs* are bivariate correlations.

Table 4

Results of Regression Analyses and Bivariate Correlations for Study 2.

	Modern Sexism				Old-Fashioned Sexism			
	R^2 (F)	β (t)	p	r (p)	R^2 (F)	β (t)	p	r (p)
Model	.12 (12.16)		<.001		.15 (15.21)		< .001	
Polyculturalism		−.38 (−5.86)	<.001	−.34 (<.001)		−.40 (−6.20)	< .001	−.39 (<.001)
Multiculturalism (neutral; group differences)		.11 (1.68)	.095	−.07 (.253)		.02 (0.35)	.727	−.16 (.012)
Colorblindness (neutral; unique individuals; and commonalities)		.06 (0.95)	.341	.06 (.307)		.01 (0.12)	.905	.04 .563

Note. N = 265. βs are standardized regression coefficients and *rs* are bivariate correlations.

Table 5

Results of Regression Analyses and Bivariate Correlations for Study 3.

	Hostile Sexism				Benevolent Sexism				Attitudes Toward Feminism and Women's Rights			
	R^2 (F)	β (t)	p	r (p)	R^2 (F)	β (t)	p	r (p)	R^2 (F)	β (t)	p	r (p)
Model	.30 (7.28)		<.001		.25 (5.57)		<.001	1	.34 8.71)		<.001	
Polyculturalism		−.33 (−3.28)	.001	−.40 (<.001)		−.21 (−1.98)	.050	−.25 (.003)		.20 (2.01)	.047	.35 (<.001)
Multiculturalism (neutral; group differences)		−.02 (−0.24)	.811	−.25 (.003)		.19 (2.06)	.041	−.02 (.796)		.09 (1.03)	.303	.30 (<.001)
Multiculturalism (positive; group differences and contributions)		.09 (0.87)	.386	−.28 (.001)		−.25 (−2.43)	.016	−.33 (<.001)		.00 (0.04)	.971	.33 (<.001)
Colorblindness (neutral; unique individuals and commonalities)		−.07 (−0.80)	.432	−.20 (.016)		−.15 (−1.63)	.106	−.11 (.217)		.12 (1.34)	.183	.21 (.013)
Colorblindness (positive; unique individuals and commonalities)		−.14 (−1.50)	.136	−.30 (<.001)		.06 (0.60)	.550	−.10 (.217)		.00 (0.05)	.962	.28 (.001)
Social dominance orientation		.24 (2.85)	.005	.37 (<.001)		.08 (0.95)	.344	.20 (.016)		−.24 (−2.98)	.003	−.43 (<.001)
Conservatism		.15 (1.86)	0.65	.26 (.002)		.11 (1.32)	.190	.20 (.020)	−.24 (−3.01)		.003	−.38 (<.001)
Ethnic identity attachment and behavioral involvement		.16 (2.16)	.032	.06 (.494)		.28 (3.64)	<.001	.25 (.003)		(.12) (1.71)	.089	.22 (.008)

Note. N = 142. βs are standardized regression coefficients and rs are bivariate correlations.

Table 6

Results of Regression Analysis and Bivariate Correlations for Study 4.

	Modern Sexism Time 2			
	R^2 (F)	β (t)	p	r (p)
Model	.03 (3.08)		.016	
Polyculturalism: Time 1		−.15 (−3.36)	.001	−.15 (.001)
Egalitarianism: Time 2		.01 (0.23)	.818	.00 (.966)
Ethnic identity importance and attachment: Time 2		.04 (0.71)	.479	.04 (.362)
Gender identity importance and attachment: Time 2		−.01 (−0.09)	.930	.00 (.934)

Note. N = 489. βs are standardized regression coefficients and *rs* are bivariate correlations.