

The Fairer Sex: Ethnocentric Explanations of Racial Differences in Sexual Behavior.

By

© 2020

Natasha Bharj

M.Sc., University of Surrey, 2012

B.Sc., University of Surrey, 2011

Submitted to the graduate degree program in Psychology and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

---

Chair, Glenn Adams, PhD

---

Monica Biernat, PhD

---

Ludwin Molina, PhD

---

Charlene Muehlenhard, PhD

---

Stacey Vanderhurst, PhD

Date Defended: 28 July 2020

The dissertation committee for Natasha Bharj certifies that this is the approved version of the following dissertation:

The Fairer Sex: Ethnocentric Explanations of Racial Differences in Sexual Behavior.

---

Chair, Glenn Adams, PhD

Date Accepted: 25 August 2020

## Abstract

This research examines the intersection of racial and gender discourse in beliefs about sexuality. The sexual habits of women of color have been pathologized in popular and scientific discourse. White women and the behavioral patterns of White women, by contrast, are positioned as normative. Using psychological models of social cognition, I explore how ethnocentrism permeates discourse about what normal sexuality should look like. Across three mixed-methods experimental studies, I draw particularly on the *effect to be explained* paradigm to explore how Black women are positioned as deviant subjects in need of explanation and intervention. Study 1 (n=156) examines the racial stereotyping and Othering evident in patterns of explanations for racial differences in sexuality. Study 2 (n=180) focuses on prescriptive norms about sexuality, demonstrating a prescriptive norm for higher frequencies of sexual activity and racialized discourse. In Study 3 (n=160), a study of perceived group mutability, participants adhere to the sexual frequency norm by anchoring the descriptive norm to a higher value, while also positioning Black women as deviant. Taken together, these studies offer a preliminary insight into the interaction between sexual norms and racialized sexual stereotypes. The results reveal a tension between neoliberal discourses about sexual expression and pathologizing racial discourse, both of which leave Black women's sexuality in a precarious marginal space.

## **Acknowledgements**

I am deeply indebted to my advisor, Dr Glenn Adams, for modeling what it means to thrive as an academic committed to ethical and political scholarship,. Thank you for your continuous mentorship and support. I would also like to thank my committee members, Dr. Charlene Muehlenhard, Dr. Monica Biernat, Dr. Ludwin Molina, and Dr. Stacey Vanderhurst. You have all contributed to my work in immeasurable ways. I am incredibly grateful for the friendship and solidarity I found in the Cultural Psychology Research Group and in Dr. Muehlenhard's research lab. I wouldn't have made it through grad school without my social psych and WGSS family.

To my actual family – there are no words for how much your support has meant to me. I am constantly inspired by my hard working and loving parents, and happily distracted by my siblings' unbeatable humor. No diploma could rival the joy of watching my niblings grow, even from afar. Thank you for keeping me grounded and (relatively) healthy through an emotional and stressful journey.

## Table of Contents

Abstract.....	iii
Acknowledgements.....	iv
List of Figures.....	vi
List of Tables.....	vii
Introduction.....	1
Interdisciplinary Perspectives on Sexuality Discourse.....	2
Social Cognition Approach to Ethnocentrism in Sex Discourse.....	7
Overview of Current Research.....	17
Study One.....	21
Method.....	21
Results.....	30
Critical Discursive Analysis.....	39
Discussion.....	49
Study Two.....	50
Method.....	50
Results.....	58
Missing Data.....	66
Discussion.....	66
Study Three.....	67
Method.....	68
Results.....	77
Discussion.....	84
General Discussion.....	85
Overview of Results.....	85
Limitations and Future Directions.....	87
Conclusion.....	90
References.....	91
Appendices.....	105

## List of Figures

Figure 1: Graph Stimulus Used in Study 1 .....	23
Figure 2: Proportion of Focal Group Ratings as a Function of Direction Manipulation. ....	32
Figure 3: Proportion of Valenced Framing Ratings as a Function of Focal Group. ....	34
Figure 4: Table Stimulus Used in Study 2. ....	52
Figure 5: Proportion of Responses Endorsing Positive or Negative Sexual Ideology as a Function of Gender Identity. ....	62
Figure 6: Table Stimulus Used in Study 3 .....	71
Figure 7: Black and White Mutability as a Function of Direction and Order .....	80
Figure 8: Percentage of Participants That Selected Each Program as a Function of Direction .....	82

## List of Tables

Table 1: Measures Attributed to Graph Stimulus .....	27
Table 2: Frequencies and Descriptions of the Types of Responses Coded as Missing in Study 1. ....	39
Table 3: Summary of Sex-Positive and Sex-Negative Sub-Themes in Justification of Ideal Frequency Responses.....	55
Table 4: Frequency of Themes Identified in Explanations of Difference.....	57
Table 5: Estimated Ideal Frequency Means and Standard Deviations as a Function Of Order and Direction Manipulations .....	59
Table 6: Sexual Ideology Frequencies as a Function Of Order and Direction .....	61
Table 7: Focal Group Frequencies as a Function of Order and Direction .....	64
Table 8: Valence of Explanation as a Function of Direction and Focal Group .....	65
Table 9: Program Descriptions and Themes .....	72
Table 10: Sexual Ideology Themes and Frequencies in Explanations for Change Responses .....	74
Table 11: Frequency of Justification Themes as a Function of Selected Program .....	76
Table 12: Estimated Mutability Means and Standard Errors as a Function of Direction .....	78
Table 13: Proportions of Missing/Not-Missing Responses as a Function of Educational Attainment.....	83

The Fairer Sex: Ethnocentric Explanations of Racial Differences in Sexual Behavior.

### **Introduction**

*“Population differences exist in personality and sexual behavior such that, in terms of restraint, Orientals > Whites > Blacks” (Rushton & Bogaert, 1987, p.529).*

The above quote from Rushton and Bogaert (1987) articulates a particular discourse regarding the relationship between race and sexuality: racial differences in sexual behavior can be articulated in terms of people of color’s deviation from a White norm. Rushton and Bogaert’s (1987) use of mathematical symbols further highlight the scaled nature of this discourse; patterns of sexual behavior can be positioned on a continuum with people of color at either end of the scale diverging from the White center point. In trying to explain this variation we (scientists, scholars, society) look to the endpoints (for example, one might ask ‘why do “Orientals” show too much restraint?’ or ‘Why don’t “Blacks” show enough?’), leaving undisputed the assumption that White people show the median, just-right amount. In this paper, I explore this discourse as it relates to beliefs about women’s sexuality. Histories of racism and colonialism reveal the stereotypes of women of color as exhibiting too much, or not enough, sexuality. These histories are embedded within social science, where patterns observed among women of color are pathologized, while the sexual patterns of White women, and Whiteness in general, go unmarked. In this research I utilize both critical theory and social cognition paradigms to empirically investigate the discourses people draw upon when explaining racial differences in women’s sexual behavior. The implications of this are important for uncovering the normativity of Whiteness and challenging ethnocentrism in science and beyond.



## **Interdisciplinary Perspectives on Sexuality Discourse**

Feminist and decolonial feminist scholars have noted the co-constitution of race and gender (Lugones, 2007) and of ethnicity and sexuality (Nagel, 2003). Adopting a historical perspective, Nagel (2003) analyzes the deployment of sexual control and sexual violence as a tool of colonialism and, later, post-colonial nation building. Histories of anti-miscegenation laws, particularly in the United States, document how important the policing of White women's sexuality was to racial and colonial projects. The disciplinary function of policing women's sexuality serves to maintain hegemonic notions of nation/race/ethnicity, as women are positioned as the carriers of culture (Nagel, 2003, Ferber, 1998).

Colonial stereotypes often involved characterizations of sexual dysfunction or violence. Stereotypes of women in the Middle East as sexually repressed were used to justify colonial intervention and formed the basis of White savior fantasies, wherein White men liberated Arab women physically and sexually (Said, 2003; Jarmakani, 2008). Violence against Black women was justified through stereotypes of the promiscuous 'Jezebel' Black women within the historical context of colonialism and slavery. The hypersexualisation of Black women links their victimization to an essentialised image of their sexuality, thus obscuring the violence of the (White) perpetrators and the material context that made Black women vulnerable to violence (Ladson-Billings, 2009). White womanhood was constructed as sexually pure through comparisons to negative racialized stereotypes of women of color (Freedman, 2013).

**Naturalizing White women's sexuality.** A clear example of ethnocentric understandings of sexuality can be observed in instances of scientific racism in which White womanhood is explicitly normalized or venerated. An apparent example of this is the 2011 piece by Satoshi

Kanazawa on the relationship between race and attractiveness, which purported to provide scientific ‘proof’ of the superior physical attractiveness of White women. There also exist more complicated and polarizing critiques of ethnocentric bias in sexuality research, such as Grande’s (2004) critiques of western research on female circumcision traditions. Grande (2004) argues that western perspectives on female circumcision are emblematic of a pathologizing, reductionist approach to cross-cultural research and reveal more about western conceptions of sexual pleasure than about gender and sexuality in the spaces in which female circumcision is performed.

Beyond these more explicit examples of ethnocentrism, cultural psychology has critiqued psychology’s more subtle tendencies to naturalize and generalize WEIRD (Western, Educated, Industrialized, Rich and – supposedly – Democratic) cultural patterns (Henrich, Heine, & Norenzayan, 2010). By contextualizing the interpretations of (mostly WEIRD) sexuality researchers we can begin to uncover constructions of sexuality that center White womanhood at the expense of others. For example, Majority World feminist perspectives have critiqued Western, hegemonic conceptualizations of agency and self-expression as being harmful to minoritized and colonialized women. Models of intimate justice can reify Orientalist representations of the sexually oppressed ‘Third World woman’ (Mohanty, 1988) when self-reporting of sexual satisfaction by non-WEIRD women is framed as evidence of a sort of sexual false consciousness, supposing that they would be less satisfied if they weren’t ignorant of the sexual possibilities enjoyed by women in Western cultures (Kurtiş & Adams, 2015). Feminist Psychology has been critiqued for valorizing individual agency and self-expression over other values more often observed among non-Western cultures, such as interdependence and maintenance-oriented relationality (Hare-Mustin and Maracek, 1986; Kurtiş & Adams, 2015). This image of optimal sexuality as driven by an individualist construction of self propagates the

problematic narratives of the late 20th Century Western ‘sexual revolution’ wherein sexual liberation was made synonymous with notions of ‘authentic’ self-expression and desire abstracted from context (Freedman, 2013).

Rutherford (2018) examines the construction of young (White, middle class) women as ideal neoliberal<sup>1</sup> subjects; neoliberal values of agency, self-expression, individual responsibility and self-expansion are being promoted through ‘postfeminist’ narratives of empowered heteronormative femininity. Rutherford (2018) denaturalizes these neoliberal values at the root of hegemonic feminist constructions of sexual agency. The emphasis on personal feelings of empowerment over material and structural change is a re-articulation of modern concepts of the abstracted independent self. Similarly, Muehlenhard, Humphreys, Jozkowski and Peterson’s (2016) review of research on sexual consent demonstrates that sexuality researchers often conceptualize negotiations of consent as occurring between two rational and unconstrained individual actors abstracted from their social context. Models of sexual consent that emphasize individualist abstracted relations fail to account for the ways consent might work when the actors involved have a more embedded conception of the self. They also obscure the pressures that actors within individualist cultures might experience when negotiating consent (e.g. sexual scripts and stereotypes). These atomistic conceptions of expression and relatedness are typical of

---

<sup>1</sup> Neoliberalism is a broad and fluid concept, but here I am conceptualizing it as a political ideology which retains a focus on individual autonomy derived from classical liberal theory, alongside a more recent promotion of unregulated free-market capitalism and opposition to state welfare or intervention. Neoliberal subjectivity is characterized by an emphasis on individual choice, self-reliance, and expression, alongside a belief in meritocracy and happiness as an “entrepreneurial project” (Sugarman, 2015; p. 109)

neoliberal modern individualism produced by coloniality (Adams, Estrada-Villalta & Gómez Ordóñez, 2019; Adams, Estrada-Villalta, Sullivan, & Markus, 2019; Rutherford, 2018).

The term ‘epistemicide’ (coined by de Sousa Santos, 2015) is used to describe the process through which knowledge and experience that emerges from marginalized and colonized spaces has been systematically erased and replaced with prescriptive and descriptive norms that originate from and promote the interests of Western spaces. I argue that research which pathologizes patterns of behavior observed among global majority women while naturalizing White, western women’s behavior is an example of epistemicide. The erasure of non-White womanhood(s) means that conceptualizations of womanhood, femininity, and gender more broadly are necessarily occupied by what remains - Whiteness. This is evident in studies of stereotype content that demonstrate the prototypicality of White women through their conflation with the category of woman (Ghavami & Peplau, 2013)

**Pathologizing Non-White Sexuality.** As sex research increasingly employed cross-cultural and racially diverse samples, the sexual habits of women of color became increasingly scrutinized. Although avoiding the pitfalls of generalizing from White women to other groups, this research is still vulnerable to ethnocentrism if explanations reproduce images of women of color’s sexuality as unnatural and undesirable, in comparison to White women. This ethnocentric framing of women of color’s sexuality can be observed in sex research that (intentionally or not) provides valenced explanations of women of color’s deviance from White women. For example, the stereotypic constructions of Asian women as overly sexually conservative, and Latina women as too promiscuous (Brotto, Chik, Ryder, Gorzalka & Seal, 2005; Raffaelli, Zamboanga & Carlo, 2005) imply that there exists an optimal level of sexuality somewhere in the middle.

This is a reproduction of the discourse asserted by Rushton & Bogaert (1987). Colonial understandings of White womanhood as the model of liberation structure the interpretation of diversity in sexual experience, as evidenced in research that pathologizes the sexual activity of non-White women while leaving White women's sexual patterns unmarked.

The pathologizing of non-White sexuality can also be traced to colonial discourse and histories of gender discourse. Feminist scholars point to the image of the Victorian woman as an example of White (female) identity that was set up as a parallel image to a racialized and stigmatized Other. Mohanty (1988) notes how the discourse of the Third World Woman in Western feminism serves to consolidate a construction of the liberated Western woman. The apparent respectability and freedom of Victorian women, exemplified by their domesticity and virtuous womanhood, was taken as proof of Western progress. The construction of a dichotomy between liberated Western women and the oppressed Muslim women is one mechanism through which colonial and Orientalist discourses have been perpetuated and incorporated into colonial and imperialist action (Narayan, 1997, 1998; Mohanty, 1988). Men did not have access to the harem, therefore, western women (including early feminist activists) played an important role in representing Middle Eastern gender politics for the Western imagination. Feminist attempts to 'liberate' Muslim women reproduced the dichotomy between a 'civilized' Western society and 'barbaric' Eastern society (Ahmed, 1982). This sentiment reinforced colonialism by positioning Muslim women as passive victims of repression that needed to be rescued by the liberal and progressive White woman (Hasan, 2005; Burton, 1992; Lewis, 1996).

Early first-wave liberal feminists imagined the liberated woman as exemplifying an unmarked, de-racialized, de-classed (and so implicitly middle class and White) form of

womanhood (Kotef, 2009). This abstract, disembodied conception of womanhood grounded in Whiteness and class privilege reflected the contemporary universalized abstract subject of liberalism. The body was involved only so far as restrictions on physical movement were framed as restrictions on individual will and liberty. This understanding of liberty endured through both first and second wave feminism, in which White women's physical exclusion from the workplace and voting booth were challenged on the basis of their intellectual and moral parity with White men. In contrast, Black women were constructed as excessively corporeal, through descriptions of the "overwhelming physicality" (Morgan, 2004; as cited in Kotef, 2009) of Black bodies and the physical violence they endured. Women of color were imagined solely as abused bodies, while White women were seen as liberated minds seeking to overcome physical restrictions. The early feminist movement organized around this image of White womanhood and so focused its efforts upon granting White women the same unconstrained and abstracted self-determination as enjoyed by White men (Kotef, 2009). White femininity was constructed as exemplifying liberty, especially in relation to construction of 'culturally-bound' non-White colonized women (Lee, 1996; Shome, 2011). Colonizers and feminists alike imposed this image as the standard to which non-White women should aspire, a standard achieved through the abandonment of their native cultures (Cramer, 2003).

### **Social Cognition Approach to Ethnocentrism in Sex Discourse**

I have articulated the ways that psychological research can both perpetuate and challenge ethnocentric discourse. To continue, I consider a number of concepts that have emerged from social cognition research for understanding how a group or sub-group is positioned as normative

or deviant. These concepts can be used as tools to uncover the ways in which Whiteness and womanhood are entwined within understandings of sexuality.

**Descriptive and Prescriptive Norms.** To understand what is construed as normal or deviant within a group, we can examine the content of categories, which can represent both descriptive norms of what is typical in a group and prescriptive norms in which traits are perceived as required for optimal functioning of the group (Cialdini, Reno and Kallgreen, 1990; Bailey, LaFrance and Dovidio, 2018; Bear & Knobe, 2016). Applying this to the study on androcentrism, Bailey, LaFrance and Dovidio (2018) highlight the visibility of men in terms of representation in positions with social power (such as, higher numbers of men in government; Hunt, Ramon, Tran, Sargent, & Díaz, 2017), linguistic biases that signify men in discussions of general humanity (e.g. universalizing usage of male pronouns identified by Twenge, Campbell & Gentile, 2012), and the over-representation of men in popular media (Bailey & LaFrance, 2016). Bailey, LaFrance and Dovidio (2018) note that in individualist Western societies, attributes such as agency and independence are coded as typical of masculinity, and thus are more highly valued than feminine-typical traits. They compare this to patterns observed in collectivist cultures where communality is more associated with masculinity (Cuddy, Wolf, Glick, Crotty, Chony & Norton, 2015). This appeal to the individualist/collectivist taxonomy of cultures links the construction of category ideals to broader cultural patterns of self-construal, i.e. independent versus interdependent selfways. To extend this analysis beyond simply noting a difference (which leaves the analysis open to pathologizing explanations), we can also look at how colonialism has determined the core and ideal traits of humanity and the ways in which those are maintained through epistemological violence. The importance of category ideals is most evident in cases of

norm violation, such as repercussions faced by gender non-conforming men and women (Moss-Racusin, Phelan, & Rudman, 2010; Phelan, Moss-Racusin, & Rudman, 2008).

Motschenbacher (2009) suggests that sexuality is largely associated with prescriptive norms (and descriptive norms that can become prescriptive). These norms function as a continuum, not a binary, (sex acts can be more or less normative) and exert regulatory influence while also granting individuals agency in how they can enact or resist the norm. The field of sexual health has utilized research on behavior change to explore the effects of norms on sexual practices, such as the use of contraceptives and prophylactics (Jain, Tobey, Ismail & Erulkar, 2018). Some notable examples are studies demonstrating that people often misperceive the descriptive and prescriptive sex norms of their group. Research conducted with students often reports pluralistic ignorance whereby students assume their peers are more comfortable with sex and having more sex than themselves. This often leads to an over-reporting of sexual activity to attempt to meet these descriptive norms (Barriger and Vélez-Blasini, 2013) or attributions of external influence (such as media) to explain peers' presumed higher sexual permissiveness (Chia and Gunther, 2006) students overestimate peer sexual permissiveness, especially when see peers as influenced by media. Sexuality norms are also communicated through gender role socialization, in which gendered norms about agency and consent create an environment conducive to sexual coercion of women by men (Walker, 1997). The manifestation of prescriptive gendered norms about sexuality have been observed in the context of women's magazines (Trent, 2009) and in ritualized conventions of wedding photography (Strano, 2006).

Sexual norms are not monolithic and interact with other social norms. Jensen & Bute (2010) examine the competing discourses navigated by low-income women in regard to the onset



of sexual activity and the appropriate time to have children. Similarly, normative communications can have varied effect depending on the target of communication; Bosson, Parrott, Swan, Kuchynka and Schramm (2015) observe a ‘boomerang effect’ of prescriptive norms about gender relations among men high in hostile sexism. These men show heightened levels of sexual aggression towards a fictional female partner after being exposed to paternalism and equity norms. This boomerang effect is also observed among men high in benevolent sexism after being exposed to paternalism norms, a seemingly discordant effect given that benevolent sexism and paternalism norms should be highly congruent. The authors speculate that this effect is due to paternalism and benevolent sexism being understood as applying only to specific types of women (those do not challenge traditional gender roles). Thus, the observed sexual aggression towards a (fictional) female student could be explained by college women as a group failing to meet this qualification. Sexual aggression as reactance to gender relation norms was also observed in research by Bosson, Kuchynka, Parrott, Swan and Schramm (2020), in which exposure to prescriptive paternalism and equity norms also activated cognitive networks associated with misogyny in men high in hostile and benevolent sexism. These studies suggest that prescriptive norms intended to promote positive gender relations can be subverted when they come into contact with antagonistic gender discourse.

In the context of sex research, Motschenbacher (2009) notes a recent shift towards scholarship looking to challenge some forms of normativity and to analyze discursive regimes. Heteronormativity and homonormativity have received considerable attention in research. However, other sexual normativities have been investigated less – notably race, as well as age, cisnormativity, monogamy, sex as taboo, animals/objects. Motschenbacher (2009) emphasizes that the goal of critical sex research is not to abolish all norms, as they provide heuristics for

understanding the world and are sometimes important for enforcing cultural ethical standards. Instead, the purpose of research on sexual normativities should be to identify and mitigate harm caused by norms, particularly when the harm is being enacted upon already marginalized groups.

**Prototypicality.** Studies of prototypicality have been particularly useful for revealing the prototypicality of White people within superordinate categories, such as American or Australian national identity (Devos & Banaji, 2005; Sibley & Barlow, 2009; Tran & Peterson, 2015). Social psychologists have similarly adopted feminist and intersectional approaches to examining the representation of White women as prototypical of women in general. This work often manifests in studies that test the non-prototypicality of women of color. Social cognition research has demonstrated the non-prototypicality of Black women, for example, through participants' failing to recall the faces and speech contributions of Black women (Sesko & Biernat, 2010) and lower fluency in racial categorizations (Thomas, Dovidio & West, 2014; Johnson, Freeman & Pauker, 2011; Goff, Thomas & Jackson, 2008; Zarate & Smith, 1990). Recent work has extended the focus to non-prototypicality of other groups, such as Asian men (Schug, Alt & Klauer, 2015), who are perceived as less prototypical of their race due to being stereotyped as having typically feminine attributes.

Research on the non-prototypicality of Black women led to the development of the intersectional invisibility paradigm, wherein Black women are rendered invisible by virtue of being neither prototypical of their race nor their gender (Purdie-Vaughns & Eibach, 2008). Intersectional theory constructs the space where two marginalized identities converge as productive of invisibility in terms of both absence from category prototypes and, often by extension, the distribution of resources (Purdie-Vaughns & Eibach, 2008). This model speaks to

Black feminist theorizing on the prototypicality of White women in conceptualizations of gender as a source of negative comparative representations of Black women (Crenshaw, 1990). Within the intersectional invisibility paradigm, visibility is conceptualized as inclusion into category representations or norms.

The ways that invisibility impacts treatment is complex: invisibility can be both the shield and the dagger. On one hand, because they are not the norm, Black women are overlooked in gender and race-based movements/discourse and simultaneously are the focus of violence (physical, material, and discursive) as a result of their non-normativity. Invisibility can make Black women vulnerable to deindividuation (Sesko & Biernat, 2010) and pathologization by psychological models that do not account for their experience (Purdie-Vaughns & Eibach, 2008). On the other hand, potential benefits of being invisible are evident in studies of Black women's strategic identity shifting and code switching to evade negative effects of tokenism & discrimination in the workplace (Dickens, Womack & Dimes, 2018). Phoenix's (1987) concept of *homogenous absence/pathologized presence* provides a framework to account for this pattern where Black women are simultaneously neglected and targeted (cited in Burman, Smailes & Chantler, 2004). Burman, Smailes & Chantler (2004) use this as an interpretive framework to describe their observations that 'Othering' of ethnic minority women leads to their exclusion from community services, while also making them hypervisible when they are present in those spaces.

Of the few studies that have adopted an intersectional approach in documenting the content of gendered and racial stereotypes, Ghavami & Peplau (2012) tested the degree to which stereotypes of White woman and women of color overlapped with stereotypes of women in

general. They reported that stereotypes of women showed a significantly greater overlap with stereotypes of White women than with Middle Eastern, Asian American, Latina, and Black women. This process by which attributes of a higher order category become populated with attributes of a specific sub-group can be contextualized within broad histories of intellectual imperialism, as well as traced in specific disciplines. Cundiff (2012) critiques androcentrism and ethnocentrism in mainstream Psychology, attributing the conflation of maleness and Whiteness with humanity to the under-representation of women and people of color in psychological research. Though efforts to diversify research have long been under way, non-Western ways of being remain largely erased from understandings of psychological functioning. WEIRD participants continue to populate psychological studies, and so are over-represented and over-generalized (Henrich, Heine, & Norenzayan, 2010). Psychological studies of over-representation in stereotypes and research can thus identify the domains in which Whiteness has structured the perceived central tendencies of categories, such as in womanhood and humanity.

Empirical studies that compare cognitive processing of Black and White women generally do so to demonstrate the non-prototypicality of Black women. In the process, these studies do provide evidence of the prototypicality of White women, but these data are generally not the focus of interpretation. The prototypicality of Whiteness, though articulated, is rarely directly investigated. One example of an empirical research that considers how the prototypicality of Whiteness impacts social cognition is Hegarty's (2017) study on the failure of participants to detect the pattern in an array of celebrity images when that pattern is that most of the celebrities featured are White. In contrast, participants are quick to identify race as a shared feature when the majority of celebrities are Black. Participants failing to notice that the targets are White demonstrates the prototypicality of Whiteness (in this case, within the larger category

of celebrities) in much the same way that similar research implies the prototypicality of Whiteness by noting the speed with which participants can racially categorize non-White targets. Unlike those studies, however, the focus of interpretation in Hegarty's (2017) study is Whiteness itself. By examining Whiteness directly, Hegarty (2017) draws attention to the social power inherent in prototypicality and its power to inform our understandings of representation. For example Hegarty (2017) subverts common critiques about diversity in Hollywood to draw attention to the dominance of White actors: "Given the under-representation of *all* ethnic minority actors in top Hollywood roles, there is more evidence White people are over-represented among Hollywood actors, although the claim that Black actors are underrepresented is more commonly heard" (p. 60). This distinction is important if research on prototypicality is to account for epistemic violence; by explicitly examining the over-representation of Whiteness and White womanhood we can better connect studies of frequency of instantiation to knowledge structures that represent WEIRD ways of being as representative of humanity as a whole.

**The Effect to Be Explained.** Social sciences can enact epistemological violence by positioning some groups as being more representative of essential and ideal human nature than others (Teo, 2010). Consequently, when inter-group comparisons are made researchers can explain difference in terms of the particularities of the non-prototypical group that prevent it from meeting the category ideal. The '*effect to be explained*' paradigm reorients attention to this epistemological violence by examining asymmetries in explanations of group difference. The behavior of privileged groups is positioned as normative through a lack of explanation, while marginalized groups are over-explained in terms of their deviation from the implicit standard of the privileged group. The experimental findings of Hegarty and Pratto (2001) indicated that participants more often focus explanations of group difference upon atypical group members (for

example, explaining the behavior of gay men as compared to straight men). Bruckmüller and Abele (2010) demonstrated that a group that is the focus of explanation is perceived as less powerful than the group that was positioned as the norm (by virtue of *not* being explained). Hegarty, Lemieux & McQueen (2010) demonstrate that perceptions of differential power and status, along with the order in which group data is presented, determines which group's behavior is the focus of explanation. These effects were observed using the “visual metaphor” of the bar graph (Hegarty, Lemieux & McQueen, 2010, p. 375), a two-dimensional analogical representation of difference between discrete variables that is interpreted using a graph schema. The content of this graph schema includes knowledge of the functional features of graphs as well as socially constructed beliefs about the nature of the variables represented and what can be signified by difference. Participants that constructed a bar graph to represent a gender difference tended to produce androcentric reporting patterns by depicting men's behavior first (to the left) in the graph and focusing upon women's behavior in their written explanations for the difference. Even when presented with graphs that reversed this tendency, participants often falsely recalled graph order to bring differences in line with androcentric reporting patterns by misremembering men as being graphed first. The tendency to position more powerful groups first is evident in group comparisons beyond gender, such as graphing members of the Royal Family by proximity to the throne (Hegarty, Lemieux & McQueen, 2010). Hegarty & Buechel (2006) turned the lens to examine androcentric reporting in psychological studies of gender difference, finding that psychologists too show an androcentric tendency to focus upon women when explained gender differences and position men first in graphs.

Empirical research in the *effect to be explained* paradigm has revealed other mechanisms through which a group is positioned as the normative or non-normative group. For instance, the

degree to participants can mobilize stereotypical representations has been shown to determine which group is foregrounded as the focus of explanation. In Hegarty's (2013) study of Irish-British comparisons, British students did not show a tendency to foreground either Irish or British peoples when explaining differences in over-consumption, except when the difference presented to them reinforced the stereotype linking the Irish with excessive alcohol consumption, in which case explanations focused upon the Irish. Further, studies of cognitive fluency suggest that comparative communications are biased towards "more-than" explanations, with groups that show higher scores on a measure being more often the focus of explanation (Hoorens & Bruckmüller, 2015).

The *effect to be explained* paradigm has been important for identifying the process through which categories that hold social power (such as Whiteness, maleness, heterosexuality, and so on) become normative, naturalized and, therefore, invisible (Hegarty & Bruckmüller, 2013). Foucault (1977) describes the power of an outward looking disciplinary gaze: powerful groups are able to subject others to examination and control without having the gaze turned back upon them. The lack of scrutiny placed upon powerful groups is then used to justify their social position. This invisibility functions in terms of conscious articulation: even though a powerful group might be the unconscious cognitive representation of a category or concept this does not necessarily translate to conscious articulation or attention to that group – rather attention is drawn to the non-prototypical, deviant group. Sociological distinctions between 'marked' and 'unmarked' categories articulate this process: 'unmarked' categories are not so because they are unimportant or uninteresting, but because they are so powerful or normative that they do not require (or allow for) particularizing interpretation. These asymmetric explanations form the epistemological violence that constructs Whiteness (and by extension, White womanhood) as

representative of the category ideal in interpretations of data (Teo, 2010; Hegarty, 2006; Hegarty & Pratto, 2004). This process is a legacy of colonial scientific practice wherein the observation of patterns of behavior common among White/western people was constructed as general 'basic' science, that could be generalized across humanity. Meanwhile, colonized people were subject to pathologizing and othering scientific study (Shweder, 1990).

### **Overview of Current Research**

Research in the *effect to be explained* paradigm demonstrates that scientific reporting conventions can reflect and reproduce representations of groups as normative or deviant. Feminist theorizing has long argued that the co-constitution of gender and race functions to Other and pathologize women of color. Social cognition research on prototypicality and stereotype content have provided empirical support for this claim. Drawing on these interdisciplinary perspectives, I conducted three experimental studies in which I examined participants' responses to (fictional) representations of racial differences in sexuality as a technique to investigate the extent to which white normativity structures understandings of sexuality.

**Hypotheses.** The primary goal of this research is to explore the influence of racialized and gendered discourses upon people's understanding of normative female sexuality. In particular, I designed the studies to test the following two hypotheses:

*Descriptive White Normativity Hypothesis.* To the extent that racialized discourse positions White women's sexual tendencies as a somehow natural and normative standard, research in the *effect to be explained* paradigm suggests that hypothesis that participants will



show a tendency to explain racial differences in terms of Black women's deviation from the standard set by White women.

*Prescriptive White Normativity Hypothesis.* Beyond the question of which group constitutes the remarkable departure from the descriptive normativity, the project also considers the prescriptive normativity of White women's patterns: that is, the extent to which participants understand these patterns as optimal forms to which others should aspire. In this regard, intersectional feminist theory and social cognition research on negative stereotyping suggest the hypothesis that participants will show a tendency to explain Black women's sexuality in pathologizing or negative terms, relative to White women. A strong version of the hypothesis suggests that the prescriptive normativity of White women's patterns should be evident regardless of the direction of the difference attributed to the two groups. The work of intersectional feminists (e.g., Ladson-Billings, 2009) has highlighted the bidirectional nature of sexual stereotypes—the hypersexual 'Jezebel' and the asexual 'Mammy'—that pathologize Black women's patterns regardless of the direction of deviation (more than or less than) from White women's patterns.

In addition to my two primary hypotheses described above, I attempt to control for additional factors that have been shown to exert an influence upon explanations in previous research. Research demonstrates that features of scientific artifacts can influence which group in a comparison participants understand as the effect to be explained; as a result, I test the robustness of the white normativity effect against the potentially moderating impact of these features. I will be counter-balancing the order in which data for the two groups are presented. On the basis of order effects reported by Hegarty, Lemieux & McQueen (2010) one could predict

that being positioned second in a graph may signal non-normativity and so increase the likelihood that that group is targeted as the focus of explanations. The relative social power of a group has been shown to influence which group is targeted as the effect to be explained (Bruckmüller and Abele, 2010; Hegarty, Lemieux & McQueen, 2010), therefore I will be measuring perception of social power to test if this moderates white normativity effects. While white normativity is my primary research interest, testing these factors may provide some insight into the cognitive processes underlying explanations, or at least enable me to control for their effects.

**Methodology.** I adopt a mixed method approach in the design of the three studies in this research. Hesse-Biber (2013) emphasizes the value of mixed methods to feminist research as a way of understanding a phenomenon from many angles and at several levels. Adopting experimental designs allows me to test for causal relationships between the features of the stimuli representing difference and participants' explanations for that difference. Further, quantification of participants' responses affords easy comparison across groups and assessment of potential covariates. Qualitative methods best allow me to investigate discourses around normative sexuality and race.

I adopt a concurrent embedded strategy of mixed methods to address my research questions (see Creswell, 2009). Across the three studies, I collected qualitative and quantitative data concurrently and with differing priority levels. Study 1 outcome measures are largely qualitative. I concentrate my interpretations upon identifying the focus of explanations, and I use critical discursive analysis to delve into the narratives participants draw upon when explaining racial differences. The quantitative analysis, transforming thematic analysis into frequency

counts and comparing across conditions and groups, is secondary to the qualitative analysis. In Studies 2 and 3 this prioritization switches: the primary outcomes of interest are the quantitative measures that I use to represent descriptive and prescriptive norms about sexual activity. In these studies, I use qualitative analyses to elaborate upon the quantitative patterns. In this embedded strategy of mixed-methods research, qualitative and quantitative data expand upon each other and offer opportunities for initiation (i.e., quantitative results can inspire future qualitative research questions, and vice versa). However, I do not necessarily expect inferences to converge upon one cohesive conclusion, as would be the case in a triangulation mixed-method strategy (Mark, 2015). In much the same way that my research does not seek to answer questions about what *actually is* the ‘right type’ of sexuality, I also do not suppose that my results reveal a monolithic, context-general truth about the intersections between racial, gendered and sexual norms. As with any study, my analysis of the data is deeply situated in the particular circumstances of the research (e.g., materials, participants, historical context), and the conclusions are generalizable to other circumstances only in some abstract form. I formally note this particularity in an attempt to meet Harding’s (1992) standards of “strong objectivity”, including the recognition that my positionality exerts influence at every stage of the research design and implementation process. The goal of this reflexivity is not to deny the possibility of objective truth, but instead to provide a more faithful account of empirical observations by attending carefully to the context in which they occurred (rather than attempt the “god-trick” of a view from nowhere; Haraway, 1988).

## Study One

In this study I explore the racial and gendered discourse available to participants when they attempt to explain a racial difference in sexuality. Participants viewed a figure portraying a group difference in an unidentified sexual behavior. They provided an explanation for the difference and the behavior that the figure portrayed. I analyzed their responses to determine which group was the focus of their explanation, as well as the valence and content of their explanation.

### Method

**Participants.** I recruited a total of 165 participants using Amazon MTurk, an online survey platform through which adults in the United States can receive monetary compensation for participating in research studies. I did not target any specific demographics in recruitment, and those workers who completed the study received \$1.50 in compensation for their time. I excluded data of 11 participants for incomplete responses or for failure to pass attention and manipulation checks. The following analyses report only include data from the remaining 156 participants. The ages of these participants ranged from 18 to 68 years ( $M=24.25$ ,  $SD=10.22$ ). I adopted an open-ended question to ask participants to indicate their gender identity and categorized these written responses. In response, 67 participants identified themselves as women (using terms “woman” or “female”), and another 86 identified themselves as men (using terms “male” or “man”). One participant identified themselves as genderfluid. Racial identifications of participants included White (67.9%), African American (10.9%), Hispanic and/or Latino (9.6%), Asian-American (7.7%), Biracial/Multiracial (2.6%) and Native American or Alaska Native (.6%). The majority (95.5%) of participants indicated that they were born in the USA and 98.7%

identified English as their first language. All but one participant indicated that they had completed at least a high school education and only a minority (12.%) were currently students.<sup>2</sup>

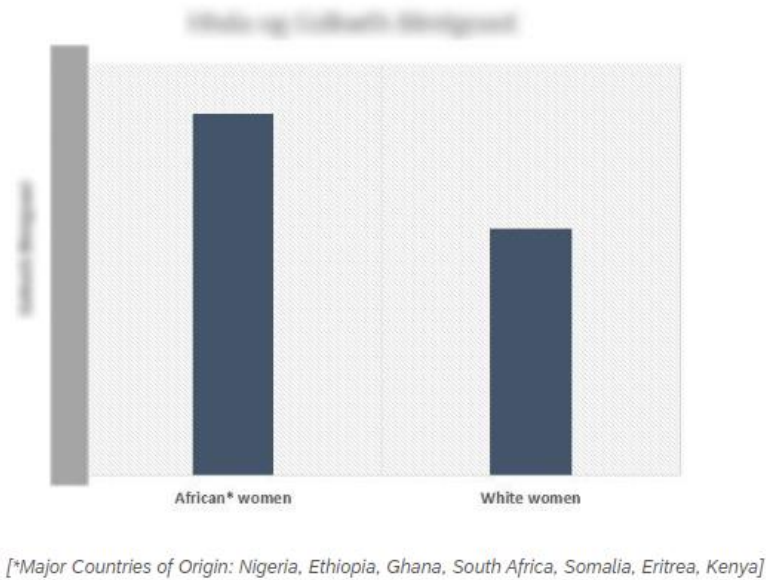
**Procedure and Design.** Participants read an introductory statement explaining that they would be presented with excerpts from the (fictitious) “National Survey of Sexual Attitudes and Behavior (NSSAB)”, which reports data on sexual behavior, attraction, identity and beliefs among women in the United States. I informed them that they would be asked to draw conclusions from the data, some of which may have been blurred out. Participants then viewed a simple bar graph that represented a difference between African and White women. I used photo editing software to distort sections of the graph to give the appearance that existing features (the Y-axis and title) had been redacted: the obscured sections of the image created ambiguity as to the exact nature of the data. I manipulated information in the graph to create a 2 (*Order*) x 2 (*Direction*) between-subjects design. To manipulate order, I varied whether the first (left-hand) bar in the graph carried the label African women or White women. To manipulate direction, I varied whether the higher of the two bars carried the label African women or White women (see Figure 1).

---

<sup>2</sup> Across the three studies I tested the effects of these linguistic and educational variables upon the manipulation checks and dependent variables to ensure that the task was accessible to all demographics. These analyses revealed no significant effects, so I do not include these variables in subsequent analyses.

## Figure 1

*Graph Stimulus Used in Study 1*



I then asked participants to complete two open-ended questions: the first of which asked them “what specific measure would you guess the graph was representing?” The second question asked them “If you had to guess what caused this difference, what might you predict?” The open-ended responses to these questions form the primary dependent variables for this study.

**Covariates.** Following the graph explanation tasks I presented participants with several quantitative measures on an exploratory basis to investigate whether power and prejudice were associated with different patterns of explanation. To assess the discrepancies in the perceived social power of groups featured in the graphs, participants completed a modified version of the MacArthur Scale of Subjective Social Status (Adler, Epel, Castellazzo, & Ickovics, 2000). For this measure, participants indicated on two separate ladders with rungs labeled with numbers from 1 (representing the highest level of social power) to ten (representing the lowest level of

social power) their beliefs about the relative social standing in U.S. society of White women and women of African descent . Participants also completed a modified short-form version of the Legitimacy of Inequality scale (Miron, Branscombe & Schmitt, 2006;  $\alpha = .927$ . Participants used a scale from 1 (Strongly Disagree) to 7 (Strongly Agree) to respond to items (e.g., “In our society, White women and African women are treated equally”) concerning their appraisal of racial equality in American society. In the final section of the study I asked a series of demographic questions. Included in these questions was a measure of political orientation: I measured political orientation with a 100-point sliding scale in which higher numbers indicating greater endorsement of conservative political ideology.<sup>3</sup>

***Manipulation Checks.*** Prior to the demographic questions I asked participants to complete a number of manipulation checks to check recall for the contents of the graph. The first question asked participants to name the two groups they read about, using a two response boxes. This allowed me to assess not only if participants could correctly recall the two groups, but also the order in which they named the two groups. Participants that could not correctly name the two groups were excluded from the analysis. The majority (81.4%) of participants recalled the groups in the same order in which they were presented in the graph. The remaining participants were retained in the analyses, as their exclusion did not change the direction or significance of reported effects. Next, I asked participants to describe the graph in as much detail as possible. Responses were screened by myself and the research assistants and any participants who

---

<sup>3</sup> I also presented a number of exploratory measures assessing gender and racial attitudes, details of which are provided in the appendices. These measures did not interact with outcomes variables across studies and so are not included in the analyses.

provided an inaccurate description were excluded from the analysis. Finally, I asked participants to name some of the countries that the African participants were said to originate from. These responses were again screened and participants that could not correctly recall at least two countries were excluded from the analysis. Across all three studies participants were required to read a debriefing statement that informed them that the data presented was fabricated.

### *Coding of Open-Ended Responses*

My primary concern in this analysis was to identify which group, if any, was the focus of explanations that participants offered for the difference portrayed in the graph. I worked with a group of four undergraduate research assistants, three White women and one Black man, to code the open-ended responses for these factors.<sup>4</sup> We developed the coding scheme using an inductive process in which the research assistants first collaboratively identified recurrent themes and expressions in the data, which we then organized into superordinate categories for quantitative coding. Here and throughout this project, we adopted a conservative approach in which we indicated the presence of a theme only if it explicitly fit the coding criterion. This resulted in the exclusion of a large portion of participants from the coding analysis due to missing or uncategorizable responses. Throughout the coding process I masked condition assignment and did not inform the research assistants of the study hypotheses or design.

**Attribution of Measure.** The first open-ended response participants provided was their attribution of a specific sexual measure to the graph. I was interested in what types of sexual

---

<sup>4</sup> Analysis of inter-rater reliability did not indicate that the research assistants' coding varied as a function of race or gender.



behaviors and attitudes participants would attribute to the graph and whether this would vary according to the order and direction manipulations. Two of the research assistants (one Black man and one White woman) used a dichotomous coding system to code the presence or absence of a specific category was coded as 1 or 0, respectively, as these themes were largely non-mutually exclusive. These categories encompassed a wide range of measures, from more self-evident sexual behavior categories (such as “premarital sex” and “sexual attraction”) to more distal factors, such as the use of technology in dating. The two coders showed fair to strong agreement on these categories ( $\kappa = .269 - 1.000$ ). I then further combined these themes into a dichotomous *measure valence* variable, coding for whether the measures attributed to the graph were represented as positive (such as relationship satisfaction) or negative (such as sexual violence)<sup>5</sup>. Responses could be coded as attributing more than one type of measure. Responses that could not be categorized were coded as missing data (n=61).

---

<sup>5</sup> Due to time constraints, I had to complete the final stages of coding and variable creation myself.

**Table 1***Measures Attributed to Graph Stimulus*

<b>Measure Valence</b>	<b>Measure</b>	<b>Example</b>	<b>Frequency</b>
Positive	Sexual satisfaction and desire	“libido White woman are more open to sex and sexuality as compared to African women”	8
	(Positively framed) sexual activity	“Amount of women engaged in regular sexual behavior”	9
	Sex in the context of relationships or marriage	“I think it was about sexual belief. Specifically, whether women seek a relationship before sex.”	4
	(Positively framed) abstinence from sex	“I think it was beliefs that you should be in a committed relationship with your partner before you have sexual intercourse.”	6
	Sexual attraction or attractiveness	“I think the missing information is that White women are considered more sexually appealing than African women”	5
	Access to contraceptives or sexual health resources	“The amount of women who use birth control. Women who use condoms, Take the pill etc...”	9
	Sexual agency or empowerment	“showed that more Black women initiate sex than White”	4
Negative	Sexual violence or exploitation	“Woman who are sexually assaulted and that don't report their abuser to the police.”	19
	Risky sexual behavior	“sexual behavior. specifically relating to unprotected sex and illegitimate childbirth”	9
	Sexually Transmitted Diseases	“some stds are more common among Black people than White so probably one of those”	10
	Single mothers and unplanned or teenage pregnancy	“I would guess that the graph is depicting percentage of women who believe having children without having a committed relationship is acceptable.”	17
	Infidelity	“This is really hard to guess. But perhaps beliefs on whether cheating on one's partner was acceptable under certain circumstances.”	2
	Sex outside of marriage or relationships	“Lost virginity outside of marriage”	13

The research assistants also coded which group, if any, emerged as the focus of the response. In this we adopted similar procedures as those of Hegarty (2013); coders identified a group as focal if they were the object of some action or description (“growing problems with STD transmissions *through the African-American* population...”), the figural group in a contrastive phrase (“*White women are less* involved in unprotected sex”), or the agent of the verb in a sentence (“*African countries value* chastity”). Each research assistant coded a sub-set (12% of the total responses) that the other research assistant coded, in addition to equal portions of the remaining responses, this allowed me to assess inter-rater reliability using Cohen’s  $\kappa$ . Coders moderately agreed on ratings of *measure focal group*,  $\kappa = .655$  (95% CI, .385 to .925),  $p = .000$ . I resolved any discrepancies to produce the final dataset.

**Explanation of Difference.** After guessing what type of measure the graph represented participants explained why the (fictional) researchers would have observed a group difference on this measure. I followed the same procedure in coding these responses, with two research assistants (both White women) coding a shared sub-set (12% of the total responses) of the data in addition to equal portions of the remaining responses. The coders followed the procedure described above to identify the focal group of the explanation responses. Coders also rated a number of exploratory themes identified during the bottom-up coding scheme development process (not included in quantitative analyses). Coders strongly agreed on ratings of *difference focal group*,  $\kappa = .894$  (95% CI, .692 to 1.096),  $p = .000$ . I resolved any discrepancies to produce the final dataset. I reviewed the responses and produced a dichotomous (positive/negative)

*difference valence* variable.<sup>6</sup> I adopted a conservative approach to these ratings, only coding explanations that used explicitly evaluative language (“White women are just more prudish”) or that described women as the objects of actions or contexts that would be commonly perceived as positive (“Because African women are more attractive thus having more suitors”) or negative (“Blacks are generally poorer, live a more ghetto lifestyle [...] makes them more prone to prostitution”). As with all qualitative data, there existed several ambiguous cases that were difficult to categorize (n=41). A more comprehensive analysis of the discourses mobilized within the explanations of difference is provided in the Critical Discourse Analysis.

**Overall Group Focus and Valence.** I reviewed the focal group coding for the two open-ended questions and produced an overall *group focus* variable to represent the participant’s attention across their responses. I reviewed the similarity of the *measure focal group* and *difference focal group* variables, finding only a fair level of agreement,  $\kappa = .277$  (95% CI, .028 to .526),  $p = .034$ . In resolving any discrepancies, I sought to code the responses for whichever group seemed to be the focus overall. Any responses that could not be easily categorized were coded as missing data (n=65). This combined coding served to simplify the analysis and, more importantly, better represent the cohesive nature of the responses: participants were explicitly referring to their measure attribution response when explaining the group difference and many responses would become less coherent if considered alone. I was able to classify 91 of 156 responses as clearly demonstrating a focal group. This overall *focal group* variable showed substantial agreement with the measure focal group variable,  $\kappa = .730$  (95% CI, .509 to .951),  $p$

---

<sup>6</sup> I conducted the Valence coding myself as my research assistants’ coding of responses were incomplete.

= .000 and difference focal group variable,  $\kappa = .869$  (95% CI, .745 to .992),  $p = .000$ , so was deemed reliable and analyzed.

I also computed an overall *group valence* variable to represent general appraisal of the focal group, for responses in which a focal group was identified. I reviewed the similarity of the *measure valence* and *difference valence* variables, finding only a moderate level of agreement,  $\kappa = .489$  (95% CI, .248 to .730),  $p = .001$ . This lower level of reliability between the two is again due to the nature of the flow between the two open-ended responses. For example, one participant attributed a positive behavior to the graph, “How satisfying their sexual behavior is.”, and subsequently articulated a negative White women-focused explanation for the group difference, “White women are prone to shorter relationships which lead to more unsatisfying sexual relationships”, producing a discrepancy in their the measure valence and difference valence ratings. I reviewed these cases individually and determined the most representative valence rating for explanations targeted at a specific group; for example, the previous example was rated as generally negative as the explanation of a group’s behavior was negatively valenced (i.e. in terms of White women’s lack of sexual satisfaction). This overall *group valence* variable showed substantial agreement with the *measure valence* variable,  $\kappa = .755$  (95% CI, .620 to .890),  $p = .000$  and *difference valence* variable,  $\kappa = .970$  (95% CI, .911 to 1.029),  $p = .000$ , so was deemed reliable and analyzed.

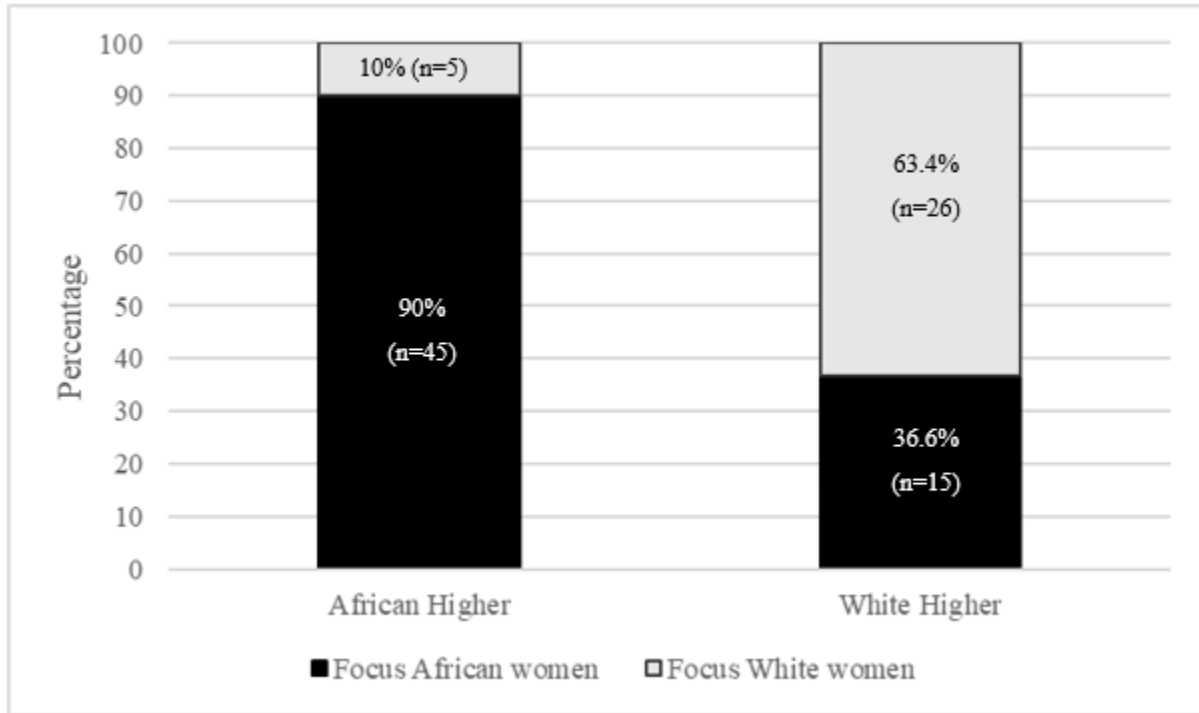
## **Results**

In this section I first present quantitative analysis of participant responses, both those that were categorized using my coding scheme and those that were coded as missing. Following this I present the results of my qualitative Critical Discursive Analysis of participant responses.

**Focal Group.** Given that the focal group coding took the form of a dichotomous judgement I ran log linear analyses to test the effects of the manipulations for the 91 participants whose responses were rated as focusing on either of the groups presented in the graph. The remaining 65 participants were coded as missing data in this variable. Hierarchical log linear analyses indicated a significant main effect of Focal Group such that, across all conditions, a greater proportion of participants who explained the behavior of a specific group focused on African women (65.93%) than White women (34.07%),  $\chi^2(1, N=91) = 9.405, p = .002$ . A significant contingency between Direction and Focal Group qualified these patterns,  $\chi^2(1, N=91) = 30.097, p = .000$ . Participants in the African higher condition showed a significant tendency (i.e., greater than chance) to focus explanations on African women (90% versus 10%),  $\chi^2(1, N=50) = 32, p = .000$ , but participants in the White higher condition did not show a significant tendency to focus explanation on either African (36.6%) or White (63.4%) women,  $\chi^2(1, N=41) = 2.951, p = .086$  (see Figure 2). The three-way contingency between order, direction and focal group was not significant  $\chi^2(1, N=91) = .548, p = .459$ . Two of the eight cells in the 2x2x2 contingency table contained expected frequencies of less than five, which does not increase the Type I error rate but can reduce statistical power (Tabachnick & Fidell, 2012). The analyses did not reveal a significant main effect of Order, nor any second-order contingencies including the Order manipulation. These results suggest an overall tendency to focus upon African women when explaining racial differences in sexuality, particularly when African women are higher in a sex-relevant measure. I also conducted a series of hierarchical log linear models to test whether *focal group* varied as a function of participant race, gender and religious affiliation, and whether these interacted with the Direction or Order manipulations, none of which yielded significant results.

**Figure 2**

*Proportion of Focal Group Ratings as a Function of Direction Manipulation.*



**Group Valence.** I used the same analytic approach to test the effects of the manipulations on the valence of explanations among the 91 participants whose responses were rated as focusing on either of the groups presented in the graph. Of these participants, 83 participants gave responses that could be clearly coded as either positively or negatively valenced. The remaining 73 participants were coded as missing data for this variable. I ran an initial hierarchical log linear model including three variables; Direction of difference (African women higher vs. White women higher), Order in graph (African women first vs. White women first), and the Group Valence rating (Positive vs. Negative), again finding that the Order manipulation did not interact with any other variables. No cells in the 2x2x2 contingency table contained expected frequencies of less than five. The model indicated a marginally significant contingency between Direction

and Group Valence, such that the percentage of participants who represented their focal group in a negative way was higher in the African Higher condition (66.7%) than in the White Higher condition (47.4%),  $\chi^2(1, N=83) = 3.293, p = .070$ . The three-way contingency between these variables was not significant,  $\chi^2(1, N=83) = .875, p = .349$ , nor were there significant main effects of the three variables. Group Valence did not vary as a function of participant gender, race or religious affiliation, nor did these variables interact with the Order or Direction manipulations.

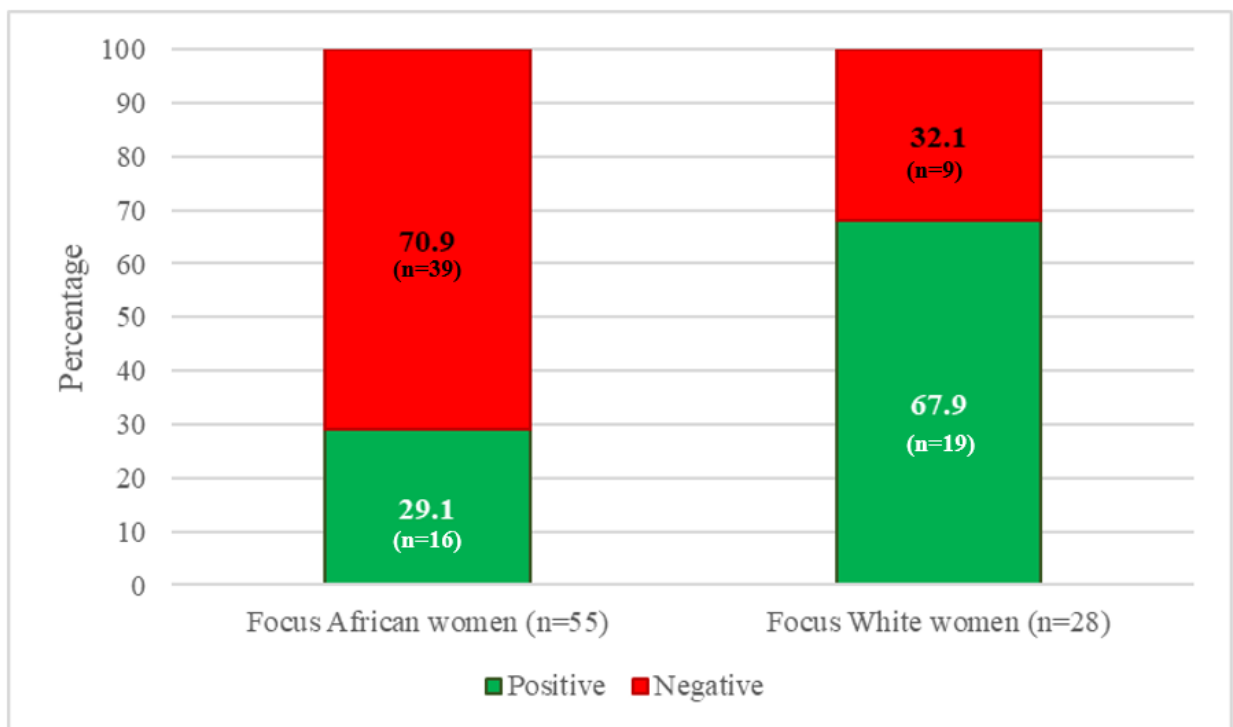
I subsequently ran another model to test whether the valence of explanations is associated with the group being explained. Given that Order did not interact with any other variables in the previous analysis, in this model I excluded the Order manipulation and included only Direction of difference (African women higher vs. White women higher), Focal Group rating (African women focus vs. White women focus), and the Group Valence rating (Positive vs. Negative). Three of the eight cells in the 2x2x2 contingency table contained expected frequencies of less than five. As in the previous analyses, results indicated a main effect of Focal Group,  $\chi^2(1, N=83) = 8.945, p = .003$ , qualified by a significant contingency between Direction and Focal Group,  $\chi^2(1, N=83) = 8.369, p = .004$ . The marginally significant contingency between Direction and Group Valence evident in the previous analysis was no longer evident here,  $\chi^2(1, N=83) = 0.00, p = 1$ . Instead, results revealed a significant contingency between Focal Group and Group Valence,  $\chi^2(1, N=83) = 8.369, p = .004$ . Participants whose responses were categorized as negatively valence showed a significant tendency (i.e., greater than chance) to focus upon African women (81.25% versus 18.74%)  $\chi^2(1, N=91) = 11.434, p = .001$ , but participants whose responses were categorized as positively valenced did not show a tendency to focus upon White women (54.29%) or African women (45.71),  $\chi^2(1, N=35) = 6.628, p = .01$  (see Figure 3). Taken



as a whole, these analyses suggest that the high proportion of negative explanations in the African higher condition is a reflection the tendency for participants in that condition to focus explanation on women of African descent. The three-way contingency approached but did not meet statistical significance,  $\chi^2(1, N=83) = 2.973, p = .085$ .<sup>7</sup>

**Figure 3**

*Proportion of Valenced Framing Ratings as a Function of Focal Group.*



<sup>7</sup> The three-way contingency between Direction, Group Focus and Valence indicated that Valence and Focal Group interacted at the White Higher level of the Direction manipulation only; participants in the White Higher condition showed a significant tendency to give positively valenced responses when focusing upon White women (73.91% versus 26.09%), and a significant tendency to give negatively valenced responses when focusing upon African women (80% versus 20%). Participants in the African Higher condition did not show a significant tendency to give positively or negatively valenced explanation when focusing upon either White women (40% positive versus 60% negative) or African women (32.5% positive versus 67.5% negative).

### *Analysis of Uncoded Data*

Across the three studies I excluded a large number of cases during the quantitative coding process. In this section I will examine the features of those participants whose responses were coded as missing data by virtue of not fitting into any categories used in my coding schemes. The amount of missing data in these studies is in part an issue of quality control. Despite providing monetary compensation and using various mechanisms to prevent false ‘bot’ accounts from participating in the study, across all three studies I received many unintelligible responses or responses scraped from internet sources, which I excluded from the dataset. Beyond these many responses were too short or lacked enough specificity to categorize using my coding scheme. However, my critical discourse analysis in Study 1 reveals participant reactance as another reason responses could not be coded. Across the three studies participants explicitly refused to participate in the tasks that asked them to extrapolate from ambiguous data. This same type of reactance has been noted among participants in other empirical studies within the *effect to be explained* paradigm, for example in participants’ reticence to rate gay men as mutable in Hegarty and Pratto (2001). Whether participants’ refusal to complete the task springs from fears about social desirability (as with the participant that expressed concern that their response would make them appear racist) or a general opposition to the task itself (as with participants that claimed the task violates their tendency towards logical and unbiased thought), it appears that participants’ engagement with the study was influenced by boarder discourses surrounding the position of the social sciences within society (see my analyses of Excerpts 17 to 20 above).

It is important not to interpret these instances of resistance as more deliberate than responses that were coded; participants who completed the task as I expected them to were being equally intentional in their choice to cooperate with my research project. In psychological

science it is common practice to interpret behavior that aligns with the predicted effects of manipulations as a sign that these manipulations ‘worked’ and truthfully represent participants’ cognitive processes, while dismissing unexpected or incongruent behavior as evidence of a flawed methodology or lack of participant engagement (Spears & Smith, 2001). However, both types of behavior can reveal how the experimental paradigm is in itself a social context which affords multiple outcomes and expressions. In this I am aligning myself with Spears and Smith’s (2001) assertion that “the products of experiments can best be seen as expressive “speech acts” rather than direct reflections of cognition or consciousness” (p. 318). My use of scientific artifacts and open-ended questions afforded participants the opportunity to align themselves with my research project and articulate social representations using the language of science, or they could position themselves in opposition to the research enterprise (mine or social scientists in general) and articulate dismissal or outright hostility. Table 2 describes some common features identified across these responses in Study 1, although it should be noted that these categories are solely intended to provide a means of representing the range of missing responses, rather than articulating assumptions about participant intention. It is entirely possible that providing a ‘vague’ or ‘short’ response is itself a form of reactance, or that the explicitly ‘reactant’ responses are the result of participants aligning themselves with the research project by demonstrating careful thinking.

In addition to my discursive analysis of the meanings communicated within uncoded responses, I will explore quantitative differences between those participants whose responses were and were not amenable to categorization using my coding scheme. The experimental context, like all social contexts, is imbued with political meanings and power dynamics which influence how participants interact with that space (Spears & Smith, 2001). Part of the politics of

experiments is the erasure, exclusion, or salience of identities, of both participants and experimenters. By examining how participants communicate their identities and use attitudinal measures to affirm social discourse, I hope to gain greater insight into how participants engaged the stimuli and the study in general.

**Missing Data.** I chose to analyze missing data in the *focal group* variable (as opposed to group valence, for example) as this is a variable that was coded in the same way across all three studies and is a primary outcome of interest. Further, many of the quantitative code variables are most meaningful in relation to the focal group variable (for example, I am most interested in the valence of a response as it relates to a specific group, rather than in general), so missing data within this variable could provide the most insight into participants' engagement with the study.

I recoded focal group into a dichotomous Missing/Not-Missing variable for this analysis. Chi-square analyses indicated that participants coded as missing did not differ from those not missing in terms of gender identification, ethnic identification, whether they were born in the USA, levels of education attainment, whether English is their first language, or religious affiliation. Independent samples t-test analysis indicated no difference in mean age between Missing and Not-Missing coded participants. Analyses did indicate a significant difference in political orientation,  $t(151)=2.196, p=.030$ , such that Missing participants expressed higher levels of conservative political ideology (48.016 versus 37.100). Participants coded as Missing scored higher on the measure of Legitimacy of Inequality scale,  $t(154)=3.234, p=.001$ , indicating greater support for statements that suggest that Black and White women are treated equally. Analyses also indicated differences in endorsement of statements in the Modern Racism Scale (see Appendices for details),  $t(154)=2.731, p=.007$ , which includes both implicit and explicit

expressions of prejudice towards Black Americans. There were no significant differences on measures of Gender Blind Sexism, ( $t(154)=1.963, p=.051$ ), Subjective Social Status ( $t(154)=.777, p=.438$ ) or Feminist Identification ( $t(154)=-.447, p=.656$ ). The number of participants coded as Missing or Not-Missing did not vary as a function of the Direction or Order manipulations. Chi-square analysis did indicate a significant contingency between the type of Missing response and the Order manipulation,  $\chi^2(2, N=65) = 7.935, p = .019$ . This can be attributed to the greater proportion of Missing responses in the African Higher condition that were categorized as too short to interpret, as compared to the White Higher condition (39.4% versus 9.4%),  $\chi^2(1, N=16) = 6.25, p = .012$ . Proportions of Vague and Reactant Missing responses did not differ as a function of Order of presentation. Type of Missing response also did not differ as a function of the Direction manipulation, or by participant race or gender. In total, these results suggest that participants with more conservative political beliefs (including prejudice towards Black Americans and, to a smaller degree, endorsement of traditional gender roles) more often gave responses that could not be categorized using my coding schemes.

**Table 2***Frequencies and Descriptions of the Types of Responses Coded as Missing in Study 1.*

<b>Type</b>	<b>Example</b>	<b>Frequency (% of Missing)</b>
<i>Vague:</i> Responses that gave comments which were not explicitly targeted towards a specific group	“i think it may be mostly due to cultural differences,maybe caused by religious restrictions or the Lack thereof.”	42 (64.62%)
<i>Short:</i> Short responses with too little detail to reliably interpret	“Sex without marriage is ok Cultural”	15 (23.08%)
<i>Reactant:</i> Responses that were explicitly expressed opposition to or discomfort with the task	“I have no idea what specific measure the graph was representing and trying to draw conclusions with little to no information only perpetuates the spread of false or misleading information. Random guess: people reporting abstaining from sex”	8 (12.31%)

***Critical Discursive Analysis***

In this section I will present a critical discursive analysis of participant responses. My analytic strategy was to inductively identify social discourses mobilized within participant explanations of the difference represented in the graph stimulus. In conducting the analysis, I loosely followed the tasks outlined by Gee (2014) to identify situated meanings and discursive formations. I also drew upon Lazer’s (2007) articulation of feminist discourse praxis, by focusing my analysis on discourses that are implicated in oppressive power relations. When I do present linguistic analyses, it is to examine how lexical choices and argument structure function to reinforce ideological structures, rather than making linguistic formations themselves my object of interest. Although I had also subjected these data to quantitative thematic coding, critical discursive analysis allows for more a contextualized analysis of the narratives that participants

reproduce and how they go about communicating these (Gee, 2014). Additionally, this analysis allows me to adopt a connective strategy through analyzing responses to the two open-ended questions in context in terms of narrative development, rather than as distinct entities (Maxwell, 2013). When presenting responses to both questions I will indent and separate them into two paragraphs, to allow for a holistic analysis while also preserving the sequential nature of the responses. Extended excerpts are numbered for ease of reference. In this analysis I will be adopting a decolonial feminist perspective, which affords attention to the interplay between narratives about global development and more local articulations of race and gender.

**Tradition and Cultural Development.** In constructing a narrative to explain the difference presented in the graph stimulus many participants reproduced a dichotomy between tradition and modernity. Participants spoke of “traditional beliefs” and, in particular religious beliefs, as impediments to sexual freedom and health. they discussed tradition as a cause of both a lack of sexual engagement (e.g., “African countries value chastity in women”) and an overabundance of sexual activity. One manifestation of this “traditional” overabundance was a presumed propensity for sexual violence: “I think in a third world country it may be more common for woman to be treated with disrespect than it is for woman in North America”. Another expression was evident in comments about effects of hypersexuality on family structure.

*Excerpt 1:* “I think it represents pregnancies. I guess I think that African American and White women may differ in that regard  
I guess it is just a traditional large family type of thing.”

Participants largely deployed the concept of tradition when focusing upon African women and culture. They typically used language that reproduces narratives of global inequities in cultural

development, using terms such as “third world country”, “developing African countries”, or “poorer nations”, to describe African countries in contrast to “industrialized nations” like the United States. When focusing upon African Americans, participants characterized economic, as opposed to cultural, development as the instigating factor in explanations of African American women’s behavior:

*Ex. 2:* “I think this graph represents sexual behavior, and shows that african american women are more sexually active.

I think they found this info because maybe African American women are more likely to be from poor neighborhoods where bad decisions are made.”

*Ex. 3:* “I think it was measuring sexual behavior. Specifically rate of prostitution

Ummm... Blacks are generally poorer, live a more ghetto lifestyle and poverty and poor standard of living makes them more prone to prostitution”

Across these explanations is the assertion of a causal relationship between distal, economic factors and group-level variations in women’s sexual beliefs and behaviors. In excerpts 2 and 3 participants shift from an individual level of analysis (“women are more sexually active”, “rate of prostitution”) to a macro-level analysis of economic disparity. This shift from micro- to macro- level explanations was a common feature in participant responses. However, this shift does not represent a re-locating of responsibility or shift away from group-level stereotypes: structural factors (“Blacks are generally poorer”, “poor neighborhoods”) are paired with negative evaluations of the group (“ghetto lifestyle”, “bad decisions”). In this, the antecedents of behavior are located at the cultural level: poverty causes bad decisions or negative habits, which in turn cause specific patterns of sexual behavior. The discourse of cultural (under)development as



having explanatory value for group-level patterns is enabled by the positioning of people of color/majority world peoples as determined by cultural-level factors, as opposed to White and western peoples, who can be understood at the group or individual level (Causadias, Vitriol & Atkin, 2018; Volpp, 2000).

**Exploration and Normative Sexuality.** In contrast to the negative framings of sexuality within tradition and development discourse, positive manifestations of sexuality were articulated within the discourse of modern neoliberal individualism. Individual expressions of sexual desire were framed in terms of exploration and openness:

*Ex. 4:* “Sexual behaviors such as fetishes or kinks. I am under the impression that White females are more open to these behaviors, so the graph would represent a higher margin for them.

Cultural indifference and judgement amongst peers would most likely be the culprit.”

*Ex. 5:* “I would surmise this is a graph that represents the amount of each ethnicity that reports having anal sex at least one time in their life. I would make this judgment based on the notion that African American women are generally more outgoing and adventurous than White women.

I believe African American women would perhaps be more likely to engage in the behavior and would most certainly be more willing to admit to the fact that they did.”

In the above quotes specific sex acts are named (“fetishes or kinks”, “anal sex”). These acts, in addition to a mention of oral sex, are examples of the relatively rare naming of sexual acts within the responses. From a Foucauldian perspective, sexual formations that are articulated in terms of practices can be understood as less normative than those that are integrated into identity discourse (Foucault, 1979). In these excerpts, the practice of non-normative sexual acts is framed as the expression of individual agency (“White females are more open”, “African American women are generally more outgoing and adventurous”). This construction of sexuality as individual expression arose frequently among responses. Also notable in the Excerpt 5 is the association created between sexual expression and authenticity (“be more willing to admit”), a component of neoliberal individualist constructions of the self (Adams, Estrada-Villalta, Sullivan, & Markus (2019). Such individual level expressions were often imagined within a broader context of a sexually permissive liberal society, as shown in the Excerpt 4 (“Cultural indifference”). This was a common discourse employed among responses, particularly as a means of positioning White/western women and culture as exemplifying progressive politics and sexual permissiveness:

*Ex. 6:* “White woman are more liberal when it comes to sexual behavior. Black women aren't as liberal.”

*Ex. 7:* “libido [...] White woman are more open to sex and sexuality as compared to African women

as compared to the african women, White women are more exposed to sexuality from television movies magazine and so on”

Circular arguments, as demonstrated in Excerpt 6, function to reinforce the validity of a claim; the logical equivalence of the two arguments ('White women are more liberal than Black women' and 'Black women are not as liberal as White women') serves to construct the participant's characterization of a racial disparity in liberal attributes towards sex as coherent and self-evident, rather than as a logical fallacy (Hahn, 2011).

**Essentialism.** While the participant in Excerpt 5 framed the practice of anal sex within a positive expression discourse, others considered this sex act within a negative framing:

*Ex. 8:* "I think it represents who likes anal more.

I feel like Black women might not be down with it as much because they are with Black guys more and Black guys have bigger dicks so it hurts more."

In Excerpt 8, the participant employs biological essentialist discourse about Black men's bodies to make claims about obstacles to Black women's sexual expression. Interestingly, the few mentions of men among the responses exclusively referred to Black men, particularly their bodies:

*Ex. 9:* "How many women like to have sex with Black men.

White chicks love the Black cock."

Dehumanizing representations of Black bodies should be understood within the historical context of slavery; the articulation of Black men and women in terms of their physicality, as sexual objects (Kotef, 2009; Brown, 2007; Farley, 1997), and/or as economic resources, functioned to justify slavery and persists in contemporary stereotypes. In addition to reinforcing these racial discourses, references to the physicality of Black people is characteristic of biological essentialist

discourse about race. These discourses can be contextualized within histories of scientific racism; indeed, Rushton & Bogaert's (1987) evolutionary psychology paper, which I quote at the beginning of this thesis, is heavily preoccupied with discussions of Black men's sexual anatomy. This essentialist construction of race is articulated in several responses, including assertions of a causal relationship between racial biology and incidence of sexually transmitted diseases:

*Ex. 10:* "Use of condoms is probably higher with Africans since HIV is more common among them.

Probably gene descendants from African ancestors"

*Ex. 11:* "some stds are more common among Black people than White so probably one of those

genetic differences related to race"

Excerpts 10 and 11 appeal to the scientific authority of genetic research in order to forge an association between Black anatomy and pathology. References to Black women's bodies more often were articulated in terms of constructions of femininity as intertwined with representations of White women's bodies:

*Ex. 12:* "Men's preference. More men are attracted to White women

White women tend to have more feminine features"

In addition to drawing biological boundaries between Black and White women, several responses drew upon essentialist constructions of culture:

*Ex. 13:* "There could be a difference in many areas, including sexual partners, between White and Black women. Culturally we are often different."

*Ex. 14:* “I would think it's just a difference in the norm of their societies and cultures for women of different races.”

*Ex. 15:* I don't know maybe sexual intention i guess like if they prefer to have sex on the first date or second date and so forth.

I have no idea honestly it's hard to use a graph when you can't actually see the information, I'm kind of shocked on hard it is if i'm being honest. To somewhat answer your question though... it just the way the world works I guess.

The use of the word “just” in Excerpts 14 and 15 function to reinforce as taken-for-granted knowledge the notion that cultures are distinct and stable entities. Also evident in Excerpt 15 is the use of mitigators (“I don’t know”, “I guess like if”) to communicate a sense of uncertainty or position the self as a careful knower (Gee, 2014). Mitigators were frequently deployed among responses and perhaps could be understood within the context of the study itself: participants were acting within the specific cultural context of a (simulated, online) research laboratory and were instructed to engage with a (supposed) scientific artifact (a graph). Representations of science as characterized by objectivity and careful thought could elicit use of mitigators as a means of navigating this space:

*Ex. 16:* “*The only thing I can come up with is that it may represent women who are waiting to have sex until marriage. I *thought at first it might* be an STD chart but I *ruled that out* because unfortunately I think African American women have higher rates than White women *but I could be wrong*. Then I *thought it might be* rape statistics but *I don't think that's accurate either*.” [emphasis mine]*

In Excerpt 16 the participant uses a series of mitigators to construct a narrative in line with the process of scientific inquiry: the participant poses a series of hypotheses, employs data to reject these (“higher rates” “rape statistics”) and closes with a disclaimer to avert the potential consequences of erroneous claims. The primacy of scientific discourse within the context of this study is contrasted to the ambiguity created by my ‘retracting’ information in the graph. This incongruity was often met with reactant responses and participants positioning themselves against this incongruity:

*Ex. 17:* “I do not know. I am a logical person that does not guess at things that cause me to reach incorrect conclusions. Therefore I do not have any thoughts about the graph as its data is likely irrelevant to me personally and even with knowing the graph specifics, probably still isn't relevant to me knowing. I do not tend to remember data I cannot use myself for some purpose.

I do not know. As I said, I came to no conclusions about the data in the graph because it is impossible for someone like me to do so. I could say the graph was about "women who enjoy going to a strip club" and no one could say I was right, no one could say I was wrong, the demographics have no meaning to me because "White" women and "African" women serve no purpose in the graph without more data. If it were about strip clubs, maybe Africa has less of them, who am I to know? That's why I think this is a bit ridiculous to ask.”

The assertion in Excerpt 17 that the task would “cause me to reach incorrect conclusions” speaks to the construction of experimentation in the social sciences as looking to deceive participants

and satisfy a liberal bias by soliciting prejudiced responses. This rhetoric is evident in a number of other reactant responses to the task:

*Ex. 18:* “Maybe women who have been sexually assaulted or have had multiple partners.

They want to show a difference between races. Everything has to be shown like that now.”

*Ex. 19:* “Income disparity leading to less sensible decision making. I think that when income is an issue, women will seek a man with higher frequency to compensate for uncertainty. I think the average White woman has more income security than an average Black woman, so I'd expect a lower reported number of sexual partners from them. Of course, this is all BS and i'm just showing myself to be a judgmental ass.”

*Ex. 20:* “I would guess that maybe the graph represented birth control use and access. Only guessing because all possible answers of what I could think of seem to be stereotypical and it makes me feel poorly that I have to think of something Black women do less than White women”

Interestingly, Excerpt 20 asserts that the task is leading them to explain Black women in relation to White women (“I have to think of something Black women do less”), a pattern that is in line with my predictions, but not an explicit part of the instructions for this task.

**Discussion of Critical Discursive Analysis.** In this analysis I have examined the use of social discourse in participant responses, specifically discourses related to tradition versus liberalism, essentialism, and science. My goal in this analysis was to illuminate some of the

discursive practices that participants engaged. I did not seek to reach saturation in my analysis, so there are certainly other discourses that could be examined within the data. The analysis presented above is useful to my research in that it demonstrates the ways that normative constructions of sexuality can interact with discourses surrounding race, development, and economic contexts. In the subsequent two studies I attempt to further explore some of these discourses.

## **Discussion**

In support of the descriptive white normativity hypotheses, the results of this study indicate that participants showed a tendency to focus their explanations of difference upon African women. This effect was moderated by Direction, in that explanations focusing upon African women were more common when the graph stimulus attributed a higher value to African women. Explanations that focused upon Black women tended to be negatively valenced, regardless of Direction, offering support for my prescriptive white normativity hypotheses. The tendency to explain African women was not moderated by effects of the Order manipulation or by the level of relative social power attributed to each group. These patterns also did not vary as a function of participant racial or gender identity.

The critical discourse analysis alongside the quantitative results offer a robust demonstration of white normativity; participants make use of colonial stereotypes in explaining the behavior of African women and naturalize constructions of white women as bastions of sexual liberation. My analysis of responses non-codable responses reveals that participants are engaging with scientific discourse as well as racial and sexual discourse. This evidence that participants were engaging with the political nature of scientific research speaks to other work in



the *effect to be explained* paradigm which demonstrates that scientific reporting conventions in themselves can reflect and reproduce normativity (such as Hegarty and Buechel, 2006).

## Study Two

Study one revealed discourses surrounding sexual empowerment versus repression as entwined with racial discourse. In my interpretation of the qualitative and quantitative data of Study 1 I examined the types of sexual activity that participants framed as positive or negative. Study 2 extends this analysis of valence to more closely examine the prescriptive white normativity hypotheses by soliciting participant expressions of a prescriptive norm about the ‘ideal’ frequency of sexual activity for women. The white normative hypothesis suggests that participants will anchor judgements of the ‘ideal’ sexual frequency (closer) to the value attributed to White women. As in Study 1, this study tests the potential moderating effects of Direction and Order.

### Method

**Participants.** I recruited a total of 200 participants using Amazon MTurk. I did not target any specific demographics in recruitment and those workers who completed the study received \$1.20 in compensation for their time. I excluded data from 20 participants who submitted incomplete responses or failed to pass comprehension and verification checks. The following analyses include data from only the remaining 180 participants. The ages of these participants ranged from 18 to 71 years ( $M=38.12$ ,  $SD=12.434$ ). In response to the open-ended question, 66 participants identified themselves as women (using terms “woman” or “female”), 112 identified themselves as men (using terms “male” or “man”), and one participant identified themselves as genderfluid. The majority of participants identified themselves as White (73.9%),

while 12.2% self-identified as African American, 5.6% as Asian-American, 4.4% as Hispanic and/or Latino, 2.2% as Biracial/Multiracial and 1.1% as Native American or Alaska Native. Nearly all participants (97.8%) indicated that they were born in the USA, and most (98.3%) identified English as their first language. About one-half of participants (56.1%) indicated affiliation with some form of religious organization. In response to an open-ended question about sexual orientation, 66.1% of participants self-identified as heterosexual (“hetero”, “straight”) and 15.6% self-identified as LGBTQI+ (“lesbian”, “bisexual”, “asexual”).

**Procedure.** The instructions directed participants to “Imagine you are a psychologist studying sexual behavior among women” and framed subsequent tasks as steps in the research process. Participants read that they would interpret results from the (fictitious), “National Survey of Sexual Attitudes and Behavior (NSSAB)”, which I described in the same way as in Study 1. Participants then viewed a calculation of the average number of sexual encounters White American and Black American<sup>8</sup> women report per year:

“Participants were asked to estimate how often they had sex each week and then could adjust their yearly total. For example, someone that had sex twice a week would have an approximate total of 104 sexual encounters per year.”

---

<sup>8</sup> In Study 2 I used the term “Black American” women as opposed to “African women”, as was used in Study 1. In Study 1, I was also interested in exploring narratives about immigration and so used the label “African” and noted countries of origin as a means of highlighting the women’s immigrant status, while still emphasizing that the survey sampled women living in the United States. I subsequently dropped this line of inquiry after Study 1 and so in subsequent studies which I switched to using the labels “Black American” and “African American” to more clearly define the groups as based in the USA.

Following this was a table representing a difference between White American women and Black American women. The manipulations of the graph content produced a 2 (*Order*: White women listed first; Black women graphed first) x 2 (*Direction*: White women higher; Black women higher) between-subjects design. To elicit a sense of realism I used photo editing software to distort sections of the graph to give the appearance that the image was an extract from a larger table of data (see Figure 4). The two values attributed to either group were based upon contemporary national studies of sexuality which indicate approximately one to two times per week as the modal response given by participants across a range of demographics (Estill, Mock, Schryer & Eibach, 2018; Twenge, Sherman & Wells, 2017) . I chose to use values at the upper and lower end of this distribution (146 and 63) to allow for enough variation to make the two scores distinct and because my interest in this study is to examine explanations of variation that may appear in participants’ everyday worlds. Presenting extreme values might have strengthened the effect of the Direction manipulation but would decrease external validity and potentially prime participants to draw upon specific narratives of pathology.

**Figure 4**

*Table Stimulus Used in Study 2.*

<i>Ethnicity</i>	
White American	146
Black American	63

After displaying the table stimulus, I performed a comprehension and manipulation check in which I asked participants to describe the data they just saw. Participants who failed this check

were excluded from the analysis. Next, I informed participants that the NSSAB researchers were interested in how frequency related to other aspects of wellbeing and that

*“The researchers found that women who reported having sex an average of \_\_\_\_\_ times per year also had the most positive scores on these other measures of sexual wellbeing.”*

Under this text was a slider, ranging from 0 to 210, for participants to indicate what they thought this ideal annual number of sexual encounters would be. This scale covers a wider frequency distribution without straying too far into extreme values and allowed the mid- and end-points to be equidistant from the two values displayed in the table. Once participants had indicated their ideal number on the sliding scale, I instructed them to explain their answer in an open-ended question. Following the Ideal Frequency task, I presented a similar open-ended measure as in Study 1 to elicit explanations for the racial difference that appeared in the table.

*Covariates.* Following the ideal frequency and explanation tasks I presented participants with several quantitative measures designed to test the effects of power and prejudice upon explanations. As in Study 1, participants completed a modified short-form version of Miron, Branscombe & Schmitt’s (2006) Legitimacy of Inequality scale ( $\alpha=.842$ ). I measured political orientation with a 100-point sliding scale in which higher numbers indicate a shift from liberal to conservative.

I asked participants to provide a detailed description of the tasks they were asked to complete. I coded these responses to assess task comprehension and accurate recall of information in the manipulation text (as a manipulation check). I excluded data from any

participants who were not able to correctly describe the stimuli or describe the study. Finally, I presented participants with the same set of demographic questions as in Study 1.

### *Coding of Open-Ended Responses*

Due to time and resource constraints I coded the open-ended responses in Study 2. I masked condition assignment during the coding process. I adopted the same coding scheme development process as in Study 1: identifying recurrent themes and expressions in the data, which I then organized into superordinate categories for quantitative coding. I adopted a conservative procedure whereby I only coded responses that explicitly fit the criteria, resulting in the exclusion of a large portion of participants from the coding analysis.

**Justification of Ideal Frequency.** My primary concern in this analysis was to identify the themes that participants articulated when justifying their choice of an ideal frequency. Only one participant made explicit reference to the groups represented in the table, so focal group was not part of the coding scheme for this measure. Across the responses a number of themes emerged regarding the value of sexual activity, akin to positive and negative sexual ideologies (Ivanski & Kohut, 2017). I combined these themes into a dichotomous *Sexual Ideology* variable that encapsulates a variety of sub-themes, as depicted in Table 3. I coded cases that did not unambiguously align with one of these categories as “no response”, leading to exclusion of a large number of responses, often due to the lack of detail in responses (n=65). Responses could be coded as fitting into more than one sub-theme within the overall Sex Positive/Negative themes.

**Table 3**

*Summary of Sex-Positive and Sex-Negative Sub-Themes in Justification of Ideal Frequency Responses*

<b>Theme</b>	<b>Sub-themes</b>	<b>Examples</b>	<b>Frequency</b>
Sex-Positive	Sexual activity is intrinsically rewarding	“having sex makes you happy”	30
	Sexual activity is a vital component of romantic relationships	“a higher frequency shows a strong and confident relationship with the partner(s)”	21
	Sexual activity has positive effects on wellbeing	“THERE ARE ALSO SOME BENEFITS ASSOCIATED WITH SEXUAL ENGAGEMENT RANGING FROM REDUCING STRESS LEVEL TO LOWERING BLOOD PRESSURE”	18
	Sexual activity is the cause or consequence of a positive self-image	“I think you are more comfortable with yourself if you have sex more often”	6
	Sexual activity is the expression of individual desire and autonomy	“I think if women are having more sexual encounters then they are confident in their sexuality and enjoy expressing it with others.”	7
Sex-Negative	Sexual activity needs to be moderated	“The number I picked reflected what I thought was a healthy number that didn't seem like a person was overly sexualized or afraid of sex someone who has an average number of encounters.”	14
	Sexual activity can be dehumanizing or otherwise damaging to the self	“It's the level of sex between the extremes, indicating (to me) sufficient expressions of sexual mutuality without neglect or deprivation on one hand, and feelings of obligation or pressure on the other.”	8
	Sexual activity is a distraction or dependent upon economic stability	“I just feel like there's a point where it gets to be too much and you need time for other things so averaging 90/year sounds good out of 365”	3

### Table 3 Responses

*Summary of Sex-Positive and Sex-Negative Sub-Themes in Justification of Ideal Frequency Responses (Continued)*

Theme	Sub-themes	Examples	Frequency
Sex-Negative	Higher frequencies of sexual activity lead to lower satisfaction	“I thought that those that had sex less often were likely more satisfied than those who were not.”	6
	Sexual activity must be confined to specific circumstances or relationships	“I am a Christian. Sex is only okay within marriage between a male and female.”	1

**Explanation of Difference.** After completing the frequency ideal task participants provided an explanation for the racial difference depicted in the table presented earlier. To code these responses, I adopted the same process as in Study 1 to produce a *difference valence* variable and *focal group* variable. I also conducted a thematic analysis on the responses and generated a number of themes to characterize the explanations. The frequencies of these themes did not vary as a function of Order or Direction manipulation, participant demographics (Gender, Race, Political orientation, Religious affiliation) or Sex Ideology. I coded uncategorizable responses as missing data (n=91). See Results for analyses of this missing data.

**Table 4***Frequency of Themes Identified in Explanations of Difference*

<b>Theme</b>	<b>Description</b>	<b>Examples</b>	<b>Frequency</b>
Agentic sexual behavior	Access to privilege or resources determines ability to engage in sexual encounters	“I may explain this difference as it relates to poverty, to be honest. More African Americans are impoverished than caucasian, and one free (and exciting) activity to do is have sex.”	28
Hypersexuality	Group differences in desire for sexual activity	“I would say that Black women have a higher sexual appetite than do White women. Although the same could be said for their partners, depending on their race.”	13
Types of relationships	Sexual activity is determined by quality/character of family and/or romantic relationships	“I'm honestly unsure. I thought the 146 figure was very high and probably a younger age group. Because women who are married with children, surely aren't having that much sex. I'm assuming it has something to do with a higher number of Black women being single mothers and not in present relationships.”	11
Willingness to report	Cultural norms lead some groups to be more willing to honestly report sexual activity	“The only thing that I could think of is that maybe in the Black community, its more taboo to admit to having more sex than whats "expected" of a lady. Maybe they're more likely to be disparaged for doing so.”	7
Resistance to task	Participants were unwilling to draw conclusions about the data	“I think this is a very slippery slope that I do not want to try and explain. I feel there is enough problems with racial discrimination and I do not want to or need to add to it by making up an explanation for this.”	30



## Results

**Ideal Frequency.** I conducted a 2 (Direction: Black American higher, White American higher) x 2 (Order: Black American first, White American first) between-subjects ANCOVA to investigate the effects of the table manipulations upon the raw Ideal Frequency values ( $M=115.71$ ,  $SD=38.255$ ). Results indicated no main effects or interaction between the Order and Direction manipulations, as summarized in Table 6, such that across conditions participants tended to select values slightly above the mid-point of the scale.<sup>9</sup> Further, I calculated a *White Distance* variable ( $M=49.372$ ,  $SD=33.431$ ) to represent how close the participants placed their ideal to the value attributed to White American women. Higher scores in this variable indicate a larger gap between the two values. I conducted a 2 x 2 between-subjects ANCOVA to investigate the effects of the Order and Direction manipulations upon the White Distance variable. Results indicated a significant main effect of Direction,  $F(1, 176) = 10.075$ ,  $p=.002$ ,  $\eta_p^2=.054$ , but no significant main effect of Order,  $F(1, 176) = 2.232$ ,  $p=.137$ ,  $\eta_p^2=.013$ . White Distance scores were significantly lower among participants in the White Higher condition ( $M=41.54$ ,  $SD=32.601$ ) than among those in the Black Higher condition ( $M=56.70$ ,  $SD=32.691$ ). The Order x Direction interaction effect was not significant,  $F(1, 176) = 1.042$ ,  $p=.309$ ,  $\eta_p^2=.006$ . These results run counter to the White normativity hypotheses, suggesting instead that participants generally anchored their ideal frequency to the higher value presented in

---

<sup>9</sup> I also conducted a series of analysis investigating the effects of Legitimacy of Inequality and participant demographics (Gender, Race, Sexuality and Religious Affiliation) upon the dependent variables in this study. None of which were significant and so are not reported in the analyses.

the table, regardless of the group that value was attributed to. Ideal Frequency did not vary as a function of participant race, gender, sexual orientation, or religious affiliation.

**Table 5**

*Estimated Ideal Frequency Means and Standard Deviations as a Function Of Order and Direction Manipulations*

<b>Direction</b>	<b>Order</b>	<b>Mean (S.D)</b>
White American Higher	White American First	111.93 (42.865)
	Black American First	125.18 (32.178)
Black American Higher	White American First	114.02 (40.386)
	Black American First	111.96 (36.852)

**Justification of Ideal Frequency.** The justifications participants gave for their Ideal Frequency score could help illuminate the factors and social discourses driving participant responses. I conducted a series of log linear analyses to investigate whether sexual ideologies were affected by the Order and Direction manipulations. The hierarchical log linear model included three variables; Direction of difference (Black American women higher vs. White American women higher), Order in table (Black American women first vs. White American women first) and Sexual Ideology (Sex Positivity vs. Sex Negativity). Only one of the cells in the 2x2x2 contingency table contained expected frequencies of less than five. There was a significant main effect of Sexual Ideology,  $\chi^2(1, N=91) = 30.31, p = .000$ , such that Sex Positive ideology (78.02%) was more common than Sex Negative ideology (21.98%). Second-order contingencies with Direction and Order did not moderate this tendency ( $\chi^2(1, N=91) = 1.944, p = .163$  and  $\chi^2(1, N=91) = .644, p = .415$ , respectively), but the three-way contingency was significant  $\chi^2(1, N=91) = 4.386, p = .036$ . Relevant frequency counts appear in Table 7. To

interpret this pattern, I examined variation in the frequency of Sex Negative ideologies as a function of Order within each Direction condition. Among participants in the White Higher condition, there was no significant tendency to articulate either a sex positive or sex negative ideology, whether White Americans were presented first (69.23% versus 30.77%, respectively) or Black Americans were presented first (76% versus 24%)  $\chi^2(1, N=51) = .293, p = .588$ . Participants in the Black American Higher condition did not show a significant tendency to articulate Sex Positive ideology when Black Americans were presented first (70.59% versus 29.41%), but did show a tendency to articulate a sex positive ideology when White Americans were presented first, (95.65% versus 4.35%),  $\chi^2(1, N=40) = 4.816, p = .028$ . These results run counter to the hypothesized pattern that representations that align with Othering understandings of Black women's sexuality (Black women have the higher level of sexual activity and are made the focal group by virtue of being presented second), would lead participants to frame sexuality more negatively; instead, the majority of participants subsequently articulated a sex positive ideology.

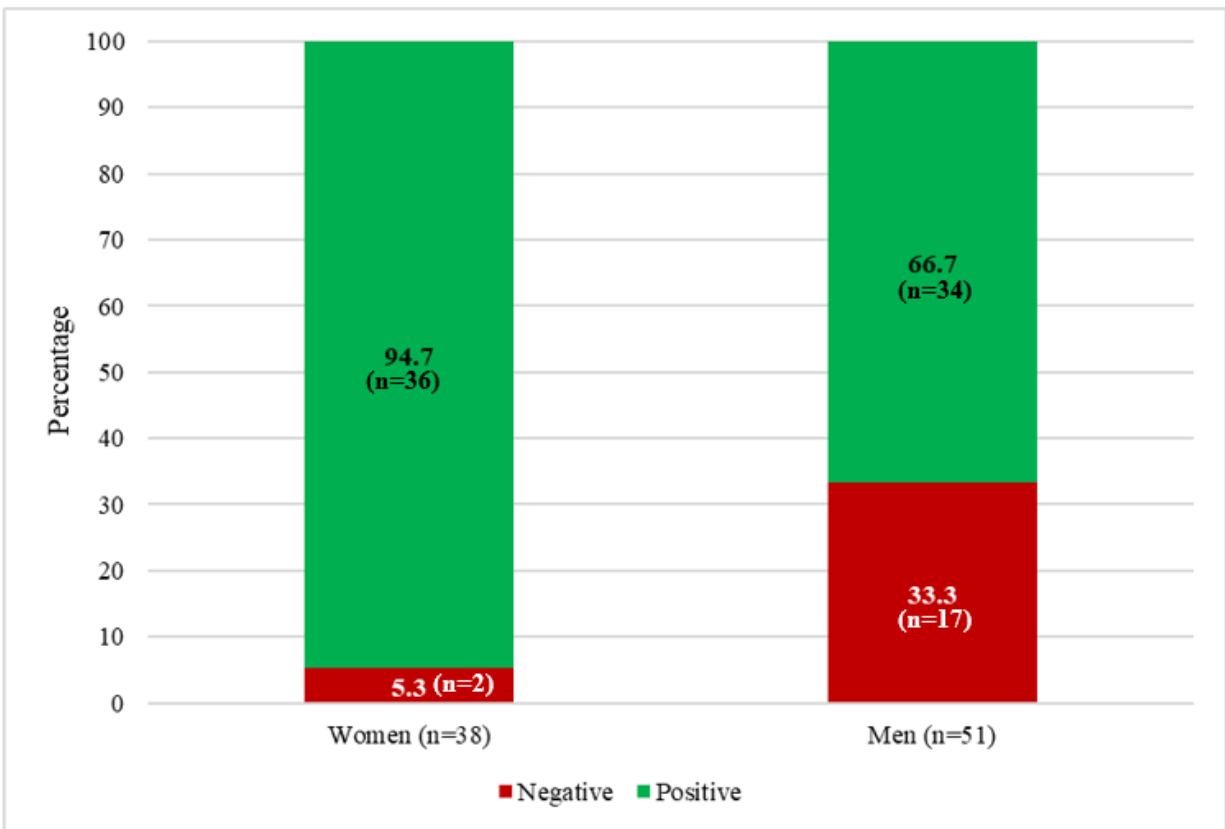
I ran a series of chi-square tests to examine the association between participant demographics (gender, race, sexual orientation, and religious affiliation) and sexual ideologies. Gender identity was the only variable to show a significant result,  $\chi^2(1, N=89) = 10.218, p = .001$ , with men expressing Sex Negative ideologies more frequently than women (33.3% vs. 5.3%) as shown in Figure 5. This result is fairly representative of the gender differences reported in the literature on sexual ideologies (Ivanski & Kohut, 2017).

**Table 6***Sexual Ideology Frequencies as a Function Of Order and Direction*

Direction	Order	Sex Ideology	Observed	
			Count	%
White American Higher	White American First	Positive	18	69.23
		Negative	8	30.77
	Black American First	Positive	19	76
		Negative	6	24
Black American Higher	White American First	Positive	22	95.65
		Negative	1	4.35
	Black American First	Positive	12	70.59
		Negative	5	29.41

**Figure 5**

*Proportion of Responses Endorsing Positive or Negative Sexual Ideology as a Function of Gender Identity.*



**Explanation of Difference.** I was also interested in the explanations participants gave for the difference represented in the table. To investigate hypothesized variation in the focus of explanation, I conducted hierarchical log linear model analyses including three variables; Direction of difference (Black American women higher vs. White American women higher), Order in table (Black American women first vs. White American women first) and Focal Group, the outcome variable of interest (Black American focus vs White American focus). Three of

eight the cells in the 2x2x2 contingency table contained expected frequencies of less than five. As in Study 1, there was a significant main effect of Focal Group,  $\chi^2(1, N=59) = 4.968, p = .026$ , such that a greater proportion of participants who focused explanation on one group focused upon Black American women (64.41%) than focused on White American women (35.59%). The second-order contingencies between Focal Group and Direction and between Focal Group and Order were not significant. However, the three-way contingency between these variables was significant  $\chi^2(1, N=59) = 14.249, p = .000$ . Frequency counts corresponding to this three-way interaction appear in Table 7. To interpret this pattern, I examined variation in the frequency of Focal Group as a function of Order within each Direction condition. Among participants in the White Higher condition, participants in the White First condition showed a non-significant tendency to focus upon either White American women or Black American (55% versus 45%, respectively). When Black Americans were presented first analyses indicated marginally significant difference in proportion of responses focused upon Black American women than White American women (85% versus 15%),  $\chi^2(1, N=20) = 3.516, p = .06$ . The opposite pattern emerged among participants in the Black Higher condition: when White Americans were presented first there was a marginally significant tendency to focus upon Black American women (90.91% versus 9.09%),  $\chi^2(1, N=19) = 3.536, p = .06$ . When Black Americans were first there was a significant tendency to focus upon White American women (62.5% versus 37.5%),  $\chi^2(1, N=19) = 6.000, p = .014$ .

**Table 7***Focal Group Frequencies as a Function of Order and Direction*

Direction	Order	Focal Group	Observed	
			Count	%
White American Higher	White American First	White American Focus	11	55
		Black American Focus	9	45
	Black American First	White American Focus	3	15
		Black American Focus	17	85
Black American Higher	White American First	White American Focus	1	9.09
		Black American Focus	10	90.91
	Black American First	White American Focus	5	62.5
		Black American Focus	3	37.5

In addition to coding the focal group of explanations I was interested in the valence of that explanation. I conducted a hierarchical 2x2x2x2 log linear analysis including Order, Direction, Group Focus and Valence, however model fit estimates indicated that removing the non-significant third-order and fourth-order contingencies would not reduce the fit of the model ( $\chi^2(1, N=45) = 8.667, p = .123$ , and  $\chi^2(1, N=45) = 0.45, p = .833$ , respectively). As there was no significant main effect or second-order contingencies involving Order, I calculated a new saturated model with the remaining three variables, which did show significant effects. As in the previous model, this new 2x2x2 model indicated that the third-order contingency between Direction, Focal Group and Valence was non-significant,  $\chi^2(1, N=45) = .233, p = .637$ ). The results indicated significant main effects of Focal Group, qualified by a significant second-order contingencies between Direction and Focal Group ( $\chi^2(1, N=45) = 4.971, p = .026$ ). Further probing of this pattern revealed that the tendency to explain Black American women was

stronger in the Black Higher condition (85.71% versus 14.29%) than in the White Higher condition (61.29% versus 38.71%). There was also a significant contingency between Focal Group and Valence ( $\chi^2(1, N=45) = 4.784, p = .029$ ). Participants who gave negatively valenced explanations tended to focus upon Black women (80.95% versus 19.05%), but participants who gave positively valenced explanations did not show a tendency to focus upon either Black women or White women (58.3% versus 41.6%, respectively). Finally, there was a significant contingency between Direction and Valence, ( $\chi^2(1, N=45) = 4.784, p = .029$ ). Participants in the Black Higher condition showed a tendency to provide positively valenced explanations (71.4% versus 28.6%), but participants in the White Higher condition did not show a tendency to provide either positive (45.2%) or negative (54.8%) explanations. Frequency counts appear in Table 8. These data are difficult to interpret, given that all effects were only marginally significant and sample size was small. Further empirical investigation would help illuminate these effects.

**Table 8**

*Valence of Explanation as a Function of Direction and Focal Group*

Direction	Focal Group	Valence	Observed	
			Count	%
White American Higher	White American Focus	Positive	8	66.67
		Negative	4	33.33
	Black American Focus	Positive	6	31.58
		Negative	13	68.42
Black American Higher	White American Focus	Positive	2	100
		Negative	0	0
	Black American Focus	Positive	8	66.67
		Negative	4	33.33



**Missing Data.** As in Study 1, I examined the differences between participants whose responses I had coded as Missing/Not-Missing in the focal group variable. The proportion of Missing/Not-Missing responses did not vary as a function of participant gender identification, ethnic identification, whether they were born in the USA, levels of education attainment, whether English is their first language, religious affiliation, or age. Similar to Study 1, participants whose responses I had coded as Missing expressed higher levels of conservative political ideology,  $t(176)=2.284$ ,  $p=.024$  and higher scores on measures of Legitimacy of Inequality,  $t(178)=3.087$ ,  $p=.002$ , and Modern Racism,  $t(178)=5.038$ ,  $p=.000$ . There was also a significant difference between Missing/Not-Missing responses on the measure of Gender Blind Sexism,  $t(178)=3.202$ ,  $p=.002$ , with Missing participants showing higher endorsement of traditional gender beliefs. Scores for the primary outcome variable for this study, White Distance, did not differ as a function of whether participants' responses were coded as Missing or Not-Missing,  $t(178)=1.608$ ,  $p=.110$ . Further, the proportions of Missing/Not-Missing cases did not vary as a function of the Direction and Order manipulations. In sum, while the Missing/Not-Missing variable did not interact with the primary outcome or manipulations of this study, I did observe a similar pattern to that of Study 1, wherein participants whose responses were coded as Missing articulated higher levels of conservative political ideology and prejudice.

## **Discussion**

Analyses of open-ended responses demonstrate support for the descriptive white normativity hypothesis, in that participants showed a tendency to explain Black compared to White women. Analyses similarly demonstrate support for the prescriptive white normativity hypothesis in evidence of negatively valenced explanations of Black women's sexuality.

The quantitative measure of a prescriptive frequency norm offered more ambiguous results; analyses of the White Distance measure provided no evidence for the prescriptive white normativity hypothesis in that participants did not anchor their frequency norm to the value attributed to white women. Instead, participants placed their ideal closer to the higher score they observed in the table stimulus, regardless of the group to which it had been attributed. These results suggest that participants were using a difference prescriptive norm to guide their response to the ideal frequency question: namely, a moderated more-is-better approach, wherein participants endorsed a higher frequency by anchoring their ideal to the higher value, without exceeding it. This is complemented by the more frequent articulation of sex positive ideologies in participants' justification for their ideal frequency. Analysis of the missing data replicated effects observed in Study 1, wherein participants who provided non-codable responses also expressed a more conservative political ideology and prejudiced racial and gender attitudes.

### **Study Three**

Analyses of open-ended responses in Study 2 demonstrated support for the prescriptive and descriptive white normativity hypotheses. In contrast, results for the quantitative "Ideal Frequency" outcome measure suggested an unexpected effect of a prescriptive norm about sexual frequency, such that participants tended to express that higher frequencies of sexual encounters were more desirable. However, within this pattern, results also suggested racialized variation in discourse about what high levels of sexual activity mean when attributed to Black versus White women. There is a tension between sex positive ideologies and racial stereotypes: more sex is better, although problematic when is it Black women who are having more sex. In this final study I look to further examine the interaction between normative beliefs about

sexuality and racial stereotypes. If there exists a prescriptive norm for higher frequencies of sex, participants should endorse an increase in sexual activity for both Black and White women. To investigate the prescriptive and descriptive norms about women's sexuality I use a measure of mutability, which allows for participants to alter one or both groups in order to align with normative expectations. On the basis of theory and research that people tend to perceive lower status groups as more mutable (Hegarty, 2006), one can hypothesize that participants will anticipate greater change among Black women to assimilate to a White standard, than change among White women to assimilate to a Black standard.

I am also interested in the explanations that participants provide for changing sexual patterns within racial groups. In this study I presented an exploratory program choice measure, in which participants indicated which one of several intervention programs would best account for the change of sexual patterns among one or both groups. In this I am interested in how participants might mobilize discourse about empowering sexuality or normalizing deviance in relation to the two groups.

## **Method**

**Participants.** I recruited a total of 160 participants using Amazon MTurk. I did not target any specific demographics in recruitment and those workers who completed the study were compensated \$1.50 for their time. I excluded data from four participants who gave incomplete responses or who failed to pass attention and manipulation checks.

The following analyses include data from only the remaining 156 participants. The ages of these participants ranged from 18 to 69 years ( $M=33.11$ ,  $SD=9.366$ ). I adopted an open-ended question to ask participants to indicate their gender identity and categorized these written

responses; 65 participants identified themselves as women (using terms “woman” or “female”) and 90 identified themselves as men (using terms “male” or “man”). Racial identifications of participants included White (70.5%), African American (9.6%), Asian-American (8.3%), Hispanic and/or Latino (6.4%), Biracial/Multiracial (3.2%) and Native American or Alaska Native (0.6%). The majority (97.4%) of participants identified English as their first language and all but one participant indicated that they had completed a high school or higher level of education.

**Procedure.** The same initial instructions as in Studies 1 and 2 introduced the study. Participants read that they would be interpreting the results of a fictitious national study of American women’s sexual behavior, the “National Survey of Sexual Attitudes and Behavior (NSSAB)”, as displayed in a simple table of data. I claimed that the data from this survey could be broken down by city or state.

In this study, I informed participants that the data they would be reading was collected in an unnamed metropolitan ‘City A’ in 2007. I also informed participants that the data represented an equal number of Black and White women living in that City A at the time. This table represented a difference in the average number of sexual partners between White women and African American women living in the US. As in previous studies, the content of the table was manipulated to produce a 2 (*Order*: White women listed first; Black women listed first) x 2 (*Direction*: White women higher; Black women higher) between-subjects design. As in Study 2, the two scores sat at the upper (5.1) and lower (3.2) ends of scores commonly reported by younger cohorts living in urban settings, while also allowing for a wide enough range to capture some variation in responses (see Figure 6).

After presenting the table stimulus I informed participants that the same organization had again conducted the study ten years later and that if they looked at the 2017 data for City A they would “see that the researchers found NO SIGNIFICANT DIFFERENCE between the African American and White women this time”. Having informed participants that there was no longer a racial difference in the number of sexual partners reported I asked participants to guess the average number of partners that each group reported in 2017. This procedure was based upon that used to measure perceived mutability in Hegarty (2006). The two groups were listed, in the same order that they appeared in the table, next to drop-down menus that allowed participants to select from an 8-point scale of numbers for both groups. These numbers, ranged from 2.9 to 5.5 at intervals of .2, to create equidistant mid- and end-points for the scale. In the dataset responses to this measure are coded on a scale of 1-8, rather than as the numbers participants selected, to more clearly represent the difference between scores. I allowed participants to guess the score reported by each group individually, even though the instructions should have directed them to select the same number for each group, to allow for participants to select different but similar numbers (which still might not be significantly different), to account for participants that may refuse to accept that the two groups could be the same, and as a way to gauge participant comprehension of the instructions. After guessing the 2017 scores for each group I asked participants to explain “why the researchers found different results in 2007 and 2017”. This open-ended measure is intended to reveal participants’ perceptions of how sexual behavior can change over time and the racial dynamics that may factor into this.

## Figure 6

### *Table Stimulus Used in Study 3*

The City A results from the 2007 survey are represented below:

Group	Avg. number of sexual partners in past year
African-American women	5.1
White American women	3.2

I informed participants that the subsequent step in their ‘research process’ was to examine changes that occurred in City A between 2007 and 2017, to see if these might explain the change in racial patterns over time. I presented participants with a list of five ‘programs’ that were implemented in City A during that decade, and I asked them to select the program that they thought could best explain the change in NSSAB results over that time. I designed descriptions of these programs to cover a range of social and structural concerns that might occur in an urban setting based upon programs I observed during a review I conducted of social interventions implemented at the state level. All of the programs could be framed as having the potential to affect an increase or decrease in sexual behavior. For example, the “Faith in Communities” program could decrease the frequency of sexual behavior through religious restrictions against premarital sex, or it could facilitate sexual behavior (e.g., dating) through the creation of community and opportunity for social interaction. Table 9 provides the name and description of each program, in addition to the major themes evident in participant explanations of what effects they expect the program to have. After participants selected one of the programs, the instructions directed them to explain their choice in an open-ended response. This program choice measure is largely exploratory and functions to afford participants a further opportunity to

articulate theories regarding the causal factors of racial differences in sexuality and potential sociopolitical factors that could influence how women engage in sexual behavior.

**Table 9**

*Program Descriptions and Themes*

<b>Program</b>	<b>Description</b>	<b>Themes in participants' justifications</b>
Faith in Communities	“Investment in religious institutions that lead effective social service programs”	Dissemination of religious and moral prescriptions regarding sex
Citizen Observer	“Government support for the recruitment and maintenance of neighborhood watch groups across the city.”	General improvement in environment
Enterprise Zone	“Investment in job creation and training in key growth areas, as well as investments in educational opportunities.”	Empowerment of women through increase economic opportunities
Health Matters	“Trained facilitators provide community education on issues of consent, sexual health, positive relationships, and family planning.”	Reduction of sexual risk and normalizing sexual desire
Living City	“Programs to encourage active citizenship and integration in the city culture through community services and events.”	Community integration as facilitating sexual contact

*Covariates.* The final section of the study included several of the same measures from Studies 1 and 2: Subjective Social Status and exploratory attitude measures. I screened the open-ended responses as manipulation checks, in addition to responses to a question at the end of the survey asking participants to describe the study. I used the same set of demographic questions as in Studies 1 and 2.

### *Coding of Open-Ended Responses*

The coding procedure for Study 3 followed the same process as in Study 1: I was able to recruit a group of undergraduate research assistants to assist with coding themes (two White women, one Black man and one White man). I also conducted some coding by to organize these themes into superordinate categories.

**Explanation for Change.** The first open-ended response participants provided was explanation as to why the (fictitious) researchers would have found a racial difference in 2007 but not in 2017. I was interested in what types of social factors participants would attribute this change to, and whether this would vary according to the order and direction manipulations. Four research assistants used a dichotomous coding system in which the presence/absence of a specific category was coded as 1/0, respectively, as these themes were largely non-mutually exclusive. These categories encompassed a wide range of measures, from changes in social norms regarding sexual activity (such as increasing acceptance of sexual diversity and movements for women's sexual empowerment) to more distal structural factors (such as use of migration in or out of the city and changes in technology). Inter-rater reliability ranged from poor to moderate (see Table 132 in Appendices). I resolved any conflicts between ratings. Similar to Study 2, I was interested in how these themes aligned with larger social discourses about sexual behavior. In creating a superordinate *Sexual Ideology* variable to represent the many factors that the data change was attributed to, I sought to align themes within a sexual ideology framework. Many of the themes represented a sense of increasing empowerment and greater access to resources that facilitate sexual expression as the instigators of change, which I categorized as sex-positive attributions. Conversely, other themes focused upon aspects of sexual risk and fear of decreasing morality as the cause of change. I categorized these themes as sex-negative



attributions. Table 10 depicts Sexual Ideology themes, sub-themes, and descriptive data.

Responses could be coded as fitting one or more of the sub-themes within each larger valence Sex Positive/Negative theme. Responses that could not be categorized were coded as missing data (n=65)

**Table 10**

*Sexual Ideology Themes and Frequencies in Explanations for Change Responses.*

<b>Theme</b>	<b>Sub-themes</b>	<b>Examples</b>	<b>Frequency</b>
Sex-Positive	Increasingly positive attitudes towards sexuality	“Sex has become increasingly more accepted. I don’t think there’s much of a taboo around exploration these days.	22
	Movements for sexual empowerment	“Black women in particular have been the subject of empowerment movements, so this might let them feel even more in control of their own bodies.”	35
	Greater access to economic or technological resources	“I would look into how the invention of dating apps, specifically ones designed for short term or hook ups have affected the average number of partners”	22
Sex-Negative	Hypersexuality or decline of sexual mores	“White people are more interested in Black culture, such as vile rap music, therefore are doing the same things as them. It's popular in culture today to be sexually promiscuous.”	6
	Prohibitive levels/fear of sexual risk	“Maybe because of so many diseases women are being more careful.”	8

The research assistants also coded which group, if any, emerged as the focus of the response using the same criteria as in Study 1. Each research assistant coded responses in two of the four conditions, to allow me to assess inter-rater reliability using Cohen’s  $\kappa$ . One coder’s ratings had to be deleted due to incomplete and incorrect ratings, so I completed the missing

ratings myself. Inter-rater reliability for this *Focal Group* measure ranged from .203 to .731. I resolved any discrepancies between the remaining coders' ratings to produce the final data set. As before, I adopted a conservative approach that led to a large subset of the data being coded as missing in these variables.

**Justification of Program Choice.** After selecting the program that they thought best explained the change between 2007 and 2017, participants justified their choice in an open-ended response. The ratings produced by undergraduate research assistants were incomplete, so I independently reviewed the responses and produced the final *Program Justification* themes. These themes broadly aligned with the intended characterization of each program, with the addition of a “logical match” theme which represents those participants who selected the “Health Matters” program on the basis that it was the only description that explicitly mentioned sex (due to an error in my creation of the descriptions) and therefore was deemed the logical choice. Frequencies of each theme among those who selected each program appear in Table 11. I will not subject these to further analysis because they appear to suggest that participants generally interpreted the programs as I intended. No participants mentioned any specific group when justifying their choice of program, so I did not code for focal group.

I created a valence category to code whether the participants articulated that the program they selected would have positive or negative effects on the community. I coded three responses (1.9%) as expressing negative outcomes of the selected program; two of these selected the “Faith in Communities” program and asserted that the investment in religious organizations would result in sexual inhibition, “I mean religion tends to be anti sex so it would probably have the biggest impact”; “If sexual activity significantly decreased, then a religious organization

spreading propaganda may be the culprit.”. One participant selected the “Health Matters” program and articulated that the emphasis on consent would lead to a decrease in heterosexual sexual relations “with the rise of campaigns for consent before sex, and the metoo movement too, I believe most men are now more withdrawn from women.” The remaining participants either articulated positive outcomes of the program they selected (73.2%) or did not use valenced language when writing about their choice of program (26.9%). I also calculated a *Program Change* variable to code responses for indications that the programs were expected to cause an increase or decrease in sexual activity. 88 (56.4%) of responses were coded as explicitly predicting an effect of the selected program upon sexual activity; 70 (79.5%) of these responses predicted an increase in sexual activity and 18 (20.5%) predicted a decrease in sexual activity as a result of the program.

**Table 11**

*Frequency of Justification Themes as a Function of Selected Program*

Program (N)	Program Justification Theme Ratings (Frequency)					
	Empowerment	Morality	Sexual Risk	Integration	Resources	Logical Match
Faith in Communities (N=9)	0	5	0	0	0	0
Enterprise Zone (N=15)	3	0	0	0	6	0
Health Matters (N=105)	19	0	42	0	0	38
Citizen Observer (N=9)	0	0	0	0	0	0
Living City (N=18)	0	0	0	12	2	0

## Results

**Group Mutability.** In my preliminary analyses, I had planned to exclude participants who inaccurately completed the 2017 scores task by attributing different values to each group. However, such a large proportion of participants fell into this category (74.38%) that I was forced to reconsider this strategy; I coded each response for *Score Similarity* - whether participants did or did not input scores that fell within three points of the scale from each other, thus implying a level of similarity between the two. Even with this relaxed constraint, I still found and excluded from mutability analyses 51 responses that fell outside of this range. Although this constraint produced a considerable reduction in my sample size, it served to ensure that the analysis only includes participants who understood and followed instructions.

To test the hypothesis that participants would represent Black women as more mutable, I calculated a *Black Mutability* variable ( $M=.362, SD=2.704$ ) and *White Mutability* variable ( $M=.486, SD=2.770$ ), depicting how much each group's 2017 score differed from the score attributed to that group in 2007. I conducted a two-way MANOVA to test the effects of the Order and Direction manipulations upon *Black Mutability* and *White Mutability*. Analyses indicated a significant main effect of the Direction manipulation upon Black Mutability,  $F(1, 101) = 146.5, p=.000, \eta_p^2=.592$  and White Mutability,  $F(1, 101) = 158.029, p=.000, \eta_p^2=.610$ . These effects indicate that for both groups mutability is highest when that group was attributed the lower score in the 2007 table. In other words, participants anchored the 2017 scores to the higher 2007 score, requiring the group with the lower score to shift in order to meet this higher score. However, it is important to note that the means of both Black and White Mutability scores are negative when that group was attributed the higher score in the 2007 table. This indicates

that, while the higher scoring group was not expected to change as much, sexual activity was expected to decrease. In other words, participants expected sexual activity to increase from 2007 to 2017, but not to the extent that the higher scoring group would report even higher levels of sexual activity. The two groups shifted towards each other, meeting towards the upper end of the scale. Means for the two mutability scores as a function of Direction are provided in Table 12. Neither Black or White Mutability varied as a function of participant race or gender identity.

**Table 12**

*Estimated Mutability Means and Standard Errors as a Function of Direction.*

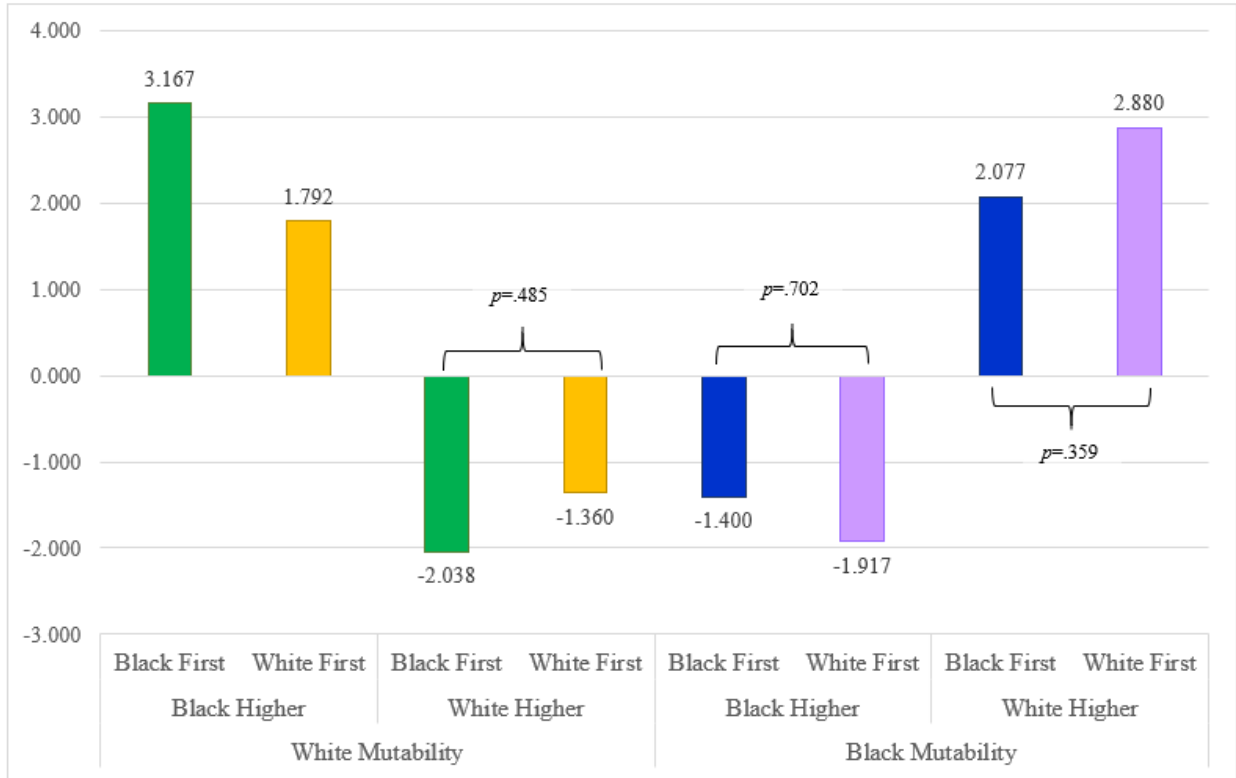
<b>DV</b>	<b>Direction</b>	<b>Mean (S.E)</b>
Black Mutability	Black Higher	-1.658 (.239)
	White Higher	2.478 (.244)
White Mutability	Black Higher	2.479 (.232)
	White Higher	-1.699 (.238)

The results also indicated a marginally significant OrderxDirection interaction effect upon Black Mutability,  $F(1, 101) = 3.729, p=.056, \eta_p^2=.036$  and a significant interaction effect upon White Mutability,  $F(1, 101) = 9.542, p=.003, \eta_p^2=.086$ . To interpret these interactions, I examined the effects of Order within each Direction condition. Mutability for each group was highest for the lower-scoring group (in order to bring their score closer to the higher group) and when that group was presented second in the table. Within the Black Higher condition, Black Mutability was higher when White Americans were presented first ( $M= -1.917, S.E.=.356$ ) than when Black Americans were presented first ( $M= -1.400, S.E.=.319$ ), although this difference did not meet significance ( $p=.359$ ). The opposite was true of White Mutability; in the Black Higher

condition, White Mutability was significantly higher when Black Americans were presented first ( $M= 3.167, S.E.=.310$ ) than when White Americans were presented first ( $M= 1.792, S.E.=.346$ ), ( $p=.020$ ). A similar pattern emerged in the White Higher condition, such that Black Mutability was higher when White Americans were presented first ( $M= 2.880, S.E.=.342$ ) than when Black Americans were presented first ( $M= 2.077, S.E.=.342$ ), though this difference was not significant ( $p=.359$ ). In the White Higher condition, White Mutability was higher when Black Americans were presented first ( $M= -2.038, S.E.=.333$ ) than when Black Americans were presented first ( $M= -1.360, S.E.=.339$ ), although this difference was not significant ( $p=.485$ ). In addition to the  $p$ , these results also indicate some support for my hypothesis regarding the effects of Order; Figure 7 represents these results and, for the sake of clarity, all non-significant differences are labelled and all remaining differences were significant at the  $p > .01$  level.

**Figure 7**

*Black and White Mutability as a Function of Direction and Order*



**Focal Group.** Due to small sample sizes I did not deem log linear modeling to be an appropriate means of testing the effects of the manipulations upon focal group. Consistent with Studies 1 and 2, an exact binomial test revealed that, among responses that focused upon a group, a greater proportion focused on Black women (n = 19; 86.4%) than White women (n = 3; 13.6%),  $Z=19.000$ ,  $p=.001$ . Chi-square analysis indicated a marginally significant contingency between the *Direction* manipulation and *focal group*,  $\chi^2(1, N=21) = 3.850$ ,  $p = .05$ . In the White Higher condition, all relevant responses focused upon Black women (n=11). To a less exclusive extent, responses in the Black Higher condition also focused upon Black women (n = 7; 70%) than upon White women (n = 3, 30%). There was so significant contingency between the *Order*

manipulation and *focal group*,  $\chi^2(1, N=21) = .064, p = .854$ . Focal group did not vary as a function of participant race or gender.

**Program Choice and Justification.** Program choice varied significantly as a function of Direction,  $\chi^2(4, N=156) = 15.717, p = .003$ , but not Order,  $\chi^2(4, N=156) = 3.883, p = .442$ . Figure 8 illustrates the relative frequency of program selection across the Direction manipulation. Given the predominance of the ‘Health Matters’ program interpretations of the proportions of the remaining programs must be conservative. Chi-square goodness-of-fit tests indicated that the “Living City” program was selected more often in the White Higher condition (18.4%, n=14) than in the Black Higher condition (5%, n=4),  $\chi^2(1) = 5.556, p = .018$ . Analyses also indicated that the “Citizen Observer” program was selected more often in the Black Higher condition (10%, n=8) than in the White Higher condition (1.3%, n=1),  $\chi^2(1) = 4.05, p = .044$ . The proportions of participants that selected the “Enterprise Zone”, “Health Matters” and “Faith in Communities” programs did not vary by Direction ( $ps = .121, .241, \text{ and } .180$ , respectively).

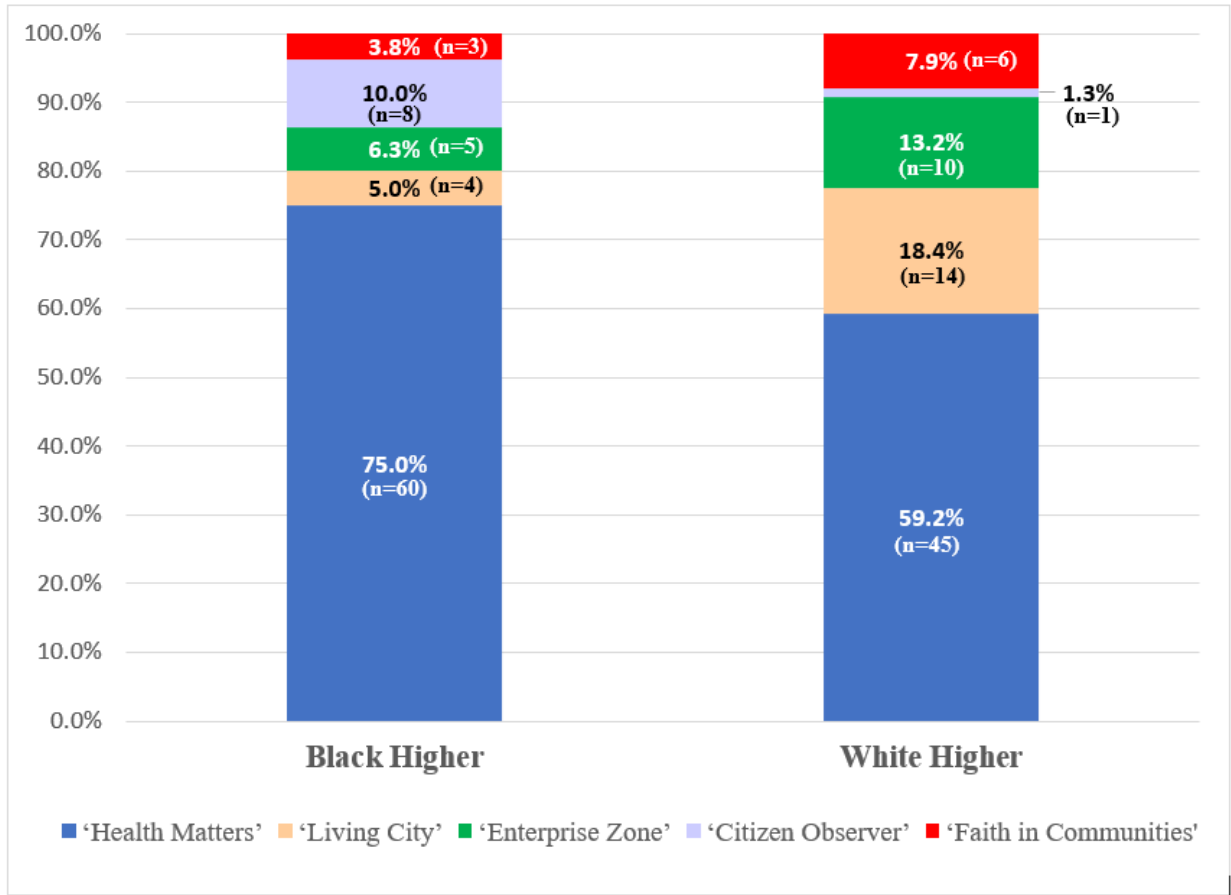
Program Choice did not differ as a function of Focal Group,  $\chi^2(4, N=21) = 1.400, p = .497$ , as the majority of participants selected ‘Health Matters’ (71.4%) regardless of focus group. Chi-square analysis indicated that Program Change did not differ as a function of Program Choice,  $\chi^2(4, N=88) = 5.211, p = .226$ , such that the majority of responses indicated an expectation that the program would increase sexual activity (85%). Program Change ratings were also not influenced by the Direction manipulation,  $\chi^2(1, N=60) = .021, p = .885$ , nor the Order manipulation,  $\chi^2(1, N=60) = .582, p = .445$ . Further, a greater proportion of responses that were coded in the Program Valence variable articulated positive expected outcomes of the



program (97.4%) than those that expected negative outcomes of the selected program (2.6%),  $Z=3.000, p=.000$ . Program choice did not vary as a function of participant race or gender.

**Figure 8**

*Percentage of Participants That Selected Each Program as a Function of Direction*



**Missing Data.** As in previous studies I recoded the focal group variable to examine differences between participants whose responses were coded as Missing or Not-Missing. The proportion of Missing/Not-Missing responses did not vary as a function of participant gender identification, ethnic identification, whether they were born in the USA, whether English is their first language, religious affiliation, or age. However, unlike previous studies, chi-square analysis did indicate a significant contingency between level of educational attainment and whether

responses were coded as Missing,  $\chi^2(4, n=155)=11.400, p=.022$ . This result indicated a higher proportion of Missing responses across all educational levels except for participants that had earned a Graduate or Professional degree, where a slightly higher number of participants provided responses that were coded as Not-Missing (18.9% versus 5.1%) (see Table 13). This could be interpreted as signaling the difficulty of the task, but further empirical investigation would be required to fully understand this effect. Unlike Studies 1 and 2 there were no significant differences between Missing and Not-Missing participants on measures of political orientation ( $t(151)=1.041, p=.300$ ), Modern Racism ( $t(154)=1.578, p=.117$ ), Gender Blind Sexism ( $t(154)=1.829, p=.069$ ), Subjective Social Status ( $t(154)=.297, p=.766$ ), or Feminist ID ( $t(154)=-1.816, p=.071$ ). Participants whose responses were coded as Missing did not differ from those coded as Non-Missing on the primary outcome variables Black Mutability ( $t(154)=-.777, p=.438$ ) or White Mutability ( $t(154)=-.187, p=.852$ ), nor did proportions of Missing/Not-Missing responses vary as a function of the Order or Direction manipulations.

**Table 13**

*Proportions of Missing/Not-Missing Responses as a Function of Educational Attainment*

<b>Level of educational attainment</b>	<b>Frequency of Missing Responses (% within educational level)</b>	<b>Frequency of Not-Missing Responses (% within educational level)</b>
High school diploma	34 (73.9%)	12 (26.1%)
Associate degree	21 (95.5%)	1 (4.5%)
Bachelor's Degree	56 (76.7%)	17 (23.3%)
Graduate or Professional Degree	6 (46.2%)	7 (53.8%)
Other qualification	1 (100%)	0 (0%)

## **Discussion**

Analyses of open-ended responses provided support for the descriptive white normativity hypothesis, in that participants again showed a tendency to focus explanation on Black women rather than White women. Similarly, the negative valence of participants explanations of Black women lend support to the prescriptive white normativity hypothesis. The tendency to explain Black women was not moderated by the Order manipulation. Quantitative analyses of mutability measures did not support the prescriptive white normativity hypothesis; mutability scores for both groups indicated that participants anchored responses on the higher score, rather than assimilating Black women to the White standard.

The measures of mutability in this study seem to indicate a sexual norm similar to that observed in Study 2, wherein sexual activity does and should increase over time (although not to the point of exceeding the higher value presented in the table stimulus). In line with this, a large proportion of responses to the program selection task indicated an expectation that programs would increase sexual behavior. A possible interpretation of these results is that participants expected the combined effects of time and the programs implemented to result in a moderate increase in sexual activity characterized by broadly positive social changes. In light of this, the proportions in which participants selected programs across conditions could be interpreted as signifying what types of social changes participants believe would facilitate a change in which the higher group would decrease slightly and the lower group would increase greatly to produce a global score on the upper end of the distribution (but not beyond what the higher group reported). Across both levels of the Direction manipulation participants selected the ‘Health Matters’ program, which is directed towards sexual education, as the program most likely to

produce this pattern regardless of race. In the Black Higher condition, the second most frequently selected program, “Citizen Observer”, was directed at community policing, which one might interpret as an indication that greater policing reduces Black women’s sexual activity and increases White women’s sexual activity. In the White Higher condition, the second most frequently selected program, “Living City”, was directed at community integration, which one might interpret as an indication that greater integration would result in decreased sexual activity among White women and increased sexual activity among Black women. However, few participants explicitly mentioned a group when describing the expected effects of the program, so it is unclear whether they expect the program to have an effect on one or both groups. The nuances of this measure certainly require further empirical testing to reliably interpret, but the results suggest that racialized narratives about sexuality interact with the broader assumption that sexual activity increases over time in ways that might lead to differential endorsement of social interventions or policies, depending upon which group’s behavior is subject to change. Contrary to the previous studies, there was no relationship between participant political orientation and the tendency to provide explanations that could not be quantitatively coded.

## **General Discussion**

### **Overview of Results**

In these studies, I sought to examine the norms and social discourses that people mobilize to explain racial differences in sexuality. Analyses of open-ended responses across the three studies provide insight into participants’ racialized understandings of women’s sexuality. In support of the descriptive white normativity hypotheses, the white norm was evident in the open-ended responses wherein the focus of explanation was more often on Black women than on

White women. In Studies 1 and 2, the content of these explanations showed support for the prescriptive white normativity hypothesis, as explanations were often characterized by racial stereotypes and ethnocentric discourse that pathologized Black women's sexuality. These effects emerged independently of the Order and (to a lesser extent) Direction manipulations, suggesting that white normativity is robust enough an effect to emerge across features of scientific reporting.

The quantitative outcomes in Studies 2 and 3, measuring prescriptive norms of sexual frequency and descriptive norms about sexual mutability, did not offer such clear answers. I did not observe predicted patterns of white normativity in these quantitative measures. Participants did not anchor their ideal frequency to a White standard, nor did they expect Black women to assimilate to a White standard. Across Studies 2 and 3, I did, however, observe the effects of a competing discourse: a descriptive and prescriptive norm toward higher levels of sexual activity over time. This prescriptive and descriptive sexual norm manifested in participants anchoring their ideal frequency and estimate of contemporary female sexuality closer to, but not above, the higher value presented to them, independent of the race of the more active target. The fact that participants did not exceed the value is significant in that one might expect that a sex positive, more-is-better approach would lead participants to select the highest possible frequency of sexual activity. As one participant in Study 2 stated, "The more sex you have, the happier you are". This moderate approach to frequency norms makes sense given the concurrent expressions of pathologizing framings of high levels of sexuality. Even as participants espoused the inherent desirability of higher frequency sex, they also articulated the potential dangers of sex and mobilized negative, 'slut-shaming' narratives about women who frequently engage in sex. These negative representations were particularly evident among explanations that focused upon Black

women, often drawing upon stereotypes of the hypersexual Jezebel or ‘welfare queen’ who has unplanned and excessive pregnancies. This tension is reminiscent of Lazar’s (1993) discursive analysis of “double-talk” in public campaigns; the government ads overtly mobilized the language of gender equality, while also covertly reproducing traditional gender ideology in order to produce an image of feminism that largely maintained the patriarchal status quo. One should understand such contradictions as facets, not failures, of gendered discourse; feminist theory has long documented the ways in which women are precariously positioned within punitive binaries (virgin-whore, bitch-saint) that restrict their movement in either direction. The application of an intersectional lens to such binaries produces a more complex, though valuable, image of gendered discourse.

### **Limitations and Future Directions**

The reliability of the quantitative coding of written responses was diminished by the difficulty I experienced recruiting and receiving completed work from research assistants. This resulted in me having to code a number of important variables on my own, particularly in Study 2. Although multiple coders and statistical tests of inter-rater reliability are not always required for qualitative research to be considered sound or illuminating, there is much value in the iterative and interactive process of collaborating on coding. Although I masked participant condition in the data that I coded, the fact that I was aware of the hypotheses of the research is also potentially problematic. I attempted to adopt a conservative approach to coding to avoid confirmatory bias, but I imagine that a more complete and independent coding of the data would produce greater reliability than attained in these studies.

Another limitation of the research program is the inconsistency in labels across studies: in Study 1 I presented stimuli representing a comparison between African and White women, in Study 2 I used the labels Black American and White American women, and in Study 3 I used the labels African-American and White American. Although qualitative responses also suggested a degree of inter-changeability among these terms (e.g. participants in Study 1 referred to African-Americans, participants in Study 3 used the label “Black”, and so on), future research should show consistency in terminology in order to avoid unintentionally priming different group representations.

The studies may also have benefitted from more consistency within study stimuli. Across the three studies I utilized two types of scientific artifacts (a graph and a table) to represent difference and attributed two different measures of sexual activity to these stimuli (frequency of sexual encounters and number of sexual partners). Adopting the same measures and artifact type across studies may have produced more consistent results.

A major impediment to analysis was the necessary exclusion of a large number of qualitative responses due to lack of detail or failure to comply with the task. Part of this can be attributed to issues with quality control when recruiting online samples, but this also speaks to the broader difficulties of collecting high-quality qualitative data. Similarly, the use of multiple methods (while important for elaboration and discursive analysis) did constrain the number and types of measures I could include in each study. Given that qualitative data was both integral to my research and difficult to obtain, I was reluctant to include additional open-ended questions or quantitative measures to avoid participant dropout or reactance. However, the data that I did obtain are valuable for initiating further studies.

My analysis of responses that were not amenable to quantitative coding highlights an important feature of the *effect to be explained* paradigm – the recognition that the pathologizing constructions communicated by participants are also evident in social science itself. The scientific artifacts I used as stimuli prompted many participants to articulate negative stereotypes. These are not external beliefs carried into the (online) laboratory space by participants, but instead rhetorical affordances built into the stimuli themselves. Another pattern observed among participants was engagement with the study and stimuli as political and rhetorical acts in themselves, expressing doubt in the reliability of the stimuli and positioning social science as a politically biased enterprise (which is not an unfair characterization). This was observed in my Critical Discursive Analysis of reactant participant responses in Study 1. Similarly, my quantitative analysis of participants whose responses could not be coded demonstrated that those participants more often endorsed conservative political ideology and racially biased statements. The suggestion that participant engagement was influenced by political and social beliefs reveals the ways in which experiments in themselves are embedded in political discourse. It is also illuminating that the responses that could be coded nevertheless demonstrated patterns of white normativity, given that the participants who did engage with the studies were more politically liberal than those that did not engage. One could predict that these effects would have been even stronger if I had successfully solicited compliance among the more politically conservative participants whose responses were not usable. These results demonstrate the ways that scientific reporting reproduces social discourse and how social discourse constructs science.

The associations between racial discourse and the Sexual Ideology themes identified in Studies 2 and 3 are particularly ripe for further exploration. The language of sex positivity is



currently extremely prevalent among feminist and sexual health scholars and practitioners, yet there is no consensus on a coherent definition of what this ideology entails, even less so for the complementary sex negative ideology (Ivanski & Kohut, 2017). Scholars such as Rutherford (2018) have challenged the ethnocentric and neoliberal narratives embedded within popular conceptualizations of empowerment and sexual expression, which are prominent features of Sex Positive discourse. I believe the methods I have used could be adapted in future empirical research to directly examine the tension that arises when these implicitly White sex positive narratives meet racially charged discourses about hypersexuality and sexual deviance and exploitation.

## **Conclusion**

The present research offers insight into patterns of white normativity within explanations of racial differences in sexuality. Quantitative analyses demonstrate a tendency for Black American to be positioned as the “effect to be explained” in participants discussion of fictional racial differences. Qualitative analyses illuminated these effects, demonstrating that participants mobilized discourses related to development and essentialism to explain Black women’s behavior. Further, the unexpected patterns observed in Studies 2 and 3 suggest a concurrent neoliberal narrative regarding normative levels of sexual activity for women. The purpose of the project was not necessarily to investigate sexual ideologies, yet the revelation of a prescriptive frequency norms provides opportunities for further empirical investigation. By adopting a mixed-methodology and intersectional approach this research highlights that social and scientific discourse on women’s sexuality must be interrogated both ethnocentric biases that position whiteness and white womanhood as the ‘normal’ ways of being.

## References

- Abele, A. E. (2003). The dynamics of masculine-agentic and feminine-communal traits: Findings from a prospective study. *Journal of Personality and Social Psychology, 85*, 768-776
- Abele, A. E. (2014). Pursuit of communal values in an agentic manner: A way to happiness? *Frontiers in Psychology, 5*, 1-9.
- Adams, G., Estrada-Villalta, S., & Ordóñez, L. H. G. (2018). The modernity/coloniality of being: Hegemonic psychology as intercultural relations. *International Journal of Intercultural Relations, 62*, 13-22.
- Adams, G., Estrada-Villalta, S., Sullivan, D., & Markus, H. R. (2019). The psychology of neoliberalism and the neoliberalism of psychology. *Journal of Social Issues, 75(1)*, 189-216.
- Adams G., Kurtiş, T., Salter, P.S., & Anderson, S.L. (2012). A Cultural Psychology of Relationship: Decolonizing Science and Practice. In O. Gillath, G. Adams, & A.D. Kunkel, (Eds.), *Relationship Science: Integrating Evolutionary, Neuroscience, and Sociocultural Approaches* (pp. 49-70). Washington, DC: American Psychological Association.
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy White women. *Health Psychology, 19(6)*, 586-592.
- Ahmed, L. (1992). *Women and Gender in Islam: Historical Roots of a Modern Debate*. London: Yale University Press.
- Alcoff, L. M. (2015). *The Future of Whiteness*. Cambridge, UK: Polity Press.

- Bailey, A. H., & LaFrance, M. (2016). Anonymously male: Social media avatar icons are implicitly male and resistant to change. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *10*(4), Article 8.
- Bailey, A. H., LaFrance, M., & Dovidio, J. F. (2018). Is man the measure of all things? A social cognitive account of androcentrism. *Personality and Social Psychology Review*, *23*, 207-331
- Barriger, M., & Vélez-Blasini, C. J. (2013). Descriptive and injunctive social norm overestimation in hooking up and their role as predictors of hook-up activity in a college student sample. *Journal of Sex Research*, *50*(1), 84-94.
- Bear, A., & Knobe, J. (2017). Normality: Part descriptive, part prescriptive. *Cognition*, *167*, 25-37.
- Biernat, M., Manis, M., & Nelson, T. E. (1991). Stereotypes and standards of judgment. *Journal of Personality and Social Psychology*, *60*(4), 485-499.
- Bosson, J. K., Kuchynka, S. L., Parrott, D. J., Swan, S. C., & Schramm, A. T. (2020). Injunctive norms, sexism, and misogyny network activation among men. *Psychology of Men & Masculinities*, *21*(1), 124-138.
- Bosson, J. K., Parrott, D. J., Swan, S. C., Kuchynka, S. L., & Schramm, A. T. (2015). A dangerous boomerang: Injunctive norms, hostile sexist attitudes, and male-to-female sexual aggression. *Aggressive Behavior*, *41*(6), 580-593.
- Brotto, L. A., Chik, H. M., Ryder, A. G., Gorzalka, B. B., & Seal, B. N. (2005). Acculturation and sexual function in Asian women. *Archives of Sexual Behavior*, *34*, 613-626.

- Bruckmüller, S., & Abele, A. E. (2010). Comparison focus in intergroup comparisons: Who we compare to whom influences who we see as powerful and agentic. *Personality and Social Psychology Bulletin*, 36, 1424-1435.
- Burman, E., Smailes, S. L., & Chantler, K. (2004). 'Culture' as a barrier to service provision and delivery: domestic violence services for minoritized women. *Critical Social Policy*, 24(3), 332-357.
- Burton, A. M. (1992). The White woman's burden: British feminists and "the Indian woman," 1865 – 1915. In N. Chaudhari & M. Strobel (Eds.), *Western Women and Imperialism: Complicity and Resistance* (pp. 137 – 158). Bloomington, IN: Indiana University Press.
- Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York, NY: Routledge.
- Cassidy, A. (2007). The (sexual) politics of evolution: Popular controversy in the late 20<sup>th</sup> century United Kingdom. *History of Psychology*, 10, 199 – 226.
- Causadias, J. M., Vitriol, J. A., & Atkin, A. L. (2018). Do we overemphasize the role of culture in the behavior of racial/ethnic minorities? Evidence of cultural (mis)attribution bias in American psychology. *American Psychologist*, 73, 243-255.
- Chia, S. C., & Gunther, A. C. (2006). How media contribute to misperceptions of social norms about sex. *Mass Communication & Society*, 9(3), 301-320.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015-1026.

- Cottrell, C. A., Neuberg, S. L., & Li, N. P. (2007). What do people desire in others? A sociofunctional perspective on the importance of different valued characteristics. *Journal of Personality and Social Psychology, 92*(2), 208-231.
- Cramer, J. M. (2003). White Womanhood and Religion: Colonial Discourse in the U.S. Women's Missionary Press, 1869–1904. *The Howard Journal of Communications, 14*, 209 – 224.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review, 43*, 1241-1299.
- Cuddy, A. J., Wolf, E. B., Glick, P., Crotty, S., Chong, J., & Norton, M. I. (2015). Men as cultural ideals: Cultural values moderate gender stereotype content. *Journal of Personality and Social Psychology, 109*, 622-635.
- Cundiff, J. L. (2012). Is mainstream psychological research “womanless” and “raceless”? An updated analysis. *Sex Roles, 67*, 158 – 173.
- de Sousa Santos, B. (2015). *Epistemologies of the South: Justice against Epistemicide*. New York, NY: Routledge.
- Devos, T., & Banaji, M. R. (2005). American = White? *Journal of Personality and Social Psychology, 88*, 447-466.
- Dickens, D. D., Womack, V. Y., & Dimes, T. (2018). Managing hypervisibility: An exploration of theory and research on identity shifting strategies in the workplace among Black women. *Journal of Vocational Behavior, 113*, 153-160.

- Eagly, A. H., & Mladinic, A. (1994). Are people prejudiced against women? Some answers from research on attitudes, gender stereotypes, and judgments of competence. *European Review of Social Psychology*, 5, 1-35.
- Estill, A., Mock, S. E., Schryer, E., & Eibach, R. P. (2018). The effects of subjective age and aging attitudes on mid-to late-life sexuality. *The Journal of Sex Research*, 55(2), 146-151.
- Ferber, A. L. (1998) Constructing Whiteness: the intersections of race and gender in US White supremacist discourse. *Ethnic and Racial Studies*, 21, 48-63
- Foucault. M. (1977). *Discipline and Punish: The Birth of the Prison*. London, UK: Allen Lane
- Foucault. M. (1979). *The History of Sexuality: Volume I*. London, UK: Allen Lane.
- Frankenberg, R. (1993). *White Women, Race Matters: The Social Construction of Whiteness*. Minneapolis: MN: University of Minnesota Press.
- Freedman, E. B. (2013). *Redefining Rape*. London, UK: Harvard University Press.
- Gee, J. P. (2014). *An Introduction to Discourse Analysis: Theory and Method*. New York, NY: Routledge.
- Ghavami, N., & Peplau, L. A. (2013). An intersectional analysis of gender and ethnic stereotypes: Testing three hypotheses. *Psychology of Women Quarterly*, 37(1), 113-127.
- Goff, P. A., Thomas, M. A., & Jackson, M. C. (2008). "Ain't I a woman?": Towards an intersectional approach to person perception and group-based harms. *Sex Roles*, 59(5-6), 392-403.
- Grande, E. (2004). Hegemonic human rights and African resistance: Female circumcision in a broader comparative perspective. *Global Jurist Frontiers*, 4(2),1-21.

- Grey, S. (2004). Decolonizing feminism: Aboriginal women and the global 'sisterhood'.  
*Enweyin*, 8, 9-22.
- Hacking, I. (1995). The looping effects of human kinds. In D. Sperber, D. Premack, & A. J. Premack (Eds.), *Symposia of the Fyssen Foundation. Causal cognition: A multidisciplinary debate* (pp. 351-394). New York, NY, US: Clarendon Press/Oxford University Press.
- Hahn, U. (2011). The problem of circularity in evidence, argument, and explanation.  
*Perspectives on Psychological Science*, 6(2), 172-182.
- Haraway, D. (1988). Situated Knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14, 575-599.
- Harding, S. (1992). Rethinking standpoint epistemology: What is "strong objectivity?". *The Centennial Review*, 36(3), 437-470.
- Hare-Mustin, R. T., & Marecek, J. (1986). Autonomy and gender: Some questions for therapists.  
*Psychotherapy: Theory, Research, Practice, Training*, 23(2), 205-212.
- Hasan, M. M. (2005). The orientalizing of gender. *The American Journal of Islamic Social Studies*, 22, 26 – 56.
- Haslam, N., & Loughnan, S. (2014). Dehumanization and infrahumanization. *Annual Review of Psychology*, 65, 399-423.
- Haslam, N., Loughnan, S., & Holland, E. (2013). The psychology of humanness. In S. J. Gervais (Ed.), *Objectification and Dehumanization* (pp. 25-51). New York: Springer.
- Haslam, N., Loughnan, S., & Sun, P. (2011). Beastly: What makes animal metaphors offensive?  
*Journal of Language and Social Psychology*, 30, 311 – 325.

- Hegarty, P. (2006). Undoing androcentric explanations of gender differences: Explaining the effect to be predicted. *Sex Roles, 55*, 861-867.
- Hegarty, P. (2013). Essential differences: constructing frames of reference in spontaneous explanations of differences between the British and the Irish. *The Irish Journal of Psychology, 34(1)*, 35-48.
- Hegarty, P. (2017). On the failure to notice that White people are White: Generating and testing hypotheses in the celebrity guessing game. *Journal of Experimental Psychology: General, 146(1)*, 41-62.
- Hegarty, P., & Bruckmuller, S. (2013). Asymmetric explanations of group differences: Experimental evidence of Foucault's disciplinary power. *Social and Personality Compass, 7*, 176-186.
- Hegarty, P., & Buechel, C. (2006). Androcentric reporting of gender differences in APA journals: 1965-2004. *Review of General Psychology, 10(4)*, 377-389.
- Hegarty, P., & Pratto, F. (2001). The effects of social category norms and stereotypes on explanations for intergroup differences. *Journal of Personality and Social Psychology, 80*, 723-735.
- Hegarty, P., & Pratto, F. (2004). The differences that norms make: Empiricism, social constructionism, and the interpretation of group differences. *Sex Roles, 50*, 445-453
- Heinrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world. *Behavioral and Brain Sciences, 33(2-3)*, 61-83.



- Hesse-Biber, S. N. (2013). A re-invitation to feminist research. In S. N. Hess-Biber (Ed.). *Feminist Research Practice: A Primer (pp.1-14)*. Los Angeles, CA: Sage Publications, Inc.
- Hoorens, V., & Bruckmüller, S. (2015). Less is more? Think again! A cognitive fluency-based more–less asymmetry in comparative communication. *Journal of Personality and Social Psychology, 109*(5), 753-766.
- Hunt, D., Ramon, A., Tran, M., Sargent, A., & Díaz, V. (2017). 2017 Hollywood diversity report. *Bunche, Ralph J. Bunche Center for African American Studies at UCLA*. Retrieved from <http://bunchecenter.ucla.edu.www2.lib.ku.edu/hollywood-diversity-report-2/>
- Ivanski, C., & Kohut, T. (2017). Exploring definitions of sex positivity through thematic analysis. *The Canadian Journal of Human Sexuality, 26*(3), 216-225.
- Jahoda, G. (2018). *Images of Savages: Ancient Roots of Modern Prejudice in Western Culture*. New York, NY: Routledge.
- Jain, A., Tobey, E., Ismail, H., & Erulkar, A. (2018). Condom use at last sex by young men in Ethiopia: the effect of descriptive and injunctive norms. *Reproductive Health, 15*(1), 164-175.
- Jarmakani, A. (2008). *Imagining Arab womanhood: The Cultural Mythology of Veils, Harems, and Belly Dancers in the US*. New York, NY: Palgrave MacMillian.
- Jensen, R. E., & Bute, J. J. (2010). Fertility-related perceptions and behaviors among low-income women: Injunctive norms, sanctions, and the assumption of choice. *Qualitative Health Research, 20*(11), 1573-1584.

- Johnson, K. L., Freeman, J. B., & Pauker, K. (2012). Race is gendered: How covarying phenotypes and stereotypes bias sex categorization. *Journal of Personality and Social Psychology, 102*, 116-131.
- Kotef, H. (2009). On Abstractness: First Wave Liberal Feminism and the Construction of the Abstract Woman. *Feminist Studies, 35*, 495 – 522.
- Kurtiş, T., & Adams, G. (2015). Decolonizing liberation: Toward a transnational feminist psychology. *Journal of Social and Political Psychology, 3(1)*, 388-413.
- Ladson-Billings, G. (2009). “Who you callin’ nappy-headed?”: A critical race theory look at the construction of Black women. *Race, Ethnicity & Education, 12*, 87 – 99.
- Lee, J. (1996). Between subordination and she-tiger: Social constructions of White femininity in the lives of single, Protestant missionaries in China, 1905 – 1930. *Women’s Studies International Forum, 19*, 621 – 632.
- Lewis, R. (1996). *Gendering Orientalism: Race, Femininity and Representation*. London, UK: Routledge.
- Lugones, M. (2007). Heterosexualism and the colonial / modern gender system. *Hypatia, 22* (1), 186-219.
- Macleod, C., Marecek, J., & Capdevila, R. (2014). Feminism & Psychology going forward. *Feminism & Psychology, 24(1)*, 3–17.
- Maldonado-Torres, N. (2016). Outline of ten theses on coloniality and decoloniality. Retrieved from *Foundation Frantz Fanon: <http://frantzfanonfoundation-fondationfrantzfanon.com/article2360.html>*.

Mark, M. M. (2015). Mixed and multimethods in predominantly quantitative studies, especially experiments and quasi-experiments. In Hesse-Biber, S. N., & Johnson, R. B. (Eds.). *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry* (pp. 21-41). New York, NY: Oxford University Press.

Maxwell, J.A. (2013). *Qualitative Research Design: An Interactive Approach*. London, UK: Sage Publications Ltd.

Mignolo, W. D. (2018). Colonial/Imperial Differences: Classifying and inventing global orders of lands, seas, and living organisms. In W. D. Mignolo & C. E. Walsh (Eds.). *On Decoloniality: Concepts, Analytics, Praxis* (pp. 177-194). London, UK: Duke University Press.

Miron, A. M., Branscombe, N. R., & Schmitt, M. T. (2006). Collective guilt as distress over illegitimate intergroup inequality. *Group Processes & Intergroup Relations*, 9(2), 163-180.

Mohanty, C. (1988). Under Western eyes: Feminist scholarship and colonial discourses. *Feminist Review*, 30(1), 61-88.

Moss-Racusin, C. A., Phelan, J. E., & Rudman, L.A. (2010). When men break the gender rules: Status incongruity and backlash against modest men. *Psychology of Men & Masculinity*, 11, 140-151.

Motschenbacher, H. (2019). Language and sexual normativity. In: R. Barrett & K. Hall, (Eds.). *Oxford Handbook of Language and Sexuality*. Oxford: Oxford University Press, Retrieved from: [https://hvl-no.academia.edu/HeikoMotschenbacher/LIDISNO-Project-Publications-\(Open-Access\)](https://hvl-no.academia.edu/HeikoMotschenbacher/LIDISNO-Project-Publications-(Open-Access))

- Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *The Journal of Sex Research, 53*(4-5), 457-487.
- Myser, C. (2003). Differences from somewhere: The normativity of Whiteness in bioethics in the United States. *American Journal of Bioethics, 3*, 1-11.
- Nagel, J. (2003). *Race, Ethnicity, and Sexuality: Intimate Intersections, Forbidden Frontiers*. New York, NY: Oxford University Press.
- Narayan, U. (1997). *Dislocating Cultures: Identities, Traditions, and Third-World Feminism*. New York, NY: Routledge
- Narayan, U. (1998). Essence of culture and a sense of history: A feminist critique of cultural essentialism. *Hypatia, 13*, 86 – 106.
- Phelan, J. E., Moss-Racusin, C. A., & Rudman, L. A. (2008). Competent yet out in the cold: Shifting criteria for hiring reflect backlash toward agentic women. *Psychology of Women Quarterly, 32*, 406-413.
- Purdie-Vaughns, V., & Eibach, R. P. (2008). Intersectional invisibility: The distinctive advantages and disadvantages of multiple subordinate-group identities. *Sex Roles, 59*, 377-391.
- Raffaelli, M., Zamboanga, B. L., & Carlo, G. (2005). Acculturation status and sexuality among female Cuban American college students. *Journal of American College Health, 54*(1), 7-13.
- Rifkin, M. (2010). *When did Indians Become Straight?: Kinship, the History of Sexuality, and Native Sovereignty*. New York, NY: Oxford University Press.

- Rottenberg, C. (2014). The Rise of Neoliberal Feminism, *Cultural Studies*, 28:3, 418-437.
- Rushton, P. J., & Bogaert, F. (1987). Race differences in sexual behavior: Testing an evolutionary hypothesis. *Journal of Research in Personality*, 21, 529-55.
- Rutherford, A. (2018). Feminism, psychology, and the gendering of neoliberal subjectivity: From critique to disruption. *Theory & Psychology*, 28(5), 619-644.
- Said, E. (2003). *Orientalism: Western Conceptions of the Orient*. London, UK: Penguin Books.
- Schug, J., Alt, N. P., & Klauer, K. C. (2015). Gendered race prototypes: Evidence for the non-prototypicality of Asian men and Black women. *Journal of Experimental Social Psychology*, 56, 121-125.
- Sesko, A. K., & Biernat, M. (2010). Prototypes of race and gender: The invisibility of Black women. *Journal of Experimental Social Psychology*, 46, 356-360.
- Shome, R. (2011). "Global Motherhood": The Transnational Intimacies of White Femininity. *Critical Studies in Media Communication*, 28:5, 388-406
- Sibley, C. G., & Barlow, F. K. (2009). Ubiquity of Whiteness in majority group national imagination: Australian= White, but New Zealander does not. *Australian Journal of Psychology*, 61(3), 119-127.
- Strano, M. M. (2006). Ritualized transmission of social norms through wedding photography. *Communication Theory*, 16(1), 31-46.
- Tabachnick, B. G. & Fidell, L. S. (2012). *Using Multivariate Statistics* (6th ed.). Boston, MA: Pearson

- Sugarman, J. (2015). Neoliberalism and psychological ethics. *Journal of Theoretical and Philosophical Psychology*, 35(2), 103-116.
- Teo, T. (2010). What is epistemological violence in the empirical social sciences?. *Social and Personality Psychology Compass*, 4(5), 295-303.
- Thomas, E. L., Dovidio, J. F., & West, T.V. (2014). Lost in the categorical shuffle: Evidence for the social non-prototypicality of Black women. *Cultural Diversity & Ethnic Minority Psychology*, 20, 370-376.
- Tran, N. & Paterson, S. E. (2015). “American” as a proxy for “Whiteness”: Racial color-blindness in everyday life. *Women & Therapy*, 38, 341 – 355.
- Trent, C. J. (2009). *Culture of sex: sexual linguistics and discourse of Cosmopolitan editions in the United States, France and India* (Doctoral dissertation, University of Missouri--Columbia). Retrieved from <https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/5373/short.pdf?sequence=2>
- Twenge, J. M., Campbell, W. K., & Gentile, B. (2012). Male and female pronoun use in US books reflects women’s status, 1900–2008. *Sex Roles*, 67, 488-493.
- Twenge, J. M., Sherman, R. A., & Wells, B. E. (2015). Changes in American adults’ sexual behavior and attitudes, 1972–2012. *Archives of Sexual Behavior*, 44(8), 2273-2285.
- Vaes, J., Leyens, J. P., Paola Paladino, M., & Pires Miranda, M. (2012). We are human, they are not: Driving forces behind outgroup dehumanisation and the humanisation of the ingroup. *European Review of Social Psychology*, 23(1), 64-106.

Volpp, L. (2000). Blaming culture for bad behavior. *Yale Journal of Law & the Humanities*, 12, 89 – 116.

Walker, S. J. (1997). When “no” becomes “yes”: Why girls and women consent to unwanted sex. *Applied and Preventive Psychology*, 6(3), 157-166.

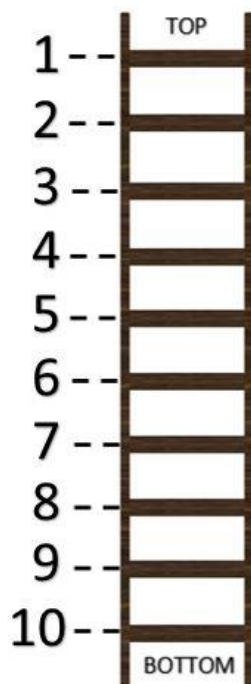
Zárte, M. A., & Smith, E. R. (1990). Person categorization and stereotyping. *Social Cognition*, 8, 161-185.

## Appendices

### Appendix A. Measures of Perceived Social Power.

*Scale of Subjective Social Status (Adapted from Adler, Epel, Castellazzo, & Ickovics, 2000).*

“Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are the best off, those who have the most money, most education, and best overall lives. At the bottom are the people who are the worst off, those who have me least money, least education, and worst overall lives.”



Use the drop-down menu to the rung that you think best represents where [African American women/ White American women] stand on the ladder.



*Legitimacy of Inequality Scale (Adapted from Miron, Branscombe, & Schmitt, 2006) [ $\alpha=.927$ ]*

*1 [Strongly Disagree] - - - - 7 [Strongly Agree]*

1. American society has reached the point where African American women and White women have equal opportunities for achievement.
2. In our society, White women and African American women are treated equally.
3. White women do not receive the same economic benefits that African American women do.(R - Reverse coded)
4. African American women have just as many privileges as White women do

## **Appendix B. Exploratory Attitude Measures of Gender and Racial Attitudes.**

*Gender Blind Sexism Inventory (Adapted from Stoll, Lilley & Printer, 2018) [ $\alpha=.837$ ] [measured in Studies 1, 2, & 3]*

*1 [Strongly Disagree] - - - - 7 [Strongly Agree]*

1. Affirmative action policies benefit women at the expense of men.
2. If a public policy focuses specifically on women, it is not fair to men.
3. Women are naturally more emotional than men.
4. Men are naturally more aggressive than women.
5. Nature is more important than nurture in explaining the differences between men and women.
6. It is important to teach children to behave in gender-appropriate ways.
7. There is nothing wrong with a girl acting boyish
8. There is nothing wrong with a boy acting girly
9. It is better to socialize girls to be caregivers and boys to be breadwinners than vice versa.
10. Sexism is not a major problem in today's society.
11. Today, women have all the opportunities that men have.
12. Gender inequality in the United States is not as bad as it used to be.

*Modern Racism Scale (Adapted from Son Hing, Chung-Yan, Hamilton, & Zanna, 2008) [ $\alpha=.902$ ]*

[measured in Studies 1, 2, & 3]

*1 [Strongly Disagree] - - - - 7 [Strongly Agree]*

1. There are too many foreign students of African descent being allowed to attend university in America
2. America should open its doors to more African immigration from the poorer countries. (R)
3. It's good to live in a country where there are so many African Americans. (R)
4. Intermarriage between African Americans and White Americans is a good thing for America. (R)
5. It is not fair that so many scholarships and awards are awarded to African American students.
6. It is too easy for people of African descent to illegally arrive in America and receive refugee status.
7. Many African Americans do not bother to learn proper English.
8. Discrimination against African Americans is no longer a problem in America.
9. White Americans do not get treated very well in African American neighborhoods.

*Feminist Identification* [ $\alpha=.892$ ] [measured in Studies 1 & 3]

1 [Strongly Disagree] - - - - 7 [Strongly Agree]

1. I feel a bond with feminists
2. I identify as a feminist
3. I believe in gender equality
4. I am proud to be a feminist