**Abstract**

 Racism and sexism are pervasive forms of discrimination that cause significant individual and societal burden. Understanding manipulable psychological processes that contribute to these modes of discrimination would aid in developing anti-prejudice interventions that target them. Psychological flexibility has been proposed as a potential tool in combating prejudice by modifying one’s relationship with unwanted or automatic prejudicial thoughts, in addition to the ability to take the perspective of marginalized groups. A survey assessing psychological inflexibility and perspective taking along with anti-racist/anti-sexist attitudes and behaviors was administered to a sample of 395 undergraduate students. Perspective taking predicted anti-racist/anti-sexist behaviors above and beyond their corresponding attitudes. Psychological inflexibility was a not a significant predictor of relevant attitudes or behaviors. Our findings suggest that perspective taking may be an important target of anti-prejudice interventions.

*Keywords*: anti-racism, anti-sexism, psychological inflexibility, multicultural interventions, perspective taking

The Role of Psychological Inflexibility and Perspective Taking in Anti-Racism and Anti-Sexism

Discrimination based on race and gender continues to be prevalent and has sustained negative impacts on individuals in multiple domains including healthcare, housing, employment, communities, and daily social life (e.g. Lee et al., 2019; Graf et al., 2018; The Trevor Project, 2019). Several interventions have been tested which explicitly aim to reduce racist/sexist attitudes and behaviors, though a recent systematic review found overall mixed evidence for their effectiveness (FitzGerald et al., 2019). Recently, there has been an emphasis on moving beyond the mere reduction of prejudiced attitudes and towards increasing the prevalence of active behaviors which challenge discrimination, i.e. anti-prejudicial actions. For instance, anti-racism has been defined as not only reducing racist behaviors, but as contributing to the empowerment of marginalized groups, supporting victims of racism, and fostering broad cultural changes (Hage, 2016). Likewise, calls have been made to address a “rape culture” through the anti-sexist actions of promoting non-violence and the challenging of structural inequalities based on gender, as opposed to focusing solely on changing men’s attitudes (Flood, 2015).

 While this conscious challenging of racism and sexism at both an individual and systemic level has been emphasized, the best methods for promoting such behaviors continue to be debated. Though discriminatory behaviors have historically been thought to rely on the holding of underlying prejudiced attitudes or beliefs (Schütz & Six, 1996), more recent research has emphasized the role of psychological factors (e.g., Bosson et al., 2020; Donald et al., 2019; McManus et al., 2019; Patterson et al., 2018). For instance, white individuals who report having non-racist attitudes may still have aversive emotional reactions to racial outgroups, which can lead to inhibitions in helping behaviors (McManus et al., 2019). Additionally, while the holding of explicit sexist beliefs has been shown to predict sexist behavior (de Oliveira Laux et al., 2015), interventions promoting anti-sexism in men may elicit strong emotional reactions (e.g. anger) and produce a “boomerang” effect, or unintended increases in sexist behaviors (Bosson et al., 2020). Therefore, understanding other psychological components of prejudice, particularly those related to emotional processes, is critical in designing effective strategies to increase anti-racist and anti-sexist actions.

 One such construct with growing support as it relates to this area is psychological flexibility, or the ability to maintain contact with the present moment while choosing contextually appropriate and values-consistent actions regardless of one’s internal experiences (e.g., cognitions, emotions; Hayes et al., 2006). By fostering acceptance as opposed to resistance of unwanted emotional reactions, psychological flexibility allows for engagement in meaningful behaviors (such as anti-discrimination) irrespective of internal experiences, such as implicit prejudiced thoughts or feelings of guilt and shame. Conversely, psychological *in*flexibility is conceptualized as rigid behavioral control based on internal experiences, e.g. avoiding confronting someone who made an insensitive remark due to feeling guilty about one’s own biases. In a recent application of this construct to racial prejudice, an intervention targeting psychological inflexibility effectively reduced the prevalence of microaggressive thoughts among white participants (Williams et al., 2020).

 Perspective taking (i.e., the ability to adopt another person’s perspective) may also be an important process to the development of anti-prejudicial attitudes and behaviors. In the same intervention mentioned previously, psychological flexibility was used in tandem with perspective taking to address racist attitudes, and perspective taking has also been shown to support psychological flexibility in predicting lower generalized prejudice (Levin et al., 2016). Therefore, it is important to understand how these two constructs may work together in the promotion of anti-prejudicial attitudes and behaviors.

In sum, prior findings suggest that perspective taking and psychological inflexibility are important predictors of many specific discriminatory attitudes (Levin et al., 2016). However, the effect of psychological inflexibility and perspective taking on *anti*-prejudicial attitudes and behavior has not yet been examined. These processes are theoretically highly relevant to adopting anti-prejudicial attitudes and behavior. Perspective taking abilities can help individuals to understand what it might be like to experience discrimination based on race or gender, and addressing psychological inflexibility can help individuals to cope with uncomfortable emotions and thoughts that may occur when developing anti-prejudicial attitudes (e.g., experiencing stereotypic thoughts, shame at previous inaction) or engaging in anti-prejudicial behavior. Therefore, we sought to test a model which combined psychological inflexibility and perspective taking as predictors of specific anti-prejudicial attitudes and behaviors.

In testing such a model, it is imperative to consider potential variations based on individual aspects of identity. For instance, white individuals may be less aware of racial inequities, especially in homogenous social contexts where the effects of prejudice are less directly experienced (Wong et al., 2020). In addition to race, one’s gender identity and political affiliation have been shown to influence the holding of prejudiced beliefs (e.g. Cowling et al., 2019; Crawford et al., 2017). We therefore aimed to clarify whether psychological inflexibility and perspective taking offer utility in predicting anti-prejudicial attitudes and behaviors beyond personal demographics, consistent with previous models of psychological contributors to prejudice which have included demographic factors as covariates (e.g. Zmigrod et al., 2019). The current study thus tested a model using psychological inflexibility and perspective taking as predictors of anti-racism and anti-sexism, while including personal demographic factors which may also influence these constructs. Assessing results of a survey administered to an undergraduate sample, we predicted that lower psychological inflexibility and higher perspective taking would relate to higher anti-racist/sexist attitudes and behaviors, above and beyond demographics.

**1. Method**

*1.1 Participants and procedures*

 An online survey of attitudes and psychological processes was administered to a sample of undergraduate students at a large public university in the Western United States. Approval for this study was received from the local Institutional Review Board and all participants provided informed consent. In order to enroll in the study, participants had to be at least 18 years of age and be currently enrolled at the university. After completing informed consent, participants completed measures of anti-racist/anti-sexist attitudes and psychological processes followed by a demographic questionnaire with questions regarding age, gender identity, race/ethnicity, and affiliation with a U.S. political party (i.e. Democrat, Republican, or independent). We administered a follow-up survey two months later with measures of anti-racist/anti-sexist behaviors, so that we could test whether initial attitudes predicted subsequent behaviors. Upon completing surveys, participants received research participation credit.

 A sample of 395 participants was recruited between January and November of 2019. The sample was largely young (*Mage* = 20.33, *SDage* = 4.39), female (66.93%), white (92.19%), and non-Hispanic (96.61%). Additionally, 80.73% of respondents identified as members of the Church of Jesus Christ of Latter-day Saints. See Table 1 for detailed participant demographics. Nine participants were removed for self-reported random responding, leaving a sample of 386 for analysis.

Table 1*.**Demographics of survey respondents*

|  |  |
| --- | --- |
|  | *M(SD) / %* |
| Age | 20.33 (4.39) |
| Gender identity | 32.55% male66.93% female0.26% nonbinary0.26% other |
| Ethnicity | 3.39% Hispanic/Latinx96.61% non-Hispanic/Latinx |
| Race | 0.26% American Indian/Alaska Native0.78% Asian1.3% Native Hawaiian or other Pacific Islander1.3% Black or African American92.19% White or Caucasian0.52% Other3.65% Multiracial |
| Median household income | $60,000-79,999 |
| Religion | 80.73% Church of Jesus Christ of Latter-day Saints1.56% Catholic0.26% Protestant5.99% Nothing in particular3.65% Not religious7.81% Other |
| Political affiliation | 14.58% Democratic Party42.45% Republican Party13.28% Independent2.86% Other party26.82% Not sure/nothing in particular |

*1.2 Measures*

*1.2.1 Psychological inflexibility*

 The Acceptance and Action Questionnaire–Stigma (AAQ-S; Levin et al., 2014) was used to measure the degree to which individuals are overly guided by prejudicial thoughts and feelings, rather than being able to acknowledge and accept such experiences while still acting without prejudice. The AAQ-S includes two subscales which have been validated as distinct factors: inflexibility (e.g. “I often get caught up in my evaluations of what others are doing wrong”), and flexibility (e.g. “I’m good at noticing when I have a judgment of another person,”), with respondents identifying their level of agreement (1 = *never true*, 7 = *always true*) with 21 statements. To aid interpretation, the flexibility subscale is reverse scored, so that higher scores on both subscales indicate higher inflexibility. The AAQ-S has initial support for construct validity (i.e., significantly correlated in expected directions with measures of stigma and empathy; Levin et al., 2014; Levin et al., 2016). Internal consistency was adequate for both subscales in our sample (Flexibility a = .71, Inflexibility a = .78).

*1.2.2 Perspective taking*

 Perspective taking was assessed using the Perspective Taking subscale of the Interpersonal Reactivity Index (IRI; Davis, 1980). This subscale contains 7 items assessing perspective taking (e.g. “Before criticizing somebody, I try to imagine how I would feel if I were in their place”) on a 5-point scale (1 = *does not describe me well*, 5 = *describes me very well*), and has shown good reliability and validity (Pulos et al., 2004). Reliability was good in this study (a = 0.83).

*1.2.3 Anti-racist/anti-sexist attitudes*

 Increasing awareness of white privilege, or the unearned advantages afforded to white individuals, has been proposed as a critical first step in improving motivation to engage in anti-racist actions (Hochman & Suyemoto, 2020). Therefore, we used the Awareness subscale of the White Privilege Attitudes Scale (WPAS; Pinterits et al., 2009) as a measure of anti-racist attitudes. The WPAS asks respondents to rate their level of agreement on a 6-point scale (1 = *strongly disagree*, 6 = *strongly agree*) with a number of statements concerning awareness of the positionality of white individuals that contribute to systemic disadvantages to non-whites (e.g. “white people have it easier than people of color,” “I am ashamed that the system is stacked in my favor because I am white”). The WPAS has demonstrated good reliability and validity, and reliability was good in this sample (a = .86).

The Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1996) was used to measure sexist attitudes. The ASI is a 22-item measure with subscales assessing hostile (e.g. “Most women fail to appreciate fully all that men do for them”) as well as benevolent (e.g. “Women should be cherished and protected by men”) sexism. Respondents rate agreement with statements on a 6-point scale (0 = *disagree strongly*, 5 = *agree strongly*). The ASI has demonstrated good reliability and validity, and internal consistency was good for the total scale (a = .89).

*1.2.4 Anti-racist/anti-sexist behaviors*

 Anti-racist behaviors were measured using the Anti-Racism Behavioral Inventory (ARBI; Pieterse et al., 2016). The ARBI asks participants to rate their level of agreement (1 = *strongly disagree*, 6 = *strongly agree*) with 21 items assessing involvement in anti-racist actions (e.g. “I volunteer with anti-racist or racial justice organizations,” “When I hear people telling racist jokes and using negative racial stereotypes, I usually confront them”). The ARBI has shown good reliability and validity (Pieterse et al., 2016), and internal consistency was excellent in this study (a = .92).

The Bystander Attitude Scale–Revised (BAS; McMahon et al., 2014) High Risk subscale was used to assess proactive behaviors to prevent sexual assault, i.e. an anti-sexist behavior. Willingness to intervene to prevent violence and/or sexual assault against women has been described as an important behavioral component of anti-sexism (Kaya et al., 2019; Casey, 2010). Participants indicate how likely it is (1 = *unlikely*, 5 = *very likely*) that they would intervene in situations where there is a high risk of sexual assault (e.g. “Check in with a friend who looks drunk when she goes to a room with someone else at a party”). The BAS has demonstrated adequate reliability and validity, and internal consistency was good for the BAS High Risk subscale (a = .84).

*1.3 Statistical analyses*

 All analyses were conducted using R statistical software (R Core Team, 2018). Missing data were infrequent in baseline responses (0 to 3.37% by variable) but were relatively common in follow-up responses (20.21 to 21.76%). Missing data were imputed using multivariate imputation by chained equations (MICE), using the mice() package in R (van Buuren & Groothuis-Oudshoorn, 2011). All variables noted in this paper were used to conduct the imputation, which generated 20 imputed datasets that were pooled for results. All analyses were conducted using the imputed data set with the exception of measure reliabilities, demographics, and zero order correlations. Demographic variables were recoded as dichotomous dummy variables for all analyses. Specifically, the most common responses for each variable (female, non-Hispanic white, Republican) were set as reference groups so that the effect of alternate responses on study variables could be interpreted. We categorized race as a binary variable of non-Hispanic white versus other (Hispanic white or non-white) considering the limited racial/ethnic diversity in our sample.

 Zero order correlations between study variables were conducted to examine potential correlations between psychological variables and anti-racist/sexist variables. To examine the relations between perspective taking and psychological inflexibility with anti-racist/anti-sexist attitudes, a pair of hierarchical linear regressions were conducted for both ambivalent sexism and white privilege awareness. In the first model, only demographic factors were tested, including age, gender identity, race/ethnicity, and political affiliation. This was followed by a second model incorporating psychological inflexibility and perspective taking. *R2* values were compared to determine whether the complete models accounted for a greater proportion of variance when examining predictors of each attitude.

A similar series of hierarchical linear regressions were conducted to predict anti-racist/anti-sexist behaviors at follow-up. However, in the first model relevant attitudes (i.e. ambivalent sexism predicting willingness to intervene against sexual assault in high-risk situations and white privilege awareness predicting anti-racist behaviors) at baseline were included in addition to baseline demographic covariates. Baseline Psychological inflexibility and perspective taking were then added to a second model. These models thus tested whether psychological inflexibility and perspective taking predicted anti-racist/anti-sexist behaviors over time independent of relevant attitudes.

**2. Results**

*2.1 Preliminary analyses*

Study variables (IRI-PT, AAQS-Flexibility, AAQS-Inflexibility, ASI, WPAS-Aware, BAS-High Risk and ARBI) were inspected and all approximated normality, as did residual plots for all regression models. We additionally tested for potential multi-collinearity in regression models, which can produce misleading parameter estimates (O’Brien, 2007). Variance inflation factors (VIF) were calculated for all models across all 20 MI datasets, and values did not exceed 1.62, suggesting a relatively low influence of multi-collinearity of predictors on parameter estimates.

Zero order correlations of study variables are presented in Table 2. Anti-racist/anti-sexist attitudes showed small to large correlations with relevant behaviors, i.e. ambivalent sexism with willingness to intervene against sexual assault in high-risk situations (*r* = -.23), and white privilege awareness with anti-racist behaviors (*r* = .61). Additionally, anti-sexist and anti-racist attitudes showed a strong correlation with one another (*r* = .57). Perspective taking showed small significant correlations with all anti-racist/sexist attitudes and behaviors, with a magnitude of .12-.23, with the exception of white privilege awareness. Perspective taking showed small negative correlations with psychological inflexibility (*r* = -.29) and flexibility (reverse scored; *r* = -.28). Psychological inflexibility showed a small, negative correlation with willingness to intervene against sexual assault, and psychological flexibility (reverse scored) likewise showed a small positive correlation with ambivalent sexism (*r* = .10) and a small negative correlation with willingness to intervene against sexual assault (*r* = -.16).

Table 2.*Zero order correlations between ASI, WPAS-Aware, BAS-High Risk, ARBI, IRI-Perspective Taking, AAQS-Flexibility, and AAQS-Inflexibility*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variable | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. ASI | - |  |  |  |  |  |
| 2. WPAS-Aware | -.57\*\*  | - |  |  |  |  |
| 3. BAS-High Risk | -.23\*\*  | .09  | - |  |  |  |
| 4. ARBI | -.50\*\* | .61\*\* | .29\*\*  | - |  |  |
| 5. IRI-Perspective Taking | -.12\* | .04 | .23\*\*  | .12\* | - |  |
| 6. AAQS-Inflexibility | .04 | .03 | -.14\*  | .01  | -.29\*\* | - |
| 7. AAQS-Flexibilitya | .10\*  | -.04 | -.16\*\*  | -.02  | -.28\*\* | .24\*\* |

aReverse scored

\*p < .05, \*\*p < .01, \*\*\*p < .001

*Note*: ASI = Ambivalent Sexism Inventory; WPAS = White Privilege Attitudes Scale; BAS = Bystander Attitude Scale; ARBI = Anti-Racism Behavioral Inventory; IRI = Interpersonal Reactivity Index; AAQS = Acceptance and Action Questionnaire–Stigma; reference groups for dummy coding of demographic variables were as follows: female, non-Hispanic white, Republican

*2.2 Predictors of anti-racist/anti-sexist attitudes*

The first model testing predictors of ambivalent sexism with only demographic factors indicated that male gender, older age, and Republican political affiliation predicted higher ambivalent sexism (see Table 3). In the second model, adding perspective taking and psychological inflexibility marginally increased the proportion of variance accounted for in ambivalent sexism (*R2* value changed from .31 to .33), with no psychological factors being significant predictors.

The first model testing predictors of white privilege awareness with only demographic factors indicated male gender and Republican political affiliation largely predicted lower awareness compared to other groups, but not age or race/ethnicity. In the second model, adding perspective taking and psychological inflexibility did not change the proportion of variance accounted for in white privilege awareness (*R2* value was 0.33 in both models). Gender and political affiliation remained significant predictors in this model, and no other demographic or psychological factors were identified as significant predictors.

Table 3. *Psychological inflexibility, perspective taking, and demographics predicting anti-sexist/anti-racist attitudes*

|  |  |  |  |
| --- | --- | --- | --- |
| *Predicting ASI* | B | SE | *R2*  |
| *Model 1* |  |  | 0.31 |
| Age | -0.39\* | 0.18 |  |
| Male | 9.81\*\*\* | 1.73 |  |
| Gender nonbinary | -22.32 | 15.45 |  |
| Other gender identity | -21.85 | 15.55 |  |
| Non-white | -1.77 | 2.65 |  |
| Democrat | -24.30\*\*\* | 2.44 |  |
| Other political party | -17.56\*\*\* | 4.86 |  |
| Politically independent | -9.72\*\*\* | 2.50 |  |
| No political affiliation/unsure | -7.86\*\*\* | 1.94 |  |
| *Model 2* |  |  | 0.33 |
| Age | -0.33 | 0.18 |  |
| Male | 9.65\*\*\* | 1.74 |  |
| Gender nonbinary | -24.43 | 15.38 |  |
| Other gender identity | -21.80 | 15.51 |  |
| Non-white | -2.10 | 2.66 |  |
| Democrat | -24.56\*\*\* | 2.46 |  |
| Other political party | -17.04\*\*\* | 4.83 |  |
| Politically independent | -9.22\*\*\* | 2.49 |  |
| No political affiliation/unsure | -8.05\*\*\* | 1.94 |  |
| IRI-PT | -0.17 | 0.17 |  |
| AAQ-S Inflexibility | 0.11 | 0.10 |  |
| AAQ-S Flexibilitya | 0.22 | 0.12 |  |
| *Predicting WPAS-Awareness* | B | SE |  |
| *Model 1* |  |  | 0.33 |
| Age | -0.01 | 0.05 |  |
| Male | -2.37\*\*\* | 0.46 |  |
| Nonbinary | -1.36 | 4.13 |  |
| Other gender identity | 5.27 | 4.16 |  |
| Non-white | 1.03 | 0.71 |  |
| Democrat | 6.93\*\*\* | 0.65 |  |
| Other political party | 2.16 | 1.31 |  |
| Politically independent | 2.37\*\*\* | 0.67 |  |
| No political affiliation/unsure | 3.02\*\*\* | 0.52 |  |
| *Model 2* |  |  | 0.33 |
| Age | -0.02 | 0.05 |  |
| Male | -2.38\*\*\* | 0.47 |  |
| Nonbinary | -1.08 | 4.16 |  |
| Other gender identity | 5.11 | 4.19 |  |
| Non-white | 1.04 | 0.72 |  |
| Democrat | 6.94\*\*\* | 0.67 |  |
| Other political party | 2.12 | 1.32 |  |
| Politically independent | 2.34\*\*\* | 0.67 |  |
| No political affiliation/unsure | 3.06\*\*\* | 0.53 |  |
| IRI-PT | 0.01 | 0.05 |  |
| AAQ-S Inflexibility | -0.01 | 0.03 |  |
| AAQ-S Flexibilitya | -0.03 | 0.03 |  |

aReverse scored

\*p < .05, \*\*p < .01, \*\*\*p < .001

*Note*: ASI = Ambivalent Sexism Inventory; WPAS = White Privilege Attitudes Scale; BAS = Bystander Attitude Scale; ARBI = Anti-Racism Behavioral Inventory; IRI = Interpersonal Reactivity Index; AAQ-S = Acceptance and Action Questionnaire–Stigma; reference groups for dummy coding of demographic variables were as follows: female, non-Hispanic white, Republican.

*2.3 Predictors of anti-racist/anti-sexist behaviors*

The initial model testing predictors of willingness to intervene against sexual assault using only the relevant attitudinal measure (i.e. ambivalent sexism) and demographic factors indicated that ambivalent sexism and no political affiliation predicted lower likelihood of intervening, whereas “other” political affiliation predicted higher likelihood (see Table 4). In the second model, adding perspective taking and psychological inflexibility increased the proportion of variance accounted for (*R2* value changed from 0.09 to 0.14), and higher perspective taking predicted higher willingness to intervene above and beyond ambivalent sexism (b = 0.14, SE = 0.04, *p* = .002). The influence of political affiliation remained the same, with no indication of psychological flexibility being a predictor.

 The first model testing predictors of anti-racist behaviors with only the relevant attitudinal measure (i.e. white privilege awareness) and demographic factors indicated higher white privilege awareness and Democratic/independent/other political affiliation to be significant predictors. In the second model, adding perspective taking and psychological inflexibility marginally increased the proportion of variance accounted for in anti-racist behaviors (*R2* value changed from 0.42 to 0.43). Higher perspective taking predicted higher anti-racist behaviors above and beyond white privilege awareness (b = 0.39, SE = 0.13, p = .002), with the same pattern of demographic predictors, and no suggestion that psychological flexibility predicted behavior.

Table 4. *Psychological inflexibility, perspective taking, and demographics predicting anti-sexist/anti-racist behaviors*

|  |  |  |  |
| --- | --- | --- | --- |
| *Predicting BAS High Risk* | B | SE | *R2*  |
| *Model 1* |  |  | 0.09 |
| ASI | -0.03\* | 0.01 |  |
| Age | -0.02 | 0.04 |  |
| Male | -0.34 | 0.48 |  |
| Nonbinary | -0.29 | 3.65 |  |
| Other gender identity | -0.34 | 3.66 |  |
| Non-white | 0.28 | 0.70 |  |
| Democrat | 0.20 | 0.72 |  |
| Other political party | 2.65\* | 1.22 |  |
| Politically independent | 0.82 | 0.65 |  |
| No political affiliation/unsure | -1.18\* | 0.53 |  |
| *Model 2* |  |  | 0.14 |
| ASI | -0.03 | 0.01 |  |
| Age | -0.04 | 0.04 |  |
| Male | -0.21 | 0.47 |  |
| Nonbinary | 0.07 | 3.58 |  |
| Other gender identity | 0.64 | 3.60 |  |
| Non-white | 0.56 | 0.70 |  |
| Democrat | 0.47 | 0.72 |  |
| Other political party | 2.54\* | 1.19 |  |
| Politically independent | 0.61 | 0.65 |  |
| No political affiliation/unsure | -1.19\* | 0.52 |  |
| IRI-PT | 0.14\*\* | 0.04 |  |
| AAQ-S Inflexibility | -0.03 | 0.03 |  |
| AAQ-S Flexibilitya | -0.02 | 0.03 |  |
| *Predicting ARBI* |  |  |  |
| *Model 1* |  |  | 0.42 |
| WPAS-Awareness | 1.35\*\*\* | 0.16 |  |
| Age | -0.19 | 0.13 |  |
| Male | -2.81 | 1.43 |  |
| Nonbinary | 9.64 | 10.82 |  |
| Other gender identity | 8.55 | 10.95 |  |
| Non-white | 2.65 | 2.01 |  |
| Democrat | 6.35\*\* | 2.21 |  |
| Other political party | 7.56\* | 3.81 |  |
| Politically independent | 4.61\* | 1.99 |  |
| No political affiliation/unsure | -1.19 | 1.60 |  |
| *Model 2* |  |  | 0.43 |
| WPAS-Awareness | 1.35\*\*\* | 0.16 |  |
| Age | -0.22 | 0.13 |  |
| Male | -2.26 | 1.43 |  |
| Nonbinary | 7.54 | 10.76 |  |
| Other gender identity | 11.25 | 10.90 |  |
| Non-white | 3.49 | 2.03 |  |
| Democrat | 6.10\*\* | 2.26 |  |
| Other political party | 7.29\* | 3.77 |  |
| Politically independent | 4.01\* | 1.98 |  |
| No political affiliation/unsure | -1.79 | 1.59 |  |
| IRI-PT | 0.39\*\* | 0.13 |  |
| AAQ-S Inflexibility | 0.08 | 0.08 |  |
| AAQ-S Flexibilitya | 0.11 | 0.91 |  |

aReverse scored

\*p < .05, \*\*p < .01, \*\*\*p < .001

*Note*: ASI = Ambivalent Sexism Inventory; WPAS = White Privilege Attitudes Scale; BAS = Bystander Attitude Scale; ARBI = Anti-Racism Behavioral Inventory; IRI = Interpersonal Reactivity Index; AAQS = Acceptance and Action Questionnaire–Stigma; reference groups for dummy coding of demographic variables were as follows: female, non-Hispanic white, Republican

**3. Discussion**

The current study sought to examine the relevance of two processes theorized to contribute to anti-racist/anti-sexist attitudes and behaviors: psychological inflexibility and perspective taking. A notable limitation in prior research is an emphasis on altering the content of prejudicial attitudes themselves as opposed to psychological processes that may affect whether or not they are acted upon. A greater understanding of the “bridge” between the holding of prejudicial beliefs and acting upon them is necessary in order to effectively combat prejudice and its detrimental effects. We sought to determine whether psychological inflexibility and perspective taking may be meaningful processes in this regard.

Importantly, we found that perspective taking predicted anti-racist/anti-sexist behaviors (i.e. actively challenging racist behavior, intervening to stop potential sexual assaults) across multiple domains above and beyond related attitudes (i.e. white privilege awareness, low ambivalent sexism). This suggests that facilitating perspective taking may be a critical process in promoting the behavioral components of anti-racism/anti-sexism. Recent experimental research indicates that perspective taking can be effectively trained and is a viable route to behavior change (Montoya-Rodriguez et al., 2017), and an intervention targeting psychological inflexibility around racial microaggressions featured perspective taking as a central component (Williams et al., 2020). Our findings support that perspective taking is additionally a component of active anti-racist/anti-sexist behavior, and that interventions such as experiential intergroup contact may aid in the promotion of these behaviors.

 Additionally, anti-racist/anti-sexist attitudes themselves were found to be significant predictors of anti-racist/anti-sexist behaviors, findings which complement previous research linking the holding of stigmatizing attitudes to discriminatory behaviors (Bagci et al., 2020). Psychological inflexibility was not found to predict anti-racist/anti-sexist attitudes or behaviors, suggesting that this construct on its own may not be sufficient in accounting for prejudicial attitudes and behaviors, and potential influences on this relationship should be examined in future research.

**4. Limitations and conclusions**

Several limitations should be noted when interpreting these results. Our sample was largely female, white, non-Hispanic, and college-educated, leaving open the question of whether similar patterns would be observed in more diverse samples. For instance, our ability to fully assess attitudes and behaviors associated with sexism may have been limited by the lack of gender diversity in our sample. Regarding race, however, there may still be lessons to be learned within a mostly white sample. Prior literature has emphasized the importance of educating white individuals, particularly those of student age, on issues such as systemic and interpersonal racism (Seaton et al., 2018). Therefore, developing relevant interventions targeting populations similar to our sample may have important repercussions on the perception and treatment of minority individuals. Additionally, the fact that a majority of our sample identified as members of a single religious institution (the Church of Jesus Christ of Latter-day Saints) may limit the generalizability of our findings on account of shared religious or social values. However, heterogeneity along other social variables (such as political affiliation) was observed, suggesting that a diversity of value systems may have been captured beyond religious belief. In any case, it would be worthwhile to examine the role of psychological inflexibility and perspective taking in the development and behavioral impact of prejudicial attitudes within larger and more diverse samples, to determine if our initial findings can be generalized. Therefore, replicability studies which examine the relationship between these constructs in other samples would be beneficial.

 Importantly, the factors we chose to assess in this study are limited in their ability to account for all forms of discrimination and prejudice. Given the exploratory goals of our study, we chose to focus on the areas of anti-racism and anti-sexism. Exploring associations with the challenging of other forms of discrimination such as homophobia, ableism, etc., would strengthen the validity of models and improve the applicability of interventions targeting relevant processes (Rosenthal, 2016). Additionally, incorporating implicit or behavioral assessments of anti-prejudicial attitudes and behavior may help in determining the real-world effect of psychological inflexibility and perspective taking on these variables.

 While our study used a broad measure of psychological inflexibility as a potential predictor of anti-racism/anti-sexism, it would be worthwhile to examine whether specific components of psychological inflexibility may predict these attitudes and behaviors more reliably. For example, a lack of clarity about one’s personal values is an important component of the psychological inflexibility model (Gloster et al., 2017). In turn, the development of anti-prejudicial and prosocial behaviors has been theorized to rely on the fostering of values such as a dedication to the wellbeing of others, making personal sacrifices to fight broader inequities, and willingness to engage in self-development (Biglan & Embry, 2013). Our lack of significant findings on the role of general psychological inflexibility related to prejudice may point to the fact that without assessing personal values, psychological inflexibility alone does not contribute to anti-racism/anti-sexism. Therefore, future work in this area should incorporate values as a potential link between prejudicial attitudes and behaviors, such as examining how clarity on anti-racist/anti-sexist values could help mitigate the impact of emotional responses to engaging in anti-racist/anti-sexist behaviors.

 Our study examined how psychological inflexibility and perspective taking relate to anti-racism and anti-sexism. Our results suggest that psychological inflexibility on its own does not predict anti-racism or anti-sexism. However, perspective taking was found to have a strong influence on anti-racist/anti-sexist behaviors above and beyond corresponding attitudes. This may prove important towards the development of interventions or trainings targeting prejudice. For instance, designing interventions which foster perspective taking skills, particularly as they contribute to assuming the viewpoint of marginalized groups, may be effective as opposed to interventions seeking to alter the content of prejudicial attitudes and beliefs. This remains consistent with a psychological flexibility model, in which altering functional processes, as opposed to particular patterns of cognition, is emphasized. Along similar lines, training psychological flexibility skills, such as acceptance and mindfulness, may help to bolster the effect of perspective taking by managing distressing or unwanted emotions that arise. Further clarifying the means by which prejudicial attitudes lead to discriminatory behaviors, and developing effective interventions to alter this pathway, is paramount in reducing the interpersonal and systemic harm experienced by marginalized groups.

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**References**

Bagci, S. C., Turnuklu, A., & Tercan, M. (2020). Positive intergroup contact decreases the likelihood that prejudicial attitudes become avoidant behavioral tendencies. *European Journal of Social Psychology, 50*(3), 597-613. https://doi.org/10.1002/ejsp.2646

Biglan, A., & Embry, D. D. (2013). A framework for intentional cultural change. *Journal of Contextual Behavioral Science, 2*(3-4), 95-104. https://doi.org/10.1016/j.jcbs.2013.06.001

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. https://doi.org/10.1037/men0000217

Casey, E. (2010). Strategies for engaging men as anti-violence allies: Implications for ally movements. *Advances in Social Work, 11*(2), 267-282. <https://doi.org/10.18060/580>

Cowling, M. M., Anderson, J. R., & Ferguson, R. (2019). Prejudice-relevant correlates of attitudes towards refugees: A meta-analysis. *Journal of Refugee Studies*, *32*(3), 502-524. <https://doi.org/10.1093/jrs/fey062>

Crawford, J. T., Brandt, M. J., Inbar, Y., Chambers, J. R., & Motyl, M. (2017). Social and economic ideologies differentially predict prejudice across the political spectrum, but social issues are most divisive. *Journal of Personality and Social Psychology*, *112*(3), 383. <https://doi.org/10.31234/osf.io/3g5pz>

Donald, J. N., Sahdra, B. K., Van Zanden, B., Duineveld, J. J., Atkins, P. W., Marshall, S. L., & Ciarrochi, J. (2019). Does your mindfulness benefit others? A systematic review and meta‐analysis of the link between mindfulness and prosocial behaviour. *British Journal of Psychology, 110*(1), 101-125. https://doi.org/10.1111/bjop.12338

FitzGerald, C., Martin, A., Berner, D., & Hurst, S. (2019). Interventions designed to reduce implicit prejudices and implicit stereotypes in real world contexts: a systematic review. *BMC Psychology, 7*(1), 29. https://doi.org/10.1186/s40359-019-0299-7

Flood, M. (2015). Work with men to end violence against women: a critical stocktake. *Culture, health & sexuality*, *17*(sup2), 159-176. https://doi.org/10.1080/13691058.2015.1070435

Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism*. Journal of Personality and Social Psychology, 70*(3), 49.

Gloster, A. T., Klotsche, J., Ciarrochi, J., Eifert, G., Sonntag, R., Wittchen, H. U., & Hoyer, J. (2017). Increasing valued behaviors precedes reduction in suffering: Findings from a randomized controlled trial using ACT. *Behaviour Research and Therapy, 91*, 64-71. https://doi.org/10.1016/j.brat.2017.01.013

Graf, N., Brown, A., & Patten, E. (2018). The narrowing, but persistent, gender gap in pay. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2019/03/22/gender-pay-gap-facts/

Hage, G. (2016). Recalling anti-racism. *Ethnic and Racial Studies*, *39*(1), 123-133. https://doi.org/10.1080/01419870.2016.1096412

Hochman, A. L., & Suyemoto, K. L. (2020). Evaluating and dismantling an intervention aimed at increasing white people’s knowledge and understanding of racial justice issues. *American Journal of Orthopsychiatry*. https://doi.org/10.1037/ort0000506

Kaya, A., Le, T. P., Brady, J., & Iwamoto, D. (2019). Men who intervene to prevent sexual assault: A grounded theory study on the role of masculinity in bystander intervention. *Psychology of Men & Masculinities, 21* (3), 463-478. https://doi.org/10.1037/men0000249

Lee, R. T., Perez, A. D., Boykin, C. M., & Mendoza-Denton, R. (2019). On the prevalence of racial discrimination in the United States. *PloS One, 14*(1).

Levin, M. E., Luoma, J. B., Lillis, J., Hayes, S. C., & Vilardaga, R. (2014). The Acceptance and Action Questionnaire–Stigma (AAQ-S): Developing a measure of psychological flexibility with stigmatizing thoughts. *Journal of Contextual Behavioral Science, 3*(1), 21-26. https://doi.org/10.1016/j.jcbs.2013.11.003

Levin, M. E., Luoma, J. B., Vilardaga, R., Lillis, J., Nobles, R., & Hayes, S. C. (2016). Examining the role of psychological inflexibility, perspective taking, and empathic concern in generalized prejudice. *Journal of Applied Social Psychology, 46*(3), 180-191. https://doi.org/10.1111/jasp.12355

Löwe, B., Kroenke, K., & Gräfe, K. (2005). Detecting and monitoring depression with a two-item questionnaire (PHQ-2). *Journal of Psychosomatic Research, 58*(2), 163–171. http://doi.org/10.1016/j.jpsychores.2004.09.006

McMahon, S., Allen, C. T., Postmus, J. L., McMahon, S. M., Andrew Peterson, N., & Hoffman, M. L. (2014). Measuring bystander attitudes and behavior to prevent sexual violence. *Journal of American College Health, 62*(1), 58–66. http://doi.org/10.1080/07448481.2013.849258

McManus, J. L., Saucier, D. A., O’Dea, C. J., & Bernard, D. L. (2019). Aversive Affect Versus Racism as Predictors of Racial Discrimination in Helping. *Basic and Applied Social Psychology*, *41*(4), 230-253. https://doi.org/10.1080/01973533.2019.1622545

Montoya-Rodriguez, M. M., Molina, F.J., & McHugh, L. (2017). A review of relational frame theory research into deictic relational responding. *The Psychological Record, 67* (4), 569-579. <https://doi.org/10.1007/s40732-016-0216-x>

O’Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, *41*(5), 673-690. https://doi.org/10.1007/s11135-006-9018-6

Patterson, C. A., Papa, L. A., Reveles, A. K., & Domenech Rodríguez, M. M. (2018). Undergraduate student change in cultural competence: Impact of a multicultural psychology course. *Scholarship of Teaching and Learning in Psychology, 4*(2), 81. https://doi.org/10.1037/stl0000108

Pieterse, A. L., Utsey, S. O., Miller, M. J., Pieterse, A. L., Utsey, S. O., & Miller, M. J. (2015). Development and initial validation of the anti- racism behavioral inventory. *Counselling Psychology Quarterly, 29*, 1–26. http://doi.org/10.1080/09515070.2015.1101534

Pinterits, E. J., Poteat, V. P., & Spanierman, L. B. (2009). The White Privilege Attitudes Scale: Development and Initial Validation. *Journal of Counseling Psychology, 56*(3), 417–429. http://doi.org/10.1037/a0016274

Pulos, S., Elison, J., & Lennon, R. (2004). The hierarchical structure of the Interpersonal Reactivity Index. *Social Behavior and Personality, 32*(4), 355-360. https://doi.org/10.2224/sbp.2004.32.4.355

R Core Team. (2018). R: A language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing.

Rosenthal, L. (2016). Incorporating intersectionality into psychology: An opportunity to promote social justice and equity. *American Psychologist, 71*(6), 474. https://doi.org/10.1037/a0040323

Schütz, H., & Six, B. (1996). How strong is the relationship between prejudice and discrimination? A meta-analytic answer. *International Journal of Intercultural Relations*, *20*(3-4), 441-462. https://doi.org/10.1016/0147-1767(96)00028-4

Seaton, E. K., Gee, G. C., Neblett, E., & Spanierman, L. (2018). New directions for racial discrimination research as inspired by the integrative model. *American Psychologist*, *73*(6), 768. https://doi.org/10.1037/amp0000315

The Trevor Project. (2019) National Survey on LGBTQ Mental Health. New York, New York: The Trevor Project. <https://www.thetrevorproject.org/wp-content/uploads/2019/06/The-Trevor-Project-National-Survey-Results-2019.pdf>

van Buuren, S., & Groothuis-Oudshoorn, K. (2011). MICE: Multivariate imputation by chained equations in R. *Journal of Statistical Software, 45*. <https://doi.org/10.1080/10580530.2013.739883>

Williams, M. T., Kanter, J. W., Peña, A., Ching, T. H., & Oshin, L. (2020). Reducing microaggressions and promoting interracial connection: The racial harmony workshop. *Journal of Contextual Behavioral Science, 16*, 153-161. <https://doi.org/10.1016/j.jcbs.2020.04.008>

Wong, B., Elmorally, R., Copsey-Blake, M., Highwood, E., & Singarayer, J. (2020). Is race still relevant? Student perceptions and experiences of racism in higher education. *Cambridge Journal of Education*, 1-17. https://doi.org/10.1080/0305764x.2020.1831441

Zmigrod, L., Rentfrow, P. J., & Robbins, T. W. (2019). Cognitive inflexibility predicts extremist attitudes. *Frontiers in Psychology*, *10*, 989. <https://doi.org/10.3389/fpsyg.2019.00989>