

Social Attitudes Towards Sexism, Self-Objectification, Fear of Crime, and Trustworthiness-
Based Face Ratings

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Abstract

This current study investigates the relationship between sexist beliefs, self-objectification, and fear of crime. In addition, the researchers sought to investigate whether these social attitudes would predict trustworthiness ratings of male faces. In part one, survey responses from 52 participants were collected. In part two, 45 participants were exposed to a crime salience manipulation before rating the trustworthiness of a series of male faces. We ran bivariate correlations between the predictor variables to confirm existing relationships as seen in the literature regarding the development of the scales as well as the research used well after the scales were developed. The results confirmed these existing relationships and revealed a significant negative relationship between fear of crime and body shame, as well as a significant positive relationship between right-wing political ideology and hostile sexism. In part two, those who were exposed to the crime salience manipulation agreed more with the results of the crime-centered poll if they scored high in fear of crime rather than low. Those exposed to the control condition showed no difference in agreement whether low or high in fear of crime. A 4-way interaction was also found between the dichotomized fear of crime variable, the manipulation condition, face model type, and the amount of manipulation applied to faces. For trust model-derived faces, trustworthiness ratings increased in a linear progression as more information was applied. However, for dominance model-derived faces, trust judgments increased in a curvilinear progression. Trust ratings peaked at the mid-level of information and were the lowest at the highest level of information.

Social Attitudes Towards Sexism, Self-Objectification, Fear of Crime, and Trustworthiness-Based Face Ratings

Sexism is pervasive, found cross-culturally (Barreto & Doyle, 2022), in daily interactions (Holland et al., 2016; Swim et al., 2001) and within personal interactions (Glick et al., 2000). Sexism was initially conceptualized as blatant hostility towards women, until Glick and Fiske (1996) expanded the theory to include both hostile sexism and benevolent sexism, referred to in combination as ambivalent sexism. Actions towards women that are derived from benevolent sexism, such as helping and intimacy-seeking behaviors, are often perceived as prosocial (Glick & Fiske, 1996). Alternatively, hostile sexism exists as a deep-seated dislike of women that is based on rigid beliefs and reflects hatred towards a group identity. The two forms of sexism differ in their explicit manifestations, yet stem from the belief that women exist as the weaker gender (Glick & Fiske, 1996). Benevolent sexism encourages and rewards behavior that serves the needs of men, such as the performance of household duties that lie within the traditional female gender role. Hostile sexism acts as a punishment for women who violate these traditional gender roles. This form of sexism can be observed in interactions as a means for asserting dominance and maintaining power over women (Glick & Fiske, 2001).

Both forms of sexism are associated with a range of problems for women, including violence. In a recent meta-analysis, Agadullina et al. (2022) found that ambivalent sexism is positively correlated with the acceptance of male-to-female violence, with hostile sexism showing a stronger relationship. Scoring high in hostile sexism has also been found to predict a greater acceptance of intimate partner violence. Using qualitative methods such as videorecording and journal entries from participants, Cross et al. (2017) found that men who scored high in hostile sexism were more likely to engage in psychological abuse towards their

female partner in daily life and in times of conflict, but only if they perceived their partner to be uncommitted. Similar results were found in a study by Juarros-Basterretxea et al. (2019), which included imprisoned men who completed self-report questionnaires. In this study, a direct relationship was found between hostile sexism and psychological aggressive towards a partner, with positive attitudes toward abuse mediating the relationship. Hostile sexism has also been found to have a direct effect on the recognition of violence, with those higher in hostile sexism reporting less acceptance that psychological abuse is a form of violence against women (Rollero et al., 2019). In addition, continuous exposure to both forms of sexism is known to contribute to a range of mental health issues in women (Landrine et al., 1995). Saunders et al. (2017) conducted two studies involving perceptions of stranger harassment towards women. In the first study, researchers collected self-report data from undergraduate women regarding self-esteem, gender-specific system justification, and sexual harassment experiences. A positive relationship was found between the perception that gender relations were fair and the tendency to make benign attributions for stranger harassment, while a negative relationship was found between self-esteem and benign attributions. In their second study involving male undergraduates, researchers sought to examine the relationship between ambivalent sexism and the belief that women should cope after being catcalled. Prescriptive coping beliefs were assessed using an altered version of the Coping with Stranger Harassment Scale (Fairchild and Rudman, 2008), where participants were presented with a written vignette of a woman being catcalled before sharing how they believed she should cope. Hostile sexism was found to be positively correlated with the belief that women subjected to harassment should engage in self-blame, make benign attributions towards their catcallers, and cope in a passive manner. Men are often the perpetrators of sexual harassment towards women (Black et al., 2011) and their dominant status within

society as well as their sexist attitudes can directly affect how women respond to sexism (Drury & Kaiser, 2014). A study from Becker and Wright (2011) that exposed participants to sexist statements before asking them to sign a petition for collective action found that exposing women to benevolent sexism decreased their participation in social change, whereas exposure to hostile sexism increased their participation.

Sexist attitudes have also been found to predict political viewpoints. In a study concerning the 2016 United States election cycle, Bock et al., (2017) found that ambivalent sexism was positively associated with identification as a republican voter and with the likelihood of voting for male, republican presidential candidate Donald Trump. In another study of the same election cycle, hostile sexism was negatively associated with favorability for female, democratic presidential candidate Hillary Clinton, while benevolent sexism was positively associated with favorability. Ambivalent sexism was positively associated with a preference for Donald Trump (Cassese & Holman, 2019). Extending these findings is a study by Winter (2022), where hostile sexism in Americans was negatively associated with favorability ratings for Hillary Clinton and positively associated with favorability ratings for Donald Trump. Associations have also been found outside of the 2016 election cycle. In a study by Austin and Jackson (2019), participants completed an online survey assessing right-wing authoritarianism, social dominance orientation, and ambivalent sexism. Right-wing authoritarianism and social dominance orientation were positively associated with ambivalent sexism. Additionally, benevolent sexism was positively associated with established facets of right-wing authoritarianism traditionalism and dominance (Duckitt & Bizumic, 2013), while hostile sexism was positively associated with conservatism and anti-egalitarianism.

Sexism has also been linked to other social attitudes. Harsey and Zurbriggen (2021) investigated the relationship between sexist beliefs, self-objectification, and the objectification of women in both men and women using self-report surveys. The researchers found that both men and women who were high in hostile sexism were more likely to accept the objectification of women. Men and women did not differ in the interrelationship of the three variables. The lack of differences suggests that sexism may be a common thread between men and women that leads to self-objectification and the objectification of women. This study is part of a small pool of research that seeks to address the association between self-objectification and sexism, providing a possible avenue for further research.

Self-Objectification

Acting as a basis for self-objectification, sexual objectification theory states that women are regarded as a collection of sexualized body parts, rather than a whole being. The objectified body exists for the pleasure and viewing of others (Fredrickson & Roberts, 1997). When this sexual objectification is internalized by women, it manifests as self-objectification. Self-objectification imposes a number of burdens on women. Similar to the correlational relationships between forms of sexism and measures of mental health, self-objectification can contribute to issues with mental health. Self-objectification is positively associated with anxiety and negatively associated with bodily awareness (often referred to as interoception) (Frederickson & Roberts, 1997). As an example of this later point, Ainley and Tsakiris (2013) operationalized good interoception as accurate heartbeat counting. Interoceptive awareness was found to be negatively associated with self-objectification. Felig et al. (2022) conducted a study where interoceptive awareness was operationalized as women's ability to interpret feelings of cold. In the field study, women were surveyed in an ecologically valid manner outside of a nightclub on

cold Florida evenings. The survey contained questions from the Objectified Body Consciousness Scale (McKinley & Hyde, 1996). Similar to Ainley & Tsakiris (2013), researchers found that self-objectification was negatively correlated with awareness of bodily sensations.

Self-objectification also effects how women perform everyday activities. Women who actively monitor their bodies and present as high in self-objectification have been shown to demonstrate less intrinsic motivation and diminished enjoyment of organized activities (Dimas et al., 2021). Additionally, self-objectification has been found to be negatively correlated with the willingness to participate in gender-based social activism (Calogero, 2013). Guizzo and Cadinu's (2017) study, which was the first to examine the relationship between objectification and the ability to enter a flow state, surveyed women who were actively aware that they were under an objectifying gaze reported a decreased flow state. Those who tended to internalize beauty ideals reported a greater disruption in their work. These results contribute to the growing research that suggests that self-objectification ultimately serves as an oppressive force against women and their motivating qualities. In turn, women are subjected to an array of issues and detrimental consequences.

The relationship between sexism and objectification has been explored in research involving men and women. Sexist beliefs have been directly linked to a state of self-objectification, with hostile sexism correlating more positively in men (Harsey & Zurbriggen, 2021; Le et al., 2021). In several studies within the last 20 years, self-objectification in men and women has been linked to increased objectification of women. Recent findings are continually supporting these claims (Harsey & Zurbriggen, 2021). When controlling for social pressures, one study conducted on college women revealed a positive association between exposure to sexist experiences and the need to cope by drinking, as well as a positive association between self-

objectification and drinking to cope (Le et al., 2021). In one study, Lameiras-Fernández et al. (2018) had female participants complete a survey before having them rate their enjoyment of sexually objectifying comments after imagining that the perpetrator was a stranger, colleague, friend, or intimate partner. Sexist beliefs in women were found to have a direct association with the acceptance of objectification from a male perpetrator, with an increased acceptance for intimate partners.

Fear of Crime

Being the victim of objectification can lead to a heightened awareness of the possibility of crime, possibly due in part to the nature of sexual violence and in part to feelings of weakened autonomy (Fredrickson & Roberts, 1997). Benevolent sexism and self-objectification have been directly linked to higher reports of fear of crime and compromised well-being. In Phelan et al. (2009), undergraduate participants completed a survey before undergoing a crime salience manipulation, where participants in the crime condition were asked to evaluate an email detailing a crime committed on a college campus, while the control condition evaluated an email detailing a weather report. Fear of crime was found to be positively associated with the endorsement of benevolent sexism as well as behavioral inhibition, and negatively associated with self-esteem. Notably, participants in the crime salience condition indicated greater endorsement of benevolent sexism, lower levels of self-esteem, and greater behavior inhibition when compared to the control condition. A study conducted in the U.S. by Watson et al. (2015) examined the relationships between sexual objectification experiences, physical safety concerns, and psychological distress using an online survey distributed to undergraduate participants. A direct relationship was observed between sexual objectification experiences and fear of crime, with Black women reporting more sexual objectification and a greater fear of crime than white

women. In both groups of women, the perceived risk of crime fully mediated the relationship between sexual objectification and fear of crime. In a different study by Donnelly and Calogero (2018), undergraduate women at a British university indicated that stranger harassment was a common experience and were asked to complete a self-report survey and to rate the severity of and likelihood of crimes happening to them. Analyses revealed a positive correlation between stranger harassment and self-surveillance, as well as between stranger harassment and the perceived likelihood of intimate partner violence. Furthermore, there was a positive correlation between self-surveillance and the perceived likelihood of rape. These results suggest that stranger harassment, with self-objectification acting as a mediator, can lead to a fear of sexual crime and intimate partner violence.

Furthering this research is a 5-part study conducted by Calogero et al. (2021) that sought to examine the relationship between sexual objectification and restricted freedom of movement with personal safety anxiety as a potential mediator (Calogero et al., 2021). Participants were recruited from Amazon Mechanical Turk (MTurk) and responded to measures of personal safety anxiety and vigilance, rape-specific fears, restricted freedom of movement, interpersonal sexual objectification, self-objectification, and relational power. Participants who experienced everyday experiences of sexual objectification or self-objectification reported higher levels of personal safety anxiety and personally chosen restricted freedom of movement. However, within this relationship there were large mean differences between men and women, indicating that women have sexual objectification experiences more often.

Fear of crime can also predict preferences for aggressiveness in relationships. Across three internet-based studies, Snyder et al. (2011) found that women's fear of crime was positively associated with a preference for aggressive-formidability in long-term mates. In a similar study,

Meskelyte and Lyons (2020) surveyed British females on their exposure to crime, subjective fear of crime, and preference for aggressive-formidability in male friends. Higher fear of crime in participants predicted preference for aggressiveness-formidability in potential male friends as well as the presence of aggressive-formidability in current male friends. In a second part to this study, high fear of crime in men and women was positively correlated with preference for aggressive-formidability in potential male and female friends.

Preference for Faces

One physiognomic trait of faces that has been investigated since the 90s is the measure of the width of the face in relation to its height, known as facial width-to-height ratio (fWHR). Facial height and width are often manipulated in research to test determinants of social inference. Though results have been mixed over the years, studies indicate that fWHR can affect social trait inferences such as integrity (Ormiston et al., 2017) aggressiveness, femininity, and trustworthiness (Carré et al., 2009; Costa et al., 2017). One study conducted on over 800 skeletons of both men and women even revealed that men with narrower faces were more likely to have died from contact violence wounds (Stirrat et al., 2012). Similarly, Zilioli et al. (2014) found that a higher bizygomatic width, or the distance between the left and right zygion, predicts higher perceptions of formidability in males as well as a greater fighting ability. A study by Durkee and Ayers (2021) that encompasses eleven world regions had male and female participants make facial judgments for traits such as dominance, trustworthiness, sociability. Their study revealed a positive association between fWHR and perceptions of meanness and aggressiveness in male but not female faces, and a negative association between fWHR and trustworthiness in male but not female faces.

In an effort to further understand what underlies the quick inferences made about someone based on facial features, Todorov & Oosterhof (2008) developed a set of computer-generated faces by varying facial attributes such as width, fullness, reflectance, and eyebrow shape. The faces were meant to also reflect varying levels of trustworthiness and dominance, which were validated by participant ratings. In order to further understand the role held by certain facial features in trait assumptions, facial features were exaggerated before being exposed to six rounds of participant ratings. The faces were generated as white and were set to a neutral expression before dimensions were applied. Across 12 studies, it was found that the use of the developed stimuli accurately predicted the quick social inferences that are decided at first glance, including dominance, trustworthiness, threat, and weakness.

In 2020, Todorov and colleagues conducted another study that utilized their computer-generated stimuli (Oh et al., 2020). In this three-part study, the experimenters asked groups of participants to form impressions for faces across several positive and negative traits. In studies one and two, researchers found that men and women's faces are judged similarly for trustworthiness and dominance impressions based on visual information. However, trait ratings were highly correlated in women's faces, meaning that there was less differentiation between trait ratings despite the differing facial displays. This could be due to the presence of gender categorization in facial perception, as ratings are better understood as highly related to emotional valence in women's faces more than men's. Following the theory of benevolent sexism, women whose appearances are counterstereotypical and reflect traits such as assertiveness are more likely to be evaluated more negatively than men, while women whose appearances reflect accepted traits such as helpfulness are likely to be evaluated more positively. The results supported this theory, as evidenced by high intercorrelations between impressions of women. In

addition, raters who scored high in gender stereotype endorsement were more likely to report less differentiated impressions for male and female faces, as measured by a survey following ratings in the first study. Between studies two and three, researchers found that male and female faces were rated as trustworthy or dominant based on similar facial information. For the last study in this set, researchers developed faces from gender-specific impression models. They found that faces that were derived from male models were more effective for the manipulation of participant impressions. These results suggest that there is a sexist undertone within the evaluation of faces, as facial information used to evaluate male and female faces is the same but is evaluated differently.

The Present Research

In this study, we aim to investigate the relationships between self-reported measures of ambivalent sexism, self-objectification, and fear of crime. Since there is ample evidence supporting the associations between fear of crime and ambivalent sexism and self-objectification, an added crime salience manipulation will be present in the study. The crime salience manipulation, motivated by Phelan et al. (2009), will consist of having participants rate how much they agree with a poll presented to them as a summary of top concerns among college students. The poll for the experimental condition will emphasize campus crime as a primary concern among college students and the poll for the control condition will emphasize college costs. We are seeking a strong manipulation, though do not expect the results of the current manipulation design to equal or exceed results from Phelan et al. (2009). It is possible that effects on face judgments will only be seen in those with a pre-existing fear of crime but who have had that fear experimentally reactivated. Finally, a trustworthiness face-rating task will be performed by participants. The study will consist of two parts, which are divided between (1) the

assessments of predictor variables and (2) the crime salience manipulation and face ratings. Data will be linked between the two parts through a code created anonymously by participants.

Based on previous research, I hypothesize the following:

1. There will be a positive correlation between self-reported benevolent sexism and hostile sexism.
2. There will be positive correlations between self-objectification and fear of crime as well as ambivalent sexism and self-objectification.
3. For those in the crime salience manipulation, those who score high in fear of crime in part one of the study will show higher agreement with the results of the poll than those who scored low in fear of crime.
4. Regarding the links between part one and part two of the study, I hypothesize that women who are high in self-objectification, benevolent sexism, and fear of crime will rate male faces that are higher in dominance as more trustworthy.

In this study, we seek to expand the research regarding both male and female ratings of trustworthiness in relationship to sexist beliefs, self-objectification tendencies, and reported fear of crime. Therefore, this is an exploratory study.

Method

Participants

The participants in this study ($n = 52$ part one participants) and ($n = 37$ linked part one and part two participants) were recruited from Wittenberg University's population of students enrolled in undergraduate psychology courses. 62% of the participants identified as female ($n = 34$) and 34% identified as male ($n = 18$). All participants were between the ages of 18 and 21, with the majority reporting 19 years of age. In part two of the study, participants were subjected

to a crime salience manipulation where ($n = 16$) were a part of the control condition and ($n = 21$) were in the experimental condition.

Materials

All parts of this study were conducted online using the Testable survey platform. The first part of the study included 59 survey items, one political ideology question, and two open-ended demographic questions. The Ambivalent Sexism Inventory (ASI) was presented first (22 items), with one attention check item ("Please respond to this question with disagree slightly") placed after the 11th ASI item. Following the ASI was the political ideology question ("Generally speaking, do you usually think of yourself as Republican, Democrat, Independent, or what?") with seven response options ranging from "Strong democrat" to "Strong Republican" and one labeled "Other." We created this question from a branching question taken from the Pew Research Center's American Survey Panel (ATP). Following political ideology was the Fear of Crime Scale, and after that was the Objectified Body Consciousness scale (OBCS). Another attention check ("Please respond to this question with slightly agree") was placed at the midpoint of the OBCS items. The second part of the study included 144 digitized photos (24 male-trust model faces at manipulation levels 1, 4, and 7; 24 male dominance-model faces at manipulation levels 1, 4, and 7) and one of two fictional polls created by the researchers.

Self-Objectification Tendencies

The Objectified Body Consciousness Scale (OBCS) (McKinley & Hyde, 1996) was used to measure the participant's tendency to self-objectify. The scale consists of 24 items and used a 7-point Likert scale response ($1 = strongly agree$; $7 = strongly disagree$). The 24 items were divided into 3 categories, with items 1 to 8 addressing Body Surveillance, items 9 to 16 addressing Body Shame, and items 17 to 24 addressing Control Beliefs regarding the body. An

example item for Body Surveillance would be "I think more about how my body feels than how my body looks," for Body Shame would be "I feel like I must be a bad person when I don't look as good as I could," and for Control Beliefs would be "I can weigh what I'm supposed to when I try hard enough." Of the 24 items, 10 are reverse scored.

Fear of Crime

To assess fear of crime, the Fear of Crime scale (Ferraro, 1996) was utilized. The original scale is divided into six subscales measuring Fear of Crime, Risk of Crime, Constrained Behavior, Ecological Characteristics, Neighborhood Perceptions, and Personal Characteristics. For this study, only the 10-question subscale meant to assess Fear of Crime was used. This omission was decided based on the questions' perceived relevancy to the study and in an effort to maintain a realistic survey length to ensure optimal participant attention. The ten items were rated on a 10-point Likert Scale. Each item began with Ferraro's original prompt: "At one time or another, most of us have experienced fear about becoming the victim of crime. Some crimes probably frighten you more than others. We are interested in how afraid people are in everyday life of being a victim of different kinds of crimes. Please rate your fear on a scale of 1 to 10 where 1 means you are not afraid at all and 10 means you are very afraid. Rate your fear of..." Example items that participants were asked to rate included "Being approached on the street by a beggar or panhandler" and "Having someone break into your home while you are there."

Benevolent and Hostile Sexism

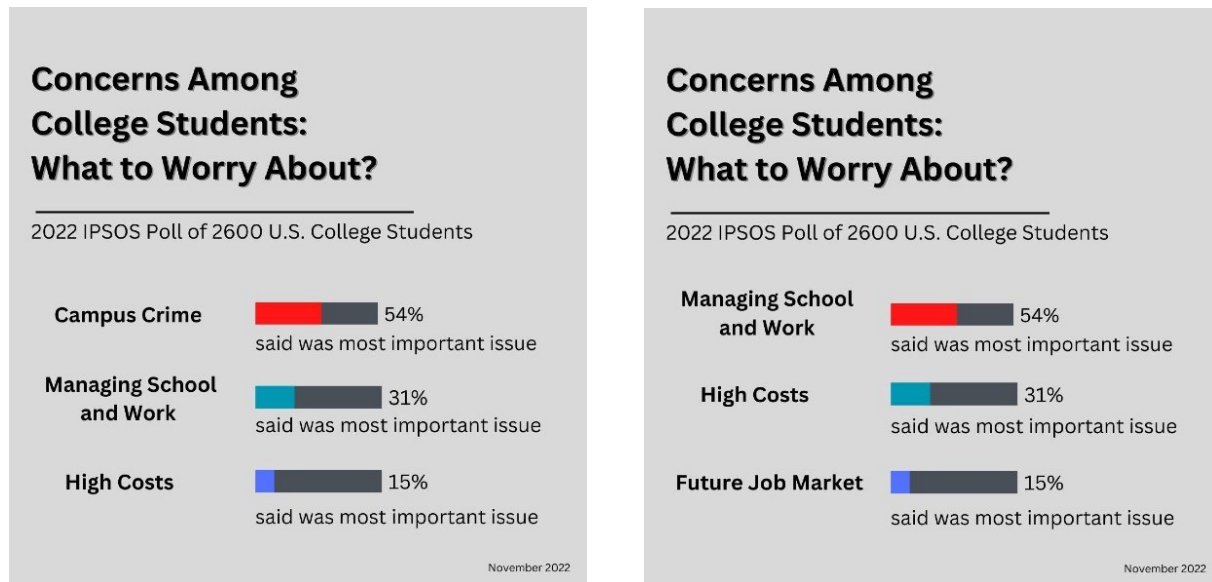
To measure beliefs surrounding sexism, the Ambivalent Sexism Inventory (ASI) (Glick & Fiske, 1996) was used. This scale consists of 22 items meant to assess attitudes towards Hostile Sexism and Benevolent Sexism and includes additional subfactors throughout (e.g., Protective Paternalism, Complementary Gender Differentiation, and Heterosexual Intimacy).

The items were rated on a 6-point Likert scale (1 = *disagree strongly*; 6 = *agree strongly*).

Example items for measuring Hostile Sexism include "Most women interpret innocent remarks or acts as being sexist," while example items for Benevolent Sexism include "Women should be cherished and protected by men." Of the 22 items, 6 are reverse scored (e.g., Feminists are making entirely reasonable demands of men).

Fictional Polls

The polls for the crime salience manipulation were created using Canva software and were modeled after real-life polls to appear more realistic to participants. The polls were identical outside of the order of concerns, began with the heading, "Concerns Among College Students: What to Worry About?" and were labeled as a "2022 IPSOS Poll of 2600 College Students." The control poll listed "Managing School and Work" as the highest concern, "High Costs" as the second highest, and "Future Job Market" as the lowest concern. The experimental poll differed only in that it listed "Campus Crime" as the highest reported concern. To ensure crime was made salient, participants were randomly presented with one of the two polls and asked for agreement from a slider ranging from 1-100. The polls are shown on the next page (Figure 1).

Figure 1*Researcher-generated Polls Reporting College Concerns*

Note: The poll on the left was presented to those in the experimental condition; the poll on the right was presented to those in the control condition. Percentages remained the same across conditions.

Todorov Faces

For the face rating portion of the study, 144 digitized images of male faces were used. The faces were taken from a database of 1,400 faces. Shape, reflectance, and other parameters were manipulated based on gender-specific models (Todorov et al., 2020). The manipulations were performed across seven equally increasing levels (of trust and dominance). The current study included two sets of male-modeled faces across 24 different face identities, with each identity being represented by levels 1, 4, and 7 (increasing septiles) of dominance manipulation or trust manipulation.

Procedure

The link to the online study was added to a list of available studies for undergraduate psychology students at Wittenberg University to earn class credit. The study was divided into two parts. For the first part of the study, participants were able to earn (1) class credit, and for the second part, (2) class credits. Participants were notified by their professors of the study's availability.

Before beginning part one of the study, students were asked to provide their informed consent and to enter a personal code (suggested format: [color] + [animal] + [number]) that would allow researchers to link their data from the first part to the second part. The first part of the study consisted of 22 survey questions from the Ambivalent Sexism Inventory (ASI), 10 from the Fear of Crime scale, 22 from the Objectified Body Consciousness Scale (OBCS), one question assessing political identity (inserted after the ASI items), and two at the end of the survey collecting demographic information. The survey had a total collection of 62 items. Two attention checks were inserted after items 11 and 45 to ensure thoughtful responses. Participants were debriefed via an electronic form after the survey.

Part two of the study began with the participant's informed consent and a prompt asking for the self-generated code from part one. Participants were then exposed to one of the two fictional polls (dependent upon their random assignment to either the experimental or control group) and were asked to rate their agreement with the results of the poll on a sliding scale from 1 to 100. After indicating their understanding of instructions, participants were asked to rate the trustworthiness of 144 male faces by combination of 24 faces identities presented for each face model (trustworthiness, dominance) and amount of manipulation (1, 4, and 7). After completion of the ratings, participants were debriefed via an electronic form.

Results

Out of the ($n = 52$) participants who completed part one of the study, ($n = 45$) went on to complete part two. Exclusion criteria consisted of a failure of one or both of the two attention checks included in part one and/or the use of repeated participant codes. Because of repeated participant codes, response data from ($n = 4$) participants was excluded from the results, resulting in a total of ($n = 48$) being included.

Part One

Verification of Existing Findings

Pearson correlation coefficients were computed to assess the linear relationships between data from both the full scales and subscales from all participants ($n = 48$). There was a positive correlation between Benevolent Sexism and Hostile Sexism, $r(46) = .46, p = .001$. This did not differ much between women, $r(28) = .41, p = .03$ and men, $r(16) = .39, p = .11$, though the female subsample reached traditional statistical significance while the smaller male subsample did not (see Figure 2).

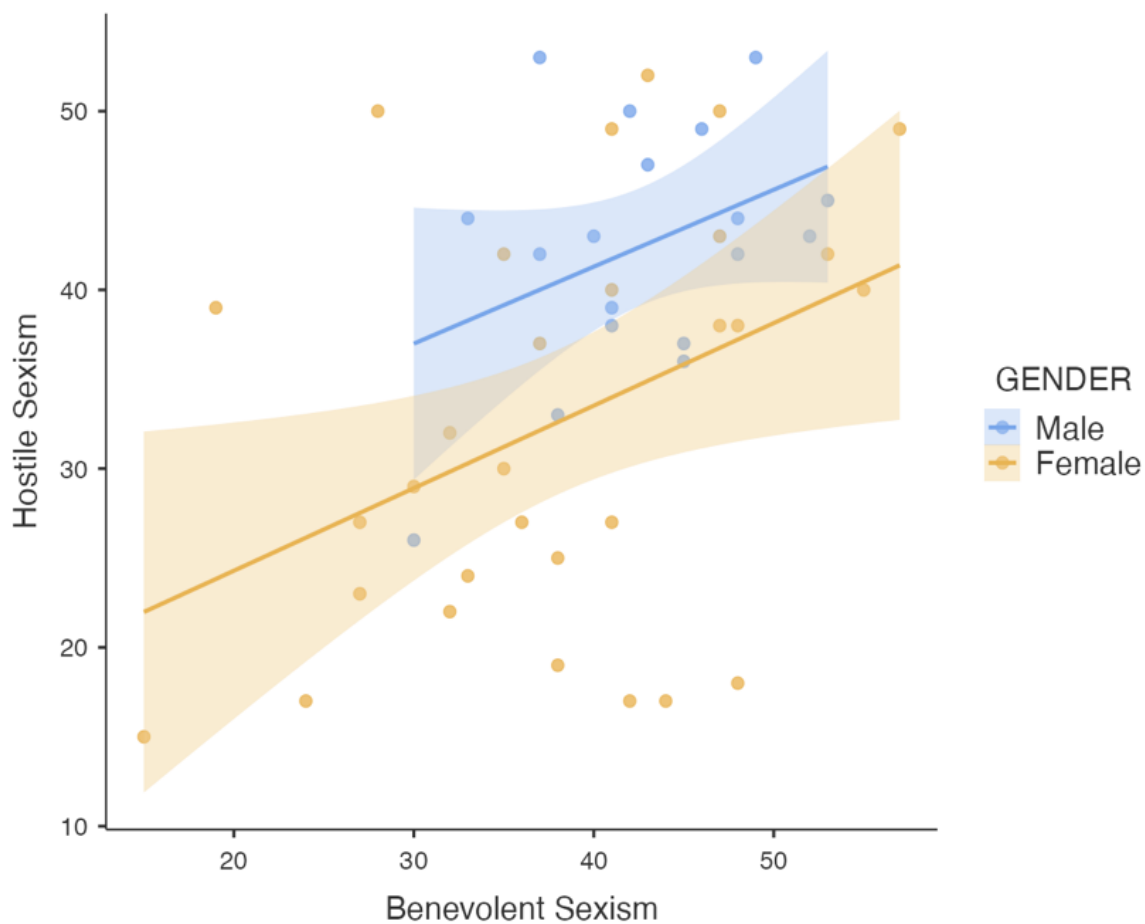
Significant Findings

A negative correlation was found between Fear of Crime and the Body Shame subscale of the Objectified Body Consciousness scale, $r(46) = -.38, p = .007$. With the exclusion of ($n = 2$) participants who reported "other" as their political identification, there was also a positive correlation between Hostile Sexism and right-wing political preferences, as measured by the Pew political ideology item, $r(44) = .50, p < .001$. Male participants were responsible for the overall negative relationship between Fear of Crime and Benevolent Sexism, $r(46) = -.09, p = .53$ as well as Fear of Crime and Hostile Sexism, $r(46) = -.27, p = .06$ (see Figure 3).

For the women-only sample ($n = 30$), Fear of Crime remained negatively associated with the Body Shame subscale, $r(28) = -.37$, $p = .043$. Hostile sexism also remained positively correlated with right-wing political preferences, $r(26) = .64$, $p < .001$. In contrast to the full sample of participants, there was a negative correlation between Fear of Crime and right-wing political preference, $r(26) = -.43$, $p = .022$.

Figure 2

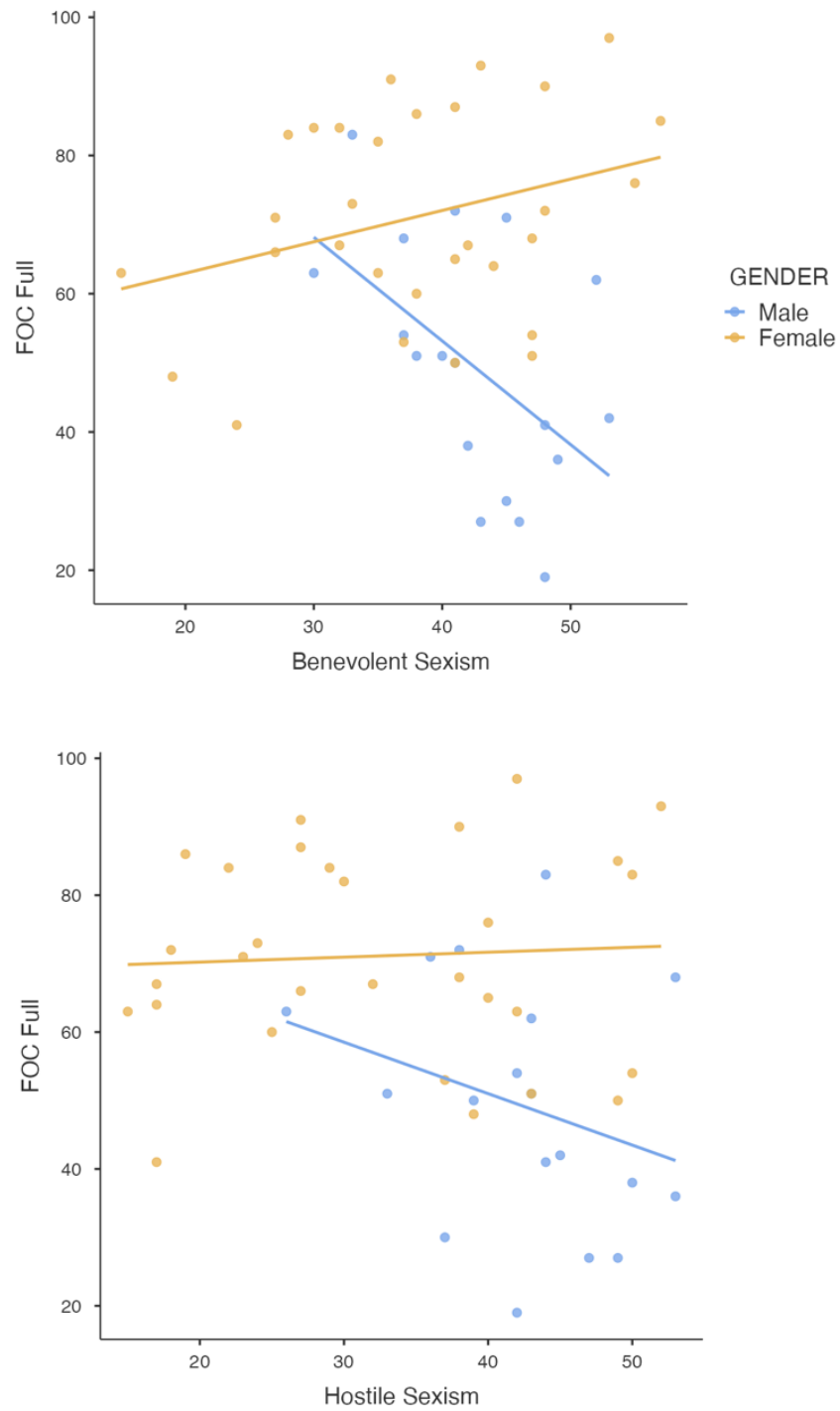
Associations Between Hostile Sexism and Benevolent Sexism



Note: The best-fit lines for both male and female participants are parallel.

Figure 3

Associations Between Fear of Crime and Hostile and Benevolent Sexism



Note: Fear of Crime (FoC) is represented by the y-axis.

Effectiveness of Crime Salience Manipulation

Independent sample t-tests were conducted to examine the differences between those who received the control poll ($n = 16$) and those who received the experimental poll ($n = 21$). For those who received the control poll, participants scoring high in Fear of Crime in part one ($n = 12$; $M = 63.70$, $SD = 19.30$) agreed with the poll equally as those who scored low in Fear of Crime ($n = 9$; $M = 69.10$; $SD = 22.00$), $t(19) = .60$, $p = .50$. However, for those who experienced the crime salience experimental poll, high Fear of Crime participants ($n = 9$; $M = 61.70$; $SD = 21.90$) expressed greater agreement than low Fear of Crime participants ($n = 7$; $M = 36.40$; $SD = 17.90$; $t(14) = 2.47$, $p = .03$) (see Table 1).

Table 1

Poll Agreement with Dichotomized FoC and Crime Salience Manipulation

FoC Score	Condition	
	Control	Crime Salience
Above Median	69.10	61.70
Below Median	63.70	36.40

Note: This table displays agreement scores chosen from a 1-100 slider. Those exposed to the control poll agreed with the poll equally whether they scored high or low FoC; those exposed to the campus crime poll agreed more with the poll if they scored high in FoC.

Part Two

The main dependent variable in part two are the trust ratings assigned to the group of 24 faces. We conducted a two (face model; dominance, trust) by three (amount of information; levels 1, 4, and 7) by 2 (crime salience condition; control, crime) by two (independent variable of interest; below or above median) mixed-factor ANOVA with the average trust rating for each participant as the dependent variable.

Fear of Crime

There were no significant main effects of the dichotomized Fear of Crime variable, $F(1, 33) = 1.79, p = .19$, or of the crime salience manipulation, $F(1, 33) = 3.17, p = .08$. Likewise there was no significant interaction between the crime salience manipulation and the level of FoC, $F(1,33) = 3.20, p = .08$.

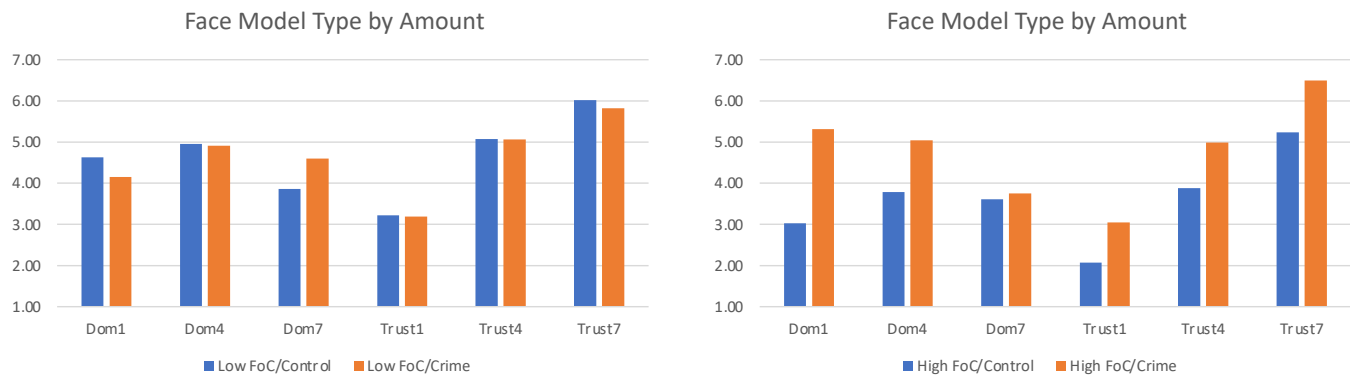
There was a significant main effect of the type of model used to derive the faces. Trust model derived faces were rated as more trustworthy overall ($M = 4.51, SD = 1.01$) than dominance model derived faces ($M = 4.30, SD = .99$), $F(1,33) = 29.06, p < .001$. There was also a main effect for the amount of information applied to the face stimulus, $F(2, 66) = 36.68, p < .001$. Faces with level 1 amount of information ($M = 3.60, SD = 1.23$) showed lower trust ratings ($M = -1.13, SD = .91$) than faces with level 4 information ($M = 4.72, SD = 1.18$), $t(36) = 7.76, p < .001$. Faces with level 4 amount of information showed trust ratings equal to faces with level 7 information ($M = 4.91, SD = 1.18$), $t(36) = 1.60, p = .12$. Faces with level 1 amount of information showed lower trust ratings than faces with level 7 information, $t(36) = 5.99, p < .001$ (see Figure 4).

There were no other significant 2 or 3-level interactions of the factors, as all F 's < 2.80 and all p 's $> .10$.

There was a 4-way interaction of the variables, $F(2,66) = 80.91, p < .001$. Because subsamples are so small, this interaction is shown graphically in Figure 5.

Figure 4

4-way Interaction Between Face Model, Condition, Dichotomized FoC, and Amount of Manipulation Applied to Faces



Note: The left panel represents low FoC participants ($n = 19$); the right panel represents high FoC participants ($n = 18$). Those who were exposed to the experimental poll and scored high in FoC rated dominant faces in the low and middle range as more trustworthy than those who scored high in FoC in the control condition.

Objectified Body Consciousness Scale: Body Shame

Using the same 4-way mixed factor ANOVA as above, we substituted the new independent variable of body shame that had been dichotomized as above and below median between participants. There were no new main effects or interactions with body shame as the independent variable. For the repeated measures component, please see the means in the above analyses.

As mentioned, there were no significant main effects of the dichotomized body shame variable in this model, $F(1, 33) = .52, p = .48$, or of the crime salience manipulation, $F(1, 33) =$

1.38, $p = .25$. There was also no significant interaction between the crime salience manipulation and the level of body shame, $F(1,33) = .28, p = .60$.

As in the analyses with dichotomized fear of crime as an independent variable, there was a significant main effect of the type of model used to derive the faces. Trust model derived faces were rated as more trustworthy overall than dominance model derived faces,

$F(1,33) = 30.66, p < .001$. There was also a main effect for the amount of information applied to the face stimulus, $F(2, 66) = 31.83, p < .001$.

There were no other significant 2 or 3-level interactions of the factors, as all F s < 1.92 and all p s $> .10$.

Benevolent Sexism

We again used a 4-way mixed factor ANOVA and substituted the new independent variable of benevolent sexism that had been dichotomized as above and below median between participants. There were no new main effects or interactions with body shame as the independent variable. The repeated measures component can be found in the above analyses.

As mentioned, there were no significant main effects of the dichotomized Benevolent Sexism variable, $F(1, 33) = .16, p = .69$, or of the crime salience manipulation, $F(1, 33) = 2.24, p = .14$. Likewise there was no significant interaction between the crime salience manipulation and the level of Benevolent Sexism $F(1,33) = .01, p = .92$.

As in the analyses with dichotomized fear of crime and body shame as independent variables, there was a significant main effect of the type of model used to derive the faces. Trust model derived faces were rated as more trustworthy overall than dominance model derived faces $F(1,33) = 30.41, p < .001$. There was also a main effect for the amount of information applied to the face stimulus, $F(2, 66) = 33.20, p < .001$.

There were no other significant 2 or 3-level interactions of the factors, as all F s < 3.1 and all p s > .08.

Discussion

The goal of this study was to examine the relationships between self-reported social attitudes (Fear of Crime, Ambivalent Sexism, and Self-Objectification) and trustworthiness ratings of faces manipulated by level of dominance and trustworthiness, with an added manipulation of crime salience. For part one of the study, we first predicted that there would be a positive relationship between self-reported benevolent sexism and hostile sexism, which was supported by the results. These results are in line with results from related studies; Harsey & Zurbriggen (2021) reported positive correlation sizes equally as strong as those found in this study while Glick & Fiske (1996) reported slightly stronger positive correlation sizes in their originating paper for the ASI.

In my second hypothesis, a positive relationship was expected between self-objectification and fear of crime, which was partially supported through the Body Shame subscale of the Objectified Body Consciousness Scale in both the women-only sample and full sample. Ambivalent sexism and self-objectification were also expected to have a positive relationship, which was not supported by the results. Our results may have differed from Harsey and Zurbriggen's (2021) findings due to the small amount of university students who were available, as well as possible social desirability bias, especially considering that the sample was drawn from a small university. Additionally, there was a strong and significant positive relationship between identification as a conservative and self-reported Hostile Sexism in both men and women, which reflects findings from previous studies (Winter, 2022; Bock, et al., 2017; Cassese & Holman, 2019).

Outside of the full sample, a negative relationship was found between women's self-reported Fear of Crime and right-wing political preference, meaning those who reported higher fear of crime were more likely to identify as left-wing, and vice versa. This relationship could possibly be explained by the emphasis placed on authority in right-wing circles. The overall negative relationship that was observed between Ambivalent Sexism and Fear of Crime was more prevalent in males sampled than females sampled, suggesting that high scores for both hostile and benevolent sexism could predict less fear of crime in males. This could also be explained by general gender differences in fear of crime (Beebeejaun, 2017; Johansson & Haandrikman, 2021).

For my third hypothesis, I predicted that the crime salience manipulation would increase awareness of crime among those who scored high in self-reported Fear of Crime. The results supported this hypothesis, with those in the experimental condition who reported high fear of crime showing stronger agreement with the crime-based poll than those who reported a lower fear of crime. Additionally, those who scored above the median in Fear of Crime rated dominant faces as more trustworthy in the crime salience condition than in the control condition. These results suggest that the crime salience manipulation was strong enough to be detected among predisposed people.

For part two of the study, my fourth hypothesis predicted a 3-way interaction between the women who rated above the median score in each surveyed variable and their subsequent trustworthy ratings of higher dominance faces. This was not supported by the results. This could be explained by the small female subsample, which was too small to draw sufficient conclusions.

The main finding of this study was the significant interaction that was found between the dichotomized Fear of Crime variable, the crime salience manipulation subject group, the face

model type (dominant or trustworthy), and the amount of manipulation applied to faces (1, 4, and 7 taken from increasing septiles). We found that those who scored high in Fear of Crime in part one and who received the experimental poll for the crime salience manipulation rated low dominance and middle dominance faces (faces that received 1 and 4 levels of dominance manipulation) as significantly more trustworthy than those who rated as high in Fear of Crime but who received the control poll. These results suggest that those who display a higher fear of crime and who are primed with crime are more likely to find dominant faces trustworthy, with the exception of faces that have received a high level of dominance manipulation. This could be explained by the observed negative impressions of high dominance faces (Oh et al., 2020) and the assumption of violence that is associated with them (Stirrat, Stulp, & Pollet, 2012; Durkee & Ayers, 2021).

Strengths and Limitations

The largest limitation of this study was the number of participants recruited. The complex nature of the 4-way interaction calls for a higher sample size (Gelman, 2018) though the smaller sample size yielded significant results. Because of this limitation, these results are interpreted as means for further exploration with a larger sample.

Another limitation of this study was the inability to selectively recruit participants who identified as female. This is due partially to the limited sample size. Other factors that prevented this were the recruitment process and the population that the sample was drawn from. The study was made available for class credit for undergraduate psychology students at a small, private university where other studies were also available for credit. In an effort to collect high enough numbers to perform exploratory analyses, researchers opened the study to both male and female participants.

Finally, this study was limited in the results found regarding self-objectification. Studies suggest that self-objectification is positively correlated with sexist beliefs in both men and women (Swami & Voracek, 2013; Harsey & Zurbruggen, 2021; Le et al., 2021). In this study, there were no significant correlations found between Ambivalent Sexism and Self-Objectification. Additionally, several of the non-significant correlations between these variables and their subscales were negative rather than positive. This harms the reliability of our conclusions, as our sample displayed results contrary to those confirmed by previous, larger studies. The contrasting nature of this could be due in part to an unwillingness for college students to self-report feelings of objectification despite anonymity. Since this research was being presented to the participants by a peer, there may have been feelings of self-consciousness that lead to social desirability bias.

A strong point of this study was the sample of faces used. The collection of faces and their empirical use were highly supported by evidence from previous studies (Oh et al., 2020; Oosterhof & Todorov, 2009; Oosterhof & Todorov, 2008). Additionally, participants were exposed to a large sample size of these faces across three levels of manipulation and two models. This allowed the researchers with a larger sample of data to probe for differences between dominance and trust increments of faces. Likewise, analyses were able to be performed across both face model types (dominance and trustworthy) and their respective amount of manipulation (1, 4, and 7).

Additionally, the significant correlations that were found in part one of the study between benevolent sexism and hostile sexism was an important relationship. This finding allowed the researchers to verify that the scales used were received in the same manner they are in larger studies, confirming internal validity.

Further Research

Research following this study could benefit from a larger sample size. A larger sample size would allow researchers to explore the links between Fear of Crime, Self-objectification, and Ambivalent Sexism with more confidence. In addition to this larger sample size, further research could build specifically on the significant interaction that was found between Fear of Crime, crime salience, face model type, and the amount of trustworthy and dominance manipulation. Limiting the larger research pool to female participants would allow further insight into the relationship between women's Fear of Crime and trustworthiness face ratings. With specific attention to the results from this study, it could be beneficial to focus primarily on Fear of Crime. Higher agreement in the crime salience condition was positively associated with high reports of fear of crime, which in turn interacted with face model type and manipulation amount. Fear of crime is associated with a preference for aggressiveness in both friends and partners for women (Meskelyte & Lyons, 2020 ; Snyder et al., 2011). The addition of facial ratings of trustworthiness could expand on this previous research.

Alternatively, sexual objectification could be emphasized in the research. Women have been found to fear crime more than men (Ferraro, 1995), with sexual assault being the major crime to inspire fear among women (Ferraro, 1996). A measurement of sexual objectification experiences, such as the Interpersonal Sexual Objectification Scale (ISOS) (Kozee et al. 2007), would allow researchers to examine the links between sexual objectification and the perceived trustworthiness of faces. In addition to this, the assessment of the fear of sexual assault using a scale such as the Fear of Rape Scale (FORS) (Senn and Dzinis, 1996) would contribute. Research on the effects of sexual objectification on women's health is increasing due to the prevalence of sexual objectification in modern culture (Holland et al., 2016; Miles-McLean

2016). Women who self-objectify are more likely to accept intimate partner violence, meaning they could possibly find dominant male faces that are deemed as having negative expressions as more attractive (Lameiras-Fernández et al., 2018; Oh et al., 2020). Sexist beliefs have also been linked to the dismissal of sexual assault towards women by means of victim blaming (Abrams et al., 2003). The addition of variables addressing sexual implications to the current research would aid in the expansion of research, as there is limited research addressing the relationship between face ratings and sexual objectification.

This study could easily be replicated with a focus on either of the two predictor variables (self-objectification and sexism) that were not reinforced in this study's manipulation. Just as fear of crime was reinforced, a manipulation could be implemented with the intention of increasing salience for the chosen factor. We were motivated by Phelan et al. (2009) in the design of the crime salience manipulation, meaning that the specific manipulation design used had been shown to be successful in encouraging crime salience. However, a substitution of the main fear of crime variable for self-objectification or sexism may yield similar results. We found that those who were high in fear of crime were more likely to agree with the results of the campus crime poll. In addition, those who were exposed to the campus crime poll rated low-to-mid dominance faces as more trustworthy than high dominance faces. If the manipulation were to emphasize self-objectification, for example, participants may be more likely to rate higher dominance faces as trustworthy, just as they did in the fear of crime condition. This is supported by past associations observed between sexism and fear of crime and objectification and fear of crime, as expressed by women (Phelan et al., 2009; Watson et al., 2015; Donnelly & Calogero, 2018; Calogero et al., 2021).

The testing platform used to conduct this experiment, Testable, allows researchers to collect data regarding response times. This data, though collected, was not utilized in this study. Further research could make use of this data through the implementation of additional analyses. Response times from the crime salience manipulation at the beginning of part two and from the face ratings would be particularly valuable. Bivariate correlational analyses between social attitudes from part one and response times from the crime salience agreement item could potentially reveal a relationship between pre-existing attitudes of fear of crime, sexism, or benevolent sexism and the time it takes to evaluate and respond to the presented poll. Response times from face ratings could be explored using a 4-way mixed-factor ANOVA. Factors could include the dichotomized fear of crime variable, the face model used, the amount of manipulation applied to the faces, and the experimental condition, with response times as a dependent variable. The main effects found in this study for face model type and amount of facial information could be expected, and an interaction could potentially be observed between all four factors. With regard to the results of the current study, high fear of crime participants in the crime salience condition could have slower response times for faces with low-to-mid dominance manipulation.

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