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## Confrontation as a Coping Strategy to Protect Women's Mental and Physical Health

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# CONFRONTATION AS A COPING STRATEGY TO PROTECT WOMEN'S MENTAL AND PHYSICAL HEALTH

by

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A Thesis Submitted in Partial Fulfillment of the Requirements for a Degree with Honors (Psychology)

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#### **ABSTRACT**

Women suffer harmful consequences for mental and physical health after being exposed to sexism. In this study, I explored confrontation as a coping mechanism to protect women's mental and physical health following an experience of sexism. This study consisted of a mock job search review in which the participant was exposed to blatant sexism and was instructed to confront or ignore the sexism. The participants completed measures of perceived sexism, psychological wellbeing, mental health, and physical health following the committee meeting. I hypothesized that women who were instructed to confront would do so and those instructed to ignore would not. I also expected that women in the confrontation condition would report higher psychological wellbeing, better mental health, and better physical health than those in the ignore condition. I found the manipulation of confrontation was effective, though I suggest some improvements for future research. My findings also pointed to initial support of confrontation as a protective mechanism for women's psychological wellbeing, mental health, and physical health after experiencing sexism.

#### **ACKNOWLEGMENTS**

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#### INTRODUCTION

Sexist remarks, attitudes, or behaviors can harm women's psychological wellbeing, mental health, and physical health (Dardenne et al., 2007; Fitzgerald, 1993; Homan, 2019; Schneider et al., 2001; Solomon et al, 2015; Swim et al., 2001). Sexism, defined as prejudiced or discriminatory behavior based on one's gender, is a form of hate-based violence committed against women (Allwood et al., 2021; Swim et al., 2001). Hate-based violence, which is violence or hatred committed against someone based on the perpetrator's bias or prejudice against the victim's perceived group, including race, sex, gender identity, etc., is a traumatic experience that can be physically or psychologically harmful, and may lead to long-lasting effects (Allwood et al., 2021; Center for Substance Abuse Treatment, 2014; Federal Bureau of Investigation [FBI], 2019). Experiences of prejudice or discrimination can also be experiences of hate-based violence inflicted on the victim's identity, even if that said event does not threaten the individual's life, like instances of sexism in everyday life (Allwood et al., 2021; Bryant-Davis & Ocampo, 2005). Hate-based violence is traumatic for the target of the violence as well as the victim's social group and community (Allwood et al., 2021).

Hate-based violence can take many forms - it can be psychological, behavioral, economic, sexual, or emotional, and can also take the form of discrimination (Allwood et al., 2021; Sugarman et al., 2018). In this, a connection can be drawn to people who perpetrate sexism against women as inflicting trauma and a sense of not belonging to the woman who is the target of gender-based hate. Those who are victims of hate-based

violence experience feelings of powerlessness, isolation, guilt, shame, and anger (Allwood et al., 2021).

Because sexism has been shown to negatively harm women's psychological and physical wellbeing, it is imperative to explore ways that could help women who are targets of sexism. It is important that women be provided with effective strategies and coping mechanisms, as sexism can have potentially harmful consequences. A way in which women can stand up to sexism is by confronting it. Confronting sexism involves directly challenging blatant or subtle acts of prejudice, or in this case, sexism, and is supported as a way for women to protect their wellbeing and health after sexism (Chaney et al., 2015, Noh & Kaspar, 2003). In the current thesis, I explore how confronting sexism versus not confronting sexism impacts women's psychological wellbeing, mental health, and physical health.

## Types of Sexism

There are many different types of sexism and prejudice. Prejudice and sexism can be formal and interpersonal (Ashburn-Nardo & Karim, 2019). Formal prejudice and sexism could mean things like concrete denial of public services, or employment (Ashburn-Nardo & Karim, 2019). Intrapersonal prejudice and sexism could mean an event that occurs through social interaction, such as sexist remarks, verbal harassment, or use of derogatory statements (Ashburn-Nardo & Karim, 2019). Sexism can also be categorized as either hostile or benevolent. Hostile sexism is a set of hostile attitudes and beliefs about women who are perceived to be taking away from the status and power of men (e.g., women shouldn't enter a field that is predominantly male because she is female; Glick & Fiske, 1996, 2001; Salomon et al., 2015). Benevolent sexism consists of

condescending beliefs and attitudes towards women viewing them as weaker than their male counterparts, along with the display of restrictive attitudes and behaviors towards women (e.g., a woman's value is only in her role as a mother; Glick & Fiske, 1996, 2001; Molix, 2014; Salomon et al., 2015). Sexism can be targeted towards both women and men, but the focus of this paper is on sexism targeted towards women because of the prevalence of sexism targeted towards women, along with the vast array of harmful consequences it has on their psychological and physical wellbeing. In the current study, college-aged women were exposed to interpersonal, clear sexism that included both hostile and benevolent sexist beliefs.

#### How Sexism Harms Women's Mental Health

Psychologically, experiencing sexism can lead to detrimental effects for women. Women who report experiencing more sexism also report dealing with more psychological issues such as post-traumatic stress disorder and psychological distress (Molix et al., 2014). Schmitt and colleagues (2003) found that when women experienced greater pervasive gender discrimination, they reported worse psychological wellbeing, including more negative self-esteem and affect. Pervasive discrimination is defined within the social identity theory implying that a person's self-defined social group, such as their gender, is inherently and persistently devalued in social interaction and of lower status than other individuals' self-defined social groups (Schmitt et al., 2003; Tajfel & Turner, 1979).

Women's perceived pervasiveness of discrimination can affect whether women perceive a single instance of sexism as an assault on their identity and women as a whole or as an isolated, uncommon experience. If women perceive greater pervasive sexism, a

single sexist remark or event affects their psychological and physical functioning more than women who perceive less pervasive sexism (Schmitt et al, 2003). Women tend to report increased feelings of incompetence, lowered feelings of control and hope, more negative emotions, as well as increased feelings of anxiety and anger when they are the victims of everyday sexism, which is the experience of discrimination consistently in daily life (Allwood et al., 2021; Dardenne et al., 2007; Homan, 2019; Schneider et al., 2001; Solomon et al, 2015; Swim et al., 2001; Vescio et al., 2005). Sexism can also have a negative effect on those who witness it, also known as bystanders. Bradley-Geist and colleagues (2015) explored how an instance of sexism impacted the self-esteem and career aspirations of bystanders (both men and women). They found that hostile sexism negatively impacted a female bystander's state self-esteem, predicting lower levels of career aspiration along with lower global self-esteem. This effect was stronger for female bystanders than male bystanders. Because of these established negative effects of sexism on both the target and the bystander, it is important that researchers explore ways in which these effects can be mitigated, for example, via confrontation.

#### How Sexism Harms Women's Physical Health

Experiencing sexism can also have detrimental physical effects on the target.

Sexism is a psychosocial risk factor for cardiovascular disease in women (Allport, 1954;

Landrine & Klonoff, 1997, Landrine et al., 1995; Molix, 2014). Molix and colleagues

(2014) found that women who reported experiencing more sexism also reported a higher frequency of smoking and drinking. Smoking and drinking are significant risk factors for cardiovascular disease and, ultimately, mortality from cardiovascular disease

(Dohrenwend et al., 1974; Kanner et al., 1981; O'Connor et al., 2008; Molix, 2014).

Encountering sexism can also result in a cardiovascular stress response (Townsend et al., 2013). In some cases, this stress can lead to dysregulation of some physiological responses (Molix, 2014; Zucker & Landry, 2007). Researchers have directly documented a maladaptive stress response in women after exposure to sexism. Chronic activation of the hypothalamic-pituitary axis (as part of a cardiovascular stress response) can lead to greater cardiovascular risk factors for women (Molix, 2014; Rosmond et al., 1998; Whitworth et al., 1995). For example, Salomon and colleagues (2015) found that after being exposed to hostile and benevolent sexism, women showed significant increases in cardiovascular reactivity (increases in cardiovascular variables associated with stress). While both hostile and benevolent sexism lead to a stress response in women, benevolent sexism lead to impaired cardiovascular recovery. Impairments in recovery to stress, if consistently activated in daily life (i.e., like to everyday sexism) can be linked to overactivation of the hypothalamic-pituitary axis negatively impacting women's cardiovascular health. Thus, sexism, both benevolent and hostile sexism, can have negative effects on women's cardiovascular health. In addition to detriments to cardiovascular health, exposure to sexism can also lead to other negative physical health outcomes, including gastrointestinal issues and issues with alcohol and drug use (Homan et al., 2019; Scheer et al., 2021). These negative physical effects that have been shown to come with exposure to sexism lend to the importance of studying ways in which women can learn to cope with sexism.

#### Coping with Sexism

Given the profound negative impacts sexism can have on women's mental and physical health, it is important to reduce the prevalence of sexism and for women to have

coping skills that can reduce the effects of sexism. Women may use many coping strategies when faced with sexism including disengagement coping, reflective coping, suppressive or reactive coping, or primary control or active coping strategies (Compass et al., 2001; Heppner et al., 1995; Henrichs-Beck & Szymanski, 2014; Kaiser & Miller, 2004). Disengagement coping occurs when women make an effort to cognitively, emotionally, and behaviorally distance themselves from a sexist event (Kaiser & Miller, 2004). A reflective approach to coping occurs when the target of prejudice reflects on the problem (i.e., reflecting on the prejudiced situation or event) via a systematic approach, and engages in behaviors that are meant to change the situation itself (Henrichs-Beck & Szymanski, 2014; Heppner et al., 1995). A suppressive or reactive coping strategy occurs when the target approaches the issue with avoidance and denial (Henrichs-Beck & Szymanski, 2014; Heppner et al., 1995). Finally, primary control, or active coping can involve an effort to influence the event or regulate emotions in response to sexism (Compass et al., 2001; Kaiser & Miller, 2004). An example of active coping is confrontation of prejudice, as confrontation involves an effort to directly challenge sexism (Chaney et al., 2015, Noh & Kaspar, 2003). Confronting sexism has been identified as an active coping strategy associated with potential benefits to women's psychological wellbeing and health (Chaney et al., 2015; Noh & Kaspar, 2003). In fact, confronting prejudice is associated with coping strategies common with positive stress responses (Czopp, 2019). In the current study, I explored confrontation and its role as an active coping strategy in protecting women's psychological and physical health after an experience of sexism.

#### Confrontation of Prejudice

Confrontation is an effective strategy for women to reclaim their environment from prejudiced perpetrators (Ashburn-Nardo & Karim, 2019). Confronting sexism is defined as directly addressing the source of the sexism to express disagreement or displeasure with the sexist treatment (Ashburn-Nardo & Karim, 2019; Becker & Barreto, 2014). Confrontation is often associated with aggressive conflict and arguments, however, confrontations of prejudice do not necessarily imply this negativity. There are many types of confrontation of prejudice, including aggressive and non-aggressive confrontations (Becker and Barreto, 2014), evidence-based and not evidence-based (Parker et al., 2018), assertive and non-assertive confrontations (Monteith et al., 2019), or direct and non-direct (Gervais & Hillard, 2014). Of particular interest to this project are whether confrontations are direct versus indirect. Direct confrontations are seen as directly noting that the event or comment was sexist while indirect confrontations are seen as labeling the event as unfair or problematic, but not specifically sexist (Gervais & Hillard, 2014). Direct confrontations tend to be more recommended by researchers than indirect confrontations as they are more clear to the sexist perpetrator resulting in a greater potential to reduce the perpetrator's prejudice expression.

#### Confronting Prejudice Reduces Prejudice Expression

A major benefit of confrontation is that it can reduce people's prejudice and bias. Confronting prejudice leads to decreases in acceptance of negative stereotypes about members of stigmatized groups. Confronting can also encourage self-regulation and inhibit expression of prejudice (Czopp et al. 2006). Those who are confronted for their prejudice indicate stronger intentions to amend behavior in the future and are more likely to report less prejudiced attitudes in the future (Czopp, 2019). It is clear that confronting

prejudice can reduce the prevalence of bias, but it is also important to give targets of prejudice resources to cope with prejudice. There is also evidence to suggest that confronting could protect wellbeing after experiencing prejudice.

#### Confronting Prejudice Protects Confronters' Psychological Wellbeing

Many researchers have found that confronting prejudice can protect women's psychological wellbeing (Foster, 2013; Gervais et al., 2010; Sanchez et al., 2016). Coping with prejudice via confrontation is associated greater empowerment, self-esteem, and perceived control compared to ignoring prejudice (Czopp, 2019). Confrontation of prejudice has been linked to positive outcomes, such as less reported distress and greater self-reported psychological wellbeing over time (Noh & Kaspar, 2003; Chaney et al., 2015). There is also some evidence that confronting prejudice may protect mental health. Those who reported standing up to prejudice versus those who reported ignoring prejudice reported lower levels of anxiety and depression (Forsyth & Carter, 2012; Gervais et al., 2010). With this evidence, confrontation is strongly supported as a coping strategy for women in the face of sexism, particularly for protecting their psychological wellbeing (Chaney et al., 2015). Kreiger and Sidney (1996) also found that Black Americans who reported confronting racism had lower blood pressure and lower rates of psychiatric issues. Consequently, confrontation could be considered a protective mechanism against harmful physical effects that come with being the target of prejudice (Noh & Kaspar, 2003; Chaney et al., 2015; Kreiger & Sidney, 1996). It is not completely clear, however, if confronting sexism can protect women's physical or mental health after sexism. Based on the evidence suggesting confrontation is a strategy to protect women's psychological wellbeing following an experience of sexism, I investigated if

confronting sexism versus not confronting sexism impacted women's mental and physical health.

#### The Current Study

In this study, I examined if women who confronted sexism reported better psychological wellbeing, mental health, and physical health compared to women who did not confront sexism. After being exposed to sexism, women were instructed to either confront or not confront. In this way, I manipulated if women confronted or did not confront the sexism. This manipulation of confrontation has not been done in previous research to my knowledge. Therefore, my thesis was the first to test a manipulation of confrontation as a method to investigate how confronting impacts women's health.

H1: To evaluate the manipulation of confrontation, I investigated if women who were randomly assigned to confront the sexism did in fact confront the sexism and if women who were randomly assigned to ignore the sexism did in fact ignore it. Therefore, I predicted that those in the confrontation condition would confront the sexism and those in the ignore condition would ignore the sexism. Following the manipulation of confrontation, I measured women's self-reported psychological wellbeing, mental health, and physical health. Though my main interests were in determining if confronting sexism protected women's mental and physical health, I also included women's psychological wellbeing to replicate past research.

H2: I expected that women in the confrontation condition would report higher psychological wellbeing than women in the ignore condition. Specifically, I expected women in the confrontation condition to report greater self-esteem, perceived control, and empowerment than women in the ignore condition.

H3: I expected that those in the confrontation condition would report better mental health when compared to those in the ignore condition.

H4: I expected that women in the confrontation condition would report better physical health compared to those in the ignore condition who would report worse physical health.

#### **METHOD**

#### **Participants**

Undergraduate women (N = 28) enrolled in PSY100 at the University of Maine participated in the current study for course credit. There were 18 participants who identified as white, 1 participant who identified as Black or African American, and 2 participants who identified as Asian American. There were thirteen individuals who indicated that they were a first year student, 5 who said they were second year students, 1 who said they were a third year, and 2 who were fourth year students. Regarding sexual orientation, there was 1 individual who identified as lesbian, gay, or homosexual, 17 who identified as straight or heterosexual, and 3 who identified as bisexual.

#### Procedure

Once the participant had reviewed and signed the informed consent form, the researcher explained the study to the participant (see Appendix B). The participant was told that they were assisting another research laboratory in selecting a candidate to hire for a research manager position, which allowed our lab to explore how people communicate in group settings. The participant was also told that it was an audio-only committee meeting with another participant in the lab. In reality, the other person was not real. The participant was told that the goal of the committee meeting was to select the most qualified applicant for the position.

After receiving instructions, the participant was given a ten-minute preparation period for the committee meeting where they read over a job description for a fake research manager position (see Appendix C) along with two resumes (see Appendices D & E). The resumes included a male (Robert) and a female (Rebecca) candidate. Rebecca

was presented as obviously more qualified for the position than Robert. The resumes were designed like this in order to encourage the participant to choose Rebecca over Robert. In previous versions of this experiment about 90% of women selected Rebecca for the research manager position. The participant was also asked to complete a brief questionnaire rating each candidate's qualifications and selecting an initial recommendation for the manager position.

#### **Applicant Ratings**

Participants rated the job candidate's qualification, hireability, and fit for the position on a 1 (*not at all*) to 7 (*very much so*) scale (see Appendix X). Participants also selected their preferred job candidate before the discussion period began. In contrast to previous experiments using this methodology (i.e., Helwig et al., in prep), the discussion period progressed regardless of the participant's preferred job candidate.

The preparation period lasted 10 minutes after which the discussion period began. At the start of the discussion, the experimenter began the audio recording to record the participant's response. The "committee head" began the introductions among committee members, along with reviewing the protocol for the discussion.

#### Search Committee Meeting Protocol

The search committee meeting period took approximately four to five minutes.

The participant was told that each committee member would speak for 90 seconds and that they should make their arguments about why they recommended Robert or Rebecca.

The faux committee member began the discussion and presented blatant sexism towards Rebecca (e.g., "Like most women, Rebecca would probably be too emotional to handle a competitive lab environment. To be a researcher, you need to be focused and

rational"; see Appendix X for full transcript). After, the participant presented her arguments during her 90 seconds. Before beginning, however, the participant was given an additional set of instructions designed to manipulate confrontation.

Confrontation Manipulation. I pilot-tested a novel manipulation of confrontation behavior in the current study. To manipulate confrontation, there were two conditions designed to encourage a confrontation of sexism (the confrontation condition) versus discourage a confrontation of sexism (the ignore condition). In the confrontation condition, the participant was instructed (prior to the start of the committee meeting) to directly address each of her partner's comments (e.g., "When it is your turn to speak, we ask that you focus solely on responding directly to the other committee members' comments"). In the ignore condition, the participant was instructed to ignore her partner's arguments and focus solely on her own reasons for selecting the strongest candidate (e.g., "When it is your turn to speak, we ask that you ignore the other committee member's arguments and focus solely on your own reasons for selecting your preferred candidate").

After the participant presented her arguments, the discussion period ended. At this point, the experimenter terminated the audio recording and provided the participant with the final set of questionnaires. Participants reported their opinions about the other committee members and the discussions, as well as their psychological wellbeing, mental health, and physical health.

#### Measures

All measures are described in the order they were presented to participants.

<u>Perceived Sexism.</u> To measure perceived sexism, the participant selected the extent to which they thought the other committee member's comments were "fair" and

"biased", along with asking them to select the extent to which they thought the other committee member's comments were due to "the qualifications of Applicant A", "the qualifications of Applicant B", "the gender of the applicants", or "a committee member's bias". This measure was scaled from 1 (*strongly disagree*) to 7 (*strongly agree*), with a reliability of  $\alpha = .63$ . Everything in this measure was combined into a mean composite of perceived sexism with higher numbers representing greater perceived sexism.

Mental Health. I utilized the 5-item depression and 6-item anxiety subscales of the Brief Symptom Inventory (e.g., Right how, how much are you distressed by...nervousness or shakiness inside (anxiety) or feeling no interest in things (depression); Derogatis & Melisaratos, 1983) and the SF-36 mental health subscale, which assesses symptoms of depression and anxiety (e.g., Right now, I feel full of pep (reverse-scored; anxiety) or so down in the dumps that nothing could cheer me up (depression); Ware & Sherbourne, 1992). Both scales were combined into a mean composite of mental health, scaled from 1 (*not at all*) to 7 (*extremely*) with high reliability ( $\alpha = .85$ ). With this measure, higher numbers indicate greater anxious or depressive symptomology, thus, worse mental health.

Physical Health. I utilized the SF-36 questionnaire to measure the general, emotional, physical, and social health of participants (Ware & Sherbourne, 1992). The SF-36 questionnaire is a National Institutes of Health approved measure of general health and was designed to be utilized in clinical practice, research, and general surveys. I only used a portion of the full scale that measured participants' general perception of health. This was a 6-item measure, 1 of which asked the participant to rate their health in the current moment, scaled from 1 (poor) to 7 (excellent), another which asked the

participant to rate their health compared between one year ago and the current moment on a scale of 1 (*much worse*) to 7 (*much better*). The final four items of this measure asked the participant to rate how true or false a statement was for them (e.g. I seem to get sick a little easier than other people"). This was scaled from 1 (*mostly false*) to 7 (*mostly true*). These items were combined into a mean composite (higher numbers represent greater physical health) to create a variable for physical health with high reliability ( $\alpha = .75$ )

<u>Psychological Wellbeing.</u> I assessed women's psychological wellbeing using three measures: empowerment, perceived control, and self-esteem. All measures of psychological wellbeing were scaled from 1 (*strongly disagree*) to 7 (*strongly agree*) with higher numbers representing greater psychological wellbeing (i.e., greater empowerment, perceived control, or self-esteem).

Empowerment. I assessed empowerment using the 8-item Keltner et al. (2008) scale measuring social power. An example item includes "In this moment, I feel my wishes do not carry much weight." I combined all measures into one variable with high reliability ( $\alpha = .76$ ).

Perceived Control. I assessed perceived control using the 7-item Pearlin and Schooler (1978) scale measuring perceived control. An example item includes "In this moment, I feel there is really no way I can solve some of the problems I have." This measure was one variable with a high reliability ( $\alpha = .85$ ).

Self-Esteem. To measure self-esteem, I utilized the 10-item Rosenberg (1965) self-esteem scale. An example item includes "In this moment, I feel I am able to do things as well as most people." This measure was made into one variable with high reliability ( $\alpha = .91$ ).

Following completion of the final questionnaire, the participant was debriefed by an experimenter and awarded research credits for their course.

#### Data Processing

Confrontation of Sexism. The discussion period was audio recorded which allowed me to code a participant's response during the committee meeting. Confrontation was coded based on transcriptions of their 90 second speech in committee discussions. Confrontation was coded according to a categorical system. Regarding the categorical system, if the participant showed disagreement with the confederate because they found it sexist, the response was coded as a direct confrontation. If the participant expressed disagreement because they see the confederate's argument as unfair, but did not mention sexism or bias, the response was coded as an indirect confrontation. Finally, if the participant did not express disagreement with the argument based on sexism or unfairness, the response was coded as not confronting. I also rated their confrontations to measure the assertiveness, hostility, how evidence-based the response was, and the aggressiveness of the confrontation. The continuous variables were rated on a 1 (not at all) to 7 (very much so) scale.

#### **RESULTS**

#### Overview of Analyses

In this study, I investigated how confronting sexism impacts self-reported psychological wellbeing, mental health, and physical health. I conducted an experiment in which participants were exposed to sexism and I manipulated if women were asked to confront versus ignore the sexism.

Due to COVID-19 constraints on in-person research, the number of participants in each condition was smaller than planned. Throughout the results section, I focused on general trends in the data rather than on significance, though, I did run significance tests and evaluated effect sizes (i.e., the strength of the difference between both conditions).

## Was the confrontation manipulation effective?

#### **Confrontation Conditions**

Before conducting the main analyses related to women's wellbeing and health, I explored how women responded to the sexism and if their responses were consistent with the instructions in the condition they were assigned to. In other words, I investigated if women in the confrontation condition confronted the sexism and if women in the ignore condition ignored the sexism. Twelve out of 15 (80%) of women in the confrontation condition confronted the sexism and 10 out of 11 (90.9%) of women in the ignore condition did not confront the sexism.

I also investigated the styles of women's responses. Women in the confrontation condition were significantly more hostile and less respectful in their responses than women in the ignore condition. Trends in the data suggest that women in the confrontation condition were also more assertive in their responses to the other

committee member compared to women in the ignore condition. However, it appears that women in the ignore condition may have provided more evidence in their response than women in the confrontation condition.

Overall, these results pointed toward effectiveness of the manipulation of confrontation, but there could be improvements made in future work. Because the manipulation was not perfect, I presented all main analyses comparing between the confrontation and ignore conditions. I also conducted analyses comparing between women's confrontation behavior, regardless of the condition they were assigned to. In addition, I discussed potential differences between the manipulation and behavior analyses in the discussion section.

#### Confrontation Behavior

Because some women's responses to the sexism were inconsistent with their assigned condition, I also analyzed all data according to women's confrontation behavior, regardless of their assigned condition. Overall, 14 (50%) of women confronted the sexism and 13 (46.4%) of women did not confront the sexism.

I also explored how the style of women's responses differed between those who confronted and those who did not. Similar to patterns when comparing between conditions, women who confronted the sexism were more assertive and hostile, along with less respectful than those who did not confront, however, they were less evidence-based in their responses. Women who did not confront were less assertive and less hostile but used more evidence and were more respectful in their responses.

Table 1
Descriptive Statistics of Women's Responses

	Confronted Sexism			Ignored Sexism		
Dependent Variables	M	SD	n	M	SD	n
Conditions						
Assertive	$6.27^{a}$	1.71	15	$5.73^{b}$	1.90	11
Hostile	$3.33^{a}$	2.41	15	1.09 <sup>a</sup>	.30	11
Evidence-Based	$6.00^{a}$	1.96	15	$6.36^{a}$	1.36	11
Respectful	4.33a	2.16	15	$6.82^{b}$	1.66	11
Behavior						
Assertive	6.43a	1.65	14	5.77 <sup>a</sup>	1.92	13
Hostile	$3.64^{a}$	2.31	14	$1.08^{b}$	.28	13
Evidence-Based	5.64 <sup>a</sup>	1.87	14	6.62a	1.39	13
Respectful	4.64 <sup>a</sup>	2.41	14	$6.38^{b}$	1.90	13

Note. M = mean, SD = standard deviation, n = number of participants. Means with different superscripts between groups (columns) are significantly different from one another at the p < .05 level with an independent samples t-test.

Table 2 *T-Test Results for Women's Responses* 

J	1			
	df	t	d	р
Conditions				
Assertive	24	.758	.30	.456
Hostile	24	3.05	1.21	.005
Evidence-Based	24	527	.21	.603
Respectful	24	-3.18	1.26	.004
Behavior				
Assertive	25	.959	.37	.347
Hostile	25	3.98	1.53	.001
Evidence-Based	25	-1.53	.59	.139
Respectful	25	-2.08	.80	.048

#### Did perceived sexism differ by confrontation condition?

### Confrontation Manipulation

Next, I explored how women's perceived sexism differed between conditions.

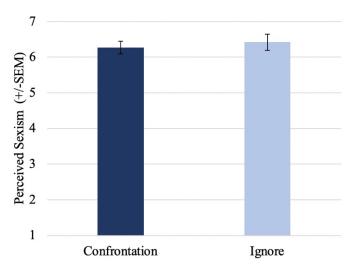


Figure 1. Perceived sexism between conditions effect was small.

Women in the confrontation condition (M = 6.27, SD = .73, n = 17) perceived less sexism than those in the ignore condition [M = 6.42, SD = .75, n = 11; t(26) = -.53, p = .604, d = .20]. With few participants, this effect was not significant, but the size of this

#### **Confrontation Behavior**

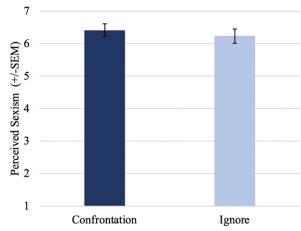


Figure 2. Perceived sexism between confrontation behavior

I also investigated how a woman's perceived sexism differed based on whether they confronted the sexist perpetrator, regardless of their assigned condition. Women who confronted (M = 6.41, SD = .73, n = 14) the sexism showed higher rates of perceived sexism than those who ignored

the sexism (M = 6.24, SD = .77, n = 13); [t(25) = 25, p = .555, d = .23]. Again, with few participants, this effect was not significant, but the size of this effect was also small.

Did confronting sexism impact women's psychological wellbeing, mental health, or physical health?

#### **Confrontation Condition**

In the main analyses, I explored whether women assigned to the confront versus ignore condition reported differences in psychological wellbeing, mental health, and physical health. I expected that women in the confrontation condition would report higher self-esteem, perceived control, and empowerment, along with better self-rated mental and physical health relative to women in the ignore condition who I expected would report lower self-esteem, perceived control, and empowerment, along with worse self-rated mental and physical health.

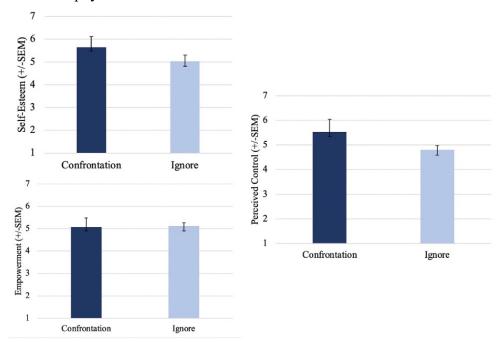


Figure 3. Psychological wellbeing between conditions

<u>Psychological Wellbeing.</u> As I expected, women in the confrontation condition reported higher perceived control and self-esteem compared to women who were in the

ignore condition who reported lower perceived control and self-esteem (see Figure 3). These differences were not significant, but there was a medium effect size suggesting that the confrontation manipulation may have influenced women's perceived control and self-esteem. Inconsistent with my hypotheses, there were no differences between the confrontation and ignore conditions in empowerment.

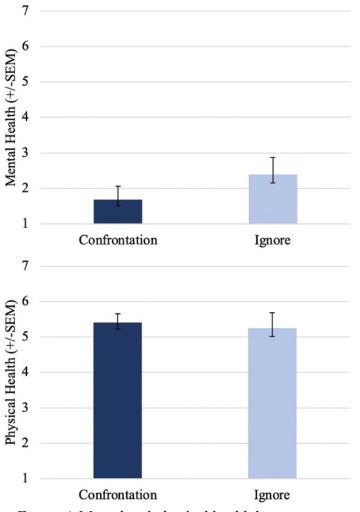


Figure 4. Mental and physical health between conditions

depressive symptomology; see Figure 4).

Mental Health. We measured depressive and anxious symptomology, so lower values represent lower depressive and anxious symptomology and greater mental health. Consistent with my expectations, women who were in the confrontation condition reported better mental health compared to women in the ignore condition who reported worse mental health (or greater anxious and

Although the difference was not significant, this is likely due to a smaller sample size, and the trend could be further solidified with a higher number of participants. There was a medium to large effect size (see Table 4).

<u>Physical Health.</u> As I hypothesized, women in the confrontation condition also self-reported better physical health, while those who were in the ignore condition self-reported worse physical health (see Figure 4). However, this difference is also not significant and the effect size was very small (see Table 4).

## Confrontation Behavior

I also explored how psychological wellbeing, mental health, and physical health differed based on whether the woman confronted the sexism, regardless of condition. I expected that women who confronted would report higher empowerment, self-esteem, and perceived control, along with better mental and physical health compared to women who did not confront.

Psychological Wellbeing. Consistent with my hypotheses, those who confronted the sexism reported higher self-esteem and perceived control compared to women who ignored the sexism and reported lower self-esteem and perceived control. However, inconsistent with my hypotheses, those who confronted sexism reported lower empowerment than those who ignored sexism (See Figure 5). As is illustrated in Table 4, while this difference was not significant, there was a small to medium effect size for

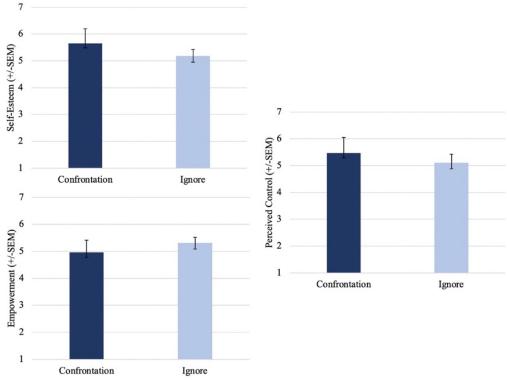


Figure 5. Psychological wellbeing between confrontation behavior empowerment. The differences for perceived control and self-esteem were also not significant, but had a small to medium effect (see Table 4).

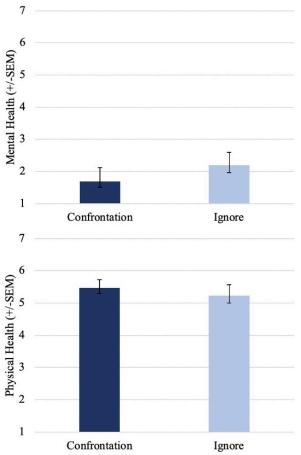


Figure 6. Mental and physical health between confrontation behavior

Mental Health. As I expected, those who confronted the sexism reported better mental health than those who ignored the sexism (see Figure 6). While this was not significant, there as a medium effect (see Table 4).

Physical Health. Consistent
with my hypotheses, those who
confronted the sexism reported better
physical health than those who did
not confront the sexism (see Figure

6). Although this was not significant, there was a small to

medium effect size (see Table 4).

Table 3
Descriptive Statistics of Women's Psychological Wellbeing, Mental Health & Physical Health

1 hysicai Heaith						
	Confronted Sexism			Ignored Sexism		
Dependent Variables	M	SD	n	M	SD	n
Condition						
Self-Esteem	5.65a	1.33	8	$5.03^{a}$	.47	3
Empowerment	$5.08^{a}$	1.14	8	5.13 <sup>a</sup>	.25	3
Perceived Control	5.53a	1.43	8	4.81a	.30	3
Mental Health	1.69a	1.04	8	$2.39^{a}$	.84	3
Physical Health	5.41a	1.01	16	5.25 <sup>a</sup>	1.36	10
Behavior						
Self-Esteem	5.66a	1.43	7	$5.18^{a}$	.48	4
Empowerment	4.96a	1.19	7	5.31a	.43	4
Perceived Control	$5.47^{a}$	1.53	7	5.11 <sup>a</sup>	.64	4
Mental Health	1.69 <sup>a</sup>	1.13	7	$2.20^{a}$	.79	4

Physical Health	$5.67^{a}$	.91	12	5.23a	1.23	13
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*Note.* M = mean, SD = standard deviation, n = number of participants. Means with different superscripts *between groups* (columns) are significantly different from one another at the p < .05 level with an independent samples t-test.

Table 4
T-Test Results for Condition and Behavior on Psychological Wellbeing, Mental Health & Physical Health

77 6116 61118, 1116 111111 111 11111 1111					
	df	t	d	p	
Condition					
Self-Esteem	9	.764	.52	.464	
Empowerment	9	068	.05	.947	
Perceived Control	9	.844	.57	.420	
Mental Health	9	-1.04	.71	.324	
Physical Health	24	.334	.14	.741	
Behavior					
Self-Esteem	9	.639	.40	.538	
Empowerment	9	556	.35	.592	
Perceived Control	9	.443	.28	.669	
Mental Health	9	797	.50	.446	
Physical Health	23	1.00	.40	.327	

#### DISCUSSION

In this project, I explored how confronting sexism impacted a woman's psychological wellbeing, mental health, and physical health. Initial findings showed that women who confronted sexism reported greater psychological wellbeing and better mental and physical health compared to women who did not confront.

In this study, I also implemented a new manipulation of confronting behavior.

Manipulating confrontation enables the determination of the causal relationship between confronting sexism allowing researchers to make more concrete conclusions about this relationship. Initial results with this specific confrontation manipulation show effectiveness as most women in the confrontation condition confronted the sexism in the encounter and almost all of the women in the ignore condition did not confront.

#### Confronting Sexism and Health

A major component of this study was exploring if confrontation could protect women from the harmful effects of sexism. As Swim and colleagues (2001) noted, sexism is a known hate-based trauma, which has a multitude of negative effects on the target. Because sexism is a prevalent issue, women need to be equipped with ways in which they can cope with the experience of prejudice. This study sought to investigate confrontation of sexism as a valuable coping skill for women faced with the hate-based trauma of sexism.

Consistent with my predictions, there was initial support of confrontation as a way of protecting women's psychological wellbeing, mental health, and physical health in the face of sexism. The participants assigned to confront sexism reported higher self-esteem and perceived control than women assigned to ignore the sexism. This result

replicated past research showing that confronting sexism might protect women's psychological wellbeing. Those who confronted also reported better mental health and physical health than those who did not confront, a promising result in the exploration of confrontation as a coping skill to protect women's health. Overall, these findings illustrated general support of confrontation as a coping strategy to help women deal with the negative health effects of sexism. My thesis was the first to directly test, to my knowledge, if confronting sexism impacts women's health. While the number of participants in this experiment is low, these findings give strong support for continuing this exploration in future research.

While women who confronted reported greater self-esteem and perceived control than women who ignored the sexism, they did not report greater empowerment. It is intriguing that there were not differences between women assigned to confront versus not confront because past researchers have found that confronting results in greater empowerment for confronters (Gervais et al., 2010). However, it is imperative to note that the sample size in this study was small due to COVID-19 limitations on in-person research, which likely had an effect on these findings. It would be important in future research to investigate if that trend continued as it does not support prior research.

As these findings indicate support for confrontation as a coping strategy, despite inconsistencies with the empowerment measure, it is necessary to explore the several implications that come with this. As I have noted before, sexism and gender-based prejudice is seen as a form of hate-based trauma, and by equipping women with a coping strategy to utilize, it could potentially help women avoid the negative and harmful effects on psychological wellbeing, mental health, and physical health that come with being the

target of sexism. Past research has noted that women do not confront sexism very frequently in everyday life, which is significant because as we see in my findings, confrontation is a valuable tool for women when they are targets of sexism and prejudice (Swim et al, 2001; Woodzicka & LaFrance, 2001). Women not using confrontation regularly when exposed to sexism could be because of a lack of education on the benefits of confrontation. Due to this, it is important that women are educated on how to confront sexism because of its value in protecting them during and after an experience of prejudice. If women are educated on how confronting sexism could benefit their physical and mental health following an experience of sexism or prejudice, they may be more likely to utilize it, and therefore have a way in which to mitigate the negative impact of sexism. In a future study, it could be beneficial to introduce an aspect of education on confrontation (e.g., educating one group women on confrontation prior to exposure to sexism vs. an exposure to sexism without the education component). This would allow the researchers to better understand how being educated on the benefits of confrontation could affect how women respond to the sexism.

#### Confrontation Manipulation

In this study, I also sought to manipulate confrontation behavior in the participants within a controlled lab environment. Generally, this manipulation was effective. Most of the participants in the confrontation condition (told in the instructions to directly address their partner's comments) confronted sexism, and the majority of the participants in the ignore condition (told to focus solely on their own arguments) did not confront the sexism. When exploring between these conditions, participants in the confrontation condition showed higher levels of hostility and lower respectfulness, along

with being more assertive in their responses. Interestingly, women in the confrontation condition were also less evidence-based in their responses. This manipulation was successful at changing women's behavior in response to sexism and is promising for use in future research.

This study is also the first to test this specific manipulation of confrontation. With this manipulation, a causal relationship can be determined between confronting sexism and health. Thus, it can be determined that there is an aspect about the action of confronting prejudice which benefits women who were assigned to confront compared to women who were not assigned to confront. This also supports past research (Chaney et al., 2015) that suggests confronting is an active coping strategy which is seen as adaptive in past research as it involves an attempt to influence the sexist event (Compass et al., 2001; Kaiser & Miller, 2004).

Although my results regarding the manipulation point to an early effectiveness of this method, it would be important in further research to more carefully assess the manipulation to ensure that it is most effective. In future research, it might be helpful to include a measure of the participant's intentions in their response to further assess the success of the manipulation. For example, in past work, my lab asked participants to indicate whether they wanted their response to be confrontational or not to further assess their intentions during a response to sexism (Liebler-Bendix et al., 2022). Measuring participants' intentions after the manipulation tested in the current study would provide valuable information on their thought processes in their decision to confront or not to confront and lend insight as to how they came to the decision to confront or not to confront.

#### Limitations

As noted before, this study had a low sample size due to COVID-19 limiting inperson research and participant availability. Because of the low sample size, it is important to recognize the trends these data show rather than focusing on the statistical significance of these trends. Overall, the trends are indicative of framing confrontation as a promising coping mechanism.

Sample demographics were also a limitation as there was little diversity across my participants. In future studies, it would be important to study participants of all ages, race, ethnicities, and backgrounds. This is important because with a more diverse sample, there could be an influence on results, as those of different backgrounds have different experiences. More specifically, my sample cannot be generalized to other cultures and backgrounds, because confrontation could play out differently for women across varied cultural contexts. Women of different backgrounds could also experience sexism differently due to their racial identity. Age is also a factor, as women who are collegeaged may be more or less likely to confront sexism.

#### **Future Directions**

It is important that researchers continue investigations into confrontation as a coping strategy for women in the face of sexism. Given the promising results of the current research, I recommend that researchers further examine the effect of educating women on the benefits confronting sexism might have for their wellbeing and health, and measure if that increases women's confrontation of sexism. Of course, it would be important to examine if those who confront sexism continue the trend of reporting better mental and physical health. Continuing research in this way is necessary because

education is an important tool in providing women with coping mechanisms to combat the negative effects of sexism, and it appears that confrontation may be a promising strategy.

In addition to studying women's responses to sexism, it would be important to continue this research and study how confrontation could assist those who are targets of other known forms of hate-based trauma such as racism, homophobia, transphobia, (Allwood et al., 2021). I would expect a similar pattern of results to the current study expanding the evidence that confronting can protect members of multiple stigmatized groups.

#### Conclusions

Sexism and prejudice are widespread in society. There is a need for those who are targets of prejudice to be able to cope with it and for those who are perpetrators to know the harm they are causing when making prejudiced remarks. This problem goes beyond gender discrimination - including racial discrimination, age discrimination, and more. By exploring ways in which confrontation can protect women in the face of sexism, researchers could also explore ways in which confrontation of other forms of discrimination and prejudice could be successful in protecting mental and physical health following those experiences.

My intentions for this study were to both test a new methodology with the manipulation of confrontation and explore whether confrontation is effective as a coping mechanism to protect mental and physical health for women in the face of sexism.

Sexism has immensely harmful psychological and physical effects and it is important that women are educated on the ways in which they can deal with sexism to avoid those

negative consequences. As is seen in my results, confrontation is a promising way in which women can protect their psychological wellbeing and better their mental and physical health during and after an experience of sexism.

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# **APPENDICES**

# APPENDIX A: MEASURES

•	ved Sexism) To what extent do you think the other committee er's comments were:					
	06					
	Strongly disagree					
Strong	ly agree					
	Fair					
	Random					
	Suprising					
	Biased					
	Predicable					
	Justified					
	Accurate					
	Unexpected					
	ved Sexism) To what extent do you think the other committee er's comments were due to:					
	056					
	Strongly disagree					
Strong	ly agree					
	The qualifications of Applicant A					
	The qualifications of Applicant B					
	The age of the applicants					
	The gender of the applicants					
	The race of the applicants					
	A committee member's personality					
	A committee member's bias					
Right r	now, how much are you distressed by					
	056					
	Not at all					
Extrem	nely					
	Nervousness or shakiness inside					
	Suddenly scared for no reason					

Feeling blue
Feeling no interest in things
Feeling fearful
Feeling hopeless about the future
Feeling tense or keyed up
Spells of terror or panic
Feeling so restless you can't sit still
Feelings of worthlessness
Right now, I feel
056
Not at all
Extremely
Full of non
Full of pep
Like a very nervous person  So down in the dumps that nothing could cheer me up
Calm and peaceful
Like I have a lot of energy
Downhearted and blue
Worn out
Like a happy person Tired
Tired
Right now, would you say your health is
056
Poor
Excellent
Command to an average have would very meta very health might never
Compared to one year ago, how would you rate your health right now?
056
Much worse Much
better
How true or false is each of the following statements for you?
056
40

Feeling lonely

Mostly false Mostly true

I seem to get sick a little easier than other people.

I am as healthy as anybody I know.

I expect my health to get worse.

My health is excellent.

(Empowerment) In this moment, I feel....

0------5-----6

Strongly disagree

Strongly agree

My wishes don't carry much weight.

Even if I voice them, my views have little sway.

My ideas and opinions are often ignored.

I can get people to listen to what I say.

I can get others to do what I want.

Even if I try, I am not able to get my way.

I think I have a great deal of power.

If I want to, I can make decisions.

(Perceived Control) In this moment, I feel....

0------5-----6 Strongly disagree Strongly

Agree

Sometimes I feel that I'm being pushed around in life.

I have little control over the things that happen to me.

Please select "strongly agree - 6" (attention check)

I can do just about anything I really set my mind to.

I often feel helpless in dealing with the problems of life.

What happens to me in the future mostly depends on me.

There is little I can do to change many of the important things in my life.

(Self-Esteem) In this moment, I feel...

0------5------6

Strongly disagree Strongly agree

Right now, I feel that I am a person of worth, at least on an equal basis with others.

Right now, I feel that I have a number of good qualities.

In the current moment, I am inclined to think I am a failure.

I am able to do things as well as most people.

I feel that I do not have much to be proud of at this moment.

Right now, I have a positive attitude toward myself.

Right now, I am satisfied with myself.

I feel useless at the current moment.

Select 0 - Strongly Disagree (attention check)

I wish I could have more respect for myself.

Right now, I feel I am no good at all.

#### APPENDIX B: INFORMED CONSENT

The following research is being administered by Shelby Helwig (graduate student) and Shannon McCoy, PhD (associate professor) in the Department of Psychology. We are interested in decision making and how people interact during search committee meetings. You are being invited to participate in this study because you are a student age 18 (or over) in Introductory Psychology.

# What you will be asked to do

You will be in the lab for approximately 30 minutes. You will be asked to complete challenging tasks, such as selecting a job applicant out of a pool of applicants and deliberating with other search committee members. The committee deliberations will be audio recorded for later analysis. You will be administered a brief, electronic self-report questionnaire after these tasks, in which you will be asked about your mood and thoughts about the task and other participants. Sample items include "Right now, I am a happy person" and "My health is excellent."

#### Risks

The challenging tasks are generally without risk, but you may have strong emotional reactions to the tasks and you may find the tasks to be stressful or uncomfortable. In that case, one of the investigators will be available to help you, and you can opt to skip any questions or stop the experiment at any time. You will not need to provide a reason for stopping the session and you will still receive credit for the time you have spent in the study. If you experience any psychological distress from participating in this study, please contact the University of Maine Counseling Center (https://umaine.edu/counseling) at (207) 581-1392.

# **Confidentiality**

Your name will not be associated with any of the research findings. Your name will appear only on the consent forms, which will be kept apart from any other study information in a locked office accessible only to study personnel; thus, your responses in this experiment are anonymous. All data, including audio, will be identified only by participant number only and will be kept in a locked office. Only your participant number will appear on all study data. Data, including recorded audio, will be kept indefinitely in accordance with guidelines of the American Psychological Association to allow verification of study findings if required. These data will be kept on a password-protected computer in a locked office.

#### **Benefits**

While there is no direct benefit to you, it is hoped that the information gained from this study will help in understanding how individuals make decisions and behave in professional search committees.

# **Compensation**

You will receive 1 credit for your participation in this experiment.

# Voluntary

Your participation is voluntary. You may skip any questions that you wish not to answer and you may stop participation at any time without the loss of credit earned up to that point.

# **COVID-19 Contact Tracing**

According to the guidelines set forth by the University of Maine Office of Research Compliance, we must collect contact tracing information which could be used to contact you in the event of a report of illness or exposure of COVID-19 that may put you at risk. Therefore, we ask that you please write your preferred contact method on the lines below. Your contact information may need to be shared with UMaine/UMS Administration and/or Maine CDC.

Email:							
Phone Number (with area code):							
With this consent form, you have also received the form "Important Information about COVID-19 and Research Participation". Please review it before your participation in ddition to the informed consent.							
581-2029). If you have any questions about contact the Office of Research Compliance mail umric@maine.edu).	n McCoy (shannon.mccoy@maine.edu; 207- it your rights as a research participant, please, University of Maine, 207/581-2657 (or e- we read and understand the above information						
Name (PRINTED)	Date						
Signature	_						

#### APPENDIX C: JOB DESCRIPTION

Job ID: 547

Date Begin: 01/15/2022

Job Title: Research Manager

Company: University

Principal Investigator: Dr. Frank

Department: Psychology

# **Description:**

The lab focuses on the social psychological study of the self, social identity, and social stigma. Within this broad scope, our primary focus is investigating the psychological and physiological consequences of forming ideas about the self after intergroup interactions. Our current research follows three lines and examines how personality, beliefs about societal norms, and implicit attitudes influence psychological, physiological, and behavioral responses in intergroup settings.

We are looking for a research manager to oversee multiple aspects of the lab, including but not limited to:

- Recruiting and testing human subjects
- Collecting data in laboratory sessions
- Conducting data cleaning (in SPSS and Physiological software)
- Assisting with administrative tasks on a daily basis (e.g., managing undergraduate research assistants, IRB submissions and revisions, occasional journal manuscript writing)
- Presenting research findings at local, regional and national conferences.

The position will begin as soon as January 15th, 2022 will continue until August 15<sup>th</sup>, 2022 with potential extension – 40 hours/week. Review of applications will take place after May 15th deadline.

#### **Key Qualifications**

- Requires min. BA/BS degree in Psychology or related field acquired by Dec 21
  - Specific interest in social psychology is preferred
- At least 2 years research experience in a psychology laboratory
- · Excellent organizational, interpersonal, and communication skills
- · Ability to work in a fast-paced environment and meet deadlines
- · Excellent attention to detail
- · Comfort in approaching and interacting with experimental subjects
- · Familiarity with the SPSS software package for statistical analysis is desired
- · Experience with psychophysiological equipment preferred, but not required

All questions about the position may be addressed to edu. More information about our lab and research can be found at www.

#### APPENDIX D: REBECCA'S RESUME







## **Objective**

To obtain the position of research manager for Dr. at University of

#### **Summary of Experience**

I have extensive research experience in the field of social and physiological psychology, as well as relevant career/academic goals and interests. I am proficient in handling human research subjects, collecting and survey and physiological data, and using the statistical software SPSS.

#### **Education**

University; Bachelor of Science in Psychology; May 2021

- o Focus: Social Psychology
- o GPA in Major: 4.0; Overall GPA: 3.868
- o Honors: Dean's List (7 semesters)
- Relevant Coursework: Psychological Measurement and Statistics, Research Methods in Psychology, Academic Writing (APA), Psychology of Personality, Brain and Behavior, Advanced Psychological Statistics, Psychophysiology, Health Psychology, Psychology of Women and Gender

#### **Research Experience**

Senior Research Assistant: August 2017 - May 2021

Primary Investigator: Dr.

- Project: Are the Benefits of Equality a Luxury? Belief in Equality Benefits Physiological Responses... if you are high in SES
- Project: Rejection Identification Model: Examining Social Class as a Moderator of College Students' Response to Resource Management

Poster presentation at Association for Psychological Science Convention, May 2021

Summer Undergraduate Research Fellowship: May 2020 - August 2020

Primary Investigator: Dr.

o Project: Examining Perceptions after Interactions with Outgroup Members Poster presentation for Psychology Department, August 2020

#### APPENDIX E: ROBERT'S RESUME



## **Summary of Experience**

I have worked in 3 neuroscience-focused research labs while completing my undergraduate degree. One of the projects I completed in Dr. ab had implications for social psychology and allowed me to receive special training in this area. While I do not have direct experience with physiological equipment, I am eager to learn and have experience with multi-method approaches to psychology through my neuroscience training.

#### **Education**

College - B.A. Psychology with a focus in Neuropsychology

Graduation: May 2021

• Overall GPA: 3.848, GPA in Major: 3.89

Coursework: Psychological Research Methods, Statistics in Psychology, Biological Bases of Human Behavior, Cognitive Psychology, Evolutionary Psychology, Biological Psychology, Neuropsychology, Introduction to Programming, Senior Thesis in Neuropsychology

# Research Experience

Research Assistant: Animal Neuroscience Lab - 3 years Advisor: Dr.

- Project: Cognitive and Social Influences on Spatial Choice in Rats
- Project: Behavioral implications after temporally triggered prefrontal neurons
- Methods: Animal research (e.g. behavioral tests, injections, dissection)

Summer Internship: June 2020 – September 2020 Advisor: Dr.

- Project: Psychobiological mechanisms in mice as modulating factors for social empathy
- Poster presentation for Neuropsychology department, September 2019
- Methods: Animal research (e.g. injections and blood collection, social and behavioral tests)

#### **Skills**

- Managing & caring for animal subjects in the lab
- Mice injection and blood collection
- Proficient in R & SPSS statistical software, Excel, and Word
- Extensive background in scientific design and methods

# APPENDIX F: IRB APPROVAL

#### APPLICATION COVER PAGE

- KEEP THIS PAGE AS ONE PAGE DO NOT CHANGE MARGINS/FONTS!!!!!!!!!
- PLEASE SUBMIT THIS PAGE AS WORD DOCUMENT

# APPLICATION FOR APPROVAL OF RESEARCH WITH HUMAN SUBJECTS Protection of Human Subjects Review Board, 400 Corbett Hall

Protec	ction of Human Subjects I	Keview Board, 40	o Corbett Hall				
(Type inside gray areas) PRINCIPAL INVESTIGATOR: FACULTY SPONSOR: (Required if PI is a student): TITLE OF PROJECT: START DATE:	Shelby Helwig Shannon McCoy Is Confronting Sexism at 09/01/2021	n Effective Copin PI DEPARTME					
STATUS OF PI: FACULTY/ST	AFF/GRADUATE/UNDE	RGRADUATE	G (F,S,G,U)				
If PI is a student, is this research to be performed:							
for an honors th for a doctoral di other (specify)	nesis/senior thesis/capstone issertation?	e? 🔲	for a master's thesis? for a course project?				
Submitting the application indicating Section I.E. of the Policies and			to abide by the responsibilities outlined <b>Subjects</b> .				
ensures that he/she has read the a University of Maine's Policies an	application and that the co d Procedures for the Prot	onduct of such re ection of Human	eir students. The Faculty Sponsor search will be in accordance with the Subjects of Research. REMINDER: if MUST submit the application to the				
Email this cover page and c	omplete application t	o UMRIC@m	aine.edu				
	**************************************		**************************************				
Judged Exempt; categor Approved as submitted.	Date of next review: by fications. Date of next revidate): 7/8/2021 ned statement)	Degree of	ccepted (date) Risk: Jegree of Risk: Minimal				
FINAL APPROVAL TO	) BEGIN	7/8/2021 Date	10/201				

# **AUTHOR'S BIOGRAPHY**

Ailin Liebler-Bendix is a psychology major with minors in pre-medical studies and Spanish from Syracuse, New York. She began at the University of Maine in the fall of 2018, joining the school's Division 1 Women's Swim and Dive team, of which she has been a part of for the past four years. Following her graduation, she plans to teach English abroad in Spain with the North American Language and Culture Assistants

Program following an incredible experience on a study abroad in Madrid in June of 2021. She then plans to attend medical school, in hopes of pursuing a career in emergency medicine.