

ABSTRACT

Title of Thesis: FEMINIST CONSCIOUSNESS AND
EMPOWERMENT AS MODERATORS IN
THE RELATIONSHIP BETWEEN SEXISM
AND SELF-OBJECTIFICATION AND
ALCOHOL USE IN COLLEGE WOMEN

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While past research has revealed a positive association between sexism and women's alcohol use, no studies have examined how feminist identity may moderate this association. Thus, with a sample of 329 college-attending women, we examined the extent to which sexism, self-objectification, and benevolent sexism were associated with alcohol-related problems and heavy episodic drinking, as well as the extent to which various forms of feminist identity moderated those associations. Results showed that self-objectification was positively associated with heavy episodic drinking, whereas neither sexism nor benevolent sexism were associated with maladaptive alcohol use. Sexism was positively associated with alcohol related problems for women of color. Results also showed that the active commitment form of feminist identity moderated the association between self-objectification and heavy episodic drinking. No other interactions with moderating variables were significant.

This study emphasizes the importance of examining gender-relevant factors when working with women who engage in risky alcohol use.

FEMINIST CONSCIOUSNESS AND EMPOWERMENT AS MODERATORS IN
THE RELATIONSHIP BETWEEN SEXISM AND OBJECTIFICATION AND
ALCOHOL USE IN COLLEGE WOMEN

by

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Table 1. *Descriptive statistics for the main study variables*

Variable	Median	Mean	Standard Deviation	Range
1. Sexism	41.14	39.00	12.99	20-82
2. Self-objectification	40.30	40.00	7.32	10-56
3. Benevolent sexism	91.00	92.58	30.06	31-180
4. Passive acceptance	16.00	16.71	4.34	7-31
5. Revelation	25.00	24.57	5.42	9-38
6. Embeddedness-Emanation	14.00	13.73	3.35	4-20
7. Synthesis	29.00	28.65	3.52	13-35
8. Active commitment	26.00	25.94	4.38	8-35
9. Womanism	43.00	42.71	5.41	30-50
10. Empowerment	84.00	85.49	7.80	65-107
11. Heavy episodic drinking	3.00	5.34	6.71	0-40
12. BYAACQ	5.00	5.47	4.75	0-22
13. Perceived peer norms	8.00	8.64	4.87	0-33
14. Drinking to cope	10.00	13.54	10.02	5-40
15. DDQ	5.00	5.86	6.17	0-33

Note. BYAACQ = Alcohol related problems. DDQ = Drinks per week. Womanism was only assessed with participants who were women of color.

Table 2*Correlation matrix consisting of the main study variables for the entire study sample*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Sexism	---														
2. Self-objectification	.15**	---													
3. Benevolent sexism	.12**	.04	---												
4. Passive acceptance	-.25**	.01	.17**	---											
5. Revelation	.42**	.13*	.05	-.24**	---										
6. Embeddedness-Emanation	.30**	.15**	-.07	-.32**	.40**	---									
7. Synthesis	.20**	.01	.20**	-.17**	.34**	.45**	---								
8. Active commitment	.40**	.12*	.14*	-.34**	.45**	.55**	.61**	---							
9. Womanism	.29**	.06	.24**	-.18	.27**	.33**	.45**	.57**	---						
10. Empowerment	-.03	-.14*	.20**	-.12*	-.01	.16**	.47**	.30**	.32**	---					
11. Heavy episodic drinking	.07	.19**	.07	.07	.04	-.10	-.05	-.05	.06	-.001	---				
12. BYAACQ	.27**	.22**	.11	.03	.14*	.09	.06	.16**	.04	.02	.40**	---			
13. Perceived peer norms	.12*	.07	.11*	-.03	-.01	-.05	-.02	.01	.05	.01	.14**	.15**	---		
14. Drinking to cope	.29**	.25**	.05	.09	.09	.06	-.02	.05	.03	-.16**	.31**	.52**	.20**	---	
15. Alcohol Quantity	.12*	.19**	.15**	.10	.07	-.03	-.02	.01	.01	.02	.69**	.55**	.32**	.55**	---

Note. BYAACQ = Alcohol related problems. Womanism was only assessed with participants who were women of color. * $p < .05$, ** $p < .01$

Table 3

Correlation matrix consisting of the main study variables for women of color in our sample

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Sexism	---														
2. Self-objectification	.16	---													
3. Benevolent sexism	.18*	.00	---												
4. Passive acceptance	-.20*	-.02	.02	---											
5. Revelation	.35**	.02	-.09	-.20*	---										
6. Embeddedness-Emanation	.27**	.10	-.04	-.24**	.37**	---									
7. Synthesis	.19*	.01	.28**	-.14	.25**	.46**	---								
8. Active commitment	.33**	.04	.18	-.23*	.33**	.45**	.57**	---							
9. Womanism	.29**	.06	.24**	-.18	.27**	.33**	.38**	.33**	---						
10. Empowerment	-.03	-.08	.27**	-.04	-.10	.23**	.54**	.29**	.32**	---					
11. Heavy episodic drinking	.13	.10	.08	.05	.12	-.07	-.10	-.02	.06	-.11	---				
12. BYAACQ	.29**	.17	.10	-.03	.16	-.02	.03	.07	.04	-.01	.52**	---			
13. Perceived peer norms	.09	.01	.11	-.12	.02	.02	.09	-.09	.05	.09	.01	.12	---		
14. Drinking to cope	.29**	.18*	.12	.10	.14	.06	-.06	.01	.03	-.14	.45**	.56**	.20	---	
15. Alcohol Quantity	.14	.21*	.12	-.02	.12	.02	.01	-.01	.01	-.05	.80**	.56**	.25**	.55**	---

Note. BYAACQ = Alcohol related problems. * $p < .05$, ** $p < .01$.

Table 4

Multiple regression with alcohol related problems as the outcome variable

	Step 1		Step 2		Step 3	
Variable	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	<i>B</i>
<u>Step 1</u>						
Greek	-.89 (.46)	-.09	-.91 (.46)	-.09	-1.30 (.48)	-.12
Alcohol Quantity	.31 (.04)	.40 ⁺⁺	.30 (.04)	.39 ⁺⁺	.28 (.04)	.37 ⁺⁺
Perceived Peer Norms	-.05 (.04)	-.05	-.06 (.04)	-.05	-.02 (.05)	-.01
Drink to Cope	.17 (.02)	.35 ⁺⁺	.15 (.02)	.33 ⁺⁺	.15 (.02)	.34 ⁺⁺
<u>Step 2</u>						
Sexism			.04 (.02)	.10	.04 (.02)	.09
SO			.03 (.03)	.05	.04 (.03)	.05
BS			.00 (.01)	-.01	.00 (.01)	-.02
Passive Acceptance			.02 (.05)	.02	.02 (.06)	.02
EE			.02 (.08)	.01	.02 (.08)	.00
Revelation			-.01 (.05)	-.01	-.01 (.05)	-.01
Synthesis			-.05 (.08)	-.04	-.07 (.09)	-.03
Active Commitment			.12 (.07)	.11	.16 (.07)	.15
Empowerment			.04 (.03)	.06	.03 (.03)	.05
<u>Step 3</u>						
Sexism*PassiveAcceptance					.00 (.00)	.00
Sexism*EE					.00 (.01)	.03
Sexism*Revelation					.00 (.00)	.13
Sexism*Synthesis					.01 (.01)	-.02
Sexism*ActiveCommitment					.00 (.01)	.00
Sexism*Empowerment					.00 (.00)	-.02
SO*PassiveAcceptance					.00 (.01)	.04
SO*EE					.03 (.01)	.10
SO*Revelation					.01 (.01)	.03
SO*Synthesis					-.01 (.01)	-.09
SO*ActiveCommitment					-.02 (.01)	-.01
SO*Empowerment					.00 (.01)	.00
BS*PassiveAcceptance					.00 (.00)	.02
BS*EE					.00 (.00)	-.08
BS*Revelation					.00 (.00)	-.01
BS*Synthesis					.00 (.00)	-.04
BS*ActiveCommitment					.00 (.00)	.01
BS*Empowerment					.00 (.00)	.02
ΔR^2	.41**		.42		.42	
R^2	.41		.44		.47	

Note. SO = Self-objectification. BS = Benevolent sexism. EE = Embeddedness-Emanation. ⁺ $p < .05$, ⁺⁺ $p < .01$.

Table 5

Multiple regression with heavy episodic drinking as the outcome variable

	Step 1		Step 2		Step 3	
Variable	<i>B</i> (<i>SE</i>)	<i>B</i>	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	<i>B</i>
<u>Step 1</u>						
Greek	-.19 (.05)	.16 ⁺⁺	-.16 (.05)	.15 ⁺⁺	-.15 (.05)	.14 ⁺⁺
Perceived Peer Norms	.01 (.01)	.09	.01 (.01)	.07	.01 (.01)	.09
Drink to Cope	.02 (.00)	.37 ⁺⁺	.02 (.00)	.34 ⁺⁺	.02 (.00)	.35 ⁺⁺
<u>Step 2</u>						
Sexism			.00 (.00)	.04	.00 (.00)	.03
SO			.01 (.00)	.15 ⁺⁺	.01 (.00)	.15 ⁺⁺
BS			.00 (.00)	.05	.00 (.00)	.05
Passive Acceptance			.00 (.01)	-.01	.00 (.01)	-.06
EE			-.01 (.01)	-.07	-.01 (.01)	-.09
Revelation			.00 (.01)	.02	.00 (.01)	.02
Synthesis			-.01 (.01)	-.06	-.01 (.01)	-.06
Active Commitment			.00 (.01)	-.03	.00 (.01)	-.04
Empowerment			.01 (.00)	.11	.01 (.00)	.10
<u>Step 3</u>						
Sexism*PassiveAcceptance					.00 (.00)	-.15 ⁺
Sexism*EE					.00 (.00)	-.10
Sexism*Revelation					.00 (.00)	.19 ⁺
Sexism*Synthesis					.00 (.00)	-.01
Sexism*ActiveCommitment					.00 (.00)	-.08
Sexism*Empowerment					.00 (.00)	-.05
SO*PassiveAcceptance					.00 (.00)	-.05
SO*EE					.00 (.00)	.10
SO*Revelation					.00 (.00)	.05
SO*Synthesis					.00 (.00)	.06
SO*ActiveCommitment					.00 (.00)	-.17 ⁺
SO*Empowerment					.00 (.00)	-.11
BS*PassiveAcceptance					.00 (.00)	.14 ⁺
BS*EE					.00 (.00)	.14 ⁺
BS*Revelation					.00 (.00)	-.01
BS*Synthesis					.00 (.00)	.05
BS*ActiveCommitment					.00 (.00)	-.02
BS*Empowerment					.00 (.00)	-.04
ΔR^2	.19**		.03		.09**	
R^2	.19		.20		.25	

Note. SO = Self-objectification. BS = Benevolent sexism. EE = Embeddedness-Emanation. ⁺ $p < .05$, ⁺⁺ $p < .01$.

Table 6

Multiple regression with alcohol related problems as the outcome variable for women of color

Variable	Step 1		Step 2		Step 3	
	<i>B (SE)</i>	β	<i>B (SE)</i>	β	<i>B (SE)</i>	<i>B</i>
<u>Step 1</u>						
Greek	1.04 (.83)	.09	1.27 (.85)	.11	1.15 (.82)	.11
Alcohol Quantity	.29 (.07)	.35 ⁺⁺	.28 (.07)	.35 ⁺⁺	.27 (.07)	.34 ⁺⁺
Perceived Peer Norms	-.03 (.06)	-.04	-.03 (.06)	-.04	.01 (.06)	.01
Drink to Cope	.16 (.04)	.37 ⁺⁺	.14 (.04)	.33 ⁺⁺	.14 (.04)	.32 ⁺⁺
<u>Step 2</u>						
Sexism			.06 (.03)	.16 ⁺	.06 (.03)	.15 ⁺
SO			.01 (.05)	.00	.00 (.05)	-.02
BS			.00 (.01)	-.02	.00 (.01)	.02
Womanism			-.01 (.06)	-.02	-.06 (.06)	-.07
<u>Step 3</u>						
Sexism*Womanism					.01 (.01)	.10
SO*Womanism					-.01 (.01)	-.09
BS*Womanism					-.01 (.00)	-.25 ⁺⁺
ΔR^2	.40 ⁺⁺		.03		.07 ⁺⁺	
R^2	.38		.39		.45	

Note. SO = Self-objectification. BS = Benevolent sexism. ⁺ $p < .05$, ⁺⁺ $p < .01$.

Table 7

Multiple regression with heavy episodic drinking as the outcome variable for women of color

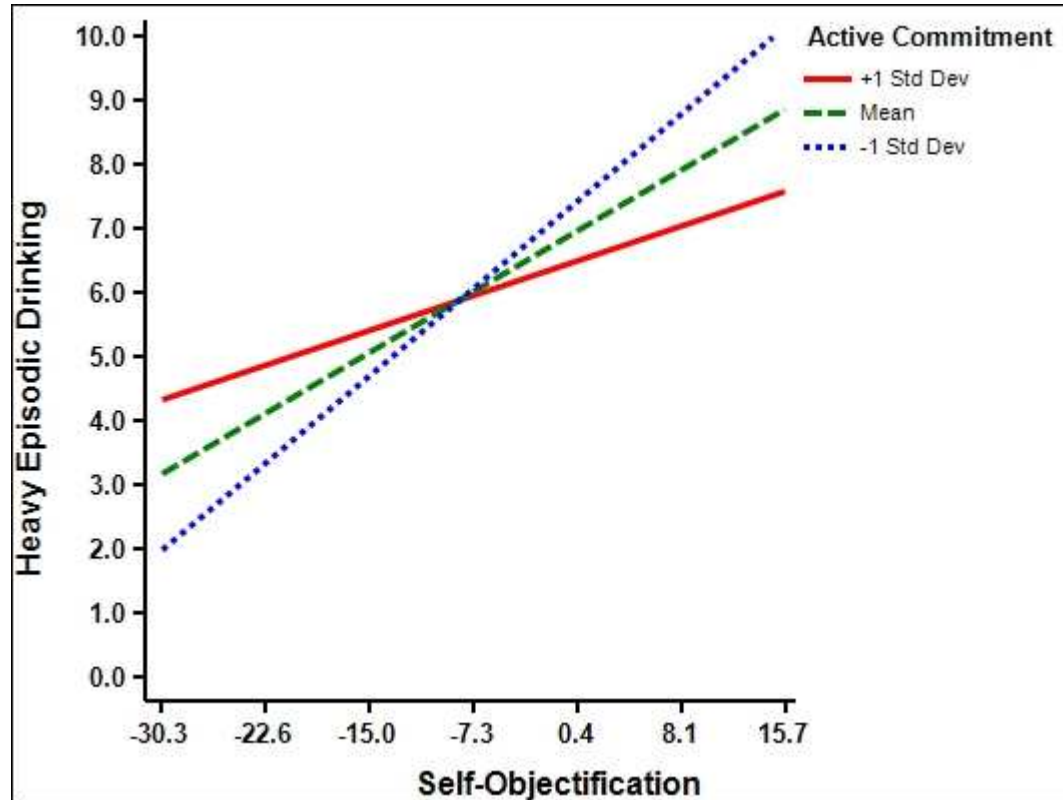
	Step 1		Step 2		Step 3	
Variable	<i>B (SE)</i>	β	<i>B (SE)</i>	β	<i>B (SE)</i>	β
<u>Step 1</u>						
Greek	.14 (.09)	.14	-.13 (.09)	.13	.09 (.09)	.09
Perceived Peer Norms	.00 (.01)	-.06	-.01 (.01)	-.07	.00 (.01)	-.06
Drink to Cope	.02 (.00)	.46 ⁺⁺	.02 (.00)	.42 ⁺⁺	.02 (.00)	.39 ⁺⁺
<u>Step 2</u>						
Sexism			.00 (.00)	.08	.01 (.00)	.16
SO			.00 (.01)	.03	.01 (.01)	.10
BS			.00 (.00)	.10	.00 (.00)	.09
Womanism			.00 (.01)	-.05	-.01 (.01)	-.10
<u>Step 3</u>						
Sexism*Womanism					.00 (.01)	-.10
SO*Womanism					.00 (.00)	-.20 ⁺
BS*Womanism					.00 (.00)	-.02
ΔR^2	.19 ⁺⁺		.02		.05	
R^2	.17		.16		.20	

Note. SO = Self-objectification. BS = Benevolent sexism. ⁺ $p < .05$, ⁺⁺ $p < .01$.

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Figure 1

The moderating effect of active commitment on the relationship between self-objectification and heavy episodic drinking



Feminist Consciousness and Empowerment as Moderators in the Relationship between Sexism and Self-Objectification and Alcohol Use in College Women

Introduction

In the United States, alcohol abuse among women attending college is a significant public health problem. Women's high-risk drinking has been associated with several adverse health consequences, such as breast cancer, engagement in unprotected sex, and sexually transmitted diseases (Hingson, Heeren, Winter, & Wechsler, 2005; Wilsnack & Wilsnack, 2014). Women are at particular risk for developing health issues related to drinking when compared to men, given biological differences that enhance the rate in which women get intoxicated, such that they store less body water, have a slower rate of alcohol metabolism, and are oftentimes physically smaller than men (Frezza et al., 1990; Nolen-Hoeksama & Hilt, 2006). While alcohol related problems have previously been considered a problem that afflicts men more than women, recent evidence suggests that women's drinking rates are rising to equal those of men, perhaps in large part due to women's changing roles in society (Johnston, O'Malley, Bachman, Schulenburg, & Miech, 2014; Lyons & Willott, 2008, Watts, Linke, Murray, & Barker, 2015). Given the prominence of high-risk drinking on college campuses in particular (Carter, Brandon, & Goldman, 2010), as well as the negative health consequences of drinking for women, it is important to investigate risk and protective factors for alcohol related problems in this vulnerable population.

One type of distinct stressor for women is sexism, or the experience of discrimination based on one's sex. Studies have found that between 99 to 100% of

women have experienced at least one exist event in their lifetime, and 97 to 100% have experienced an act of sexist discrimination in the past year (Berg, 2006; Klonoff & Landrine, 1995). The theory of embodied discrimination posits that experiences of discrimination become literally embodied, such that as living organisms, individuals incorporate, biologically, their societal and ecological circumstances, including adverse circumstances related to mistreatment based on their personal characteristics (Krieger, 2005). While stress in and of itself has been associated with an array of negative health outcomes (Hammen, 2005; Sinha, 2008), discriminatory acts have often been conceptualized as a particular type of stressor, given that they are more intensely personal and demeaning and thus have a greater negative impact on health than more generic stressors (Landrine & Klonoff, 1997). Indeed, experiences of sexism have been linked with a number of negative health outcomes for women, including eating disorders, general psychological distress, and anxiety (Moradi & Subich, 2004; Sabik & Tylka, 2006; Szymanski & Mikorski, 2017).

Experiencing increased levels of sexism has also been associated with increased levels of binge drinking within college women (Zucker & Landry, 2007). Given the extent to which alcohol is used to reduce the intensity of negative affect, it is possible that women consume alcohol to cope with the negative emotions generated by sexism (Stapinski et al., 2016). A recent meta-analysis found that discrimination based on one's sex was positively associated with drinking across women of various racial/ethnic backgrounds and sexual orientations, though out of all the studies that have examined the relationship between discrimination and alcohol outcomes, papers focused on sexism comprised the smallest body of literature (Gilbert & Zemore,

2016). Thus, it is important to conduct more research to examine the specific ways in which sexism contributes to problematic alcohol use for women, as well as protective factors that may buffer the relationship between sexism and women's alcohol related problems.

One specific form of sexism that has been linked with women's increased alcohol related problems is self-objectification. Objectification Theory posits that many women are sexually objectified and treated as objects to be valued by their appeal to others (Fredrickson & Roberts, 1997). Sexual objectification occurs in numerous ways, such as through whistling at someone, depicting women as sexual objects in the media, leering at someone's sexual body parts, unwanted sexual advances, and sexual harassment and assault (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007). Objectification theory states that due to the high frequency in which women experience this type of mistreatment, they internalize the attitude that their bodies are objects for others to assess, and they thus engage in self-objectification, in which they view their own bodies as objects that have worth based on how others perceive them (Fredrickson & Roberts, 1997). Self-objectification has been linked to various negative health outcomes, including increased disordered eating, diminished motivation, increased anxiety about physical safety (e.g., fear of sexual assault), decreased interoceptive awareness, and increased body shame (Fredrickson & Roberts, 1997; Moradi & Huang, 2008; Muehlenkamp & Saris-Baglama, 2002; Szymanski, Moffitt, & Carr, 2011).

Emerging evidence shows that self-objectification is also linked with increased binge drinking (Carr & Szymanski, 2011; Haikalas, DiLillo, & Gervais,

2017). It has been posited that drinking may act as a self-destructive method of coping with the negative affect generated by other outcomes of self-objectification, such as body shame and depression (Carr & Syzmanski, 2011). Furthermore, women who engage in self-objectification may consume more alcohol so that they can align themselves with images of women displayed in sexually objectifying media, which often pair women's sexuality and appearance with substance use (Szymanski et al., 2011). Research has shown that women who order more alcoholic drinks and who exhibit signs of intoxication are perceived as more sexually available and less human by others (Szymanski et al., 2011). Women who feel pressured to adhere to a certain sexualized ideal may thus consume more alcohol as a means to meet other's expectations of their bodies. Given the relationships between sexism and self-objectification and alcohol related problems, it is important that researchers examine protective factors that may buffer the relationship between sexist discrimination and problematic drinking.

A third form of sexism includes benevolent sexism, which refers to a more subtle form of sexism that features which paternalism, heterosexual intimacy, and complementary gender differentiation (Glick & Fiske, 1996). On the surface, benevolent sexism may appear beneficial to women, given that it portrays women as wonderful, positive, and nurturing. However, benevolent sexism also implies that women possess no strength and must depend on men, which thus manifests in patronizing behavior toward women, such as performing physical tasks for them without their consent because they are perceived to have no physical ability, or describing them in ways that emphasize and explicate stereotypically feminine

features (e.g., describing them as “pretty” or “cute” instead of “intelligent” or “confident”). Benevolent sexism has been associated with several negative health outcomes, including reduced sexual self-efficacy, self-esteem, and psychological well-being (Fitz & Zucker, 2014; Oswald, Baalbaki, & Kirkman, 2019). Furthermore, a strong gender identity has been shown to protect women from more overt forms of sexism but not benevolent sexism (Dardenne, Dumont, & Bollier, 2007). Thus, it may be beneficial to study benevolent sexism in addition to more overt forms of sexism because benevolent sexism, due to its more ambiguous nature, may be more difficult to detect, even for women with a more developed understanding of gender and gender oppression. At the same time, given how past studies have shown benevolent sexism to be associated with a variety of negative health outcomes, testing if benevolent sexism is associated with alcohol-related problems may help further expand the theory of embodied discrimination to include more subtle forms of discrimination, such as benevolent sexism, in addition to more blatant forms of discrimination like direct sexism.

It has been theorized that increased feminist consciousness can weaken the relationship between sexist events and various types of psychological distress (Landrine & Klonoff, 1997). For women, feminist consciousness provides a cognitive framework for comprehending sexism and therefore protects them by decreasing their perceptions that the sexist events were their fault, as well as by reducing the negative impact of these events. In relation to the theory of embodied discrimination, feminist consciousness may help reduce the extent to which women internalize sexist discrimination by allowing them to appropriately externalize the source of their

suffering and attribute it to those who perpetuate sexism, as opposed to feeling that they themselves are responsible for their distress. Indeed, increased feminist consciousness has been shown to buffer the effects of sexism on health outcomes including disordered eating, general psychological distress, and sexual health in both college-aged women and women in general (DeBlaere & Bertsch, 2013; Fitz & Zucker, 2014; Sabik & Tylka, 2006). However, no study has yet examined the role of feminist consciousness on serving as a protective factor in the relationship between sexism and self-objectification and alcohol related problems. Given how feminist consciousness has buffered the relationship between sexism and other health outcomes, it is possible that for women who report a higher level of feminist consciousness, they may also experience a weakened relation between sexism and alcohol related problems, as they may be able to properly externalize the source of their distress instead of coping through drinking. Additionally, more research is needed to determine what specific types of feminist consciousness can protect women from the negative effects of sexism, as different studies have used different measures to capture feminist consciousness.

One popular conceptualization of feminist consciousness is Downing and Roush's (1985) five-stage developmental model of individual feminist identity. This model includes five stages, which progress in the following order: passive acceptance (i.e., the endorsement of traditional gender roles and denial of sexism), revelation (i.e., a period of awakening in which women begin to recognize that sexism exists, question themselves and their roles, feel guilty and/or angry, and deride men), embeddedness-emanation (i.e., a time that consists of more connection with other

women, affirmation of one's own identity as a woman, and cautious interaction with men), synthesis (i.e., an understanding that traditional gender roles can be transcended, that femininity can be appreciated and not at the expense of feminist consciousness, and that men should be viewed on an individual basis), and active commitment (i.e., the engagement in tangible action to create a less sexist world). In regard to the relationship between these feminist identity stages and sexism, past studies have found that women high in passive acceptance experienced increased psychological distress due to sexism compared to women low in passive acceptance, whereas women high in synthesis and active commitment reported less disordered eating after experiencing sexism compared to women low in synthesis and active commitment (Moradi & Subich, 2002a; Sabik & Tylka, 2006). Given that the synthesis stage involves transcending gender roles and the active commitment stage entails engagement in action to fight sexism, it is possible that women high in these two feminist identity styles may report a weakened relationship between sexism and alcohol related problems as well, whereas women high in passive acceptance may experience increased alcohol related problems given their internalization of sexist gender roles and denial of sexism's existence. Furthermore, it is possible that women high in the embeddedness-emanation style would report a weakened relationship between sexism and alcohol related problems given their increased connectedness to other women, whereas those high in revelation may report an increased relationship due to their position of questioning themselves and their experiences of sexism.

Womanism acts as another conceptualization of feminist consciousness that may buffer the relationship between sexism and alcohol related problems, in

particular for women of color. Womanism offers an alternative viewpoint to feminist perspectives that emerged from the White Women's movement, such that it incorporates elements of race and culture into its conceptualization of feminism (Henley, Meng, O'Brien, McCarthy, and Sockloskie, 1998). The majority of past studies that have examined the moderating role of feminist consciousness in the association between sexism and health outcomes have included samples predominantly comprised of white women (Fitz & Zucker, 2014; Moradi & Subich, 2002a; Sabik & Tylka, 2006). Therefore, these studies findings' may not generalize to all women, including women of differing racial and ethnic backgrounds. Indeed, more recent research has supported the efficacy of womanism in contributing to reduced negative mental health outcomes. For sexual minority women of color, those with high levels of womanism did not experience a significant association between sexism and psychological distress, whereas those with low levels of womanism did experience a significant positive association between sexism and psychological distress (DeBlaere & Bertsch, 2013). Womanism also moderated the association between both racism and sexism and psychological distress within a sample of heterosexual women of color, such that both racism and sexism no longer were significantly associated with psychological distress for women of color who reported high levels of womanism (Chadwick & DeBlaere, 2019). This research speaks to the importance of incorporating womanism into studies that examine the experiences of women of color, given that popular conceptualizations of feminism often center the perspectives of white women and may not be as beneficial for women of color.

Another concept closely related to feminist consciousness that may buffer the relationship between sexism and alcohol related problems is empowerment. Empowerment has been defined as “a process by which individuals with lesser power gain control over their lives and influence the organizational and societal structures within which they live” (Segal, Silverman, & Temkin, 1995, p. 215). Indeed, empowerment has been found to be negatively correlated with disordered eating behaviors and positively correlated with positive body image and higher body-self relations (Kinsaul, Curtin, Bazzini, & Martz, 2014; Peterson, Grippo, & Tantleff-Dunn, 2008). In relation to the theory of embodied discrimination, empowerment may protect women from internalizing the negative consequences of sexism by providing them with the power and influence to change the societal structures that permit sexism to exist. Women who report enhanced feelings of empowerment may cope with the negative affect generated by sexism through acting to counteract patriarchal power structures in society, as a more healthful alternative to coping with negative affect through consuming alcohol. Still, no studies have yet examined the potential protective effects of empowerment in the relationship between sexism and alcohol related problems.

The proposed cross-sectional design will examine how endorsing various aspects of feminist consciousness and empowerment may moderate the relationship between sexism and self-objectification and alcohol related problems. We will also control for the influence of drinking to cope, affiliation with Greek life, and perceived peer norms about drinking, all of which are well-established correlates of drinking behavior for college women (Capone, Wood, Borsari, & Laird, 2007; Neighbors,

Walker, & Larimer, 2003; Stapinski et al., 2016). We hypothesize that for women who identify more with the synthesis and active commitment feminist identity styles, the association between sexism and self-objectification and alcohol related problems will be weaker, based on how these aspects of feminist consciousness have been shown to buffer the relationship between sexism and other health outcomes, such as disordered eating. We also hypothesize that women who identify more with empowerment will also report a weaker association between sexism and self-objectification and alcohol related problems, given how empowerment is associated with women's self-efficacy and self-confidence. However, we predict that women who identify more with the passive acceptance feminist identity style will experience a stronger relationship between sexism and self-objectification and alcohol related problems than women who identify less with passive acceptance, given passive acceptance's association with increased psychological distress. Finally, we hypothesize that women who identify more with the embeddedness-emanation stage will report a weakened relation between sexism and self-objectification and alcohol related problems, whereas women who identify more with the revelation stage will report an increased relation between sexism and self-objectification and alcohol related problems.

We also hypothesize that for women of color in this sample, that womanism will moderate the association between sexism and self-objectification and alcohol related problems, such that women with lower levels of womanism will report a positive association between sexism and self-objectification and alcohol related problems, whereas women with higher levels of womanism will not report an

association between these variables. We base this hypothesis on how womanism has moderated the association between sexism and psychological distress for women of color in past studies.

Method

Participants

Participants were 329 women who ranged in age from 18 to 44 ($M = 19.65$, $SD = 2.23$) (see Table 1 for sample characteristics). The sample self-identified as approximately 64% White, 11% African American, 10% Asian American, 9% Latinx, 4% as Biracial, and 2% as “other.” In terms of sexual orientation, 86% identified as heterosexual, 10% as bisexual, 2% as homosexual, and 2% as “other.” In terms of academic class standing, 35% identified as freshmen, 24% as sophomores, 22% as juniors, 18% as seniors, and 1% as graduate students.

Measures

Demographics. Demographic information collected consisted of gender, age, sexuality orientation, race/ethnicity, and academic class standing.

Greek Status. Participants’ involvement in Greek life was assessed by asking the question “Do you belong to a sorority?” with responses being either “Yes,” “No,” or “Plan to.” Both “Yes” and “Plan to” were coded as “1” whereas “No” was coded as “0”. In this sample, 29% of women ($n = 95$) reported either being, or planning to be in a sorority.

Perceived Peer Norms. This instrument is based on the Daily Drinking Questionnaire (DDQ; Collins et al., 1985), which assesses the participants’ perception of how many drinks they believe their peers consumed on a daily basis per week. The

perceived peer norms score is determined by averaging the perception of the weekly consumption for women in that participant's peer group.

Drinking to Cope. The five-item drinking to cope motives scale is from the Coping and Enhancement Motives scale developed by Cooper (1994). This scale assesses the degree to which an individual uses alcohol to “escape, avoid, or otherwise regulate negative emotions” (Cooper, Frone, Russell, & Mudar, 1995, p.991). It assesses the internally generated, negative reinforcement motives that can lead to alcohol related problems. A sample item includes “How often do you drink to forget your worries?” It has a total of 4 items and is scored on a 6-point Likert scale that ranges from (1=almost never/never) to (5=almost always/always). Past studies that have used this drinking to cope measure have reported high internal validity ($\alpha = .92$, Iwamoto, Grivel, Cheng, & Zamboanga, 2016). This scale has shown construct validity through its positive association with solitary drinking and predicted drinking problems both directly and indirectly through alcohol consumption (Cooper, 1994). In this sample, the internal reliability estimate was .92.

Sexism. Participants' experiences of sexism were measured using the Schedule of Sexist Events (SSE; Klonoff & Landrine, 1995). This survey consists of 20 items that assess the frequency of sexist discrimination. Items are rated using a 6-point scale ranging from 1 (the event never happened) to 6 (the event happened almost all the time). A sample item is “How many times have you been treated unfairly by your employers, bosses, and supervisors because of your gender?” Participants rated each question for how frequently it has occurred within the past year. A composite score was created for sexist events by summing the scores for all

20 items. Past research has found high internal consistency ($\alpha = .90$) and convergent with validity with other measures of stress, such as the PERI-Life Events Scale (B.S. Dohrenwend, Krasnoff, Askenasy, & B. P. Dohrenwend, 1978). The scale has also shown high discriminant validity through nonsignificant and negligible correlations with social desirability (Fischer et al., 2000). In this sample, the internal reliability estimate was .91.

Self-objectification. Self-objectification was measured using the Body Surveillance subscale of the Objectified Body Consciousness Scale (OBCS; McKinley & Hyde, 1996). This scale contains 8 items that assess the extent to which women self-objectify by constantly examining her own body and thinking about how it appears to others. Items are rated on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). Mean scores were used with higher scores representing greater levels of self-objectification. An example item is “I think more about how my body feels than how my body looks” (reverse scored). Reported alpha for scores on this subscale with an undergraduate sample was .84 (Hurt et al., 2007). This subscale has shown high convergent and divergent validity through its positive correlations with social anxiety, disordered eating, and self-consciousness and a negative correlation with body esteem (McKinley & Hyde, 1996). In this sample, the internal reliability estimate was .81.

Benevolent Sexism. Benevolent sexism was measured using a modified version of the Ambivalent Sexism Inventory (ASI), a valid and reliable measure of individuals’ sexist attitudes (Glick & Fiske, 1996). This same modified version of the ASI was used by Fitz and Zucker (2015) to assess participants’ experience of

benevolent sexism. To capture exposure to benevolent sexism, participants answered ten items each as they applied to three groups of men – their male romantic partners, friends and peers, and family. Items were scored on a Likert scale ranging from 1 (*never*) to 6 (*almost all of the time*) to indicate how often each group of men behaved in a benevolently sexist manner towards them. Sample items include “My *romantic partners* cherish and protect me” and “My *male friends and peers* place me on a pedestal.” Participants’ responses were summed to compute an overall benevolent sexism score, with higher scores indicating more experiences of benevolent sexism. In this sample, the internal reliability estimate was .95.

Feminist Identity. Feminist identity development was measured with the Feminist Identity Composite (Fischer et al., 2000). This 40-item scale measures the five feminist identity stages proposed by Downing and Roush (1985). A one-time administration of the FIC captures a snapshot of an individual’s identification with feminist beliefs across five different dimensions at a single point in time. These five subscales include Passive Acceptance (“I don’t see much point in questioning the general expectation that men should be masculine and women should be feminine”), Embeddedness-Emanation (“I am very interested in women writers”), Revelation (“Gradually, I am beginning to see just how sexist society really is”), Active-Commitment (“I am very committed to a cause that I believe contributes to a more fair and just world for all people”) and Synthesis (“I feel like I have blended my female attributes with my unique personal qualities”). All survey items are answered on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Each subscale will be coded in such a way that a higher score would indicate agreement

with the dimension within the subscale. Coefficient alphas for each subscale from past research ranges from .74 to .75, .84 to .86, .75 to .80, .77 to .81, and .68 to .73, respectively. The FIC has shown acceptable construct validity based on its association with another measure assessing social desirability as well as a measure assessing the frequency and appraisal of sexism (Moradi & Subich, 2002a; Moradi & Subich, 2002b). For this study's sample, the internal reliability estimates for each subscale were as follows: .70 for Passive Acceptance, .87 for Embeddedness-Emanation, .78 for Revelation, .77 for Synthesis, and .85 for Active Commitment.

Womanism. Womanism was assessed with a modified version of the WOC subscale of the FPS (Henley et al., 1998). As done by DeBlaere & Bertsch (2013), the last question was altered to be inclusive of all women of color rather than only African American women, such that the item was changed from "The tradition of Afro-American women who are strong family leaders has strengthened the Afro-American community as a whole" to "The tradition of women of color who are strong leaders has strengthened communities of color as a whole." The WOC subscale consists of 10 items rated on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Among a racially and ethnically diverse scale development sample, a Cronbach's reliability estimate of .75 was obtained, as well as 2-week and 4-week re-test reliability estimates of .85 and .80 respectively (Henley et al., 1998). Validity for the WOC scores includes significant and positive correlations with number of women's studies courses taken and degree of feminism, as well as a negative correlation with political conservatism (Henley et al., 1998). In this study's sample of women of color, the internal reliability estimate was .89.

Empowerment. Empowerment was measured using the Empowerment Scale (ES, Rogers et al., 1997). This 28-item scale assesses the construct of empowerment. Participants responded on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The scale is divided into five factors: self-esteem/self-efficacy (e.g., “I have a positive attitude about myself”), power/powerlessness (e.g., “I feel powerless most of the time”), which is reverse scored, community activism and autonomy (e.g., “People working together can have an effect on their community”), optimism and control over the future (e.g., “I am generally optimistic about the future”), and righteous anger (e.g., “Getting angry about something is often the first step toward changing it”). Scores from each subscale were summed to create a composite score. The ES has been shown to have sufficient factorial validity and known groups’ validity, and Cronbach’s alpha has been reported as .86 (Rogers et al. 1997). In this sample, the internal reliability estimate was .85.

HED and Quantity. Heavy episodic drinking for women was assessed with the question “During the last three months, how many times did you have four or more drinks in a 2-hour sitting?” Overall quantity of alcohol consumption was measured using the Daily Drinking Questionnaire (DDQ; Collins et al., 1985), which assesses typical drinking over the past 90 days. Participants were asked to estimate their typical alcohol consumption for each day of the week for the past 90 days, to determine peak alcohol consumption, number of drinks per week, and the average number of drinks per week. The DDQ and the questions on HED are count variables.

Alcohol related problems. Alcohol related problems were measured using the Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ; Kahler,

Strong, & Read, 2005), a 24-item measure which assesses alcohol consequences in line with symptoms of alcohol abuse and dependence as defined by the DSM-IV (American Psychiatric Association, 1992). This questionnaire is an abbreviated version of the original YAACQ, a 48-item measure. The original measure was shortened to more efficiently assess alcohol consequences among college students, as well as to eliminate redundant items, and to ensure that the measure was non-gender biased for all 24 items. The B-YAACQ assesses consequences that have been experienced over the past year, and are all worded in the first person, with the possible responses being “Yes” or “No.” Sample items include “I have passed out from drinking,” “I have not gone to work or missed classes at school because of drinking, a hangover, or illness caused by drinking,” and “I have been overweight because of drinking.” The B-YAACQ has shown high convergent validity with the Rutgers Alcohol Related Problems Index ($r = .78$). In this sample, the internal reliability estimate was .89.

Procedure

The study was approved by the Institutional Review Board of a large university in the mid-Atlantic region of the United States. Participants were recruited through UMD’s Psychology Department’s SONA system and were compensated with 1 SONA credit for completing the survey, which took approximately an hour. Participants were also be recruited through listservs (e.g., sorority listservs and listservs of other organizations that women participate in). The recruitment emails and flyers for the study indicated that only female-identifying UMD students were eligible and that the research pertains to women’s attitudes and health. After

accessing the survey link, participants were prompted to read and agree to the consent form. The consent form clearly stated that due to the sensitive nature of some of the questions, participants could discontinue their participation in the study at any time. Subsequently, participants completed the online survey consisting of demographic questions (e.g., age, gender, and race/ethnicity), the measures of sexism and self-objectification, the measures of feminist attitudes and empowerment, and the measures of alcohol use and alcohol related problems. The survey will also include two validity check items (e.g., “Please choose ‘3’ for this item.”).

Data Analysis Plan

A total of 365 individuals accessed the survey. However, of these 365, 4 participants answered both attention check items incorrectly, and 32 participants were missing more than 35% of their data, so these cases were excluded, leaving us with 329 participants. Additionally, no item had more than .9% missing data. Excluding demographic variables, the range of missing data for items that comprised our variables of interest was .3% (in which 34 items across all items in the study were missing one response each) to .9% (heavy episodic drinking). 319 participants (97.0%) were missing no data. Little’s Missing Completely at Random analysis was conducted and an insignificant chi-square statistic $\chi^2(84) = 83.42, p = .497$ was found, indicating that data were missing at random. Thus, in line with Scholmer, Bauman, and Card (2010)’s recommendations, the expectation maximization method was used to impute missing values. Demographic variables were excluded from the imputation procedure given that several of the demographic variables were categorical variables

(e.g., race) for which imputation would have produced non-meaningful values that would have misrepresented the demographic data.

Before running regression analyses, a test for multicollinearity was performed. Predictors added to the model had variance inflation factor coefficients that were < 10 and tolerance coefficients that were $> .20$. These results showed that there was no significant multicollinearity between the predictor variables. Furthermore, Cook's distance (D) was calculated to confirm that the regression analyses were not unduly influenced by multivariate outliers. No cases had a Cook's distance greater than 1, and given that $D > 1$ is generally regarded as the indication for outliers, we concluded that our analyses were not unduly influenced by multivariate outliers.

For each multiple regression analysis, all control variables (i.e., Greek life, drinking to cope, perceived peer norms, and quantity of alcohol) were entered at Step 1 of each analysis. Then, all predictor (i.e., sexism, self-objectification, and benevolent sexism) variables and moderating variable (i.e., feminist identity styles, empowerment) were entered into Step 2 of each analysis. At Step 3, each interaction term (e.g., sexist events x active commitment) was entered. Because statistically significant interactions are very difficult to detect in nonexperimental designs, the use of liberal alphas has been encouraged (McClelland & Judd, 1993; Sabik & Tylka, 2006). Scale scores for each predictor and moderator were centered to reduce multicollinearity between the main effect and interaction terms.

An analysis of skewness revealed that the heavy episodic drinking variable was skewed (skewness = 2.01); this was confirmed by a significant Shapiro-Wilk statistic. To adjust for this non-normality, we performed a logarithmic transformation.

The transformed heavy episodic drinking variable was used all regression analyses in which heavy episodic drinking was the outcome variable.

Results

Correlational analyses

Intercorrelations of the study's main variables of interest are reported in Table 2. In partial support of our hypothesis, alcohol related problems were positively and significantly correlated with sexism ($r = .27, p < .01$) and self-objectification ($r = .22, p < .01$), but not benevolent sexism ($r = .11, p = .051$). In regard to heavy episodic drinking, our hypothesis was also partially supported, such that heavy episodic drinking was positively and significantly correlated with self-objectification ($r = .19, p < .01$), but not sexism ($r = .07, p = .23$) or benevolent sexism ($r = .07, p = .19$). Furthermore, alcohol related problems were positively and significantly correlated with two feminist identity styles, revelation ($r = .14, p < .05$) and active commitment ($r = .16, p < .01$). Sexism was significantly and positively correlated with every feminist identity style other than passive acceptance, in which it was significantly and negatively correlated (see Table 2 for full results). As also shown in Table 2, self-objectification was significantly and positively correlated with the feminist identity styles embeddedness-emanation ($r = .15, p < .01$), revelation ($r = .13, p < .05$), and active commitment ($r = .11, p < .05$). Benevolent sexism was significantly and positively correlated with the feminist identity styles passive acceptance ($r = .18, p < .01$), synthesis ($r = .21, p < .001$), and active commitment ($r = .13, p < .05$), as well as womanism ($r = .24, p < .01$). We also ran correlations between the same set of

variables for the women of color in our sample, of which the results can be found in Table 3.

Regression Analyses Related to Alcohol Related Problems

To examine the extent to which feminist identity styles, empowerment, and womanism moderated the association between sexism, self-objectification, and benevolent sexism and alcohol related problems, we ran a multiple hierarchical regression analysis. Step 1 of the model explained 41% of the variance, a significant increment ($F(4, 324) = 55.56, p < .001$). Within this step of the model, alcohol quantity ($\beta = .40, p < .001$) and drinking to cope ($\beta = .35, p < .001$) were positively and significantly associated with alcohol related problems. Greek life ($\beta = -.09, p = .06$) and perceived peer norms ($\beta = -.05, p = .24$) were not significantly associated with alcohol related problems. Step 2, which contained the sexism variables (i.e., sexism, self-objectification, and benevolent sexism) and moderator variables, did not account for a significant amount of variance ($F(9, 311) = 1.90, p = .052$), nor were any of the individual beta weights significant. Step 3, which contained all the interactions between the sexism variables and the moderator variables, did not account for a significant amount of variance ($F(17, 294) = .86, p = .62$), nor were any of the individual beta weights significant ($ps > .07$). All results of this model are shown in Table 4.

Regression Analyses Related to Heavy Episodic Drinking

Variables were entered in the same manner as the analysis for alcohol related problems, with heavy episodic drinking inputted as the dependent variable. Step 1 of the model explained 19% of the variance, a significant increment ($F(3, 322) = 25.60,$

$p < .001$). Within this step of the model, Greek membership ($\beta = .16, p < .001$) and drinking to cope ($\beta = .37, p < .01$) were significantly and positively associated with heavy episodic drinking. Perceived peer norms were not associated with heavy episodic drinking ($\beta = .09, p = .09$). Step 2 of the model did not explain a significant increment of variance ($F(9, 313) = 1.49, p = .15$). Within Step 2, only self-objectification was significantly and positively associated with heavy episodic drinking ($\beta = .15, p < .01$), whereas none of the other variables were significantly associated with heavy episodic drinking. Step 3 of the model explained an additional 9% of the variance, a significant increment ($F(17, 296) = 2.20, p < .01$). Within this step of the model, the interactions between sexism and passive acceptance ($\beta = -.15, p < .02$) and the interaction between self-objectification and active commitment ($\beta = -.17, p < .02$) were both significantly and negatively associated with heavy episodic drinking. The interactions between sexism and synthesis ($\beta = .16, p < .03$), benevolent sexism and passive acceptance ($\beta = .14, p < .02$), and benevolent sexism and embeddedness-emanation ($\beta = .14, p < .04$) were each positively and significantly associated with heavy episodic drinking. None of the other interactions within this step were significant. All results of this model are shown in Table 4.

To further understand the significant interactions within Step 3 of this regression analysis, simple slope analyses were conducted. Simple slopes for each interaction were tested for low (-1 SD below the mean), moderate (mean), and high (+1 SD above the mean) for each moderating variable. When breaking down the interaction between sexism and passive acceptance, none of the simple slopes significantly predicted heavy episodic drinking ($ps > .23$). When breaking down the

interaction between self-objectification and active commitment, each of the simple slopes revealed a positive association between self-objectification and heavy episodic drinking, however, a significant positive association was found only for moderate levels of active commitment (*simple slope* = .12, $t(316) = 2.49$, $p < .002$) (see Figure 1). Both simple slopes for high levels (*simple slope* = .07, $t(316) = .45$, $p = .65$) and low levels of active commitment (*simple slope* = .18, $t(316) = 1.00$, $p = .32$) did not reach significance. When breaking down the remaining interactions, none of the simple slopes were significant.

Regression Analyses for Women of Color

Separate regression analyses were run to examine the potential moderating role of womanism in the association between sexism and alcohol related problems and heavy episodic drinking for women of color. All control variables (i.e., Greek life, drinking to cope, perceived peer norms, and quantity of alcohol for alcohol related problems, and Greek life, drinking to cope, and perceived peer norms for heavy episodic drinking) were entered at Step 1 of each analysis. Then, all predictor (i.e., sexism, self-objectification, and benevolent sexism) variables and womanism were entered into Step 2 of each analysis. At Step 3, each interaction term (e.g., womanism x sexism) was entered.

In the regression analysis predicting alcohol related problems for women of color, Step 1 of the model explained 40% of the variance, a significant increment ($F(4, 113) = 19.17$, $p < .001$). Within this step of the model, alcohol quantity ($\beta = .35$, $p < .001$) and drinking to cope ($\beta = .37$, $p < .001$) were significantly and positively associated with alcohol related problems. Perceived peer norms ($\beta = -.04$, $p = .65$)

and Greek membership ($\beta = -.09, p = .21$) were not significantly associated with alcohol related problems. Step 2 of the model did not explain a significant increment of variance ($F(4, 109) = 1.22, p = .31$). Within Step 2, only sexism was significantly and positively associated with alcohol related problems ($\beta = .16, p < .04$), whereas none of the other variables were significantly associated with alcohol related problems. Step 3 of the model explained an additional 7% of the variance, a significant increment ($F(3, 106) = 4.89, p < .01$). Within this step of the model, the interaction between benevolent sexism and womanism was negatively and significantly associated with alcohol related problems ($\beta = -.25, p < .01$). All other interactions were not significantly associated with alcohol related problems ($ps > .14$). When breaking down the interaction between benevolent sexism and womanism, none of the simple slopes significantly predicted alcohol related problems. All results of this model are shown in Table 5.

In the regression analysis predicting heavy episodic drinking for women of color, Step 1 of the model explained 19% of the variance, a significant increment ($F(3, 114) = 9.04, p < .001$). Within this step of the model, drinking to cope was significantly and positively associated with heavy episodic drinking ($\beta = .46, p < .001$), whereas perceived peer norms ($\beta = -.06, p = .56$) and Greek membership ($\beta = -.14, p = .10$) were not significantly associated with alcohol related problems. Step 2 of the model did not explain a significant increment of variance ($F(4, 110) = .71, p = .59$), and none of the individual beta weights were significant. Step 3 of the model did not explain a significant increment of variance ($F(3, 107) = 2.57, p = .058$). Within this step of the model, the interaction between self-objectification and

womanism was significantly and negatively associated with heavy episodic drinking ($\beta = -.19, p < .04$). All other interactions were not significantly associated with heavy episodic drinking. When breaking down the interaction between self-objectification and womanism, none of the simple slopes significantly predicted heavy episodic drinking. All results of this model are shown in Table 6.

Discussion

This study examined the extent to which various forms of sexism were associated with women's maladaptive alcohol use, as well as the potential moderating role of feminist identity variables and empowerment in the association between sexism and maladaptive alcohol use. We also examined these associations for women of color in our sample and if womanism, a specific type of feminism geared toward women of color, moderated the association between sexism and maladaptive alcohol use. In line with past studies, self-objectification was positively associated with heavy episodic drinking. However, in contrast to past studies and our hypotheses, neither sexism nor benevolent sexism were associated with maladaptive alcohol use, though sexism was positively associated with alcohol related problems for women of color. Furthermore, the interaction between self-objectification and active commitment was negatively associated with heavy episodic drinking, in which the positive association between self-objectification and active commitment was only significant for those with moderate levels of active commitment. Contrary to our hypotheses, every other interaction in this study either did not reach significance or when broken down, did not reveal significant simple slopes.

Our study revealed a significant positive association between self-objectification and heavy episodic drinking, which aligns with past research that has also yielded a positive association between these two variables (Carr & Szymanski, 2011). This finding aligns with Objectification theory, such that women who internalize messages that their self-worth is contingent upon whether others will find them attractive, may then shift their behaviors to appear more attractive to others (Fredrickson & Roberts, 1997). Because sexually objectifying media in contemporary society often pairs women's sexuality with substance use, women may thus engage in heavy episodic drinking to appear more sexually available or desirable (Szymanski et al., 2011). Surprisingly, while self-objectification was associated with heavy episodic drinking, it was not associated with alcohol related problems. It is perhaps of note that previous studies have solely investigated the association between objectification and heavy episodic drinking, not alcohol related problems (Carr & Szymanski, 2011; Haikalis, DiLillo, & Gervais, 2017). While heavy episodic drinking in and of itself has been associated with a variety of negative health consequences for women (LaBrie, Boyle, Earle, & Almedst, 2018; Powers, Duffy, Burns, & Loxton, 2016), our results suggest that increased self-objectification may be more associated with women consuming an excessive amount of alcohol as opposed to women necessarily experiencing adverse consequences due to that drinking.

This lack of an association between self-objectification and alcohol related problems should also be taken into context with how all of the associations between sexism and maladaptive alcohol use were not significant, aside from the association between self-objectification and heavy episodic drinking. This lack of significant

associations is contrary to our hypothesis, as we thought that based on the theory of embodied discrimination, women who experienced increased sexism would turn to alcohol to cope with the negative affect generated by sexism (Krieger, 2005). One potential factor that may contribute to these nonsignificant findings is that our study included several covariates that have been shown to be strong predictors of alcohol related problems and heavy episodic drinking, including Greek membership, drinking to cope, alcohol quantity, and perceived peer norms (Cox et al., 2019; Lasky, Fisher, Henricksen, & Swan, 2017; Stapinski et al., 2016). Indeed, drinking to cope was positively associated with both heavy episodic drinking and alcohol related problems, alcohol quantity was positively associated with alcohol related problems, and membership in Greek life was positively associated with heavy episodic drinking. None of the studies that have examined associations between sexism and self-objectification and alcohol use among young adult women have controlled for any of these variables (Carr & Szymanski, 2011; Haikalis, DiLillo, & Gervais, 2017; Zucker & Landry, 2007). Future research may thus seek to more closely examine how women's use of drinking to cope and their membership in Greek life may influence their drinking behavior in relation to experiences of discrimination.

In further contrast to our hypotheses, none of the feminist identity styles nor empowerment buffered the association between sexism and maladaptive alcohol use. There was one significant interaction between self-objectification and the active commitment feminist identity style that when broken down, showed that only women with a moderate amount of active commitment experienced a positive association between self-objectification and heavy episodic drinking, whereas women with high

and low levels of active commitment did not experience any association between self-objectification and heavy episodic drinking. The finding that women with high active commitment did not experience an association between self-objectification and heavy episodic drinking aligns with past literature in which active commitment has served as a protective factor against sexism in relation to mental health outcomes (Moradi & Subich, 2002a; Sabik & Tylka, 2006). However, it is unclear as to why women with low levels of active commitment would also not experience an association between self-objectification and heavy episodic drinking, especially compared to women with moderate levels of active commitment. Past research has found that increased identification with feminist values was associated with increased positive body image but not disordered eating (Kinsaul, Curtin, Bazzini, & Martz, 2014), so perhaps identification with feminist values in and of itself would not decrease the extent to which women engage in heavy episodic drinking or drinking that leads to alcohol related problems.

There were several significant correlations that may highlight alternative explanations surrounding the associations between these variables, other than our hypothesized pathways. For example, both sexism and self-objectification were positively correlated with drinking to cope, and drinking to cope was positively correlated with alcohol-related problems. It may thus be possible that sexism and self-objectification have an indirect effect on alcohol-related problems through drinking to cope. This potential indirect effect would align with Hatzenbuehler's Psychological Mediation Framework (2009), which suggests that distal-stigma related stressors, such as discrimination, are associated with negative mental health outcomes via a

mediated path that includes psychological processes that are associated with poor mental health outcomes. Thus, experiences of sexism and self-objectification may make women more susceptible to engaging in drinking to cope, which may thus confer risk for alcohol-related problems. On the other hand, given empowerment's negative correlation with drinking to cope, it is possible that empowerment may have an indirect effect on alcohol-related problems through drinking to cope in the opposite direction of sexism and self-empowerment, such that women who are more empowered may have less of a need to engage in drinking to cope and thus may experience fewer alcohol-related problems. This potential beneficial role of empowerment would align with the past literature that showed that while feminist identity was associated with increased positive body image but not disordered eating, empowerment was associated with both increased positive body image and reduced disordered eating (Kinsaul et al., 2014).

Given the lack of attention paid to women of color in the psychological literature, we also conducted secondary analysis examining the associations between sexism and maladaptive alcohol consumption for women of color in this sample. Of note, we found that sexism was positively associated with alcohol related problems for women of color, whereas there was no such association in the general sample. This may be due to how women of color experience increased discrimination based on their intersecting identities as both women and people of color (Lewis & Grzanka, 2016; Lewis, Sakamoto, & Gutiérrez, 2014). However, this explanation is purely speculative given that we did not include questionnaires that explicitly asked about intersectional experiences of discrimination. Furthermore, in contrast to our

hypothesis, womanism did not moderate the association between sexism and alcohol related problems or heavy episodic drinking for women of color. This lack of a moderation may stem from our limited sample size, as well as how different women of color may experience womanism differently, such as by drawing strength and inspiration from specific ethnic minority women leaders of their same ethnic background.

This study possesses several limitations and future directions. First, this study focused on the experiences of a predominantly white, heterosexual, college-enrolled group of women, limiting its generalizability to more diverse groups of women. Future studies would benefit from including more diverse samples of women in relation to various social identities, such as race/ethnicity, sexuality, and educational attainment. This study also used a cross-sectional design, limiting claims to directionality and causality. Future studies may benefit from examining how experiences of sexism longitudinally predict health outcomes such as alcohol related problems and heavy episodic drinking. Another limitation includes that while participants were asked about their experiences of sexism within the past year, the surveys that assessed self-objectification and benevolent sexism did not contain a specific time range. Future studies may want to ensure that they ask about experiences of sexism within a consistent time range, such as experiences of sexism within the past month prior to taking the survey, to make these experiences of discrimination more comparable. Furthermore, future studies may want to incorporate other gender-relevant proximal factors that have been shown to be associated with alcohol-related problems within college-aged women, such as feminine and

masculine norms (Iwamoto, Grivel, Cheng, Clinton, & Kaya, 2016; Kaya, Iwamoto, Grivel, Clinton, & Brady, 2016).

Despite these limitations, this study possesses a few strengths. It advances the literature pertaining to women's experiences of discrimination and alcohol use, substantiating past literature that has found a positive association between self-objectification and heavy episodic drinking while also affirming the importance of examining control variables such as drinking to cope and Greek membership. Given the prominence of sexism within the United States, it is important to develop a nuanced understanding of what specific pathways underlie the association between experiences of sexism and alcohol-related problems. Our study shows that while feminist identity variables may not necessarily serve as protective factors in the association between sexism and alcohol-related problems, targeting maladaptive psychological coping mechanisms such as drinking to cope may mitigate the extent to which women use unhealthful drinking to alleviate the distress engendered by sexism. Indeed, given how drinking to cope has often been conceptualized as a more proximal risk factor for drinking whereas discrimination serves as a more distal factor for drinking (Hatzenbuehler, 2009; Hatzenbuehler, Corbin, & Fromme, 2011), it may be worth examining the indirect effect of sexism on alcohol use through drinking to cope. Clinicians may be encouraged to explore women's experiences of self-objectification in relation to potential heavy episodic drinking, as well as alternative coping mechanisms for dealing with the negative affect engendered by sexism. Administrators and those who have the capacity to engage in broader campus outreach may consider hosting programs that combat sexism and objectification as

well, so that the burden of responsibility does not solely lie on women who experience sexism and rather can be placed appropriately on those who perpetuate sexism in the first place. Finally, clinicians may want to prioritize how additional social identities such as race may compound women's experiences of discrimination and alcohol related problems, thus recognizing how these psychological processes may manifest differently for diverse and often understudied groups of women.

List of Appendices

Appendix A

Review of the Literature

This literature review is presented in three sections: alcohol use among women, the relations between sexism and objectification and alcohol use, and various facets of feminist consciousness as moderators between sexism and alcohol use. The review first describes the growing rate of alcohol use of women in greater detail, using a feminist perspective that highlights the stigmatization of drinking within women especially in a masculine-centric society. The next portion of the review focuses on the constructs of sexism and objectification in greater detail in relation to alcohol use among women. The final section discusses how various facets of feminist consciousness – the feminist identity styles based on the Downing and Roush (1985) model and empowerment – all may moderate the relationship between sexism and alcohol use, especially given feminist consciousness’s associations with other health outcomes in past research.

Outcomes: Alcohol Use and Alcohol related Problems

Alcohol use among young adult women has increased steadily over the past several years. National surveys have focused on rates of binge drinking, which for women is defined as consuming four or more drinks in a two-hour sitting. In one longitudinal examination of over 500,000 participants from 1979 to 2006, risk for binge drinking increased among 21 to 23-year-old women, with college women

outpacing nonstudents in this age range, whereas there was no shift in 21 to 23-year-old men's binge drinking rates (Gruzca, Norberg, & Bierut, 2009). This longitudinal examination sought to examine trends in binge drinking among young adults in the United States over the past three decades, with particular attention paid to differences based on age, sex, student status (for college-age individuals), and race/ethnicity. While there were significant reductions in binge drinking for those younger than 20 years, most likely as a result of the changes in drinking laws for those under 21, risk for binge drinking among young women has risen, with risk increasing more quickly for racial/ethnic minority women than white women. This finding pertaining to women's drinking rates has been substantiated in several other recent reports about the narrowing gender gap between women and men's alcohol use and dependence (Gruzca, Bucholz, Rice, & Beirut, 2008). In a nationally representative sample of 42,693 adults under the age of 90, women's binge drinking rates increased by their birth cohort, with the birth cohorts divided into the following four sets: 1913-1932, 1933-1949, 1950-1967, and 1968-1984 (Keyes, Grant, & Hasin, 2008). The majority of this sample was White (70.9%), 47.6% was male; 21.8% of the sample was between the ages of 18-29, 30.9% were 30-44, 31.1% were 45-64, and 16.2 were 65 or older. This increase of binge drinking rates was attributed to the change in traditional gender roles in the U.S. since the 1970s, as women's drinking has become less stigmatized with the erosion of restrictive gender roles, giving women more license to drink at similar rates as men. While these studies provide important data related to the trends in women's drinking rates, more research needs to be conducted to examine the sociocultural factors that contribute to women's drinking.

The increase in women's drinking rates may be particularly detrimental given biological factors that make women more predisposed to adverse health consequences due to heavy drinking. Women's heavy drinking has been associated with various negative physical health consequences, such as risk of hypertension, liver disease, breast cancer, and bone health (Wilsnack & Wilsnack, 2014). These health consequences are exacerbated within women compared to men given specific biological differences, such as how the increased amount of estrogen within women's bodies may predispose them to liver cirrhosis and other liver injury when engaging in heavy alcohol use (Eagon 2010), as well as how alcohol's association with breast cancer has been explained through mechanisms related to increased estrogen exposure (Garcia-Closas et al., 2002; Onland-Moret et al., 2005). Evidence also suggests that there are links between women's drinking and various psychiatric disorders, including depression, post-traumatic stress disorder, eating disorders, and suicidal ideation (Wilsnack & Wilsnack, 2014). The mechanisms underlying these associations are still unclear, such that alcohol use may contribute to the development of certain disorders based on women's behaviors while intoxicated whereas with other disorders the associations may stem more from common antecedents. For example, heavy alcohol use is associated with PTSD based both on how consuming large quantities of alcohol may predispose women to engage in behaviors that may lead to trauma (e.g., driving under the influence), as well as how experiencing PTSD symptoms (e.g., flashbacks) may motivate women to cope with negative affect through drinking (Hingson, Zha, & Weitzman, 2009; Wilsnack & Wilsnack, 2014). However, the research pertaining to heavy alcohol use and eating disorders has

focused more on common antecedents, such as distress tolerance, personality characteristics, and genetic factors and less about whether eating disorders might cause or be caused by alcohol consumption (Conason & Sher, 2006). Thus, given the extent to which women's biology may predispose them to severe health consequences related to heavy alcohol use, it is important to examine risk factors – especially understudied sociocultural factors – that may contribute to or mitigate women's engagement in alcohol related problems.

Given that this study and literature review seek to explore women's alcohol use from a feminist perspective, it is also important to consider the ways in which women's drinking intersects with gendered stereotypes as well as the overarching societal standards that dictate women's behavior. While studies have found that women are now engaging in heavy drinking behaviors in similar rates to men (Gruzza et al., 2008; Keyes et al., 2008), women still experience heightened stigma for engaging in alcohol use compared to men. While women may be less encumbered by traditional gender roles to the extent that they can engage in more heavy drinking behaviors, women who drink are often perceived as lacking self-control and self-esteem, lacking femininity, and as sexually promiscuous in that they are appealing to the male gaze (Connell, 1987; Gill, 2007; Jackson & Tinkler, 2007). Whereas men who drink are perceived as following the expected standards of masculinity, women who drink are perceived as out of control and disobedient to society's standards (Thurnell-Read, 2011). Furthermore, women receive conflicting messages, because while their drinking behaviors are stigmatized based on hegemonic expectations of femininity, they also reside in a society in which drinking itself is glorified because it

is associated with masculinity, a set of norms and behaviors that are more prized than femininity (Peralta, 2007; Thurnell-Read, 2011). It is therefore important to recognize how society attaches expectations and consequences to behaviors based on gender, as well as how discrimination based on gender itself may affect women's alcohol use.

Relationships between Sexism and Self-Objectification and Alcohol Use

Only one study thus far has examined the association between sexism and alcohol use within women attending college. Zucker and Landry (2007) measured the impact of sexism and psychological distress on women's smoking and drinking behaviors, and the theory underlying their study was that of embodied discrimination, such that people incorporate the world in which they live into themselves, including their experiences of stress. They posited that women cope with the stress created by sexism by engaging in alcohol and tobacco use, which in turn reduces the negative affect generated by their experiences of sexism. Furthermore, they incorporated the theory of internalized sexist health behaviors, such that women may adopt prominent messages of sexism toward themselves (e.g., that thinness is one of the most attributes for a woman to possess) and engage in health-damaging behaviors to adhere to that internalized sexism. Building on this theory, they hypothesized that women may engage in cigarette smoking in addition to alcohol related problems, both for the affective properties generated by nicotine as well as to achieve thinness, as smoking can reduce appetite.

To test their hypotheses, Zucker and Landry (2007) administered several surveys to 192 female undergraduate students at George Washington University, who

ranged in age from 18 to 24 years ($M=19.42$, $SD=1.16$) and the majority of whom identified as European American ($N=141$, 79%). The surveys they administered measured experiences with sexism, psychological distress, binge drinking, nicotine use, and internalized sexist health behavior (i.e., the extent to which women smoked in order to meet societal standards of beauty). They found that personal distress mediated the relationship between experiences of sexism and binge drinking, as well as the relationship between experiences of sexism and smoking quantity. They also found a significant positive correlation between sexism and smoking for weight control among women who had smoked within the past month. Thus, both of their hypotheses received support and added to the literature on discrimination and coping by examining how experiences of sexism among women may lead to increased maladaptive substance use behavior.

While only Zucker and Landry (2007) have examined the association between sexism and binge drinking among women attending college, a handful of other studies have examined the association between sexism and binge drinking in national samples and more specific populations. McCabe, Bostwick, Hughes, West, and Boyd (2010) analyzed data from wave 2 of the National Epidemiologic Survey on Alcohol and Related Conditions and found that within a sample of 577 lesbian, gay, and bisexual (LGB) adults, there was a positive association between gender-based discrimination and having a substance use disorder within the past year. It is important to note that they examined gender discrimination in combination with lifetime sexual orientation discrimination, such that while sexual orientation discrimination within the past year was reported by more than one third of LGB

respondents (38.2%), gender discrimination was reported by almost half of lesbian and bisexual women (48.0%) and by about one fifth of heterosexual women (18.0%). Another study using the same dataset examined the association between past-year discrimination and past-year psychiatric disorders for Black, Hispanic, LGB, and female respondents, and they found that across groups, discrimination was associated with mood, anxiety, and substance use disorders (McLaughlin, Hatzenbuehler, & Keyes, 2010). Their findings also revealed that participants who did not accept that they were experiencing discrimination and did not disclose it with others had elevated rates of substance use disorders compared to those who did.

In addition to these studies that used data from a national sample, Richman and Rospenda (1992) found a positive association between sexism and the amount of alcohol consumed within the past month in a longitudinal study of 137 medical students in the United States, and Otiniano Verissimo, Gee, Iguchi, Ford, and Friedman (2013) found a positive association between sexism and past year alcohol use in a cross-sectional study of young adult Latinos living in New York City, New York. Taken together with the research that has examined the association between sexism and alcohol use using national survey data, these studies overall form a substantial base of literature that supports the association between sexism and alcohol use across a diverse range of women, though more studies are needed to examine potential moderators of that relationship that may buffer the harmful effects of sexism. Furthermore, all of these studies used measures that examined sexism at an interpersonal level, which highlights the necessity of further research to investigate buffers between interpersonal sexism and alcohol use, though future studies could

also examine the extent to which institutional or cultural sexism influences women's alcohol consumption as well.

A specific form of sexism that has been examined in relation to alcohol use is self-objectification. Sexual objectification describes how women are often reduced to their bodies, body parts, and sexual functions, such that their value is based on how their appearance and sexual utility to others (Fredrickson & Roberts, 1997).

Objectification Theory posits that because of the prevalence of sexual objectification in society, women often engage in self objectification, in which they internalize the sexist notion that their self-worth is based on their appearance and sexual utility to others and begin to view themselves through that objectifying lens. Objectification can thus be viewed as a specific form of sexism given that the extent to which women evaluate their bodies is often based on a perceived male gaze, so that a man's judgment of a woman's body takes precedent over how a woman herself feels about her body. Objectification Theory further argues that sexual objectification experiences contribute significantly to various mental health risks that affect women, such as sexual dysfunction, disordered eating, and depression (Fredrickson & Roberts, 1997).

Szymanski et al. (2011) argued that objectification also acts as a risk factor for substance abuse in women. Because the media often pairs women's sexuality and appearance with substance use, such as by promoting the idea that women who use substances are more sexy, attractive, and mature, women who engage in self-objectification may thus consume more substances to achieve this idealized image put forth by popular culture. Furthermore, women who self-objectify may drink more to

gain attention from men, as research suggests that women who consume more alcohol are perceived as more sexually available than non-drinking women (Abbey, 2011). Men may also overestimate the extent to which women who drink are interested in sex, as they may misinterpret women's neutral cues as sexual cues (Abbey, Jacques-Tiura, & LeBreton, 2011). Szymanski et al. (2011) also argued that women who experience objectification may abuse substances to cope with the negative affect generated by objectifying experiences, such as through using substances to numb feelings of resentment or hurt. Indeed, children who experienced sexual victimization have been found to engage in more alcohol and nicotine use in adulthood, which suggests that objectification may lead to numbing behaviors (Landrine & Klonoff, 2004; Moran, Vuchinich, & Hall, 2004).

Only two studies have directly examined the relationship between self-objectification and substance abuse. Carr and Szymanski (2011) examined the relationship between sexual objectification and substance abuse within a sample of 289 young adult women who completed an online survey with measures pertaining to objectification, depression, body shame, and substance use. Female participants ranged in age from 18 to 30 years with a mean age of 20.03 years ($SD = 2.31$). Participants were 89% White, 7% African American, 3% Asian American or Pacific Islander, and 1% multiracial. Ninety-nine percent of participants were currently enrolled in college with 41% being freshmen, 22% sophomores, 21% juniors, 14% seniors, 1% graduate students, and 1% other. The results showed that objectification was positively correlated with alcohol, nicotine, and other drug abuse. Furthermore, the researchers identified a mediation model in which objectification was linked to

women's substance abuse both directly and indirectly via body shame and depression. The model posited a direct positive association between objectification and substance abuse, as well as an indirect relation in which objectification leads to greater body shame, which leads to more depression, which leads to more substance abuse. This study built upon the previous literature pertaining to objectification and substance abuse by serving as the first study to directly examine the relation between objectification and substance abuse, whereas past papers had been theoretical in nature or had reported on studies that examined aspects of objectification and alcohol use without examining their more direct relation with one another.

Haikalis, DiLillo, and Gervais (2017) followed up Carr and Szymanski (2011) by examining the role of objectification as a mediator in the relation between women's alcohol use and sexual victimization. They administered surveys measuring alcohol use, objectification, and sexual victimization to 673 female undergraduates with a mean age of 18.92 years ($SD = 1.76$) from a large Midwestern university. Most participants identified as White (87.8%), followed by Native American (3.1%), Hispanic (2.5%), African American (2.2%), Asian (1.8%), and Other (2.5%). They first found that all of the primary study variables – objectification, alcohol use, and sexual victimization – were significantly positively correlated with one another, adding support to Carr and Szymanski (2011) which also revealed a positive correlation between objectification and alcohol use. They also found that objectification mediated the association between alcohol use and sexual victimization, suggesting that potential perpetrators may use women's alcohol use as an opportunity to objectify her, which may in turn increase the likelihood of sexual victimization.

Taken together with the results of Carr and Szymanski (2011), this study provides evidence that supports the association between objectification and substance abuse, as well as these variables' associations with sexual victimization. While both studies relay the complexity of the association between objectification and substance abuse, neither examined potential protective factors that may mitigate the relationship between the two variables. Thus, future research should investigate specific variables that may buffer the relationship between objectification and substance abuse, so that we can reduce the extent to which experiences of objectification may manifest in unhealthy coping mechanisms like heavy drinking.

Feminist Consciousness as Moderators between Sexism and Alcohol Use

Feminist scholars have conceptualized feminist consciousness in a variety of ways. One popular conceptualization is Downing and Roush's (1985) five-stage developmental model of individual feminist identity, which includes five stages: passive acceptance, revelation, embeddedness-emanation, synthesis, and active commitment. A couple of studies have examined how these various feminist identity styles may moderate the relationship between sexism and health outcomes including disordered eating and depression. Sabik & Tylka (2006) conducted a study in which they measured the moderating role of feminist identity styles on experiences of sexism and disordered eating. To support their rationale for conducting this study, the authors built their literature review upon how sexist events have been linked to several psychological disorders affecting women, including symptoms of anxiety, depression, and somatization, above and beyond general stressors. At the time the authors conducted this study, no researchers had yet examined the relationship

between sexist events and eating disorder symptomatology, even though some scholars had examined the influence of closely related forms of sexism (e.g., sexual objectification) and disordered eating. Sabik & Tylka (2006) further argued that subclinical forms of disordered eating reinforce notions and experiences of sexism that occur within society, such that they restrict women's autonomy by encouraging them to focus on their external appearance instead of their internal qualities such as their compassion or intelligence. Furthermore, it is possible that women engage in disordered eating habits, such as bingeing or purging food, to cope with the negative affect generated by experiencing sexism, similar to how women may use alcohol to numb the painful emotions evoked by experiences of sexism.

To shed further light on the relationship between sexism and disordered eating, Sabik and Tylka (2006) examined the influence of feminist identity as a moderator of the relationship between sexist events and disordered eating. To test their hypotheses that women high in Passive Acceptance and low in Synthesis and Active Commitment would experience more disordered eating, the authors administered surveys to 256 college women ranging in age from 17 to 48 years ($M = 19.84$, $SD = 4.15$) who identified predominantly as European American (77.0%). The surveys administered measured constructs such as the occurrence of lifetime and recent sexist events, feminist identity styles, and disordered eating. Their results showed that for women high in the Synthesis and Active Commitment feminist identity styles, neither lifetime nor recent sexist events predicted disordered eating. For women low in the Synthesis and Active Commitment feminist identity styles, both lifetime and recent sexist events predicted disordered eating. None of the other

three feminist identity styles moderated the relationship between sexist events and disordered eating, thus, the authors' hypotheses were partially supported. They argued that given that both Synthesis and Active Commitment are action-oriented, women who identify more with those identity styles may feel a stronger sense that they can do something about sexism and therefore are less susceptible to its harmful effects. Furthermore, women high in these feminist identity styles may be more resistant to internalizing society's pressures to have a thin body and to diet, given that women high in Synthesis and Active Commitment may have more of an internalized critique of gendered, sexist expectations of women's bodies. Given this study's findings that some feminist identity styles moderated the relation between sexism and disordered eating while others did not, it would be worthwhile to examine if these interactions extend to the relation between sexism and alcohol related problems.

Another study examined the relations between sexism, various feminist identity styles as conceptualized by the Downing and Roush (1985) model, and women's psychological distress (Moradi & Subich, 2002). They administered surveys that measured each of these variables to a group of 106 female undergraduate students and 85 female faculty and staff from a large midwestern university. 80% of the sample was White, 13% African American, 3% Asian American, 2% Latina, less than 1% Native American, and 2% multiracial or other ethnic identity. Participants ranged in age from 16 to 67 ($M = 32.60$, $SD = 13.22$). The results of the study showed that sexism, Passive Acceptance, Revelation, and Embeddedness-Emanation were each measured to women's psychological distress – however, when controlling for social desirability, age, and socioeconomic status (SES), only sexism and Passive

Acceptance accounted for unique variance in psychological distress. Furthermore, Passive Acceptance served as a moderator in the relation between sexist events and distress, such that women who were higher in Passive Acceptance reported a strengthened relationship between sexism and psychological distress compared to women lower in Passive Acceptance. Finally, Passive Acceptance was related negatively to sexist events, whereas Revelation, Embeddedness-Emanation, and Active Commitment were positively related to sexist events. Their findings suggest that identifying with the Passive Acceptance feminist identity style may exacerbate the negative psychological effects of sexism, because women who adhere to traditional gender roles may lack the strategies and resources to cope with sexism. At the same time, women high in Passive Acceptance may perceive that they experience sexism less, given that they are more readily accepting of traditional gender roles and subservience to men, whereas women who identify more with the Revelation, Embeddedness-Emanation, and Active Commitment feminist identity styles may recognize sexism more and are able to label it as such. Overall, both of these studies highlight the potential importance of examining the moderating role of various feminist identity styles on the relation between sexism and alcohol use, given how women who identify with different identify styles may vary in their capacity to recognize and cope with sexist discrimination.

Another facet of feminist consciousness that may moderate the relation between sexism and alcohol related problems is empowerment. Empowerment has been defined as “a process by which individuals with lesser power gain control over their lives and influence the organizational and societal structures within which they live”

(Segal, Silverman, & Temkin, 1995, p. 215). Empowerment has largely been examined in the context of disordered eating and body image, such that women who report higher levels of empowerment have been found to possess less disordered eating behaviors and higher contentment with their body image (Peterson, Grippo, & Tantleff-Dunn, 2008). For example, Kinsaul, Curtin, Bazzini, and Martz (2014) conducted a study in which they administered surveys that measured empowerment, body image, and disordered eating to 318 undergraduate women (age $M = 18.76$, $SD = 1.13$) attending a medium-sized university in the southeast US. The majority of participants identified as White (91.3%), followed by African American (2.8%), Latino (2.8%), and Asian (1.1%). Their results showed that women who reported higher levels of empowerment also reported higher satisfaction with body image and less disordered eating behaviors. The authors suggested that women with increased empowerment may have more specific behavioral strategies for coping with sexist beauty standards and therefore may be able to resist internalizing sexist societal ideals, which would help prevent negative body image and disordered eating behavior. This study's findings could potentially be extended to examine if empowerment could moderate the relation between sexism and alcohol related problem as well, given that perhaps women with higher levels of empowerment could resist using alcohol to cope with the negative affect generated by sexism and instead practice specific behavioral strategies to counteract the sexist society they reside within.

Appendix B

Informed Consent Form



Institutional Review Board

1204 Marie Mount Hall • 7814 Regents Drive • College Park, MD 20742 • 301-405-4212 • irb@umd.edu

CONSENT TO PARTICIPATE

Project Title	A Study Examining Women's Attitudes and Health
Purpose of the Study	This research is being conducted by Thomas Le at the University of Maryland, College Park. We are inviting you to participate in this research project because you: a) are between 18-25 years old and b) self-identify a woman. The purpose of this research project is to better understand the contextual factors that influence women's health behaviors and attitudes.
Procedures	The procedures involve participating in an online survey that will take approximately 30-45 minutes to complete. You will access the survey via a Qualtrics link that will contain a description of the survey and informed consent. You must agree to the consent form in order to proceed to the survey. The first portion of the study will contain items regarding demographic information (e.g., race/ethnicity, sex, age, student/professional status, state of residence, etc.) The next portion of the study contains several brief self-report measures that examine participants' health behaviors and attitudes. Following the survey, you will receive 1 SONA credit.
Potential Risks and Discomforts	There are no known risks associated with participating in this research project. Although we do not anticipate any risks, the current study may pose some minor risk related to frustration or embarrassment from the survey questions due to their sensitive and personal nature. Throughout the survey, you may recall experiences of sexism that may be unpleasant and uncomfortable. The risks are assumed to be comparable to those found in their ordinary activities or day-to-day encounters. In the unlikely event that you find completing the survey distressing, you would be reminded (in the consent form at the beginning of the survey) that you are free to skip any question(s) that you are uncomfortable answering and/or can stop their participation in the study at any time.
Potential Benefits	There are no direct benefits from participating in this research, but the results may help the investigator learn more about different contextual factors that increase risk for maladaptive health

	behaviors among women. We hope that, in the future, other people might benefit from this study through improved understanding of how sexism impacts various health behaviors, which will inform the development of future targeted interventions.
Confidentiality	Confidentiality will be protected in the following ways: First, the surveys are anonymous and will not contain information that can personally identify you. Data containing identifying information will be stored as a separate file and password-protected. The principal investigator will only know the password. All identifying information (e.g., email addresses) will be destroyed once the data collection has been completed. Second, once all data have been collected, they will be inputted into an SPSS file and then MPLUS, where only the principal investigator and the co-investigator, Derek Iwamoto, will have direct access to the data. This file will be stored on password-protected computers and no identifying information will be present in this dataset. Third, research products emanating from this project will report data in aggregate form only. The data will be retained for 10 years after the completion of the study, according to the University of Maryland policy on human subject files, and then will be destroyed. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Compensation	You will receive <u>1 SONA credit</u> for participation in this study.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. If you are an employee or student, your employment status or academic standing at UMD will not be affected by your participation or non-participation in this study. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: Thomas Le 3128 Biology-Psychology Building College Park, MD <i>tle@terpmail.umd.edu</i> 703-851-5172
Participant Rights	If you have questions about your rights as a research participant or

	wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking "I Agree" you indicated that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You will receive a copy of this consent form. If you agree to participate, please click 'I Agree' to move forward with the survey. If you do not wish to participate, you may click the 'I Decline' button to exit this survey.
	☐ I agree ☐ I Decline

Appendix C

Demographics

1. Gender
 - a. Male
 - b. Female
 - c. Other (please describe) _____
If “Male” is selected, then skip to End of Block.
2. Age _____
If age is less than 18, then skip to End of Block. If Age is greater than 25, then skip to End of Block
3. Marital Status
 - a. Single
 - b. In a committed relationship
 - c. Married
 - d. Separated
 - e. Divorced
 - f. Widowed
4. Sexual Orientation:
 - a. Heterosexual
 - b. Bisexual
 - c. Homosexual
 - d. Other (please describe) _____
5. GPA _____
6. Class Standing
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior

7. Are you an international student?
- a. Yes
 - b. No
 - c. Other _____
8. Where do you live?
- a. On-campus housing
 - b. Off-campus housing with friends
 - c. Off-campus housing with family
9. Do you belong to a sorority or fraternity?
- a. Yes
 - b. No
 - c. Plan to
10. What is your race/ethnicity?
- a. African American/Black
 - b. Cambodian
 - c. Caucasian/White
 - d. Chinese
 - e. Filipino
 - f. Iranian
 - g. Japanese
 - h. Korean
 - i. Hispanic/Latino/a
 - j. Native American
 - k. Pacific Islander
 - l. South Asian (i.e. India, Pakistan)
 - m. Vietnamese
 - n. Other _____
 - o. Biracial
11. Who of the following members were first to be born in the United States?
- a. No one in your family. Please specify how long you've been in the U.S. _____

- b. Yourself or your siblings
- c. Your parents
- d. Your grandparents
- e. Your great-grandparents

Appendix D

Perceived Peer Use

For the typical WOMAN, indicate the number of alcoholic drinks you think SHE consumes each day: In a TYPICAL WEEK. (One drink is equivalent to 12 ounces of beer, one shot of liquor either straight or in a mixed drinks, or five ounces of wine):

	Number of Drinks (1)
Monday (1)	
Tuesday (2)	
Wednesday (3)	
Thursday (4)	
Friday (5)	
Saturday (6)	
Sunday (7)	

Appendix E

Drinking to Cope (Cooper, 1994)

Please read the following questions and indicate your level of agreement on how you deal with daily stress by checking the number that best applies.

- 1: Never
- 2: Almost never
- 3: Some of the time
- 4: About half the time
- 5: Most of the time
- 6: Almost always

- 1. How often do you drink to forget your worries?
- 2. How often do you drink because it helps you when you feel depressed?
- 3. How often do you drink to cheer up when you're in a bad mood?
- 4. How often do you drink to forget about your worries?
- 5. How often do you drink to forget about your problems?

Appendix F

Schedule of Sexist Events (SSE; Klonoff & Landrine, 1995)

Please answer the following questions based on how much you have experienced each event within the past year of your life.

Circle 1=If the event never happened to you

Circle 2=If the event happened once in a while

Circle 3=If the event happened sometimes

Circle 4=If the event happened a lot

Circle 5=If the event happened most of the time

Circle 6=If the event happened almost all of the time

1. How many times have you been treated unfairly by teachers or professors because you are a woman?	1	2	3	4	5	6
2. How many times have you been treated unfairly by your employer, boss, or supervisors, because you are a woman?	1	2	3	4	5	6

3. How many times have you been treated unfairly by your co-workers, fellow students or colleagues because you are a woman?	1	2	3	4	5	6
4. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, and bank tellers, mechanics, and others) because you are a woman?	1	2	3	4	5	6
5. How many times have you been treated unfairly by strangers because you are a woman?	1	2	3	4	5	6
6. How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, pediatricians, school principal, gynecologists, and others) because you are a woman?	1	2	3	4	5	6
7. How many times have you been treated unfairly by neighbors because you are a woman?	1	2	3	4	5	6

8. How many times have you been treated unfairly by your boyfriend, husband, or other important man in your life because you are a woman?	1	2	3	4	5	6
9. How many times were you denied a raise, a promotion, tenure, a good assignment, a job, or other such thing at work you deserved because you are a woman?	1	2	3	4	5	6
10. How many times have you been treated unfairly by your family because you are a woman?	1	2	3	4	5	6
11. How many times have people made inappropriate or unwanted sexual advances to you because you are a woman?	1	2	3	4	5	6
12. How many times have people failed to show you the respect you deserve because you are a woman?	1	2	3	4	5	6
13. How many times have you wanted to tell someone off for being sexist?	1	2	3	4	5	6

14. How many times have you been really angry for something sexist that was done to you?	1	2	3	4	5	6
15. How many times were you forced to take drastic steps (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some sexist thing that was done to you?	1	2	3	4	5	6
16. How many times have you been called a sexist name like bitch, cunt, chick, or other names?	1	2	3	4	5	6
17. How many times have you gotten into an argument or a fight about something sexist that was done or said to you?	1	2	3	4	5	6
18. How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are a woman?	1	2	3	4	5	6

19. How many times have you heard people making sexist jokes, or degrading sexual jokes?	1	2	3	4	5	6
20. How different would your life be now if you had not been treated in a sexist and unfair way?	The same as it is now? 1	A little different 2	Different in a few ways 3	Different in a lot of ways 4	Different in most ways 5	Totally different 6

Appendix G

Objectified Body Consciousness Scale, Body Surveillance Subscale (OBCS; McKinley & Hyde, 1996)

For the following items, please indicate your extent of agreement

	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neither Agree/Disagree (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1. I rarely think about how I look.*							
2. I think it is more important that my clothes are comfortable than whether they look good on me*							

3. I think more about how my body feels than how my body looks.*							
4. I rarely compare how I look with how other people look.*							
5. During the day, I think about how I look many times.							
6. I often worry about whether the clothes I am wearing make me look good							
7. I rarely worry about how I look to other people*							
8. I am more concerned with what my body can do than how it looks.*							

Note. *Reverse score item.

Appendix H

Everyday Experiences of Benevolent Sexism (adapted from Glick & Fiske, 1996)

Response options (for each group of men):

- 1 (never)
- 2 (once in a while)
- 3 (sometimes)
- 4 (a lot)
- 5 (most of the time)
- 6 (almost all of the time)

1. I am placed on a pedestal by...

- a. My romantic partners
- b. My male friends/peers/co-workers
- c. My male family members

2. I am treated like I have a superior moral sensibility by...

- a. My romantic partners
- b. My male friends/peers/co-workers
- c. My male family members

3. I am cherished and protected by...

- a. My romantic partners
- b. My male friends/peers/co-workers
- c. My male family members
- 4. I am treated like I have a quality of purity by...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 5. I am treated like I have a more refined sense of culture and taste by...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 6. Sacrifices are made in order to provide for me by...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 7. If there were a disaster, I would be rescued first by...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 8. The following act like they adore me...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 9. The following act like they do not feel complete without me...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members
- 10. Despite accomplishment, the following act like they feel incomplete without me...**
 - a. My romantic partners
 - b. My male friends/peers/co-workers
 - c. My male family members

Appendix I

Feminist Identity Composite (Fischer et al., 2000)

The statements listed below describe attitudes you may have toward yourself as a woman. There are no right or wrong answers. Please express your feelings by indicating how much agree or disagree with each statement.

1 = strongly disagree

2 = disagree

3 = neutral or undecided

4 = agree

5 = strongly agree

_____ 1. I like being a traditional female.

_____ 2. My female friends are like me in that we are all angry at men and the ways we have been treated as women.

_____ 3. I am very interested in women artists.

_____ 4. I am very interested in women's studies.

_____ 5. I never realized until recently that I have experienced oppression and discrimination as a woman in this society.

_____ 6. I feel like I've been duped into believing society's perceptions of me as a woman.

_____ 7. I feel angry when I think about the way I am treated by men and boys.

_____ 8. Men receive many advantages in society and because of this are against equality for women.

_____ 9. Gradually, I am beginning to see just how sexist society really is.

_____ 10. Regretfully, I can see ways in which I have perpetuated sexist attitudes in the past.

_____ 11. I am very interested in women musicians.

_____ 12. I am very interested in women writers.

_____ 13. I enjoy the pride and self-assurance that comes from being a strong female.

_____ 14. I choose my "causes" carefully to work for greater equality of all people.

_____ 15. I owe it not only to women but to all people to work for greater opportunity and equality for all.

- _____ 16. In my interactions with men, I am always looking for ways I may be discriminated against because I am female.
- _____ 17. As I have grown in my beliefs I have realized that it is more important to value women as individuals than as members of a larger group of women.
- _____ 18. I am proud to be a competent woman.
- _____ 19. I feel like I have blended my female attributes with my unique personal qualities.
- _____ 20. I have incorporated what is female and feminine into my own unique personality.
- _____ 21. I think it's lucky that women aren't expected to do some of the more dangerous jobs that men are expected to do, like construction work or race car driving.
- _____ 22. I care very deeply about men and women having equal opportunities in all respects.
- _____ 23. If I were married to a man and my husband was offered a job in another state, it would be my obligation to move in support of his career.
- _____ 24. I think that men and women had it better in the 1950s when married women were housewives and their husbands supported them.
- _____ 25. It is very satisfying to me to be able to use my talents and skills in my work in the women's movement.
- _____ 26. I am willing to make certain sacrifices to effect change in this society in order to create a nonsexist, peaceful place where all people have equal opportunities.
- _____ 27. One thing I especially like about being a woman is that men will offer me their seat on a crowded bus or open doors for me because I am a woman.
- _____ 28. On some level, my motivation for almost every activity I engage in is my desire for an egalitarian world.
- _____ 29. I don't see much point in questioning the general expectation that men should be masculine and women should be feminine.
- _____ 30. I feel that I am a very powerful and effective spokesperson for the women's issues I am concerned with right now.

_____ 31. I think that most women will feel most fulfilled by being a wife and a mother.

_____ 32. I want to work to improve women's status.

_____ 33. I am very committed to a cause that I believe contributes to a more fair and just world for all people.

Appendix J

Womanist Subscale of the Feminist Perspectives Scale (FPS; Henley et al., 1998)

The statements listed below describe attitudes you may have towards women of color. There are no right or wrong answers. Please express your feelings by indicating how much agree or disagree with each statement.

1 = strongly disagree

2 = disagree

3 = neutral or undecided

4 = agree

5 = strongly agree

_____ 1. In education and legislation to stop rape, ethnicity and race must be treated sensitively to ensure that women of color are protected equally.

_____ 2. Racism and sexism make double the oppression for women of color in the work environment.

_____ 3. Women of color have less legal and social service protection from being battered than White women have.

_____ 4. Women of color are oppressed by White standards of beauty.

_____ 5. Being put on a pedestal, which White women have protested, is a luxury that women of color have not had.

_____ 6. Anti-gay and racist prejudice act together to make it more difficult for gay male and lesbian people of color to maintain relationships.

_____ 7. In rape programs and workshops, not enough attention has been given to the special needs of women of color.

_____ 8. Discrimination in the workplace is worse for women of color than for all men and White women.

_____ 9. Much of the talk about power for women overlooks the need to empower people of all races and colors first.

_____ 10. The tradition of women of color who are strong family leaders has strengthened the women of color community as a whole.

Appendix K

Empowerment Scale (ES, Rogers et al., 1997)

Please express your feelings by indicating how much agree or disagree with each of the following statements.

- 1 - strongly disagree
- 2 - disagree
- 3 - agree
- 4 – strongly agree

1. I generally accomplish what I set out to do.
2. I have a positive attitude about myself.
3. When I make plans, I am almost certain to make them work.
4. I am usually confident about the decisions I make.
5. I am often able to overcome barriers.
6. I feel I am a person of worth, at least on an equal basis with others.
7. I see myself as a capable person.
8. I am able to do things as well as most other people.
9. I feel I have a number of good qualities.
10. I feel powerless most of the time.
11. Making waves never gets you anywhere.
12. You can't fight city hall.
13. When I am unsure about something, I usually go along with the group.
14. Experts are in the best position to decide what people should do or learn.
15. Most of the misfortunes in my life were due to bad luck.

16. Usually, I feel alone.
17. People have no right to get angry just because they don't like something.
18. People have a right to make their own decisions, even if they are bad ones.
19. People should try to live their lives the way they want to.
20. People working together can have an effect on their community.
21. People have more power if they join together as a group.
22. Working with others in my community can help to change things for the better.
23. Very often a problem can be solved by taking action.
24. People are limited only by what they think is possible.
25. I can pretty much determine what will happen in my life.
26. I am generally optimistic about the future.
27. Getting angry about something is often the first step toward changing it.
28. Getting angry about something never helps.

Appendix L

Alcohol Use

Heavy episodic drinking for women will be assessed with the question “During the last three months, how many times did you have four or more drinks in a 2-hour sitting?” Overall quantity of alcohol consumption will be measured using the Daily Drinking Questionnaire (DDQ; Collins et al., 1985), which assesses typical drinking over the past 90 days. Participants will be asked to estimate their typical alcohol consumption for each day of the week for the past 90 days, to determine peak alcohol consumption, number of drinks per week, and the average number of drinks per week.

The DDQ and the questions on HED are count variables.

1. During the last three months, how many times did you have four or more drinks in a 2 hour sitting?

2. During the last three months, for a TYPICAL WEEK, please indicate the number of alcoholic drinks you consumed each day. (One drink is equivalent to 12 ounces of beer, one shot of liquor either straight or in a mixed drink, or five ounces of wine):

	Number of Drinks (1)
Monday (1)	
Tuesday (2)	
Wednesday (3)	
Thursday (4)	
Friday (5)	
Saturday (6)	
Sunday (7)	

Appendix M

Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ; Kahler,
Strong, & Read, 2005)

1. I have had a hangover (headache, sick stomach) the morning after I had been drinking.	Yes No
2. I have felt very sick to my stomach or thrown up after drinking.	Yes No
3. I have often ended up drinking on nights when I had not planned to drink.	Yes No
4. I have taken foolish risks when I have been drinking.	Yes No
5. I have passed out from drinking.	Yes No
6. I have found that I needed large amounts of alcohol to feel any effect, or that I could no longer get tipsy on the amount that used to get me tipsy or drunk.	Yes No
7. When drinking, I have done impulsive things I regretted later.	Yes No
8. I've not been able to remember large stretches of time while drinking heavily.	Yes No
9. I have driven a car when I knew I had too much to drink to drive safely.	Yes No
10. I have not gone to work or missed classes at school because of drinking, a hangover, or illness caused by drinking.	Yes No
11. My drinking has gotten me into sexual situations I later regretted.	Yes No
12. I have found it difficult to limit how much I drink.	Yes No
13. I have become very rude, obnoxious, or insulting after drinking.	Yes No
14. I have woken up in an unexpected place after heavy drinking.	Yes No
15. I have felt badly about myself because of my drinking.	Yes No

16. I have had less energy or felt tired because of my drinking.	Yes No
17. The quality of my work or school work has suffered because of my drinking.	Yes No
18. I have spent too much time drinking.	Yes No
19. I have neglected my obligations to family, work, or school because of drinking.	Yes No
20. My drinking has created problems between myself and my boyfriend/girlfriend/spouse, parents, or other near relatives.	Yes No
21. I have been overweight because of drinking.	Yes No
22. My physical appearance has been harmed by my drinking.	Yes No
23. I have felt like I needed a drink after I'd gotten up (that is, before breakfast).	Yes No

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