

Female Microaggressions Scale (FeMS): A Comprehensive Sexism Scale

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## ABSTRACT

Overt forms of sexism have become less frequent (Swim Hyers, Cohen & Ferguson, 2001; Sue & Capodilupo, 2008). Nonetheless, scholars contend that sexism is still pervasive but often manifests as female microaggressions, which have been defined as often subtle, covert forms of gender discrimination (Capodilupo et al., 2010). Extant sexism scales fail to capture female microaggressions, limiting understanding of the correlates and consequences of women's experiences of gender discrimination. Thus, the purpose of the current study was to develop the Female Microaggressions Scale (FeMS) based on an existing theoretical taxonomy and content analysis of social media data, which identifies diverse forms of sexism. Two separate studies were conducted for exploratory factor analysis (N = 582) and confirmatory factor analysis (N = 325). Exploratory factor analyses supported an eight-factor, correlated structure and confirmatory factor analyses supported a bifactor model, with eight specific factors and one general FeMS factor. Overall, reliability and validity of the FeMS (general FeMS and subscales) were mostly supported in the two present samples of diverse women. The FeMS' subscales and body surveillance were significantly positively correlated. Results regarding correlations between the FeMS subscales and anxiety, depression, and life satisfaction were mixed. The FeMS (general FeMS) was significantly positively correlated with anxiety, body surveillance, and another measure of sexism but not depression or life satisfaction. Furthermore, the FeMS (general FeMS) explained variance in anxiety and body surveillance (but not depression, self-esteem, or life satisfaction) above and beyond that explained by an existing sexism measure and explained variance

in anxiety and depression (but not self-esteem) above and beyond that explained by neuroticism. Implications for future research are discussed.

## DEDICATION

This work is dedicated to my mother, the most persevering and status-quo breaking woman I know. Your modeling has allowed me brazenly to shape my path in this world.

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## **Introduction**

Overt forms of sexism have become less commonplace (Swim Hyers, Cohen & Ferguson, 2001; Sue & Capodilupo, 2008). The decreased prevalence of overt, explicit sexism may be due, in part, to changing beliefs about traditional gender roles and women's rights to equal opportunity and fair treatment (Capodilupo, Nadal, Corman, Hamit, Lyons, & Weinberg, 2010; Spence & Hahn, 1997). Nonetheless, scholars contend that sexism is still pervasive but manifests in different ways (Capodilupo et al., 2010). These contemporary forms of sexism are thought to be covert, subtle, and/or embedded into sociocultural norms, which increases the likelihood of their occurrence (e.g., because perpetrators do not identify these behaviors as sexist; Nadal, Hamit, Lyons, Weinberg, & Corman, 2013). Indeed, Swim et al. (2001) found that women reported experiencing one to two distressing sexist experiences per week. Many of these incidents included men's expectations that women had certain interests, traits, or abilities due to their perceived gender (i.e., gender stereotyping) as opposed to traditional, hostile sexist behaviors (e.g., being called a "bitch").

Although contemporary forms of sexism are often less explicit and noticeable, they are associated with psychological distress and concerns among women (Moradi & Subich, 2003). For example, higher frequencies of experiences with everyday sexism (e.g., a strange male staring at your body) are positively correlated with anxiety, depression, low social self-esteem, low academic self-efficacy, and low career self-efficacy (Ancis & Phillips, 1996; Swim et al., 2001). Thus, these contemporary forms of sexism can have numerous detrimental consequences for women and need to be the focus

of theory and research on gender discrimination that women must navigate in their daily lives.

Addressing this need, various conceptualizations of sexism and scales measuring these theoretical propositions have been developed (e.g., Glick & Fiske, 1997; Klonoff & Landrine, 1995; Swim & Cohen, 1997). However, most are limited by their focus on one type of sexism (e.g., objectification, or being treated and viewed as a sexual object; Fredrickson & Roberts, 1997) and sexist attitudes or beliefs about women instead of women's actual experiences of sexism (e.g., "women are too easily offended"; Glick & Fiske, 1996).

Gender microaggressions theory contends that women experience subtle as well as hostile, overt forms of sexism in their everyday lives (Capodilupo et al., 2010; Sue, 2010). As will be discussed in detail in a later section, the theory provides the most comprehensive theoretical conceptualization of current forms of sexism in that it delineates distinct categories of sexism (e.g., experiencing sexist language). The seven themes outlined by the taxonomy and supported by qualitative analysis include: 1) sexual objectification, 2) second-class citizenship, 3) assumptions of inferiority, 4) assumptions of traditional gender roles, 5) denial of the reality of sexism, 6) use of sexist language, and 7) environmental (Capodilupo et al., 2010). The categories can be broken down further into specific experiences of sexism (e.g. being called a "slut") that reflect contemporary (i.e., sexism that is subtle and ubiquitous) and traditional conceptualizations of sexism (i.e., sexism that is blatant and hostile). Furthermore, the theory exclusively focuses on women's actual experiences of sexism versus endorsement

of sexist beliefs, providing insight into women's direct experiences of sexism (Nadal et al., 2013).

To date, no published scales exist that correspond to the gender microaggressions taxonomy, limiting research in this area that could further our understanding of women's experiences of sexism. The primary purpose of the current study is to develop a measure of sexism, the Female Microaggressions Scale (FeMS), that addresses this research gap. The FeMS will reflect women's current, diverse experiences of sexism and support future research on the correlates and consequences of these experiences for women.

## **Literature Review**

In the current section, I will provide a brief historical view of sexism in the U.S. and discuss the evolving definition of sexism. Furthermore, I will provide an overview of theories related to current forms of sexism. Finally, I will argue for the importance of developing a scale utilizing a gender microaggressions framework and taxonomy and discuss research on associations between sexism and mental health (Capodilupo et al., 2010).

### **Historical Context and Current Status of Sexism**

Within the past century, feminist movements have impacted the sociopolitical climate to facilitate increased gender equality. During the first wave of American feminism (approximately 1850 to 1920), women fought for and obtained the right to vote (Laughlin, Gallagher, Cobble, & Boris, 2010). Forty years later, the second wave of feminism (approximately mid-1960s to mid-1980s) saw the resurgence of the women's rights movement and established organizations, such as The National Organization for Women, that explicitly focused on combating continued "sexual discrimination in all areas: social, political, economic, and psychological" (Castro, 1999, p. 19; Laughlin et al., 2010). During this time, the Equal Pay Act of 1963 and the Civil Rights Act of 1964 were passed, which supported women's rights to equal economic and employment opportunities (e.g., prohibiting preferential hiring based on gender; National Archives, n.d.). In 1972, Title IX of the Higher Education Act helped to breakdown further systemic barriers by prohibiting federally funded educational programs to discriminate based on gender (Castro, 1999). Finally, *Roe v. Wade* (1972) ensured that women had

the right to terminate a pregnancy and emphasized that women have the right to determine what happens to their bodies (Castro, 1999).

Thus, women made various sociopolitical gains during this time that ultimately impacted and changed gender norms and experiences in the United States. For example, in 1970, 12.1% of pharmacists, 24.6% of accountants, 9.7% of physicians, and 4.9% of lawyers/judges were women (U.S. Census Bureau, 2016). In contrast, by 2010, women's representation in these career fields greatly increased such that women comprised 52.6% of pharmacists, 60% of accountants, 32.4% of physicians, and 33.4% of lawyers/judges. Furthermore, in 2014, 47.4% of the work force and 55.2% of all undergraduate and graduate students were women (U.S. Census Bureau, 2016). During that same year, 43% of women reported voting in the election and 1.6 million women were classified as military veterans (U.S. Census Bureau, 2016).

Despite these gains, research supports that women continue to experience sexism (e.g., Capodilupo et al., 2010; Swim et al., 2001). Women make 79 cents for every dollar that men earn, hold only 5% of executive positions, and represent less than 10% of full professors in math-intensive fields, showcasing the possible systemic barriers that women continue to face while pursuing gender equality (Ceci & Williams, 2010; Nelson & Brammer, 2010; Ragins, Townsend, & Mattis, 1998). Furthermore, in 2011, the U.S. Equal Employment Opportunity Commission received 11,364 complaints of sexual harassment of which 84.7% were filed by women. One in five women have experienced rape and one in three women have experienced physical violence by an intimate partner during their lifetime (National Coalition Against Domestic Violence, 2016).

These findings of persistent sexual harassment of and physical violence against women make it clear that women continue to be oppressed through *overt sexism*, which is defined as “unequal and harmful treatment of women that is readily apparent, visible, and observable, and can be easily documented” (Swim & Cohen, 1997, p. 104). Nonetheless, scholars contend and research has shown that this form of sexism is on the decline (Spence & Hahn, 1997). Instead, it is postulated that subtle and covert forms of sexism are the current norm in women’s daily lives due to the sociopolitical sanctions against blatant sexism (Capodilupo et al., 2010; Spence & Hahn, 1997). Sue (2010) explains, “In today’s societal climate, it is not politically correct to hold overtly sexist attitudes or engage in obvious discriminatory actions toward women because it is at odds with beliefs of equality” (p. 169). *Subtle sexism* involves discriminatory treatment against women that can be difficult to identify because “it is perceived to be customary or normal” (Swim & Cohen, 1997, p. 104). Making the assumption that an authority figure is a man is an example of subtle sexism because it sends the message that women are not capable of occupying these types of positions. It may be difficult to identify this assumption as sexist because it reflects societal gender norms (i.e., men and women should adhere to specific roles; Capodilupo et al., 2010). Furthermore, individuals who engage in subtle sexism may hold and/or value egalitarian attitudes and, yet, be unaware that they are engaging in subtle sexist behaviors and that these types of behaviors can have a negative impact on women (Sue, 2010).

Sue (2010) purports that:

As men, we have been culturally conditioned through a socio-political process that denigrates the importance of women, objectifies them, and views them as inferior beings. On the one hand, we may hold conscious beliefs of equality between the sexes, yet at another level also hold unconscious or hidden biases and negative attitudes toward women. (p. 177)

Thus, individuals who believe in egalitarianism may perpetuate systemic and individual sexism by their lack of awareness of the underlying sexist beliefs and actions that perpetuate gender discrimination in its contemporary form (Sue, 2010). Like subtle sexism, *covert sexism* is difficult to identify. However, it is characterized by intentionally harmful acts toward women that are masked and/or hidden (e.g., not hiring a woman because of her sex but stating the decision was made because of her lack of qualifications for the position; Swim & Cohen, 1997).

Research supports that these contemporary conceptualizations of sexism are pervasive in women's lives. A review of women's representation in the media found that they are frequently treated as sexual objects and their self-worth is often linked to their physical appearance, indicating that sexual objectification of women is embedded within sociocultural norms and not readily identified as sexist (APA, 2007). Furthermore, a daily diary study found that undergraduate women enrolled in a gender studies course reported various sexist incidents over a two-week period that included: 1) receiving comments that women should adhere to traditional gender roles (e.g., "A professor in one participant's class stressed that all the great scientists in the world were men"); being



exposed to sexist language and jokes (e.g., “Another woman noted that a man she just met came up to her, put his arm around her, and called her ‘his woman’”); and being sexually objectified (e.g., receiving catcalls; Swim et al., 2001, pgs. 36-37). Nielsen (2002) utilized field observations and telephone or in-person interviews with participants who were recruited from diverse public places (e.g., bus stops and sidewalks) to examine women’s everyday experiences of sexism. Sixty-one percent of the women interviewed reported “sexually suggestive speech” directed at them every day or often (Nielsen, 2002, p. 36). The content of the speech included remarks about their bodies (e.g., “nice ass” or “you’re a very pretty girl, very pretty girl”) or assumptions that they were available to men (e.g., “Hi honey, gonna have lunch with me?”; Nielsen, 2002, pgs. 271-272). A study among adolescent females (ages 12-18) similarly found that experiences of diverse forms of sexism are commonplace (Leaper & Brown, 2008). For example, 90% of the sample reported having experienced sexual harassment at least once, which included instances such as receiving unwanted romantic advances, being called demeaning names, and receiving critiques about their physical appearance (Leaper & Brown, 2008). Fifty-two percent had received messages that devalued their academic abilities and 76% had experienced discouragement regarding their athletic abilities (Leaper & Brown, 2008).

In summary, within the past century, women have gained various political and social rights. Nonetheless, research supports that sexism is still pervasive in women’s lives. Specifically, traditional or hostile forms of sexism may be on the decline, but theory and research support that sexism has transformed into more subtle, covert forms that continue to shape women’s lives.

## **Current Theories of Sexism**

Due to the prevalence and changing nature of sexism, various conceptualizations of sexism have been introduced within the past 20 years to better account for the current diverse manifestations of the phenomenon. The theories most prevalent in the literature will be discussed below, which include ambivalent sexism, objectification theory, everyday sexism, modern sexism, and gender microaggressions. Each conceptualization furthers understanding of sexism, but, as will be argued, gender microaggressions theory provides the most comprehensive framework for examining women's current experiences of sexism (Nadal et al., 2013)

**Ambivalent sexism.** Glick & Fiske's (1996) *ambivalent sexism* represents the polarized ways in which women are represented and discriminated against. They explain, "Sexism is indeed a prejudice...and probably always has been, a special case of prejudice marked by a deep ambivalence, rather than a uniform antipathy, toward women" (Glick & Fiske, 1996, p. 491). Specifically, the authors contend that sexism involves hostile (hostile sexism) and benevolent (benevolent sexism) attitudes toward women. *Hostile sexism* is characterized by antipathy toward women and reflects traditional conceptualizations of prejudice (Glick & Fiske, 1996). In contrast, *benevolent sexism* involves endorsement of traditional gender stereotypes that are perceived by the perpetrator and/or target as positive and/or flattering. For example, believing that females are pure and need to be protected would be categorized as a benevolent sexist attitude (Glick & Fiske, 1996). Although benevolent sexism may be perceived as portraying women in a positive light, it remains harmful to them because it reinforces

assumptions of female inferiority and gender roles and placates women's objections to sexism (e.g., by making them reliant on males for protection and utilizing seemingly positive language to characterize women; Glick & Fiske, 1996). Furthermore, both benevolent and hostile sexism are needed to perpetuate patriarchy (i.e., male dominance) because the former positively reinforces women who adhere to traditional gender roles while the latter punishes those who reject gender inequality and traditional gender norms (Glick & Fiske, 1996).

To assess ambivalent sexism, Glick & Fiske (1996) developed a 22-item measure that includes hostile sexist (e.g., "Women seek to gain power by getting control over men;" "Once a woman gets a man to commit to her, she usually tries to put him on a tight leash") and benevolent sexist items (e.g., "Many women have a quality of purity that few men possess;" "Women should be cherished and protected by men"). Participants are asked to indicate how strongly they endorse each item (0 = *Disagree strongly* to 5 = *Agree strongly*).

Benevolent and hostile sexism have been found to be unique constructs (Glick & Fiske, 1996) and prevalent across cultures (Glick et al., 2000). Furthermore, an experimental study among undergraduates found that women exposed to benevolent sexist statements more highly agreed that the current sociopolitical system is fair and just when compared to women who were exposed to positive statements that do not reflect traditional gender stereotypes about women (e.g., "Women, compared to men, tend to be more realistic;" Jost & Kay, 2005). This finding supports the possible placating effect of benevolent sexism on women's resistance to gender inequality.

**Everyday sexism.** *Everyday sexism* focuses on gender discrimination that women are frequently confronted with during their daily lives (Swim et al., 2001). Swim et al. (2001) explain:

Everyday experiences with prejudice can emerge in one's home, from one's family, or on the street from strangers. These types of experiences have been referred to as everyday prejudice or interpersonal discrimination and represent the expression of prejudice and discriminatory behavior embedded in people's daily lives. (p. 32)

Because everyday sexism captures the daily discrimination that women face as opposed to other conceptualizations that focus on individuals' endorsement of sexist beliefs, it may better represent the current biases women must navigate. Furthermore, everyday sexism may be particularly harmful to women due to its chronic nature and prevalence in multiple domains of women's lives (e.g., personal and professional lives; Swim et al., 2001).

In order to measure the frequency with which women experience sexism in their daily lives, Klonoff and Landrine (1995) constructed The Schedule of Sexist Events (SSE) scale. The scale examines both lifetime and past year sexist events and consists of 20 items. Participants are asked to indicate how frequently (1 = *The event never happened* to 6 = *The event happens almost all of the time*) they have encountered sexist experiences (e.g., "Heard people making sexist jokes or degrading sexual jokes"). Internal consistency estimates for the SSE-lifetime and SSE-past year subscales ranged

from .61- .89 among a sample of diverse women recruited from public places (e.g., an airport).

Supporting its validity, empirical research utilizing the SSE has found positive links between women's experiences of everyday sexism and mental health issues. For example, Klonoff, Landrine, and Campbell (2000) examined associations between the SSE and mental health disorder symptomatology among undergraduate students. They found that women who reported higher frequencies of sexist events in the past year had greater somatization, depression, anxiety, interpersonal sensitivity, and obsessive compulsions when compared to women who reported lower frequencies of sexist events and men. Similar research has found associations between women's experiences of sexism, as measured by the SSE, and post-traumatic stress disorder symptomatology, binge drinking, and smoking tobacco (Berg, 2006; Zucker & Landry, 2007).

**Objectification theory.** Fredrickson & Roberts (1997) proposed *objectification theory* to explain women's experiences of sexual objectification and associated consequences. Specifically, they contend that women frequently experience sexual objectification through interpersonal interactions and exposure to mainstream media. These experiences convey the message that women are objects that exist for the pleasure of men and not whole, autonomous human beings. Moreover, these messages may result in women's *self-objectification* processes (i.e., women view and treat themselves as objects; Moradi & Huang, 2008) that involve internalizing sociocultural ideals of beauty (i.e., *internalization*; Fredrickson & Roberts, 1997; Moradi, Dirks, & Matteson, 2005)

and/or perpetual monitoring of their physical appearance (i.e., *body surveillance*; Fredrickson & Roberts, 1997).

Due to the increased focus on their physical appearance, self-objectification processes can lead women to experience shame about their bodies (i.e., *body shame*) when they compare themselves to sociocultural beauty ideals and believe they do not meet such standards (Fredrickson & Roberts, 1997). Furthermore, they may experience increased anxiety about being sexually assaulted and/or judged because of their physical appearance; decreased ability to experience flow, or “being fully absorbed in challenging mental or physical activity;” and/or decreased awareness of their physiological sensations (e.g., hunger cues; Fredrickson & Roberts, 1997, p. 182). Increased negative affect related to physical appearance and decreased ability to engage in reinforcing activity and/or awareness of physical cues can, in turn, result in more severe pathology such as depression, disordered eating, and sexual dysfunction (Fredrickson & Roberts, 1997; Moradi et al., 2005).

The *Interpersonal Sexual Objectification Scale (ISOS)* assesses the frequency with which women experience incidents of being sexually objectified within the past year (Kozee, Tylka, Augustus-Horvath, & Denchik, 2007). Factor analysis has supported two-factors: 1) body evaluation and 2) unwanted explicit sexual advances (Kozee et al., 2007). The scale consists of 15 items, such as, “How often have you been whistled at while walking down a street?” and “How often have you felt that someone was staring at your body?” (Kozee et al., 2007). Internal consistency was .91 (body evaluation) and .78 (unwanted explicit sexual advances) among a sample of undergraduate females (Kozee et

al., 2007). The ISOS has been found to correlate higher with the SSE sexist degradation subscale than the other SSE subscales, providing evidence for convergent and divergent validity (Kozee et al., 2007). Furthermore, the ISOS explained variance in body surveillance and internalization of thin beauty ideals above and beyond that explained by the SSE (Kozee et al., 2007), indicating that objectification experiences are a unique form of sexism.

**Modern sexism.** *Modern sexism* represents subtle and covert forms of discrimination against women. The theory contends that current sexism involves denial of gender inequality, resentment towards women who fight towards achieving gender equality, and antipathy towards policies that seek to ameliorate sexism (Swim, Aikin, Hall, & Hunter, 1995). Modern sexism can be detrimental to women because it invalidates the continued discrimination that women experience and denigrates efforts toward gender equality (Capodilupo et al., 2010).

The *Modern Sexism Scale* (MSS) was developed to measure this construct and consists of eight items, such as, “Women often miss out on good jobs due to sexual discrimination” (reverse scored); and “Society has reached the point where women and men have equal opportunities for achievement” (Swim & Cohen, 1997; Swim et al., 1995). When studied in a sample of undergraduate students, internal reliability was acceptable (Cronbach’s alpha = .84). The MSS was found to better predict perceptions of sexual harassment in the workplace when compared to the Attitudes Toward Women Scale (a measure examining traditional or overt sexism; Swim et al., 1995). Furthermore, men and women with higher MSS scores are more likely to overestimate the number of

women in fields typically dominated by men (e.g., engineer and architect) and less likely to vote for a female political candidate when compared to men and women with lower MSS scores (Swim et al., 1995). Taken together, these findings support that this form of sexism can have important ramifications for women.

**Microaggressions.** Microaggression research and theory has focused recently on gender discrimination, but, initially, the theory garnered attention through its unique conceptualization of racial minority groups' experiences of racial discrimination (Pierce, 1970). *Racial microaggressions* are “brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group” (Sue et al., 2007, p. 273). *Racial microaggression theory* contends that racism has evolved to be subtle and covert, as current sociocultural norms generally reject blatant, overt discriminatory acts (Sue et al., 2007). Their less obvious form and insidious nature can make microaggressions even more detrimental than explicit racist acts, as racial/ethnic minorities must expend psychological and emotional energy to justify to themselves and others whether they experienced a racial microaggression (Sue et al., 2007). Furthermore, racial microaggressions are difficult to combat because perpetrators often believe that they are not discriminatory and/or did not engage in a discriminatory act (Sue et al., 2007).

Racial microaggressions are categorized into microassaults, microinsults, and microinvalidations. *Microassaults* include overt verbal and non-verbal discriminatory acts (e.g., directing a racial slur at a target; Sue et al., 2007). *Microinsults* involve more



subtle racist messages that may be less obvious to the perpetrator but are offensive and harmful to the target (e.g., a White teacher paying less attention to racial minority students; Sue et al., 2007). *Microinvalidations* “exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color” (e.g., telling a person of color they are being too sensitive when they describe a racist event; Sue et al., 2007, p. 274). The three subcategories are further subdivided into nine microaggressions themes: 1) alien in own land, 2) ascription of intelligence, 3) color blindness, 4) criminality/assumption of criminal status, 5) denial of individual racism, 6) myth of meritocracy, 7) pathologizing cultural values/communication styles, 8) second-class citizen, and 9) environmental microaggressions.

Research has shown that racial microaggressions are associated with various negative psychosocial outcomes for racial minority groups (see review by Wong, 2014). For example, during focus groups with 12 African American students, Sue, Capodilupo, and Holder (2008) found that participants’ experiences of microaggressions were linked to four main themes: 1) a sense of powerlessness (e.g., unable to combat microaggressions); 2) invisibility (e.g., their contributions are not valued); 3) forced compliance and loss of integrity (e.g., feeling forced to comply with dominant sociocultural norms); and 4) pressure to represent one’s group. To examine racial microaggressions among Asian Americans, Wang, Leu, and Shoda (2011) utilized a mixed-method approach and exposed Asian American undergraduate participants to 12 hypothetical subtle discrimination scenarios. Both closed- and open-ended responses indicated that when Asian Americans more strongly perceived the situation to be race-

related, they experienced heightened negative emotions (e.g., anger). The authors utilized the same methodology in a second study to compare possible differences in reactions to the hypothetical situations between Asian American and White undergraduate students. Primary findings indicated that associations between race-related appraisals and negative emotions were significantly stronger for Asian American than White participants.

Given the popularity of racial microaggressions theory and research, Sue and Capodilupo (2008) extended the racial microaggression framework to focus specifically on women's experiences of sexism. *Gender microaggressions* are viewed as "brief and commonplace daily verbal, behavioral, and environmental indignities that communicate hostile, derogatory, or negative sexist slights and insults toward women" (Capodilupo et al., 2010, p. 197). Gender microaggressions theory takes into account both interpersonal and environmental experiences of sexism. An example of the latter would be displaying sexually provocative pictures of women in a work environment. Although the original authors utilize the term gender microaggressions, "gender" will be replaced with "female" throughout the remainder of the paper because the study seeks to understand specifically women's experiences of sexism (i.e., as opposed to discrimination both males and females may experience; Sue & Capodilupo, 2008).

As with racial microaggressions, three broad categories are provided: female microassaults, female microinsults, and female microinvalidations. *Female microassaults* involve perpetrators' explicit, intentional sexist acts such as calling a woman a "bitch" or whistling at a woman on the street (Capodilupo et al., 2010). *Female*

*microinsults* are characterized by often subtle, unintentional sexist behaviors that support demeaning or negative views of women (Capodilupo et al., 2010). *Female microinvalidations* are enacted when women's internal experiences or perspectives are invalidated or ignored (e.g., not believing a woman's account of sexism; Capodilupo et al., 2010). Sue and Capodilupo (2008) propose various microaggressions that individuals of oppressed groups may face of which six themes specifically relate to women. Specifically, they contend that women may face microaggressions that involve: 1) *sexual objectification*, 2) *second-class citizen*, 3) *assumptions of inferiority*, 4) *denial of the reality of sexism*, 5) *assumptions of traditional gender roles*, and 6) *use of sexist language*. Nadal (2010) expanded this taxonomy by including *denial of individual sexism* (e.g., an individual engaging in a sexist act and denying that they are sexist) and *environmental microaggressions* (e.g., the media's portrayal of women as sex objects) as relevant themes.

In the first qualitative study on female microaggressions, Capodilupo et al. (2010) conducted in-depth interviews with 12 adult female participants. They found that all proposed themes were supported by the data except for denial of individual sexism. Denial of the reality of sexism was an underdeveloped theme in that only one participant reported an incident that was coded under this category (Capodilupo et al., 2010). Furthermore, an underdeveloped theme that was not outlined by the theoretical taxonomy was identified (*leaving gender at the door*; the original themes supported by this research will be discussed in detail in a subsequent section).

Although extant research on female microaggressions theory is limited, female microaggressions extend and integrate previous conceptualizations of sexism and present the opportunity to understand better the impact of sexism on women in a number of ways. The various themes outlined by Sue (2010) and supported by Capodilupo (2010) capture the current major theories of sexism. For example, denial of the reality of sexism aligns with modern sexism in that both concepts capture instances when women's experiences of gender discrimination are invalidated and/or dismissed (Capodilupo et al., 2010; Swim et al., 1995). The female microaggressions framework also provides additional themes not addressed by previous theories of sexism such as assumptions of inferiority and second-class citizenship (Nadal et al., 2013; Sue, 2010). Furthermore, female microaggressions theory take into account both interpersonal and environmental sexism (Sue, 2010). Research on everyday sexism and objectification theory, which capture sexist events, has focused mainly on sexism that manifests during interpersonal interactions. Yet, research shows that women frequently experience and report sexism present in their daily environments (e.g., media's objectification of women; APA, 2007). Thus, it seems important to assess and understand how these forms of sexist experiences impact women's social and psychological well-being. Unlike previous theories on sexism, female microaggressions have been defined by three subcategories that include microassaults, microinsults, and microinvalidations. Microassaults capture hostile, traditional forms of sexism while microassaults and microinsults represent subtle, covert forms of sexism (Capodilupo et al., 2010; Nadal et al., 2013). These distinctions capture the main forms of sexism delineated in the extant literature (i.e., hostile/traditional,

subtle, and covert sexism; Swim & Cohen 1997) and provide the opportunity to assess simultaneously how these unique conceptualizations of sexism are present in and impact women's lives. Female microaggressions also represent women's perceived experiences of sexism as opposed to individuals' endorsement of sexist beliefs (i.e., modern sexism and ambivalent sexism). Examining women's experiences of sexism versus sexist beliefs is important. Extant literature supports that beliefs do not always translate into action (Ajzen, 1987; Sue, 2010). For example, an individual may endorse egalitarian beliefs, yet engage in unintentional or intentional sexist acts because of societal norms that denounce overtly sexist beliefs (Swim & Cohen, 1997; Sue, 2010). Also, discrimination research has focused on targets' perceived experiences of discrimination (versus discriminatory beliefs) and shown consistent links between individuals' reported perceived discriminatory experiences and mental and physical outcomes (Pascoe & Smart Richman, 2009).

In summary, research on racial microaggressions provides support for applying microaggressions theory when examining minority groups' experiences of diverse forms of discrimination. Furthermore, although limited, extant scholarship on female microaggressions supports that it integrates and adds to current conceptualizations of sexism. Capodilupo et al.'s (2010) qualitative study supported seven out of eight conceptual themes of female microaggressions, which will be discussed below.

### **Themes of Female Microaggressions**

**Sexual Objectification.** Fredrickson & Roberts (1997) explain that *sexual objectification* occurs “whenever a woman's body, body parts, or sexual functions are

separated out from her person, reduced to the status of mere instruments, or regarded as if they capable of representing her” (Fredrickson & Roberts, 1997, p. 175). For example, the objectifying male gaze (e.g., being stared at while walking down the street) denies a woman’s right to be treated as a whole person and treats her as a visually and/or sexually appealing stimulus. Capodilupo et al. (2010) contend that sexual objectification experiences send the message to women that their “...value is in their bodies” and their bodies “... are meant to entertain men” (p. 206). The category most closely aligns with objectification theory and emphasizes the frequency with which women are exposed to sexual objectification and the detrimental consequences of such experiences (Capodilupo et al., 2010; Fredrickson & Roberts, 1997).

Numerous studies have supported women’s experiences of sexual objectification. Capodilupo et al.’s (2010) qualitative study found that women reported incidents of sexual objectification that included being whistled at, called “cute”, stared at, and grabbed without consent. One participant explained, “It happens all the time. I mean, like, you know, sometimes just walking down the street, you hear a guy whistling at you or saying, ‘Oh, hey, you look really cute’ or something. ‘Let me know your name’” (Capodilupo et al., 2010, p. 202). In Swim et al.’s (1997) daily diary study, undergraduate females reported experiencing an average of 1.38 sexually objectifying incidents during the previous week (Swim et al., 2001).

Furthermore, women’s sexual objectification experiences have been associated with various negative intrapersonal and interpersonal outcomes. Correlational research utilizing objectification theory as a framework has supported the possible negative

consequences of sexual objectification experiences for diverse women that include: increased body shame; body surveillance (i.e., chronic monitoring of one's physical appearance); internalization of sociocultural standards of beauty (i.e., believing that one's body should meet a specific beauty standard); anxiety about one's physical appearance; disordered eating; depression; and sexual dysfunction (Moradi et al., 2005; Noll & Fredrickson, 1998; Tiggemann, 2011; Tiggeman & Slater, 2001; Peat & Muehlenkamp; Syzmanski & Henning, 2007; Tiggemann & Kuring, 2004; Calogero & Thompson, 2009; Steer & Tiggemann, 2008; Tiggemann & Williams, 2012).

Experimental studies also have supported the negative consequences of sexual objectification for women. Utilizing a sample of female undergraduate students (sexual orientation was not assessed), the effects of anticipating a male gaze were examined. Women who were told they would be interacting with a man had higher levels of anxiety and body shame regarding their physical appearance when compared to females who anticipated interacting with a woman (Calogero, 2004). Tiggeman (2001) examined the influence of hypothetical objectifying experiences on undergraduate female's body satisfaction and body self-esteem. Women were asked to imagine themselves in one of four situations: 1) walking by men and women at a beach while wearing a bathing suit (social, objectification); 2) trying on a bathing suit in a retail store (non-social, objectification); 3) having lunch with a friend (social); and 4) getting ready for school (non-social). Results showed that women in the first two conditions had lower body satisfaction and body self-esteem when compared to women in the latter two conditions. Findings indicate that women in both social and non-social objectifying situations are

more likely to experience lower body satisfaction and body self-esteem when compared to women in non-objectifying situations.

Taken together, theoretical and empirical work emphasize that women are frequently confronted with and navigate sexual objectifying experiences. Furthermore, these experiences can culminate in various negative psychosocial outcomes for women. Thus, sexual objectification is an important and pervasive form of sexism that should be assessed in the Female Microaggression Scale (FeMS).

**Second-class citizen.** Incidents captured by *second-class citizen* occur when men are provided affordances and opportunities that women are not. Participants in Capodilupo et al.'s (2010) study reported experiences of being paid less than men for equitable positions and receiving less financial support than males when playing on high school sports team. A participant explained the meaning of such experiences for her: “[It’s like we’re] not as smart or capable and that’s why we are not paid as well for the same work” (p. 203). Capodilupo et al. (2010) explain that these types of experiences equate to the general message that “women’s contributions are not as valuable as men’s” (p. 206). Research on the gender wage gap and women’s lack of representation in STEM fields and top executive positions support the pervasiveness of this type of sexism and importance of assessing it in sexism research (Raggins et al., 1998; U.S. Census Bureau, 2016).

**Assumptions of inferiority.** *Assumptions of inferiority* relates to benevolent sexism in that it assumes that traditional female stereotypes often include perceptions that women are kind, warm, and helpful (Eagly & Mladinic, 1993; Glick & Fiske, 1996).



Although these traits might be viewed as positive and flattering, they are inversely related to attributions of intelligence and competence (i.e., warm but not competent; Cuddy, Fiske, & Glick, 2008; Eagly & Mladinic, 1994). Furthermore, it is theorized that these stereotypes are perpetuated to maintain patriarchal dominance and female subordination by characterizing women in a seemingly positively manner (e.g., warm) but also denying them equal opportunities because of the underlying assumption that they are less competent than men (Cuddy et al., 2008; Glick & Fiske, 1996).

Supporting the proposition that women are likely viewed as less competent than men, Capodilupo et al. (2010) found that women reported various incidents in which men treated them as intellectually and physically inferior. When describing the culture at work regarding women's physical abilities, one participant explained, "I mean, my job, I don't necessarily move heavy boxes or anything like that, but a lot of the time, like, the men...they won't...they purposely just won't go ask the girl to do it" (Capodilupo et al., 2010, p. 203). Other participants reported incidents in which their technical abilities (e.g., working with computers) were questioned. In Swim et al.'s (2001) daily diary study examining everyday sexism, one of three themes was "traditional gender role prejudice and stereotyping," which included the devaluation of women's competence in traditionally male roles (p. 36). For example, one participant discussed an incident that involved her husband stating to her that she should not "worry her pretty little head about these complex insurance issues" when discussing a bill with an employee (Swim et al., 2001, p. 36). Other women's experiences included assumptions by men that they were not capable of engaging in sports (Swim et al., 2001).

Research on stereotype threat also supports that women receive messages that they are less competent than men in certain intellectual domains (Spencer, Steele, & Quinn, 1999). *Stereotype threat* proposes that minority groups are stereotyped as being less valuable and capable in specific domains and that these stereotypes are known by both the targeted group and outgroups (Spencer et al., 1999). Furthermore, when the stereotype is made salient to a member of the targeted group, the ability in question is important to the member of the targeted group, and the member of the targeted group perceives that s/he may be evaluated based on the stereotype, her/his performance in that domain may be negatively affected (e.g., via a self-fulfilling prophecy; Spencer et al., 1999).

As applied to women, research has shown that women's math performance declines when they are primed to be aware of the stereotype regarding women's limited math abilities and do not want their performance to support the stereotype (i.e., because they identify with their math abilities; see meta-analysis by Nguyen & Ryan, 2008). For example, Spencer, Steele, and Quinn (1999) examined how stereotype threat influences women's math performance on a computerized math test. Participants were randomly assigned to one of two conditions: 1) told the first half of the test has shown gender differences while the second half has not shown gender differences or 2) told the first half of the test has not shown gender differences while the second half has shown gender differences. Both groups read a brief statement that indicated previous research has shown that there may be gender differences in math ability among those with low math skills, and participants were specifically chosen for the current study because of their

strong math abilities. Results showed that women performed worse than men on the portion of test that they were told has shown gender differences but performed equally as well as men on the portion of the test that they were told has not shown gender differences. These findings indicate that women are exposed to stereotypes regarding women's abilities and these messages can impact women's actual performance when made salient.

Theory and research described above support that women are likely to receive messages that they are less competent than and inferior to men. Furthermore, these messages can be utilized to oppress women by devaluing their abilities and limiting their engagement in traditionally male-dominated activities. Women may also internalize these messages, resulting in a self-fulfilling prophecy.

**Assumptions of traditional gender roles.** Similar to assumptions of inferiority and benevolent sexism, *assumptions of traditional gender roles* contend that women likely face stereotypes regarding appropriate social roles they may occupy (Capodilupo et al., 2010; Glick & Fiske, 1996). Participants in Capodilupo et al.'s (2010) study discussed incidents in which they were expected to be feminine, refrain from smoking, be accompanied by men when going to bars, cook and clean for men, and have children. One participant explained, "When we were girls, we were always put into this image that we're going to be the mother, we're going to have the kids. We're always with our moms, cooking, learning, you know, dressing up like her, thinking you know what will be the perfect mom. It's already pre-arranged for us" (Capodilupo et al., 2010, p. 204).

Research on ambivalent sexism has also shown that both males and females endorse various benevolent sexist beliefs, which are conceptually similar to traditional gender roles (i.e., theoretically, benevolent sexism and assumptions of traditional gender roles both support traditional gender roles and norms; Glick & Fiske, 1996). Furthermore, men and women who more strongly endorse benevolent sexism are more likely to blame the victim when a rape victim does not adhere to traditional gender role expectations, and women who are exposed to benevolent sexist statements are more likely to accept systemic gender inequality than women who are exposed to gender-neutral statements, indicating the negative implications of traditional gender role expectations for women (Becker & Wright, 2011; Viki & Abrams, 2002).

Empirical findings support that women are faced with assumptions that they should adhere to traditional gender roles. Furthermore, these types of gender stereotypes can impact women's lives by decreasing their involvement in various social roles and criticizing women that do not adhere to gender-stereotypical roles. Thus, the prescription of traditional roles can be utilized to support the status quo.

**Denial of the reality of sexism.** *Denial of the reality of sexism* is most closely related to *modern sexism* in that it represents men's contention that sexism is no longer an issue in current society and invalidation of women's reports of sexist incidents (Capodilupo et al., 2010; Swim et al., 1997). For example, when a woman describes an incident of street harassment to a male friend and he responds by stating, "That's not a big deal," he invalidates her concerns and belief that the incident is sexist. Although the theme was underdeveloped in Capodilupo et al.'s (2010) study (i.e., only one participant

described an incident that was coded under the category), modern sexism theory purports that traditional forms of sexism may manifest into beliefs that sexism is no longer an issue.

Examining the detrimental impact of modern sexism in three related experiments among Dutch undergraduate students, Ellemers and Barreto (2009) found that when women were led to believe that society in general or a hypothetical supervisor held modern sexist beliefs, they were less likely to perceive the beliefs as sexist, more likely to experience anger, less likely to support collective action against gender inequality, less likely to express intentions to protest against the sexist beliefs, and less likely to engage in actions focused on protesting the beliefs than when they were led to believe society or a hypothetical supervisor held hostile sexist beliefs. In a related study among a Dutch undergraduate sample, exposure to modern sexist beliefs increased anxiety when compared to exposure to hostile sexist beliefs (Barreto & Ellemers, 2005). These findings indicate that when women are exposed to beliefs that indicate sexism is no longer prevalent, they are likely to experience decreased motivation to engage in and/or endorse actions combating gender inequality and increased negative emotions.

Theory and research on modern sexism support that women's reported experiences of and beliefs about the pervasiveness of sexism may be invalidated by men. Women, in turn, may internalize associated underlying messages (e.g., that they did not experience sexism and it is no longer an important social issue). Internalization of these types of messages can then influence their emotional state (e.g., increased anger) and motivation to engage in actions that combat gender inequality.

**Use of sexist language.** *Use of sexist language* “occurs when language is used to degrade a woman” during interpersonal interactions (Capodilupo et al., 2010, p. 207). For example, participants in Capodilupo et al.’s (2010) study recounted experiences that involved being called or hearing other women being called “bimbos” and “sluts.” Participants in Nielsen’s (2002) qualitative study discussed incidents in which they were called “dyke,” “baby,” and “honey.” Each type of sexist language can send differing messages to women. For example, being called a “slut” may send the message that it is not okay for women to be sexually active and/or have multiple sexual partners (Capodilupo et al., 2010). Being called “baby” may send the message to women that they are inferior to or less competent than males and infantilize them (i.e., paternalism; Glick & Fiske, 1996).

To the author’s knowledge, no studies have explicitly examined the mental health correlates of women’s experiences of sexist language, as defined by the female microaggressions framework. Nonetheless, Swim et al.’s (2001) daily diary study found positive associations between women’s experiences of sexism in general (including experiences of sexist language) and negative affect (e.g., anger, anxiety, and depression), as well as lower social/interpersonal self-esteem. However, the study did not examine specifically the link between sexist language and outcome variables, limiting understanding of how this type of sexism influences women. Thus, the current study includes this theme in the FeMS to extend extant scholarship on sexism by explicitly focusing on sexist language women encounter during interpersonal interactions.

**Environmental.** Microaggressions can occur on the macro-level (cf. within direct interpersonal interactions; Capodilupo et al., 2010; Sue et al., 2007). The Equal Employment Opportunity Commission (n.d.) explains that systemic discrimination involves “a pattern or practice, policy, or class case where the alleged discrimination has a broad impact on an industry, profession, company, or geographic areas.” Thus, environmental female microraggressions that are systemic in nature would include the lack of paid maternity leave for employees and the gender wage gap (i.e., that women receive 79 cents for every dollar men earn) because they discriminate against women, in general, through practices and policies. As Capodilupo et al. (2010) explains, women’s lack of representation in certain fields and unequal compensation for work when compared to men can send the detrimental message to women that “they are less than or not capable of being successful in that arena...or are inferior to men” (p. 205 & 207).

Women also frequently experience environmental microaggressions through media exposure that sexually objectifies and devalues women. For example, a review by the APA Task Force (2007) found that women are often portrayed in a sexual manner (e.g., wearing revealing clothing) and utilized as objects in various forms of media (e.g., utilized to decorate a setting). Research on *objectification theory* supports the detrimental consequences of sexual objectification experiences for women (Fredrickson & Roberts, 1997; Moradi et al., 2005). As discussed previously, sexual objectification experiences have been directly and indirectly linked to negative psychological outcomes such as self-objectification (i.e., internalization of sociocultural standards of beauty and body surveillances); body shame; disordered eating; depression; and sexual dysfunction

(Calogero & Thompson, 2009; Moradi et al., 2005; Peat & Muehlenkamp, 2011). These findings are particularly concerning given that research has found that women have become more accepting of sexual images of women in the media within the past 20 years (Zimmerman & Dahlberg, 2008).

In summary, women are exposed to female microaggressions through policies and practices at institutional (e.g., gender wage gap) and societal (e.g., media) levels. Although women's experiences of these forms of female microaggressions are linked to negative intrapersonal and interpersonal outcomes, they may view them as acceptable because they are embedded within sociocultural gender norms. Thus, including environmental microaggressions in the FeMS will support future research that examines the effects of macro-level sexism for women and how women process such forms of sexism (e.g., internalizing messages received through media). Incidents categorized under other themes could also be classified as environmental (e.g., the gender wage gap could be classified under second-class citizen and environmental themes; Capodilupo et al., 2010). In the current study, items developed for other themes (i.e., not environmental) will exclusively reflect interpersonal interactions to limit overlap with the environmental theme.

### **Microaggressions and Mental Health**

Although growing, research on associations between experiences of microaggressions and mental health is lacking (Wong, Derthick, David, Saw, & Okazaki, 2014). Nonetheless, links between experiences of various forms of discrimination (e.g., perceived racial discrimination) and negative mental health outcomes have been well



documented (e.g., Pascoe & Smart Richman, 2009; Williams, Neighbors, & Jackson, 2003). For example, meta-analyses have found robust links between perceived discrimination (including racism and sexism) and depression, anxiety, self-esteem, and life satisfaction (Schmitt et al., 2014; Pascoe & Smart Richman, 2009). Furthermore, extant research on broad experiences of sexism supports the adverse impact of gender-based discrimination on the intrapersonal and interpersonal functioning of diverse women (e.g., Borrell, Artacoz, Gil-Gonzalez, Perez, Perez, Vives-Cases, & Rohlfs, 2011; Moradi & Subich, 2003; Schmitt et al., 2014; Syzmanski, 2005; Syzmanski & Stewart, 2010). In their daily diary study of college women, Swim et al. (2001) found that women's experiences of sexism (e.g., expectations that women adhere to traditional gender role stereotypes) were linked to increased anger and depression and decreased self-esteem. As such, it would be expected that women's experiences of female microaggressions, which are theorized to be chronic, ubiquitous, and stressful, would also be linked to negative mental health outcomes for women (Capodilupo et al., 2010). Furthermore, substantial research supports links between sexual objectification and body surveillance (continual monitoring of one's appearance; Fredrickson & Roberts, 1997), which, in turn, is associated with various mental health outcomes (e.g., depression; Moradi et al., 2005; Moradi & Huang, 2008; Moradi, 2013). Thus, female microaggressions also likely are linked with body surveillance, especially because taxonomy of female microaggressions includes experiences of sexual objectification.

## **The Current Study**

Diverse scales assessing sexism have advanced understanding of women's experiences of sexism. Nonetheless, these measures typically assess limited forms of sexism. For example, the SSE is one of the most widely utilized measures of sexism but most of the questions ask women to indicate how frequently they have been treated unfairly by someone because of their gender (Klonoff & Landrine, 1995). Not including diverse forms of sexism (e.g., invalidation of women's experiences of sexism, sexual objectification) makes it impossible to ascertain if or how each type of unfair or sexist event relates to a certain outcome. Furthermore, all scales discussed above exclude or include limited items representing environmental sexism. Yet, research supports the pervasiveness of this form of sexism in women's lives (e.g., APA, 2007). Thus, the current project seeks to develop a comprehensive sexism scale that integrates and adds to previous conceptualizations and measures of sexism by utilizing a female microaggressions framework. Specifically, during two studies, it will develop the FeMS that includes seven themes supported by theory and qualitative research: 1) sexual objectification, 2) second-class citizen, 3) assumptions of inferiority, 4) traditional gender roles, 5) denial of the reality of sexism, 6) use of sexist language, and 7) environmental.

The first study will focus on initial scale development and utilize exploratory factor analysis to determine the initial factor structure of the FeMS. Additionally, initial reliability (i.e., internal reliability of the factors) and validity (i.e., correlations between the FeMS and anxiety, depression, self-esteem, neuroticism, and another sexism measure; incremental validity described below) within the present sample will be examined. The

second study will confirm the factor structure identified in Study 1 and further examine reliability (i.e., internal reliability of the factors) and validity within the current sample (i.e., correlations between the FeMS and anxiety, depression, satisfaction with life, body surveillance, and another sexism measure; incremental validity described below).

An eight-factor structural model is predicted based on theory, previous qualitative studies, and initial scale development of the FeMS (see Study 1 for more information on initial scale development). The factors include: 1) Sexual Objectification, 2) Second-class citizen, 3) Assumptions of inferiority, 4) Traditional gender roles, 5) Denial of the reality of sexism, 6) Sexist language, 7) Environmental, and 8) Threatened Physical Safety. Higher-order latent variables representing microassaults, microinvalidations, and microinsults are not expected because each factor can contain measured variables that might receive differing classifications. For example, the use of sexist language factor may contain an item that would be classified as a microassault (being called a “bitch”) and another item that would be classified as a microinsult (e.g., being referred to as “honey”).

Furthermore, it is predicted that the FeMS will have no more than a small correlation ( $r < |.1|$ ) with a measure of neuroticism (as an indication of discriminant validity) but medium to large correlations ( $r > |.3|$ ) with measures of depression, anxiety, self-esteem, life satisfaction, body surveillance, and another measure of sexism, as indications of convergent validity (Cohen, 1988). That is, participants’ perceptions of their experiences with female microaggressions should not be highly related to their tendencies toward neuroticism. If they are, their endorsement (or non-endorsement) of

experiences with sexism may be due to this personality trait (correlations will of course not be able to determine this). Additionally, if they are highly correlated, the utility of the FeMS would be called into question because a measure of neuroticism would be equally useful in predicting relevant outcomes. However, the FeMS should have medium ( $r = .3$ ) to large ( $r = .5$ ) correlations with depression, anxiety, global self-esteem, satisfaction with life, body surveillance, and another sexism measure (i.e., SSE; Klonoff & Landrine, 1995) based on extant sexism research (Cohen, 1992).

To support incremental validity within the current two samples, it is predicted that the FeMS will explain variance in depression, anxiety, global self-esteem, satisfaction with life, and body surveillance above and beyond that explained by the SSE (Klonoff & Landrine, 1995) and explain variance in depression, anxiety, and self-esteem above and beyond that explained by neuroticism. As discussed previously, the FeMS aims to measure a wide variety of experiences with sexism; thus, it should explain unique variance in these constructs when compared to previous measures of sexism (i.e., the SSE). Furthermore, the FeMS should explain variance in depression, anxiety, global self-esteem, satisfaction with life, and body surveillance above and beyond that explained by neuroticism to support its unique association with these constructs.

## **Study 1: Exploratory Factor Analysis**

### **Initial Scale Development**

A deductive approach to scale development was utilized, which is characterized as the creation of items based on an existing taxonomy or typology (Hinkin, 1998). Thus, a deductive approach is typically chosen when sufficient theoretical definitions of a phenomenon exist and can be used to create items (Hinkin, 1998). The goal of the study was to develop items based on the extant female microaggressions framework, which is appropriate for the deductive approach. Furthermore, 12 items per category were created. It is likely that some items will eventually be eliminated during exploratory factor analysis and, thus, targeting this initial amount will still allow for a sufficient amount of items per category (i.e., three to five items are required per factor; Fabrigar, Wegener, MacCallum, & Strahan, 1999).

Initial items were created by examining the first 1,000 tweets from #YESALLWOMEN. Twitter is an on-line public forum, and the #YESALLWOMEN thread began in reaction to the murder of six and injury of 13 individuals by a male whose actions were interpreted as being motivated by misogyny (Isla Vista killings; Serna, 2015). The tweets surround women's experiences of sexism and violence and were imported into NVivo version 11.0 for coding purposes. Utilizing a content analysis approach (i.e., analyzing qualitative data, such as social media text, to understand phenomenon; Hsieh & Shannon, 2005), the study's author and a master's-level graduate research assistant in Counseling coded each tweet independently by determining whether it reflected one of seven themes outlined by Capodilupo et al.'s (2010) taxonomy. If a

tweet did not reflect one of seven themes, it was coded into an “other” category. After coding the first 100 tweets, the study’s author and research assistant noted that many tweets involved women’s fears and/or anxiety about their physical safety during possible and/or actual interactions with men. Thus, a *threatened physical safety* category was added and items reflecting this theme were included in the FeMS. After coding the remaining 900 tweets, the study’s author and research assistant met to discuss and resolve any discrepancies in coding. The final number of tweets coded under each category are as follows: denial of the reality of sexism = 144, environmental = 62, inferiority = 6, second-class citizen = 7, sexist language = 10, sexual objectification = 125, traditional gender roles = 40, threatened physical safety = 142, and other = 464. Tweets in the “other” category were not deemed to represent possible new themes and were often responses to previous tweets.

A sufficient number of items were not identified for each of the seven categories based on tweets alone (i.e., at least 12). Thus, the author and master’s-level graduate research assistant in Counseling developed additional items independently based on extant theory, empirical findings, and personal experiences. They met to review the items and chose those deemed best to represent each category. Four expert reviewers, who are doctoral-level scholars and have expertise in research and literature related to microaggressions, sexism, multicultural issues, and/or scale development, examined the items and provided feedback. Specifically, via an on-line survey, a list of items was provided under each theme, and reviewers were asked to rate each item in terms of clarity (1 = unclear to 3 = clear) and provide any additional feedback for each item (e.g.,

additional items that could be included). Items were revised, deleted, and/or developed based on this input, and a final list of 83 items was identified (see Appendix A).

### **Participants**

Scholars make varied recommendations regarding the appropriate number of participants for exploratory and confirmatory factor analysis (Pett, Lackey, & Sullivan, 2002). For example, Tabachnick and Fidell (2001) state that at least 300 participants are appropriate for factor analysis. Instead of utilizing an overall sample size criterion, Costello and Osborne (2005) recommend a subject-to-item ratio when determining the number of participants for factor analysis, although they did not provide a specific ratio to follow. They found that previous studies have utilized ratios ranging from 2:1 to 10:1. The current study decided to follow a 5:1 ratio (i.e., 83 items were included in the original FeMS and, thus, 415 participants were targeted), which is congruent with a number of recommendations and has been utilized more frequently than other ratios in extant research (e.g., Costello & Osborne, 2003; Costello & Osborne, 2005). Only demographic variables, depression, anxiety, self-esteem, the FeMS, and another measure of sexism (i.e., SSE; Klonoff & Landrine, 1995) were assessed during this study due to the large number of items in the initial FeMS.

**Recruitment.** Individuals who identified as a woman and were at least 18-years-old were eligible for the study. Flyers and announcements were sent out to various academic programs and departments, university listservs, Craigslist, and social media to ensure adequate representation and a diverse sample. A diverse representation of individuals from academic programs or departments and professional organizations that

correspond to often male-dominated (e.g., engineering); female-dominated (e.g., education); and gender-equivalent (i.e., equitable female to male ratios; e.g., business) disciplines was targeted. University students were offered extra credit if provided and agreed upon by a specific course. For those courses that did not offer extra credit and professionals not currently attending a university, an opportunity to receive a \$25 gift card was utilized as incentive (i.e., via a raffle). University students were eligible for both extra credit when provided by a course and the raffle.

**Demographics.** Female undergraduate students, graduate students, working professionals, and community members participated in the study. Seven hundred and twenty-two responses were collected. After removing cases with more than 10% of missing data and two participants who responded incorrectly to the two validity items included in the study (see Results section for more information), the final sample consisted of 582 participants.

Participants' mean age was 27.76 ( $SD = 10.89$ ), and 54.8% were ages 18 to 24, 35.1% were ages 25 to 44, 9.4% were ages 45 to 64, and 0.7% were 65 or older. Furthermore, 0.9% identified as American Indian or Alaska Native, 10.3% identified as Asian or Asian American, 3.6% identified as Black or African American, 10.1% identified as Hispanic or Latinx, 2.2% identified as Middle Eastern or Arab American, 0.3% identified as Native Hawaiian or Other Pacific Islander, 62.5% identified as White, and 10.1% identified as multiracial or "Other" (e.g., selected more than one race/ethnicity or explicitly selected the "Other" category). Additionally, 14.2% identified as bisexual, 78.8% identified as heterosexual or straight, 0.2% identified as gay, 3.1% identified as



lesbian, and 3.8% identified as “other” (e.g., asexual, queer, demisexual, pansexual). Regarding highest level of education, 1.2% reported completing primary school or high school, 37.2% reported completing some college, 4.1% reported having an associate’s degree, 22.4% reported having a bachelor’s degree, and 35.1% reported having a graduate or professional degree. Furthermore, 15.2% reported a household income below \$15,000, 30.3% reported a household income between \$15,000 and \$49,999, 28.4% reported a household income between \$50,000 and \$99,999, and 25.3% reported a household income over \$100,000. Four participants did not report their household income. Additionally, 38.4% had a full-time job, 43.7% worked part-time, 17.0% were unemployed, and 1.0% were retired. The majority of participants reported that they were born in the U.S. (87.8%), and 38.2% were single, 39.7% were in a relationship but not married, 20.4% were married, and 1.7% reported they were “other” (e.g., widow, divorced, engaged).

## **Measures**

**Demographic questionnaire.** Participants were asked to provide information on their race/ethnicity, age, sexual orientation, major or graduate program (if applicable), highest level of education, future or current occupation, current employment status, mother’s and father’s occupation, country of origin (if applicable, year of arrival to the U.S.), household income, and relationship status (see Appendix B).

**FeMS (Female Microaggressions Scale).** The initial FeMS consisted of 83 items. Items were randomized and presented to each participant in the same order. Participants were asked to indicate how often an event has occurred within their lifetime.

Possible response choices were: 1 = *never*, 2 = *a little/rarely*, 3 = *sometimes/a moderate amount*, and 4 = *often/frequently*. This response scale was chosen because frequency scaling is consistent with previous conceptualizations of female microaggressions as potentially pervasive in women's daily lives (e.g., Lewis & Neville, 2015).

**Schedule of Sexist Events (SSE; Klonoff & Landrine, 1995).** The SSE assesses past year and lifetime sexist incidents. The scale contains 20 items and asks participants to indicate how frequently (1= *the event never happened* to 6 = *the event happens almost all of the time*) they have encountered each sexist experience, with higher scores indicating more frequent experiences of sexism; see Appendix C). Example items include: "Treated unfairly by teachers or professors because one is a woman," and "Treated unfairly by your family because one is a woman." Factor analysis has supported two-, three-, and four-factor solutions (Klonoff & Landrine, 1995; Matteson & Moradi, 2005). Given the inconsistency in results and previous research supporting the use of the overall SSE score (e.g., Matteson & Moradi, 2005), the current study utilized the total SSE score. Internal reliability (lifetime:  $\alpha = .92$  and past year:  $\alpha = .90$ ) and split-half reliability (lifetime:  $r = .87$  and past year:  $r = .83$ ) were acceptable in a sample of undergraduate females (Klonoff & Landrine, 1995). In the current study, internal reliability was good (lifetime:  $\alpha = .94$  and past year:  $\alpha = .93$ ).

**General Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006).** The GAD-7 is a brief screening measure for assessing Generalized Anxiety Disorder. Participants are asked to indicate how strongly they experienced each symptom during the past two weeks (0 = *not at all* to 3 = *nearly every day*; see Appendix

D). Example items include: “Feeling nervous, anxious, or on edge,” and “Not being able to stop or control worrying.” Responses are summed, and higher scores indicate greater mental health symptomatology. Cronbach’s alpha in a clinical sample was .92 (Spitzer et al., 2006) and was .89 in a community sample of German women (Lowe et al., 2008). In the clinical sample, the GAD-7 was also correlated with the Beck Anxiety Inventory, the anxiety subscale of the Symptom Checklist-90, and the PHQ-8, supporting convergent validity (Spitzer et al., 2006). Internal reliability was acceptable in the current study ( $\alpha = .92$ ).

**Patient Health Questionnaire-9; (PHQ-9; Kroenke & Spitzer, 2001).** The PHQ-9 screens for depressive symptomatology (see Appendix E). The scale consists of nine items and asks participants how frequently (0 = *not at all* to 3 = *nearly every day*) they have experienced each concern within the past two weeks (e.g., “Little interest or pleasure in doing things,” “feeling down, depressed, or hopeless”). Higher scores indicate greater depressive symptomatology. Within primary care and obstetrics-gynecology patient samples, internal reliability was good ( $\alpha = .89$ ; Kroenke & Spitzer, 2001). Furthermore, as indications of convergent validity, the PHQ-9 was significantly correlated with various measures of functionality, with increasing scores on the PHQ-9 associated with greater deficits in various domains of functioning (e.g., mental health, social functioning; Kroenke & Spitzer, 2001). Internal reliability was adequate in the current study ( $\alpha = .86$ )

**Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965).** The RSES is a 10-item measure of global self-esteem (see Appendix F). Participants indicate how strongly

they agree (1 = *strongly disagree* to 4 = *strongly agree*) with five positively-worded (e.g., “On the whole, I am satisfied with myself”) and five negatively-worded (“I certainly feel useless at times”) items. Negatively-worded items were reverse-coded so higher scores on the RSES indicated greater self-esteem. Among a sample of undergraduate students, Cronbach’s alpha was .88 and test-retest reliability over a four-year period was .69 (Robins, Hendin, & Trzesniewski, 2001). Furthermore, the RSES was positively correlated with variables such as life satisfaction, academic self-efficacy, perceived intelligence, perceived physical attractiveness, and extraversion, providing evidence of convergent validity (Robins et al., 2001). In the current study, internal reliability was acceptable ( $\alpha = .91$ ).

**Neuroticism subscale of the Revised Eysenck Personality Questionnaire (EPQ-Revised; Eysenck, Eysenck, & Barrett, 1985).** The neuroticism subscale of the EPQ-Revised consists of 12 items (e.g., “Does your mood often go up and down?”). A dichotomous response format is provided (i.e., 1 = *yes* and 0 = *no*), with higher scores indicating higher levels of neuroticism (see Appendix G). Internal reliabilities have been found to range from .78 to .83 among a large undergraduate sample (Francis, Brown, & Philipchalk, 1992). Kuder-Richardson 20 was .80 in the current study.

## **Results**

**Data screening.** Analyses were conducted utilizing SPSS version 25. Data were screened for missing cases. Participants with more than 10% of missing data were removed from analyses ( $N = 138$ ; Schlomer, Bauman, & Card, 2010). Furthermore, two validity check items were included in the study. After removing participants with more

than 10% of missing data, results showed that 23 participants responded incorrectly to one validity item, two participants provided incorrect responses to both validity items, and four participants did not provide responses to either validity questions. Previous research has indicated that the majority of participants admit to responding carelessly to at least one item in self-report surveys. For example, 50%-73% of participants in previous research have admitted to responding carelessly to at one least item during surveys (e.g., Berry et al., 1992; Baer, Ballenger, Berry, & Wetter, 1997). In their examination of careless responding, Meade and Craig (2011) found that 32.8% of participants were flagged by one validity index (e.g., at least one incorrect response to nine validity questions that were “bogus” items, such as “I have never brushed my teeth”, p. 7), and 15% of participants were flagged by more than one validity index (e.g., bogus items and yes or no items asking whether participants’ data should be used in the study). They argued that participants in the latter category (i.e., individuals who were flagged by more than one validity index) might be viewed as periodically responding carelessly or inattentively (i.e., their data might still be useful). As such, eliminating individuals in the current study who responded incorrectly to only one of the validity items seemed too stringent, especially because of the long length of the survey. Thus, individuals who responded incorrectly to both validity items (i.e., two participants) were removed.

Data were examined to determine whether data were missing completely at random (MCAR), missing at random (MAR), or not missing at random (NMAR; Schlomer et al., 2010). Specifically, utilizing the entire data set (after removing the cases described above), a Little’s MCAR test was conducted. Results indicated that data were

not MCAR ( $\chi^2(2698) = 2913.30, p = .002$ ). As such, Little's MCAR tests were run on each scale, separately. The Schedule of Sexist Events-past year ( $\chi^2(53) = 100.31, p < .001$ ) and PHQ-9 ( $\chi^2(8) = 25.86, p = .001$ ) had significant results, indicating the data were not MCAR. For the SSE-past year, there were seven missing cases and a maximum of two missing cases per question. There was one missing case in the PHQ-9.

Expectation-maximization was chosen as the imputation method. This approach involves creating scores for missing data by estimating parameters via observed data (Schlomer et al., 2010). Expectation-maximization is deemed appropriate when data are MCAR or MAR and for factor analysis (Schlomer et al., 2010). Given the limited amount of missing data for scales not deemed MCAR, expectation-maximization was also chosen as the imputation method.

**Exploratory factor analysis.** Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity were conducted to determine the factorability of the FeMS. Regarding KMO, the following criteria are suggested: .90 = "marvelous," .80 = "meritorious," .70 = "middling," and less than .60 = "mediocre" (Kaiser, 1974, p.35). Bartlett's Test of Sphericity tests the null hypothesis that there are no correlations among the items (Pett et al., 2003). Thus, a significant result indicates that the items are appropriate for factor analysis. In the current study, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was .97 and Bartlett's Test of Sphericity was significant  $\chi^2(3403) = 29586.94, p < .001$ , indicating the data were factorable.

In order to examine the factor structure of the scale, an exploratory factor analysis utilizing principal axis factoring (PAF) was conducted. Due to the uncertainty of

correlations between the factors and the possibility of higher-order factors, an oblique rotation was applied (Oblimin with Kaiser Normalization; Fabrigar et al., 1999). If correlations between the factors do not exist, an oblique rotation will produce results similar to those obtained from an orthogonal rotation (Fabrigar et al., 1999). The study utilized Minimum Average Partial tests (MAP; Velicer, 1976); Parallel Analysis tests (O'Connor, 2000); and theoretical propositions to determine the number of factors that were retained. Minimum Average Partial test supported a nine-factor solution while Parallel Analysis supported 12 possible factors. As such, nine- and 12-factor solutions were examined.

The 12-factor solution did not make theoretical sense and had three factors with two items or less with a factor loading of more than .30. The nine-factor solution also had one factor with only one item with a factor loading above .30. Thus, an eight-factor solution was examined. As suggested by Pett et al. (2003), if an item had a communality (i.e., amount of variance in the item explained by all the factors) less than .30, then the item was removed ( $N = 2$ ). Additionally, through an iterative process, items with low factor loadings (less than  $|\cdot 30|$ ) were removed ( $N = 12$ ) and exploratory factor analysis rerun. This resulted in four to 11 items per factor.

In order to reduce the number of items per factor, items that did not fit theoretically with a given factor ( $N = 11$ ), items with low variance ( $N = 5$ ), and items that were deemed too similar in a given factor ( $N = 19$ ) were removed and exploratory factor analysis rerun. The final version of the FeMS was comprised of eight factors with a total of 34 items, and no changes were made to the items (e.g., re-wording; see Table 1).

Table 1

*Final 34-Item FeMS Factor Loadings*

| Item   | 1           | 2            | 3           | 4     | 5     | 6     | 7     | 8     |
|--|-------------|--------------|-------------|-------|-------|-------|-------|-------|
| Factor 1: Traditional Gender Roles                                     |             |              |             |       |       |       |       |       |
| ( $N_{items} = 4$ ; eigenvalue = 11.653)                               |             |              |             |       |       |       |       |       |
| 18. Someone assumed that I want children because of my gender          | <b>0.74</b> | 0.04         | 0.06        | 0.09  | -0.15 | 0.08  | 0.02  | -0.02 |
| 77. Someone assumed that I want to get married because of my gender    | <b>0.69</b> | -0.08        | 0.11        | -0.02 | 0.02  | -0.02 | 0.06  | 0.06  |
| 34. Someone assumed that I am nurturing because of my gender           | <b>0.52</b> | -0.02        | 0.05        | -0.04 | -0.02 | -0.22 | 0.00  | 0.11  |
| 59. Someone expected that I should cook and clean because of my gender | <b>0.47</b> | -0.06        | -0.07       | 0.10  | 0.02  | -0.18 | 0.16  | 0.01  |
| Factor 2: Sexist Language  |             |              |             |       |       |       |       |       |
| ( $N_{items} = 4$ ; eigenvalue 2.330)                                  |             |              |             |       |       |       |       |       |
| 9. Someone called me a “whore”   | 0.03        | <b>-0.89</b> | -0.09       | 0.03  | -0.05 | 0.03  | -0.00 | 0.00  |
| 39. Someone called me a “slut”   | 0.00        | <b>-0.82</b> | 0.02        | 0.09  | 0.03  | 0.03  | 0.06  | -0.01 |
| 10. Someone called me a “bitch”  | -0.00       | <b>-0.61</b> | 0.04        | 0.03  | -0.14 | -0.03 | 0.04  | -0.02 |
| 53. Someone called me a “tease”  | 0.03        | <b>-0.48</b> | 0.17        | 0.05  | 0.10  | -0.10 | -0.02 | 0.13  |
| Factor 3: Implicit Threatened Physical Safety                          |             |              |             |       |       |       |       |       |
| ( $N_{items} = 4$ ; eigenvalue = 1.950)                                |             |              |             |       |       |       |       |       |
| 35. Someone told me to watch my  | 0.03        | -0.15        | <b>0.66</b> | -0.10 | -0.05 | 0.01  | -0.04 | 0.05  |



drink when I am in a social setting

17. Someone told me to have some form of self-defense (e.g., pepper spray) when going out in a public place

37. Someone told me that I should have a safety plan when going on a first date (e.g., tell a friend where I am going)

21. Someone told me not to walk alone because I might be raped or assaulted

#### Factor 4: Explicit Threatened Physical Safety

( $N_{items} = 4$ ; eigenvalue = 1.415)

1. A man said something to me that made me feel unsafe

30. A man (a stranger) followed me in a public place

74. A man stared at me in a threatening manner

65. Someone touched me without my consent

#### Factor 5: Invalidation of the Reality of Sexism

( $N_{items} = 5$ ; eigenvalue = 1.337)

12. Someone told me that men also experience discrimination when we

were discussing sexism

29. Someone told that sexism is no -0.01 -0.02 0.05 0.11 **-0.65** -0.13 0.07 -0.06

longer an important social issue

24. Someone told me that women 0.08 -0.04 0.02 -0.06 **-0.62** 0.02 -0.05 -0.02

have the same opportunities as men

13. Someone told me that women 0.09 -0.04 -0.01 0.12 **-0.51** -0.16 0.15 0.00

are being too sensitive when they

say they experience gender

discrimination

68. Someone told me that “not all 0.05 -0.12 0.14 -0.05 **-0.31** -0.07 0.20 0.16

men are like that” (or something

similar) when we were discussing

sexism

Factor 6: Assumptions of Inferiority/Second-Class Citizen

( $N_{items} = 5$ ; eigenvalue = 1.300)

54. Someone assumed that I am not 0.00 -0.02 0.10 0.02 -0.03 **-0.72** -0.00 -0.10

good at math because of my gender

50. Someone assumed that I am not -0.03 -0.11 -0.05 0.06 -0.08 **-0.68** 0.04 0.02

intelligent because of my gender

48. Someone did not ask me about 0.09 -0.02 -0.11 -0.02 -0.00 **-0.66** 0.06 0.14

my career or accomplishments when

first meeting me because of my

gender

55. Someone assumed that I am not 0.08 0.04 0.04 0.07 0.04 **-0.62** 0.03 -

athletic because of my gender .050

72. Someone incorrectly attributed  
my work to a man

|       |      |      |      |       |              |      |      |
|-------|------|------|------|-------|--------------|------|------|
| -0.03 | 0.03 | 0.02 | 0.03 | -0.09 | <b>-0.59</b> | 0.02 | 0.08 |
|-------|------|------|------|-------|--------------|------|------|

Factor 7: Environmental

( $N_{items} = 4$ ; eigenvalue = 1.090)

51. I observed that men hold more  
leadership positions in society than  
women

|       |       |      |       |       |       |             |      |
|-------|-------|------|-------|-------|-------|-------------|------|
| -0.09 | -0.04 | 0.04 | -0.02 | -0.02 | -0.07 | <b>0.69</b> | 0.03 |
|-------|-------|------|-------|-------|-------|-------------|------|

64. I observed in the media that  
women are not believed when they  
report being sexually harassed

|      |      |       |      |       |       |             |       |
|------|------|-------|------|-------|-------|-------------|-------|
| 0.12 | 0.00 | -0.02 | 0.11 | -0.14 | -0.01 | <b>0.54</b> | -0.01 |
|------|------|-------|------|-------|-------|-------------|-------|

16. I observed in the media that  
people excuse men's behavior by  
saying "boys will be boys" (or  
something similar)

|      |      |       |      |       |       |             |      |
|------|------|-------|------|-------|-------|-------------|------|
| 0.17 | 0.01 | -0.02 | 0.05 | -0.10 | -0.02 | <b>0.53</b> | 0.04 |
|------|------|-------|------|-------|-------|-------------|------|

75. I observed women portrayed as  
housewives on T.V.

|      |       |      |       |      |       |             |      |
|------|-------|------|-------|------|-------|-------------|------|
| 0.20 | -0.10 | 0.05 | -0.09 | 0.07 | -0.08 | <b>0.51</b> | 0.03 |
|------|-------|------|-------|------|-------|-------------|------|

Factor 8: Sexual Objectification

( $N_{items} = 4$ ; eigenvalue = .900)

3. Someone gave me compliments  
about my appearance before talking  
about something else

|      |       |      |      |       |       |      |             |
|------|-------|------|------|-------|-------|------|-------------|
| 0.05 | -0.02 | 0.08 | 0.01 | -0.01 | -0.03 | 0.02 | <b>0.57</b> |
|------|-------|------|------|-------|-------|------|-------------|

5. Someone catcalled me (e.g.,  
whistled at me) while I was walking  
down the street

|      |       |       |      |       |      |      |             |
|------|-------|-------|------|-------|------|------|-------------|
| 0.00 | -0.05 | -0.02 | 0.29 | -0.01 | 0.06 | 0.05 | <b>0.49</b> |
|------|-------|-------|------|-------|------|------|-------------|

6. Someone told me that I am too  
pretty to look unhappy

|      |       |       |      |       |       |       |             |
|------|-------|-------|------|-------|-------|-------|-------------|
| 0.09 | -0.16 | -0.06 | 0.07 | -0.14 | -0.11 | -0.12 | <b>0.47</b> |
|------|-------|-------|------|-------|-------|-------|-------------|

|                                    |      |      |      |      |       |       |      |             |
|------------------------------------|------|------|------|------|-------|-------|------|-------------|
| 7. I observed someone staring at a | 0.02 | 0.04 | 0.13 | 0.08 | -0.05 | -0.00 | 0.22 | <b>0.40</b> |
| woman's body                       |      |      |      |      |       |       |      |             |

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The first factor, Traditional Gender Roles, includes four items that reflect others' assumptions regarding appropriate social roles for women (e.g., "Someone assumed that I want children because of my gender"). The factor accounted for 32.80% of the variance. The second factor, Sexist Language, is comprised of four items that capture words that are denigrating and demeaning to women (e.g., "Someone called me a whore") and accounted for 5.56% of the variance. The third factor, Implicit Threatened Physical Safety, includes four items that capture implications or indirect messages that a woman's physical safety is at risk (e.g., "Someone told me to watch my drink when I am in a social setting") and accounted for 4.34% of the variance. The fourth factor, Explicit Threatened Physical Safety, involves more direct or explicit actions that threaten a women's sense of physical safety. The factor is comprised of four items (e.g., "Someone touched me without my consent," "A man said something to me that made me feel unsafe") and accounted for 2.85% of the variance. The fifth factor accounted for 2.77% of the variance and was labeled Denial of the Reality of Sexism. The five items capture individuals' invalidation of women's experiences of sexism and gender discrimination (e.g., "Someone told me that men also experience discrimination when we were discussing sexism"). The sixth factor, Assumptions of Inferiority/Second-Class Citizen, is comprised of five items and accounted for 2.45% of the variance. The factor captures others' expectations that women have inferior abilities in traditionally male domains or individuals ignoring women's accomplishments and abilities (e.g., "Someone assumed

that I am not good at math because of my gender”). The seventh factor, Environmental, includes implicit and explicit messages in the environment (e.g., in the media) that perpetuate the oppression and marginalization of women (e.g., “I observed that men hold more leadership positions in society than women”). The factor is comprised of four items and accounted for 1.86% of the variance. The final factor, Sexual Objectification, is comprised of four items and captures individuals perceiving and treating women as objects or body parts, instead of whole human beings (e.g., “Someone gave me compliments about my appearance before talking about something else”). The factor accounted for 1.30% of the variance.

**Reliability.** Internal reliabilities for all subscales within the current sample were acceptable. Cronbach’s alphas were: Traditional Gender Roles = .84, Sexist Language = .84, Implicit Threatened Physical Safety = .79, Explicit Threatened Physical Safety = .83, Denial of the Reality of Sexism = .83, Assumptions of Inferiority/Second-Class Citizen = .84, Environmental = .77, and Sexual Objectification = .73. Additionally, all subscales were significantly positively correlated with each other ( $r = .21$  to  $r = .62$ ; see Table 2).

Table 2

*Correlations between the FeMS, Anxiety, Depression, Self-esteem, Neuroticism, and SSE, Means, and Standard Deviations*

| Var     | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11      | 12      | 13      | 14      | 15   | M   | SD |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|------|-----|----|
| 1.Trad  | .57*** | .47*** | .47*** | .58*** | .61*** | .42*** | .50*** | .79*** | .17*** | .18*** | -.11*** | .13***  | .53***  | .48***  | 2.95 | .82 |    |
| 2. Real |        | .49*** | .50*** | .53*** | .56*** | .46*** | .51*** | .80*** | .24*** | .23*** | -.15*** | .22***  | .56***  | .53***  | 2.68 | .74 |    |
| 3. Imp  |        |        | .42*** | .32*** | .40*** | .36*** | .41*** | .66*** | .25*** | .22*** | -.19*** | .24***  | .35***  | .41***  | 3.01 | .77 |    |
| 4. Exp  |        |        |        | .53*** | .41*** | .57*** | .61*** | .76*** | .31*** | .28*** | -.19*** | .19***  | .69***  | .59***  | 2.23 | .69 |    |
| 5. Inf  |        |        |        |        | .48*** | .42*** | .45*** | .76*** | .24*** | .19*** | -.11*** | .11***  | .63***  | .55***  | 2.06 | .77 |    |
| 6. Env  |        |        |        |        |        | .33*** | .42*** | .70*** | .16*** | .17*** | -.11*** | .16***  | .53***  | .44***  | 3.41 | .60 |    |
| 7. Lan  |        |        |        |        |        |        | .54**  | .69*** | .29*** | .24*** | -.17*** | .22***  | .54***  | .47***  | 2.02 | .72 |    |
| 8. Obj  |        |        |        |        |        |        |        | .74*** | .20*** | .13**  | -.03    | .10*    | .58***  | .53***  | 2.89 | .65 |    |
| 9.Gen   |        |        |        |        |        |        |        |        | .32*** | .28*** | -.18*** | .24***  | .75***  | .68***  | 2.64 | .53 |    |
| 10.An   |        |        |        |        |        |        |        |        |        | .72*** | -.55*** | .63***  | .31***  | .36***  | 1.96 | .78 |    |
| 11.Dep  |        |        |        |        |        |        |        |        |        |        | -.66*** | .54***  | .31***  | .35***  | 1.74 | .62 |    |
| 12.Self |        |        |        |        |        |        |        |        |        |        |         | -.60*** | -.22*** | -.25*** | 3.03 | .59 |    |

|        |        |        |      |     |
|--------|--------|--------|------|-----|
| 13.Neu | .17*** | .26*** | 1.49 | .27 |
| 14.SL  |        | .81*** | 2.59 | .80 |
| 15.SP  |        |        | 2.13 | .74 |

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*Note.* Trad = Traditional Gender Roles, Real = Denial of the Reality of Sexism, Imp = Implicit Threatened Physical Safety, Exp = Explicit Threatened Physical Safety, Inf = Assumptions of Inferiority/Second-Class Citizen, Env = Environmental, Lan = Sexist Language, Obj = Sexual Objectification, Gen = general FeMS, An = Anxiety, Dep = Depression, Self = Self-esteem, Neu = Neuroticism, SL = SSE-lifetime, SP = SSE-past year

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

**Validity.** To examine validity, the general FeMS and subscales were included in analyses because scholars have emphasized the overall cumulative effect of microaggressions (i.e., general FeMS) and the possible unique effects of specific forms of microaggressions on individuals' psychosocial functioning (e.g., Sue et al., 2007; Sue, Capodilupo, & Holder, 2008). As indications of convergent validity, within the current sample, the FeMS (general FeMS and each subscale) was significantly correlated with the SSE-past year and SSE-lifetime (see table 2). Correlations ranged from  $r = .35$  to  $r = .75$ . Furthermore, the FeMS (general FeMS and each subscale) was significantly positively correlated with depression and anxiety and negatively associated with self-esteem, except for a non-significant correlation between the Sexual Objectification factor and self-esteem., The FeMS (general FeMS and each subscale) was significantly positively correlated with neuroticism, but all correlations were within the small range, supporting discriminant validity.

Hierarchical regressions were conducted to examine the incremental validity of the FeMS for the current sample. Specifically, in separate analyses, the SSE-lifetime was entered in the first step and the FeMS (general FeMS) was entered during the second step to predict unique variance in depression, anxiety, and self-esteem. The same analyses were conducted with neuroticism replacing the SSE-lifetime in the first step (i.e., with depression, anxiety, and self-esteem as outcome variables).

The FeMS (general FeMS) predicted unique variance in anxiety above beyond that explained by the SSE-lifetime ( $R^2_{\text{change}} = .016$   $F_{\text{change}}(581) = 10.58$ ,  $p < .001$ ). For every one-unit increase in the FeMS, there was a .19 unit increase in anxiety ( $\beta = .19$ ,  $t$



(1, 581) = 3.25,  $p < .001$ ). The FeMS did not predict unique variance in depression ( $R^2_{\text{change}} = .005$ ,  $F_{\text{change}}(581) = 3.31$ ,  $p = .069$ ) or self-esteem ( $R^2_{\text{change}} = .001$ ,  $F_{\text{change}}(581) = .467$ ,  $p = .495$ ) above and beyond that explained by the SSE-lifetime. Furthermore, the FeMS predicted unique variance in anxiety ( $R^2_{\text{change}} = .030$ ,  $F_{\text{change}}(581) = 30.50$ ,  $p < .001$ ) and depression ( $R^2_{\text{change}} = .024$ ,  $F_{\text{change}}(581) = 20.84$ ,  $p < .001$ ) above and beyond that explained by neuroticism. For every one-unit increase in the FeMS, there was a .18 unit increase in anxiety ( $\beta = .18$ ,  $t(1, 581) = 5.52$ ,  $p < .001$ ) and .16 unit increase in depression ( $\beta = .16$ ,  $t(1, 581) = 4.57$ ,  $p < .001$ ). The FeMS did not explain unique variance in self-esteem above and beyond that explained by neuroticism ( $R^2_{\text{change}} = .002$ ,  $F_{\text{change}}(581) = 1.45$ ,  $p = .229$ ).

## Study 2: Confirmatory Factor Analysis

### Participants

As with Study 1, the current study followed a 5:1 ratio regarding the total number of participants targeted (i.e., given that 34 items were in the final FeMS, at least 170 participants were targeted). Demographic variables, depression, anxiety, life satisfaction, body surveillance, and another measure of sexism (i.e., SSE; Klonoff & Landrine, 1999) were assessed.

**Recruitment.** The methods for recruitment utilized in Study 1 were followed in the current study. Specifically, individuals who identified as a woman and were at least 18-years-old were eligible for the study. Additionally, the study was advertised on university listservs, Craigslist, and social media. University students were offered extra credit when available (i.e., an instructor offered extra credit for participating in the study), and all participants could enter a raffle to receive one of ten \$25 Amazon gift cards.

**Demographics.** A total of 437 subjects participated in the study and the final sample consisted of 325 subjects after participants with more than 10% of missing data, and individuals who incorrectly responded to both validity questions were removed (see Results section for more information).

The mean age of participants was 29.71 ( $SD = 11.07$ ), and 43.1% were ages 18 to 24, 45.5% were ages 25 to 44, 11.1% were ages 45-64, and 0.3% were over the age of 65. Furthermore, 0.6% identified as American Indian or Alaska Native, 11.1% identified as Asian or Asian American, 6.3% identified as Black or African American, 9.0% identified

as Hispanic or Latinx, 2.1% identified as Middle Eastern or Arab American, 61.1% identified as White, and 9.6% identified as multiracial or “other.” The majority of participants identified as heterosexual or straight (83.4%), while 13.0% identified as bisexual, 0.3% identified as gay, 0.9% identified as lesbian, and 2.4% identified as “other” (e.g., pansexual, demisexual, asexual). Regarding highest level of education, 8.7% reported primary school or high school, 33.7% reported some college, 6.6% reported an associate’s degree, 24.1% reported a bachelor’s degree, and 26.8% reported a graduate or professional degree. Furthermore, 38.9% had a full-time job, 31.0% had a part-time job, 28.6% were unemployed or not working, and 1.5% were retired. Furthermore, 35.2% of participants indicated a household income between \$15,000 and \$49,999, 26.7% reported an income between \$50,000 and \$99,999, 22.2% reported an income over \$100,000, and 15.8% reported an income below \$15,000. Three participants did not report their income. As with the first sample, the majority of participants were born in the U.S. (88.3%) and 36.4% were single, 32.2% were in a relationship but not married, 30.1% were married, and 1.2% were “other” (e.g., divorced, legally separated, widowed).

## **Measures**

**Demographic questionnaire.** Participants were asked to provide information on their race/ethnicity, age, sexual orientation, major or graduate program (if applicable), highest level of education, future or current occupation, current employment status, mother’s and father’s occupation, country of origin (if applicable, year of arrival to the

U.S.), household income, relationship status, and body mass index (i.e., height and weight; see Appendix B).

**FeMS (Female Microaggressions Scale).** The FeMS consisted of 34 items (see Appendix H). As in Study 1, participants were asked to indicate how often an event has occurred in their lifetime. Possible response choices were: 1 = *never*, 2 = *a little/rarely*, 3 = *sometimes/a moderate amount*, and 4 = *often/frequently*.

**Schedule of Sexist Events (SSE; Klonoff & Landrine, 1995).** The SSE assesses the frequency of past year and lifetime sexist incidents and is comprised of 20 items (see Study 1 and Appendix C for more information on the scale). Reliability and validity of the scale have been supported (Klonoff & Landrine, 1999). In the current study, internal reliability was good (past year:  $\alpha = .94$ , lifetime:  $\alpha = .95$ ).

**General Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006).** The GAD-7 is a screening measure for Generalized Anxiety Disorder and research has supported the reliability and validity of the scale (see Study 1 and Appendix D for more information regarding the scale; Spitzer et al., 2006). Participants are asked to indicate the prevalence of symptoms within the past two weeks. Internal reliability was acceptable in the current study ( $\alpha = .91$ ).

**Patient Health Questionnaire-9; (PHQ-9; Kroenke & Spitzer, 2001).** The PHQ-9 is a depression screen (see Study 1 and Appendix E for more information on the scale). The scale consists of nine items and assesses how frequently individuals have experienced depressive symptomatology within the past two weeks. Previous research

has supported the reliability and validity of the measure (Kroenke & Spitzer, 2001).

Cronbach's alpha was .88 in the current study.

**The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).** The scale consists of five items (e.g., “In most ways my life is close to ideal,” “So far I have gotten the important things I want in life”), utilizing a seven-point Likert-type scale (1= strongly *disagree* to 7 = *strongly agree*; see Appendix I). Higher scores indicate greater satisfaction with life. The scale has been shown to have good test-retest reliability and internal reliability (see review by Pavot & Diener, 2015). In the current study, internal reliability was acceptable ( $\alpha = .88$ ).

**The Objectified Body Consciousness Scale: Body Surveillance subscale (McKinley & Hyde, 1996).** The Body Surveillance subscale (1= *strongly agree* to 6= *strongly agree*) is comprised of eight items (e.g., “During the day, I think about how I look many times,” “I often worry about whether the clothes I am wearing make me look good;” see Appendix J). Higher scores indicate higher levels of individuals treating themselves as objects and monitoring their appearance in regards to how others may judge their appearance. Internal reliability was acceptable ( $\alpha = .89$ ) among a sample of undergraduate women (McKinley & Hyde, 1996). Furthermore, supporting divergent validity, the Body Surveillance subscale was negatively associated with body esteem and positively associated with public self-consciousness (McKinely & Hyde, 1996). Cronbach's alpha in the current study was .85, indicating acceptable internal reliability.

## Results

**Data screening.** Data screening analyses were conducted utilizing SPSS version 25. As with Study 1, data were screened for missing cases. Participants with more than 10% of missing data were removed from analyses ( $N = 105$ ; Schlomer et al., 2010). Furthermore, two validity items were included in the study, and 20 participants provided an incorrect response to one validity item and seven participants provided incorrect responses to both validity items. Participants who provided incorrect responses to both validity questions were removed, as previous research has indicated that removing participants who respond incorrectly to only one validity item might be too stringent of a cut off ( $N = 7$ ; Meade & Craig, 2011). After removing these cases, Little's MCAR test was conducted on the entire dataset to determine whether data were missing completely at random. Little's MCAR indicated that data were not MCAR ( $\chi^2(1186) = 1392.17, p = .000$ ). After running analyses on each measure, the SSE-lifetime was the only subscale that was not MCAR ( $\chi^2(84) = 120.66, p = .005$ ). There were a total of 12 missing cases, with only one variable with two missing cases. Furthermore, two participants did not provide any responses to the Body Surveillance scale. Expectation-maximization was chosen as the imputation method for data deemed MCAR and also used for the SSE-lifetime because of the limited amount of missing data.

**Confirmatory factor analysis.** To confirm the factor structure of the FeMS, confirmatory factor analyses were conducted. MLM model-fitting method (i.e., ML with robust estimation) was utilized. This approach can determine the statistical significance of factor loadings and correlations between the factors and corrects for non-normality in

indicator variables (Brown, 2015; Fabrigar, 1999). The Root Mean Square Error of Approximation (RMSEA; Steiger, 1990); CFI (Bentler, 1990); and Standardized Root Mean Square Residual (SRMR; Hu & Bentler, 1999) were utilized as indices of model fit. For the RMSEA, Browne & Cudeck (1993) suggest the following guidelines when interpreting results: .05 or lower = good fit, .05-.08 = fair fit, .08-.10 = mediocre fit, and .10 and above = poor fit. Hu and Bentler (1999) suggest a CFI close to or greater than .95 and  $SRMR \leq .08$  indicate acceptable model fit.

The EFA supported eight factors (i.e., Traditional Gender Roles, Assumptions of Inferiority/Second-Class Citizen, Sexist Language, Explicit Threatened Physical Safety, Implicit Threatened Physical Safety, Denial of the Reality of Sexism, Sexual Objectification, and Environmental), and microaggressions theory has indicated that various experiences of microaggressions might also be captured by a general microaggressions factor (Sue et al., 2007). For example, scholars have emphasized the importance of the cumulative impact of diverse experiences of microaggressions (Sue et al., 2007), which may be different from the impact of specific forms of microaggressions on various aspects of psychosocial functioning. Thus, a bifactor model with eight specific factors and a general FeMS factor (Hypothesized model) was expected to fit the data best. The first alternative model theorized one factor underlying all items (Model 1). The second alternative model proposed eight correlated first-order latent factors based on results from the EFA (Model 2). The third alternative model posited one general second-order latent variable and eight first-order latent variables (i.e., a hierarchical model; Model 3). Given significant correlations between the factors in the EFA, a higher-order

model seemed plausible (i.e., that an underlying latent variable may help explain associations between the factors).

Confirmatory factor analyses were conducted utilizing Stata (StataCorp, 2017) and R (R Core Team, 2013; R was utilized to examine the hypothesized model and hierarchical model because the analyses when conducted with Stata did not converge and continued to iterate). Results can be found in Table 3. The hypothesized model had a significant chi-square test but other goodness-of-fit indices indicated good model fit. Although a significant chi-square test indicates poor model fit, scholars have argued that chi-square tests are often significant with large sample sizes (Kenny, 2015). Furthermore, in the hypothesized model, all items had significant factor loadings on anticipated factors. The first alternative model, consisting of one general latent factor, produced a significant chi-square test and other goodness-of-fit indices also indicated poor fit. The second alternative model consisted of eight correlated first-order latent factors. The chi-square was significant, but the RMSEA, SRMR, and CFI indicated good model fit. Furthermore, all items had significant factor loadings on anticipated factors. The third alternative model, which posited one higher-order general latent factor and eight specific latent factors, also had a significant chi-square test but the other indices of model fit indicated fair to good model fit. Satorra-Bentler scaled chi-square difference tests, which are appropriate when utilizing MLM or other ML robust estimation methods, were calculated to compare the hypothesized model and the second alternative model and the hypothesized model and the third alternative model (Satorra & Bentler, 2010). Regarding the former comparison,  $\chi^2_{\text{diff}}(6) = 13.62$ . Given that the critical chi-square



value with 6 degrees of freedom is 12.59, the results indicate the hypothesized model and second alternative model significantly differ from each other, and the hypothesized model is a better fit to the data than the second alternative model. The result from the chi-square difference test comparing the hypothesized model and the third alternative model was  $\chi^2_{diff}(26) = 102.65$ . The critical value for 26 degrees of freedom is 38.89, indicating a significant difference and supporting that the hypothesized model fits the data better than the third alternative model.

Taken together, Satorra-Bentler chi-square difference tests indicated that the hypothesized model fit the data better than the second and third alternative models and had good goodness-of-fit indices. Furthermore, the hypothesized model is consistent with conceptualizations of microaggressions that emphasize the cumulative impact of a broad range of microaggressions on individuals' psychosocial functioning and also the possible effects of specific forms of microaggressions (e.g., Sue et al., 2007; Capodilupo et al., 2010). As such, the hypothesized model was deemed as having the best model fit (see Figure 1).

Table 3

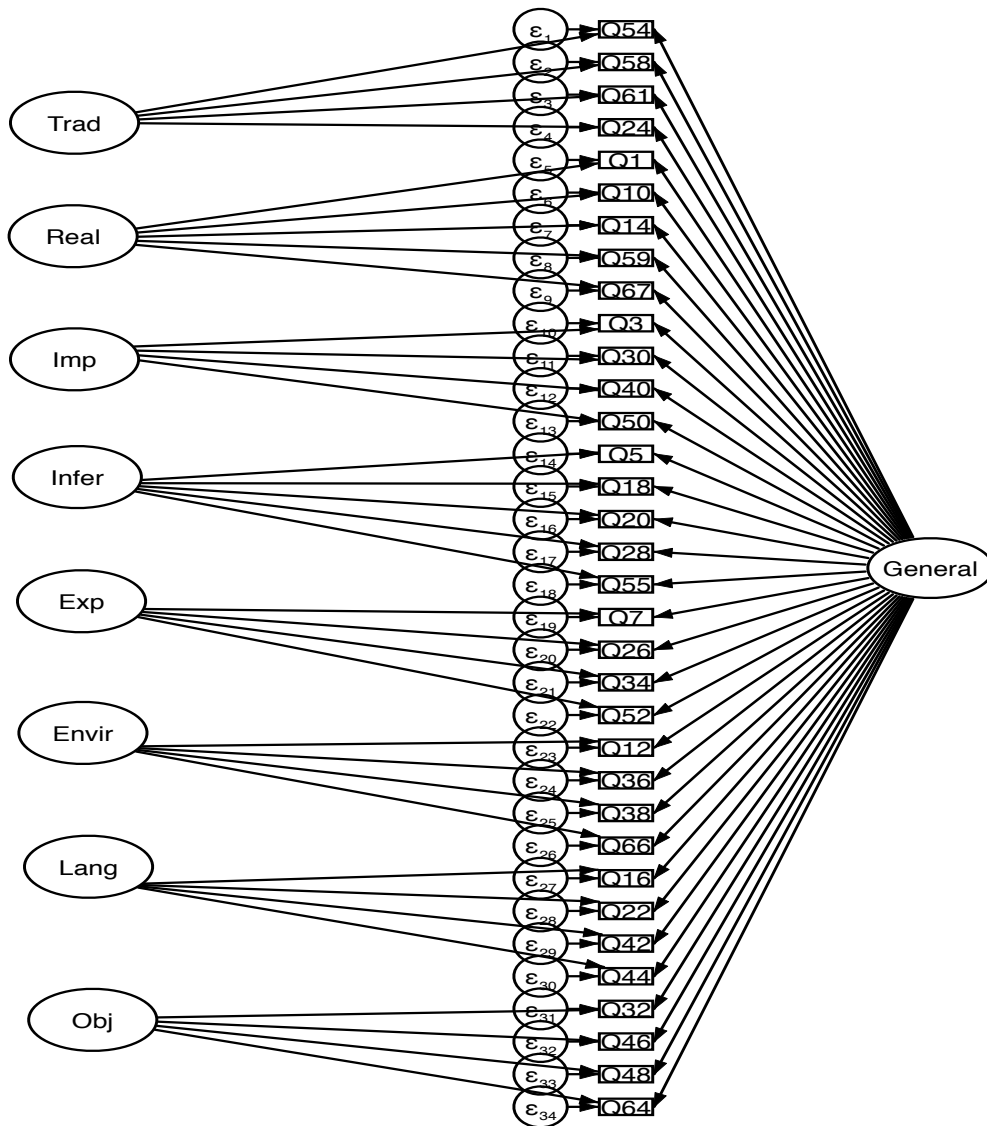
*Confirmatory Factor Analysis: FeMS Goodness-of-Fit Summary*

| Index | Model        |     |     |     |
|-------|--------------|-----|-----|-----|
|       | Hypothesized | 1   | 2   | 3   |
| CFI   | .93          | .66 | .93 | .90 |
| SRMR  | .06          | .08 | .06 | .07 |
| RMSEA | .04          | .09 | .04 | .05 |

|           |            |            |            |            |
|-----------|------------|------------|------------|------------|
| 90% CI    | [.04, .05] | [.09, .10] | [.04, .05] | [.04, .05] |
| AIC       | 26129.83   | 27281.79   | 26113.39   | 26204.85   |
| BIC       | 26644.43   | 27667.74   | 26605.29   | 26621.07   |
| $\chi^2$  | 791.18***  | 1927.67*** | 806.58***  | 900.10***  |
| <i>df</i> | 493        | 527        | 499        | 519        |

*Note.* The hypothesized model represents the bifactor model with a general FeMS factor and eight specific latent factors, Model 1 represents the general factor model, Model 2 represents the eight-factor, correlated model, and Model 3 represents the hierarchical model (one second-order latent variable and eight first-order latent variables)

\*\*\*  $p < .001$



*Figure 1.* Bifactor model with eight specific factors and a general FeMS factor. *Note.* Trad = Traditional Gender Roles, Real = Denial of the Reality of Sexism, Imp = Implicit Threatened Physical Safety, Exp = Explicit Threatened Physical Safety, Inf = Assumptions of Inferiority/Second-Class Citizen, Env = Environmental, Lan = Sexist Language, Obj = Sexual Objectification, General = general FeMS

**Reliability.** Analyses were conducted utilizing SPSS version 25. Internal reliabilities for all factors were in the acceptable range within the current sample.

Cronbach's alphas were: Traditional Gender Roles = .79, Denial of the Reality of Sexism

= .74, Implicit Threatened Physical Safety = .75, Explicit Threatened Physical Safety = .79, Assumptions of Inferiority/Second-Class Citizen = .80, Environmental = .80, Sexist Language = .83, and Sexual Objectification = .74. Furthermore, all factors were significantly positively correlated with each other ( $r = .22$  to  $r = .60$ , see Table 4).

Table 4

*Correlations Between the FeMS, Anxiety, Depression, Satisfaction with Life, and Body Surveillance, Means, and Standard Deviations*

| Var    | 1 | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12      | 13     | 14      | 15      | M    | SD   |
|--------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|---------|------|------|
| 1.Trad |   | .52*** | .44*** | .38*** | .57*** | .56*** | .33*** | .49*** | .75*** | .07    | .02    | -.03    | .15**  | .51***  | .43***  | 2.85 | .84  |
| 2.Real |   |        | .43*** | .48*** | .56*** | .52*** | .36*** | .49*** | .75*** | .14*   | .08    | .01     | .16**  | .47***  | .43***  | 2.80 | .64  |
| 3. Imp |   |        |        | .36*** | .36*** | .44*** | .37*** | .45*** | .66*** | .12*   | .06    | .04     | .26*** | .35***  | .39***  | 2.96 | .75  |
| 4. Exp |   |        |        |        | .52*** | .39*** | .56*** | .60*** | .73*** | .24*** | .21*** | -.17**  | .20*** | .59***  | .54***  | 2.34 | .67  |
| 5. Inf |   |        |        |        |        | .50*** | .42*** | .51*** | .79*** | .16**  | .12*   | -.03    | .15**  | .64***  | .58***  | 2.22 | .77  |
| 6. Env |   |        |        |        |        |        | .22*** | .53*** | .70*** | -.00   | -.02   | -.08    | .14*   | .48***  | .38***  | 3.41 | .64  |
| 7. Lan |   |        |        |        |        |        |        | .50*** | .65*** | .21*** | .25*** | -.15**  | .22*** | .56***  | .50***  | 2.10 | .79  |
| 8. Obj |   |        |        |        |        |        |        |        | .77*** | .12*   | .08    | -.14**  | .23*** | .51***  | .47***  | 2.89 | .71  |
| 9.Gen  |   |        |        |        |        |        |        |        |        | .18**  | .14*   | -.09    | .26*** | .71***  | .65***  | 2.69 | .53  |
| 10.An  |   |        |        |        |        |        |        |        |        |        | .68*** | -.32*** | .26*** | .30***  | .35***  | 2.29 | .83  |
| 11.Dep |   |        |        |        |        |        |        |        |        |        |        | -.45*** | .14*   | .29***  | .36***  | 1.97 | .70  |
| 12.Sat |   |        |        |        |        |        |        |        |        |        |        |         | -.14*  | -.23*** | -.22*** | 4.67 | 1.38 |
| 13.Bod |   |        |        |        |        |        |        |        |        |        |        |         |        | .18**   | .21***  | 4.65 | 1.19 |

|       |        |      |     |
|-------|--------|------|-----|
| 14.SL | .84*** | 2.61 | .90 |
| 15.SP |        | 2.16 | .89 |

---

*Note.* Trad = Traditional Gender Roles, Real = Denial of the Reality of Sexism, Imp = Implicit Threatened Physical Safety, Exp = Explicit Threatened Physical Safety, Inf = Assumptions of Inferiority/Second-Class Citizen, Env = Environmental, Lan = Sexist Language, Obj = Sexual Objectification, Gen = general FeMS, An = Anxiety, Dep = Depression, Sat = Satisfaction with life, Bod = Body surveillance, SL = SSE-lifetime, SP = SSE-past year

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

**Validity.** Analyses were conducted utilizing SPSS version 25. See Table 4 for correlations between the FeMS (general FeMS and each subscale) and the SSE, anxiety, depression, satisfaction with life, and body surveillance. The FeMS (general FeMS and each subscale) was significantly correlated with the SSE-past year and SSE-lifetime. Correlations ranged from .35 to .71. Additionally, the FeMS (general FeMS) had small to medium correlations with anxiety ( $r = .18$ ), depression ( $r = .14$ ), and body surveillance ( $r = .26$ ), supporting convergent validity. The FeMS (general FeMS) was not significantly associated with life satisfaction. Further supporting convergent validity, all FeMS subscales were positively correlated with body surveillance, ranging from .14 to .26. Nonetheless, there were mixed results regarding correlations between each of the FeMS subscales and depression, anxiety, and satisfaction with life (see Table 5).

Table 5

*Summary of Correlations Between the FeMS Subscales and Mental Health Variables*

| Variable | Anxiety | Depression | Satisfaction with<br>Life | Body<br>Surveillance |
|----------|---------|------------|---------------------------|----------------------|
| Trad     |         |            |                           | +                    |
| Real     | +       |            |                           | +                    |
| Imp      | +       |            |                           | +                    |
| Exp      | +       | +          | -                         | +                    |
| Inf      | +       | +          |                           | +                    |

|       |   |   |   |   |
|-------|---|---|---|---|
| Envir |   |   |   | + |
| Lang  | + | + | - | + |
| Obj   | + |   | - | + |
| Gen   | + | + |   | + |

*Note.* Trad = Traditional Gender Roles, Real = Denial of the Reality of Sexism, Imp = Implicit Threatened Physical Safety, Exp = Explicit Threatened Physical Safety, Inf = Assumptions of Inferiority/Second-Class Citizen, Env = Environmental, Lan = Sexist Language, Obj = Sexual Objectification, Gen = general FeMS  
 + = significant positive correlation,  $p < .05$ ; - = significant negative correlation,  $p < .05$

Hierarchical regressions were conducted to examine the incremental validity of the FeMS (general FeMS) within the current sample. Specifically, in separate analyses, the SSE-lifetime was entered in the first step and the FeMS (general FeMS) was entered during the second step to predict unique variance in anxiety, depression, and body surveillance. Hierarchical regressions were not run with life satisfaction as an outcome variable given its non-significant correlation with the FeMS. The FeMS (general FeMS) did not predict unique variance in anxiety ( $R^2_{\text{change}} = .002$ ,  $F_{\text{change}}(322) = .67$ ,  $p = .41$ ) or depression ( $R^2_{\text{change}} = .008$ ,  $F_{\text{change}}(322) = 2.82$ ,  $p = .09$ ) above and beyond that explained by the SSE-lifetime. The FeMS (general FeMS) predicted unique variance in body surveillance above and beyond that predicted by SSE-lifetime ( $R^2_{\text{change}} = .034$ ,  $F_{\text{change}}(327) = 11.52$ ,  $p < .001$ ). Furthermore, results indicated that for every one-unit increase in FeMS, there was a .26 unit increase in body surveillance ( $\beta = .26$ ,  $t(321) = 3.39$ ,  $p < .001$ ).



## Summary of Results from Study 1 and Study 2

Results of exploratory factor analysis supported an eight-factor structure. Diverging from the hypothesized model, *assumptions of inferiority* and *second-class citizen themes* combined to create the Assumptions of Inferiority/Second-Class Citizen factor. Furthermore, the expected Threatened Physical Safety factor divided to create two separate factors (i.e., Implicit Threatened Physical Safety and Explicit Threatened Physical Safety). Given that results from the EFA supported eight factors, and microaggressions theory has emphasized the cumulative impact of diverse experiences of microaggressions, a bifactor model with eight specific factors and one general factor was hypothesized. Results of confirmatory factor analysis supported the bifactor model (i.e., goodness-of-fit indices indicated good model fit).

Furthermore, all eight factors had good internal reliability within the two present samples. In Study 1, the FeMS (general FeMS and each subscale) had expected correlations with mental health variables (i.e., depression, anxiety, and self-esteem) and the SSE (lifetime and past year), supporting convergent validity. Correlations were smaller than expected, however (i.e., medium to large correlation were expected but, overall, the FeMS had small to medium correlations with the above-mentioned variables). Supporting discriminant validity, the FeMS (general FeMS and each subscale) had significant positive but small correlations with neuroticism. Additionally, hypotheses regarding incremental validity of the FeMS were partially supported. The FeMS explained variance in anxiety above and beyond that explained by the SSE-lifetime. However, the FeMS did not explain variance in depression or self-esteem above and

beyond that explained by the SSE-lifetime. The FeMS also explained variance in anxiety and depression but did not explain variance in self-esteem above and beyond that explained by neuroticism.

In Study 2, the FeMS (general FeMS and each subscale) was significantly positively correlated with the SSE-lifetime, SSE-past year, and body surveillance. Correlations between the FeMS (general FeMS and each subscale) and depression, anxiety, and life satisfaction were mixed (i.e., significant and non-significant correlations). The FeMS (general FeMS) was significantly correlated with anxiety and depression, but not life satisfaction. Additionally, Invalidation of the Reality of Sexism, Implicit Threatened Physical Safety, Explicit Threatened Physical Safety, Assumptions of Inferiority/Second-Class Citizen, Sexist Language, and Sexual Objectification were significantly correlated with anxiety. Explicit Threatened Physical Safety, Assumptions of Inferiority/Second-Class Citizen, and Sexist Language were significantly correlated with depression. Explicit Threatened Physical Safety, Sexist Language, and Sexual Objectification were significantly correlated with life satisfaction. Furthermore, the FeMS (general FeMS) explained unique variance in body surveillance but not anxiety and depression above and beyond that explained by the SSE-lifetime (life satisfaction was not examined as an outcome variable because of its non-significant correlation with the general FeMS).

## Discussion

Research supports that women experience various forms of sexism (Swim & Cohen, 1997; Swim et al., 2001). More recently, scholars have been interested in more subtle forms of sexism in contrast to overt, hostile forms (Capodilupo et al., 2010). Specifically, they contend that traditional forms of sexism (e.g., an individual explicitly stating that women do not deserve the same social or political rights as men) persist but are on the decline because of evolving sociocultural norms that oppose overt discrimination. It is proposed that sexist beliefs and behaviors are still rampant but manifest in covert ways (Capodilupo et al., 2010). Furthermore, research indicates that subtle, covert forms of sexism are linked to negative mental health outcomes (Swim et al., 2001; Capodilupo et al., 2010), supporting the need to examine this type of sexism.

In his seminal work, Sue et al. (2007) discussed the term microaggressions, which are defined as subtle, chronic forms of discrimination against minority groups. Although literature focused on microaggressions theory and research has intensified within the past 10 years, work on female microaggressions is limited. To the author's knowledge, only one scale capturing female microaggressions has been published, the Gendered Racial Microaggressions Scale (Lewis & Neville, 2015). The scale utilizes an intersectionality perspective, focusing on microaggressions that Black women may experience. A scale that focuses on a broad range of microaggressions that women from varied sociocultural identities may experience has not been published, limiting research in this area. As such, the primary aim of the current study was to develop and validate the Female

Microaggressions Scale (FeMS), which captures a broad range of microaggressions that women from various sociocultural backgrounds may currently navigate.

### **Female Microaggressions Scale (FeMS)**

In their qualitative work, Capodilupo et al. (2010) examined the gender microaggressions' taxonomy proposed by Sue and Capodilupo (2008) and Nadal (2010). The taxonomy consists of eight themes: 1) *sexual objectification*, 2) *second-class citizen*, 3) *assumptions of inferiority*, 4) *denial of the reality of sexism*, 5) *assumptions of traditional gender roles*, 6) *use of sexist language*, 7) *denial of individual sexism*, and 8) *environmental microaggressions*. The authors found that all themes were supported (i.e., participants reported experiences that coincided with the proposed themes) except for *denial of individual sexism*, and *denial of the reality of sexism* was an underdeveloped theme (i.e., only one participant endorsed an experience that fell under this category).

In the current study, items were developed for the seven themes that were proposed by Sue and Capodilupo (2008) and Nadal (2010) and supported by Capodilupo et al.'s (2010) qualitative study (i.e., only *denial of individual sexism* was eliminated because it was not endorsed in the aforementioned study). The author of the present study and a master's-level graduate research assistant initially developed items by coding tweets present in the Twitter thread *#YesAllWomen*, which was created after a male perpetrator, who was viewed as motivated by misogyny, murdered six individuals and injured 13 others (Serna, 2015). During the initial coding and item development process, an additional theme emerged and was termed *threatened physical safety*. The new theme was characterized by both implicit and explicit behaviors and messages that threaten a

woman's sense of physical safety. Thus, items were also developed for this theme (see Methods section for more information on the scale development process).

Results of the exploratory factor analysis supported an eight-factor structure. Specifically, the following FeMS factors were supported: Assumptions of Traditional Gender Roles, Sexist Language, Implicit Threatened Physical Safety, Explicit Threatened Physical Safety, Invalidation of the Reality of Sexism, Assumptions of Inferiority/Second-Class Citizen, Environmental, and Sexual Objectification. Thus, the hypothesized eight-factor structure was mostly supported. The original *threatened physical safety* theme became two separate factors (i.e., Implicit Threatened Physical Safety and Explicit Threatened Physical Safety). Additionally, *assumptions of inferiority* and *second-class citizen* combined to create the Assumptions of Inferiority/Second-Class Citizen factor. Furthermore, results of confirmatory factor analyses indicated that a bifactor model, with eight specific factors and a general FeMS factor, was the best fit.

**Sexual objectification.** The Sexual Objectification factor was comprised of items that reflected women's experiences of being treated like objects that serve as visual stimuli for others versus whole human beings (Fredrickson & Roberts, 1997). Items included in the factor are: 1) Someone gave me compliments about my appearance before talking about something else, 2) Someone catcalled me (e.g., whistled at me) while I was walking down the street, 3) Someone told me that I am too pretty to look unhappy, and 4) I observed someone staring at a woman's body. The Sexual Objectification factor had acceptable internal reliability within the two present samples and, in Study 2, was significantly positively associated with anxiety and body surveillance and significantly

negatively associated with satisfaction with life—it was not significantly associated with depression.

The Sexual Objectification factor coincides with the *sexual objectification* theme identified in Capodilupo et al.'s (2010) qualitative study. In their study, participants discussed experiences of being catcalled, being targets of “leering” looks, and being inappropriately touched by a stranger. In the current study, items that captured women experiencing unwanted comments (e.g., Someone called me “baby”) and staring were ultimately eliminated because of lower factor loadings in comparison to others items that loaded on the Sexual Objectification factor. Furthermore, one of the items that reflected individuals touching women without their consent (i.e., Someone touched me without my consent), originally written for the Sexual Objectification factor, loaded most strongly on the Explicit Threatened Physical Safety factor. As such, unwanted touching may be perceived by women as more threatening than other forms of sexual objectification (e.g., catcalling). Additionally, the item, “I observed someone staring at a woman’s body,” was created for the Environmental factor, yet loaded most strongly on the Sexual Objectification factor. It may be that because items that loaded most strongly on the Environmental factor were either systemic-level female microaggressions or female microaggressions present in the media, the item (i.e., I observed someone staring at a women’s body) fit best with the Sexual Objectification factor in that it reflected sexual objectification and may be perceived as more interpersonal in nature.

Substantial research on sexual objectification emphasizes that a woman’s appearance is often emphasized over other qualities, and women are viewed and treated

as objects (Syzmanski, Moffitt, & Carr, 2011). Furthermore, women may begin to view and treat themselves as objects (i.e., self-objectification; Syzmanski et al., 2011) and, in the current study, the Sexual Objectification subscale was associated with body surveillance, supporting the possibility that women's self-objectification may be linked to experiences of sexual objectification. As a purported consequence of self-objectification, women may experience various negative mental health outcomes, including disordered eating, depression, and sexual dysfunction (Syzmanski et al., 2011). As mentioned previously, the Sexual Objectification subscale was associated with anxiety and life satisfaction but not depression. Future research should examine possible reasons for the non-significant association between the Sexual Objectification subscale and depression.

In summary, the Sexual Objectification factor aligns with other research indicating the prevalence of this form of sexism in women's lives (Capodilupo et al., 2010; Syzmanski et al., 2011). Furthermore, results from the current study support that more explicit and aggressive forms of sexual objectification, such as unwanted touching, may be understood better as a distinct type of sexism (e.g., as a form of threatened physical safety). Previous research has also indicated that sexual objectification can lead to various negative health outcomes among women (e.g., Moradi, et al., 2005), and results from the current study partially supported this possibility (i.e., the Sexual Objectification subscale was associated with anxiety, satisfaction with life, and body surveillance but not depression).

**Assumptions of inferiority/second-class citizen.** Assumptions of Inferiority/Second-Class Citizen factor includes women's experiences of individuals

assuming that they are not capable of certain skills and abilities and negating their equal worth when compared to men. Items included in this factor are: 1) Someone assumed that I am not good at math because of my gender, 2) Someone assumed that I am not intelligent because of my gender, 3) Someone did not ask me about my career or accomplishments when first meeting me because of my gender, 4) Someone assumed that I am not athletic because of my gender, and 5) Someone incorrectly attributed my work to a man. The factor had acceptable internal reliability within the two present samples and, in Study 2, was significantly positively correlated with anxiety, depression, and body surveillance. The factor was not significantly correlated with satisfaction with life.

In Capodilupo et al.'s (2010) study, assumptions of inferiority and second-class citizen were classified as two distinct themes. Nonetheless, previous research supports that there may be some overlap between the two themes, depending on how individuals interpret the items. For example, Nadal (2011) found that certain items (e.g., "I was ignored when trying to get the attention of a waiter, bartender, or store clerk because of my race") loaded heavily on Assumptions of Inferiority, Second-Class Citizen, and Assumption of Criminality factors (p. 478). He argued that individuals could interpret the behavior or incident differently (e.g., they were ignored because the waiter thought they were inferior, or they were ignored because the waiter thought they were a criminal), explaining high factor loadings on multiple factors. Similarly, in the current study, items in the Assumptions of Inferiority/Second-Class Citizen factor could be interpreted multiple ways (e.g., someone assumed that I am not intelligent because they think I am inferior or someone assumed that I am not intelligent because they think I am a second-



class citizen), which may explain why the themes combined to create one factor.

Findings from the current study suggest that *assumptions of inferiority* and *second-class citizen* themes may not be as conceptually different as originally thought.

Research on parent-child interactions support that women may be socialized from a young age to believe that they are less capable than and are inferior to men in a number of ways (e.g., Tenenbaum & Leaper 2003). For example, research has found that parents perceive their daughters to be less interested in science than their sons and perceive that their daughters have more difficulty with science than their sons, even when there are no differences in children's science grades, self-efficacy, or interest (Tenenbaum & Leaper, 2003). Similar gender biases have been found regarding parents' perceptions of their children's math abilities and interests (e.g., Leedy, Runk, & Lalonde, 2003; Raty, Vanska, Kasanen, & Karkkainen, 2002). Furthermore, research supports that women continue to be treated as second-class citizens and inferior to men in athletics (e.g., Grappendorf, 2011).

It is clear that women continue to navigate messages that indicate they are inferior to and less capable than men. Capodilupo et al. (2010) identified two distinct themes (i.e., *assumptions of inferiority* and *second-class citizen*), but in the current study, these themes combined to create one factor. Research supports that women experience assumptions of inferiority, particularly in traditionally male-dominated domains (e.g., math, athletics; Tenenbaum & Leaper, 2003). Furthermore, perhaps because of these assumptions, women are often treated as "less than" men, and women's contributions are not appreciated and/or valued. The current study supported the possible negative impact

of experiencing Assumptions of Inferiority/Second-Class Citizen by its significant associations with anxiety, depression, and body surveillance.

**Assumptions of traditional gender roles.** Four items comprised this factor: 1) Someone assumed that I want children, 2) Someone assumed that I want to get married because of my gender, 3) Someone assumed that I am nurturing because of my gender, and 4) Someone expected that I should cook and clean because of my gender. Thus, the factor captures both others' expectations about acceptable roles for women (i.e., mother, wife, homemaker) and, relatedly, others' expectations regarding characteristics that women should display (i.e., nurturing). Capodilupo et al.'s (2010) findings similarly captured expectations regarding roles women should inhabit (e.g., mother, wife) and characteristics women should express (e.g., caregiving). In the current study, the factor had acceptable internal reliability within the two samples, and, in Study 2, was significantly correlated with body surveillance (i.e., continual monitoring of one's appearance) but not anxiety, depression, or satisfaction with life.

Research on traditional gender roles support that women navigate a broad range of gender stereotypes and gender role expectations (e.g., Collins, 2011; Ledin, Bornmann, Gannon, & Wallon, 2007, Lublin & Brewer, 2003; Updegraff, McHale, & Crouter, 1994; Prentice & Carranza, 2002; Tenenbaum & Leaper, 2003; Viki & Abrams, 2002). For example, the Bem Sex-Role Inventory was created to examine gender-specific characteristics (Bem, 1974). Participants are asked, "How desirable is it in American society for a man (women) to possess each of these characteristics?" (Bem, 1974, p. 157). Results have indicated that traditionally feminine traits, such as

affectionate, compassionate, warm, tender, cheerful, gentle, loves children, and soft spoken, are significantly more desirable for a woman to have than a man (Holt & Ellis, 1998). Furthermore, although the percentage of women in the workforce has increased (e.g., women made up 46.8% of labor force in 2015 versus 33% in 1950; BLS, 2015) and the amount of time women spend completing housework has decreased within the past 50 years (Bianchi, Milkie, Sayer, & Robinson 2000), there remains a discrepancy in the division of housework and child care between men and women (Bianchi, Robinson, & Sayer, 2001). For example, in 2016, women spent twice as much time per day doing laundry and preparing food and drinks than men (BLS, 2016). Similarly, in 2011, women spent twice as much time per week in childcare activities than men (Parker & Wang, 2013). Thus, these discrepancies indicate that traditional gender role expectations (e.g., caregiver) and associated gender-specific characteristics (e.g., nurturing) continue to be prevalent in women's lives.

Although traditional gender role expectations may seem less deleterious than hostile forms of sexism, scholars have argued that this form of sexism has a detrimental impact on women (e.g., sustains and perpetuates gender inequality, women's oppression, and patriarchy; Glick & Fiske, 2000). The findings that Assumptions of Traditional Gender Roles was significantly correlated with body surveillance but not depression, anxiety, or life satisfaction indicate that traditional gender role expectations may not be directly associated with common mental health outcomes among women (i.e., depression, anxiety, life satisfaction). Instead, this form of sexism may be related to other forms of traditional gender role expectations, such as the importance of a women's

physical appearance that, in turn, may be internalized by women (i.e., body surveillance). Research supports that women's internalization of expectations regarding their appearance is associated with negative mental health outcomes, such as depression and anxiety (e.g., Moradi et al., 2005).

**Invalidation of the reality of sexism.** The fifth FeMS factor is characterized by experiences where individuals deny and/or invalidate women's experiences of sexism. Items included in the factor are: 1) Someone told me that men also experience discrimination when we were discussing sexism, 2) Someone told me that sexism is no longer an important social issue, 3) Someone told me that women have the same opportunities as men, 4) Someone told me that women are being too sensitive when they say they experience gender discrimination, and 5) Someone told me that "not all men are like that" (or something similar) when we were discussing sexism. Capodilupo et al.'s (2010) results described an experience of one woman who was told to "Just ignore it. Don't worry about it" when she expressed an incident of sexism to her boss (p. 205). The incident coincides with the Invalidation of the Reality of Sexism factor in that the participant's experience of sexism was invalidated, and she was told implicitly that she was being too sensitive regarding the incident. Furthermore, the Invalidation of the Reality of Sexism subscale had acceptable internal reliability within the two present samples and, in Study 2, was significantly positively correlated with anxiety and body surveillance but not significantly correlated with depression or satisfaction with life.

Research on the impact of sexual abuse and violence has emphasized the important role of invalidation (e.g., Linehan, 1993). Invalidation involves denial of a

person's internal (e.g., thoughts, feelings) and external (e.g., interpersonal experiences) reality (Salter, 2012). It is argued that perpetrators of discrimination, abuse, and violence, particularly those from traditionally privileged statuses, utilize their social power to redefine and mold targets' realities and experiences, leaving targets confused about the incident/s and their perceptions of the event/s. (Salter, 2012). Supporting this, research on interpersonal violence indicates that perpetrators often minimize their abuse and place the responsibility of their actions on targets, which, in turn, can reshape the targets' understanding of the abuse (e.g., self-blame; Henning & Holdford, 2006).

When applying the aforementioned research to female microaggressions, invalidation of the existence of sexism in women's lives may also lead women to question whether they were targets of sexism and/or deny the negative impact of sexist experiences. Hinze (2004) conducted a qualitative study on medical residents' experiences in their training programs, and results indicated that the vast majority of women (96%) experienced an incident that has been defined as sexist in extant literature (e.g., unwanted sexual advances, overt and covert sexual comments, sexist jokes; e.g., Swim et al., 1997). Furthermore, women disclosed that after experiences of sexual harassment (e.g., a physician touching a woman on her buttock), they questioned whether they were being too sensitive and/or whether the behaviors were sexual harassment. Some participants (both women and men) explicitly stated that women are too sensitive when they experience sexist events and should ignore these types of behaviors.

Results from the aforementioned research indicates that invalidation is a method that can be used by perpetrators to deny the reality of women's internal and external

experiences and subsequently, engender confusion among targets of sexism (Hinze, 2004; Salter, 2012). This confusion can, in turn, allow perpetrators to reshape women's narratives wherein they (women) are viewed as hypersensitive. Furthermore, women may internalize these narratives and begin to view themselves (and other women) as hypersensitive and, therefore, ignore sexist behaviors and gender inequality. Based on the current study, invalidation of women's experiences of sexism may also lead to heightened anxiety and body surveillance but not increased depression or lower satisfaction with life.

**Sexist language.** The Sexist Language factor is comprised of four items: 1) Someone called me a "whore," 2) Someone called me a "slut," 3) Someone called me a "bitch," and 4) Someone called me a "tease" and had acceptable internal reliability within the two present samples. Furthermore, in Study 2, the Sexist Language factor was significantly positively correlated with anxiety, depression, and body surveillance and negatively correlated with satisfaction with life, highlighting the possible negative impact of experiences of sexist language on women's psychological functioning.

The sexist language captured in this factor has been categorized as "sexist derogatory slurs" (SDSs; Fasoli, Carnaghi, & Paladino, 2015, p. 99). "Sexist derogatory slurs...are terms that derogate women by stressing hostile stereotypes of women along with a dimension of promiscuity and sexual looseness in which women's morality is denied" (Fasoli et al., 2015, p. 99). Another category of sexist language, termed "sexually objectifying slurs" (SOSs), also has been identified (Fasoli et al., 2015, p. 99). SOSs include terms such as "hot chick," "foxy," and "babe" (Fasoli et al., 2015, p. 99).

SOSs are utilized to objectify women sexually and subordinate their status to objects that exist for the pleasure of men (Fasoli et al., 2015). These distinctions indicate that the Sexist Language factor should be included in research that seeks to capture SDSs.

Through an ambivalent sexism framework, SDSs can be viewed as products of hostile sexism (i.e., negative views of and actions toward women, especially non-traditional women; Glick & Fiske, 1996). As such, these slurs may be used to punish or control women who do not conform to traditional gender roles and/or patriarchal subjugation. Supporting this, research has found that hostile sexism is associated with negative evaluations of non-traditional women (e.g., career women) but not correlated with evaluations of traditional women (e.g., homemakers) among men and women (Glick, Diebold, Bailey-Werner, & Zhu, 1997). In the current study, significant correlations between the Sexist Language subscale and anxiety, depression, life satisfaction, and body surveillance support that SDSs may have the intended negative impact on women (i.e., negatively impacting their well-being).

In summary, the Sexist Language factor is comprised of terms that have been labeled as “sexist derogatory slurs” (Fasoli et al, 2015, p.99). Furthermore, research supports the distinctiveness of SDSs and SOSs, with the latter perhaps better understood as a form of sexual objectification. Theoretically, SDSs are linked to hostile sexism and may be used to control, dominate, and punish women, especially women who do not conform to traditional gender roles and norms, and, in the current study, the Sexist Language subscale was linked to various negative mental health outcomes.

**Implicit threatened physical safety.** The following items comprised the Implicit Threatened Physical Safety factor: 1) Someone told me to watch my drink when I am in a social setting, 2) Someone told me to have some form of self-defense (e.g., pepper spray) when going in a public place, 3) Someone told me that I should have a safety plan when going on a first date (e.g., tell a friend where I am going), and 4) Someone told me not to walk alone because I might be raped or assaulted. Items in this factor signify the tendency for women to receive messages that they need to take preemptive measures to ensure their physical safety. Although not originally included in original female microaggressions taxonomies (i.e., Sue & Capodilupo, 2008; Nadal, 2010), results from the current study indicate the pervasiveness of this form of microaggression.

Furthermore, internal reliability of the subscale was acceptable within the two present samples, and, in Study 2, Implicit Threatened Physical Safety was significantly positively correlated with anxiety and body surveillance but not significantly correlated with depression or satisfaction with life. The subscale's significant correlation with anxiety but not depression is interesting. Anxiety is primarily characterized by chronic worry, and depression is primarily characterized by depressed mood and lack of interest in activities (National Institute of Mental Health, n.d.). It may be that women who endorse receiving messages that they must take preemptive measures to ensure their physical safety also experience chronic worry about their physical safety (i.e., as opposed to feeling depressed about possible threats to their physical safety), explaining why the Implicit Threatened Physical Safety subscale was associated with anxiety but not depression.



Previous research has supported the significance of women's perceived threats to their physical safety. In a qualitative study, Nadal, Hamit, Lyons, Weinberg, and Corman (2010) examined 14 women's reactions to female microaggressions. Participants reported various incidents with men in which they felt threatened or scared, including experiences of sexual objectification and sexual harassment. Some participants stated that given these experiences, they felt the need to take protective measures in the future, such as pretending to be in a relationship, walking with male acquaintances (versus walking alone), or pretending to be on the phone. Thus, it seems that women, based on previous experiences, may develop their own ways of coping with and addressing possible threats to their physical safety.

In addition to women developing their own mechanisms for coping with potential threats to their personal safety, research supports that women often receive messages from society (e.g., via interactions with family and friends, via media) that they need to take precautions in order to prevent and/or react to physical attacks, sexual assaults, and/or sexual harassment (Easteal, Holland, & Judd, 2015). Although these messages may be perceived as a way to protect and empower women (e.g., Hollander, 2004), scholars have argued that they are highly problematic in that they maintain patriarchal ideals and norms and perpetuate victim blaming (Easteal et al., 2015). Specifically, this type of microaggression implicitly implies that women maintain the responsibility to prevent being targets of sexual harassment and sexual and physical violence (Easteal et al., 2015). That is, with their privileged status, when men perpetrate acts of harassment and violence, they may not be viewed as culpable for their actions because women are

viewed as deserving of such actions when they do not employ preventative measures that deter these behaviors. In their analysis of media representations of violence against women, Easteal et al. (2015) stated that predominate narratives can “construct avoidance of violence as the responsibility of women, as opposed to perpetrators, and unwittingly perpetuate victim-blaming attitudes” (p. 106).

Threats to women’s physical safety has not been identified previously as a theme in microaggressions literature (e.g., Capodilupo et al., 2010), but Nadal et al. (2010) found that women reported feeling threatened and unsafe during various interpersonal interactions with men. Furthermore, although women may develop compensatory strategies to address threats to their physical well being based on previous experiences, they also receive messages from others that they should be responsible for ensuring their safety. These messages can propagate victim blaming and negate the culpability of perpetrators, furthering the marginalization and oppression of women. Furthermore, in the current study, Implicit Threatened Physical Safety was associated with anxiety and body surveillance, indicating that these types of experiences may be associated with negative mental health outcomes for women.

**Explicit threatened physical safety.** Although not identified as a theme in previous conceptual and qualitative work on female microaggressions (i.e., Capodilupo et al., 2010; Sue & Capodilupo, 2008), participants endorsed experiences of Explicit Threatened Physical Safety. Items in this factor capture behaviors that violate a women’s sense of personal safety: 1) A man said something to me that made me feel unsafe, 2) A man (a stranger) followed me in a public place, 3) A man stared at me in a threatening

manner, and 4) Someone touched me without my consent. The Explicit Threatened Physical Safety subscale had adequate internal reliability within the current two samples. The subscale was significantly positively correlated with anxiety, depression, and body surveillance and significantly negatively correlated with life satisfaction, supporting the possible negative impact of this type of sexism on various mental health variables among women.

Lifetime estimates indicate approximately 35% of women worldwide have experienced physical and/or sexual intimate partner violence or sexual violence from a non-partner (World Health Organization, 2017). Furthermore, in the U.S., approximately 20 million women have been stalked, and 25% of women have been raped in their lifetime (National Coalition Against Domestic Violence, n.d.). Given these statistics, it is clear that many women have been the targets of sexual assault and physical and sexual violence. It is not surprising that women also report experiencing more subtle acts that threaten their sense of physical safety and well-being. For example, Nadal et al. (2010) found that one of the most frequent emotional reactions to female microaggressions was fear or panic-like symptoms. Specifically, women reported “not feeling safe, particularly when they were being harassed, followed, or objectified by men” (p. 207). One participant from Nadal et al.’s (2010) study stated:

Some stranger guy tried to pick me up on the subway like quite a few years ago and that completely creeped me out because I didn’t know what the hell...And like I was trying to shoot him down he thought I was like playing hard to get or

something...I was kind of scared cause I like didn't know if he was going to attack me or what he was going to do, but luckily he left.

Research on LGBTQ microaggressions has found that individuals who identify as LGBTQ endorse experiences that fall under the theme *threatening behavior* (Nadal, Issa, Leon, Meterko, Wideman, & Wong, 2011). Individuals reported incidents that involved being targets of verbal attacks, harassment (e.g., being followed), and physical assaults because of their presumed sexual orientation (Nadal et al., 2011). The researchers argued that these experiences can be viewed as microassaults (i.e., perpetrators are aware of their behaviors) and “left victims feeling unsafe and vulnerable” (Nadal et al., 2011, p. 493). Items in the Explicit Threatened Physical Safety factor can similarly be viewed as microassaults against women that likely leave women feeling vulnerable and powerless.

In summary, although not previously identified as a female microaggression theme (e.g., Capodilupo et al., 2010), women report being targets of physical and sexual assault and violence (World Health Organization, 2017). Furthermore, women report experiencing more subtle forms of harassment that also threaten their sense of physical safety (Nadal, 2010). These experiences are detrimental in that they can engender a sense of powerlessness and susceptibility to harassment and violence and, in the current study, were associated with various negative mental health outcomes.

**Environmental.** The Environmental factor was comprised of four items: 1) I observed that men hold more leadership positions in society than women, 2) I observed in the media that women are not believed when they report being sexually harassed, 3) I observed in the media that people excuse men's behavior by saying “boys will be boys”

(or something similar), and 4) I observed women portrayed as housewives on T.V. These items represent microaggressions that are present in a woman's environment (versus interpersonal interactions), and the Environmental subscale had acceptable internal reliability within the two present samples. In Study 2, the subscale was only significantly positively associated with body surveillance—it was not significantly correlated with anxiety, depression, or satisfaction with life. These findings indicate that interpersonal forms of microaggressions may be more impactful on women's mental health than environmental microaggressions. Nonetheless, the Environmental subscale's significant association with body surveillance supports the possible adverse impact of environmental microaggressions.

Capodilupo et al. (2010) study also supported environmental microaggressions (*environmental invalidations*) as a distinct theme and form of female microaggressions. Participants in their study disclosed incidents that included environmental microaggressions that were present in the direct environment (e.g., posters of pin-ups in work environments), as well as environmental microaggressions that are present on a systemic level (e.g., women's lack of representation in a specific career field). In the current study, the majority of items focused on systemic-level female microaggressions and female microaggressions present in the media. Three out of the final four items reflect this latter category. It is unclear why participants in Capodilupo et al.'s (2010) study did not identify environmental microaggressions in the media. However, the authors stated that environmental microaggressions were one of the least reported microaggressions, which may, in part, be a result of the often more subtle nature of

environmental microaggressions when compared to other types of microaggressions (e.g., sexual objectification). The current study may have better captured diverse forms of environmental microaggressions, and, in particular, the relevance of environmental microaggressions present in the media.

Furthermore, the more subtle nature of environmental microaggressions may also help explain the non-significant associations between the Environmental factor and anxiety, depression, and life satisfaction. That is, women may not readily recognize environmental microaggressions, and, subsequently, environmental microaggressions may not have as strong of an influence on typical mental health variables (i.e., anxiety, depression, life satisfaction) as other forms of microaggressions. Yet, systemic-level microaggressions and microaggressions present in the media may still impact women's experiences and lives. For example, research on the importance of having role models or mentors in developing self-efficacy and professional growth points to the detrimental impact of women's lack of representation in leadership positions and traditionally male-dominated fields (e.g., Linehan & Scullion, 2008; Mattis, 2004; Zeldin & Pajares, 2000). Future research should examine possible associations between the Environmental subscale and variables such as self-efficacy to better understand the impact of this form of microaggression.

In summary, the Environmental factor captures women's experiences of systemic-level female microaggressions and female microaggressions present in the media. The items reflect somewhat different experiences than those disclosed in Capodilupo et al.'s (2010) study (particularly female microaggressions present in the media). Nonetheless,

research highlights the importance of including these types of experiences in the FeMS, and the current study indicated that environmental microaggressions might be associated with different variables (e.g., self-efficacy) than those associated with other forms of microaggressions.

### **FeMS: Reliability and Validity**

Results from the current study provide support for the initial reliability of the FeMS. Specifically, the general FeMS and each FeMS subscale were significantly correlated with each other. Additionally, the FeMS subscales had adequate internal reliability within two present samples of diverse women.

In Study 1, the FeMS (general FeMS and each subscale) was significantly correlated with the SSE (lifetime and past year), depression, anxiety, and self-esteem (except for a non-significant correlation between the Sexual Objectification factor and self-esteem), supporting convergent validity. Furthermore, the FeMS (general FeMS and each subscale) had small significant correlations with neuroticism, providing support for divergent validity. In Study 2, the FeMS (general FeMS and each subscale) was significantly correlated with the SSE (lifetime and past year) and body surveillance. The FeMS (general FeMS) was also significantly correlated with anxiety and depression but not satisfaction with life. The FeMS subscales had differing correlations with depression, anxiety, and life satisfaction. Invalidation of the Reality of Sexism, Implicit Threatened Physical Safety, Explicit Threatened Physical Safety, Assumptions of Inferiority/Second-Class Citizen, Sexist Language, and Sexual Objectification were significantly correlated with anxiety. Explicit Threatened Physical Safety, Assumptions of Inferiority/Second-

Class Citizen, and Sexist Language were significantly correlated with depression. Explicit Threatened Physical Safety, Sexist Language, and Sexual Objectification were significantly correlated with life satisfaction. These results indicate that each FeMS subscale may be utilized to predict differing outcomes for women. Future research should further examine associations between FeMS subscales and diverse variables (e.g., self-efficacy) among women to better understand the utility of each FeMS subscale.

Confirmatory factory analysis supported a bifactor structure, with eight specific factors and a general FeMS factor. This finding is consistent with microaggressions theory, which emphasizes the negative impact of specific forms of microaggressions and the cumulative impact of microaggressions, in general, on individuals psychosocial functioning and well-being (e.g., Sue et al., 2007). Furthermore, the bifactor structure is congruent with previous sexism research that has found positive associations between women's experiences of a broad range of sexist events and mental health concerns (e.g., associations between scores on the Schedule of Sexist Events and psychological distress; Klonoff & Landrine, 1995; Syzmanski & Stewart, 2010) and positive associations between specific forms of sexism and mental health concerns (e.g., sexual objectification and body shame; Kozee, Tylka, Augustus-Horvath, & Denchik, 2007). Results from the current study also support the possible utility of utilizing the general FeMS score and each subscale score in future research.

Supporting incremental validity, within the two present samples, the FeMS (general FeMS) predicted unique variance in anxiety and body surveillance but not depression or self-esteem above and beyond that explained by the SSE-lifetime and



explained unique variance in anxiety and depression but not self-esteem above and beyond that explained by neuroticism. These results indicate that the FeMS (general FeMS) may be used in research that seeks to understand associations between women's experiences of a broad range of female microaggressions (versus broad experiences of general sexist events that are captured by the SSE-lifetime) and anxiety and body surveillance. Future research should examine the possible utility of utilizing the FeMS (general FeMS) in research examining associations between female microaggressions and other mental health variables not included in the current study (e.g., trauma-related mental health disorders).

### **Limitations and Future Directions**

There were a number of limitations of the current study. First, the diversity of the sample was limited, particularly in terms of education and income. For example, approximately one-third of the sample from Study 1 had a graduate or professional degree and approximately one-quarter of the sample had a family income over \$100,000, indicating a higher socio-economic status. Women from higher socio-economic statuses might experience female microaggressions at different frequencies and/or their perceptions of experiencing female microaggressions may be different than women from lower socio-economic statuses (e.g., Watson, Scarini, Klesges, Slawson, & Beech, 2002). Additionally, although somewhat similar to the U.S. population (U.S. Census Bureau, 2017), the majority of participants identified as White. Given that exploratory factor analysis is very sensitive to the sample (i.e., demographic characteristics of the sample, sample size; Osborne & Fitzpatrick, 2012), future studies should examine the replicability of the factor structure and robustness of the solution among a more diverse sample (e.g., greater variance in education and income) and/or specific populations (e.g., specific racial/ethnic minority groups).

A second limitation is that the study relied on retrospective data and asked participants to indicate how frequently they experienced a microaggression in their lifetime. Participants may have provided inaccurate estimates in regards to how frequently they experienced a certain event in their lifetime. For example, participants may have based their responses on events that have occurred within the past few years versus their lifetime. Or, participants may have focused on a time in their life when they

experienced microaggressions more or less frequently, skewing their responses. As such, future research might examine associations between the FeMS and data from daily diary studies examining women's experiences of female microaggressions to further support convergent validity of the FeMS. Results from these types of studies may also help support the utility of examining associations between the FeMS and more current mental health concerns. That is, if there are positive associations between the FeMS and participants' reports of experiencing recent female microaggressions and positive associations between participants' reports of experiencing female microaggressions recently and current mental health concerns, then there should also be positive associations between the FeMS and current mental health concerns.

The response format chosen for the FeMS is also a limitation (i.e., 1 = *never*, 2 = *a little/rarely*, 3 = *sometimes/a moderate amount*, 4 = *often/frequently*). The response format is consistent with that used in previous microaggressions research (e.g., Lewis & Neville, 2015) and was chosen for the FeMS because it reflected the conceptualization of the salience of female microaggressions in women's daily lives (i.e., whether women perceived a specific female microaggression to be prevalent in their lives). Nonetheless, future research might consider utilizing response formats that outline more specific frequencies (e.g., "I experienced this event 1-3 times in the past six months;" Nadal, 2011, p. 472). Furthermore, along with a frequency scale, previous research has included a stress appraisal scale in sexism measures (e.g., Lewis & Neville, 2015). Thus, future research might include a stress appraisal scale in the FeMS. A final limitation of the study is that the FeMS focused on sexist events that might apply to a broad range of

women. Thus, items may not reflect specific sexist events that women from certain sociocultural identities may experience. For example, women who identify as and/or are perceived to be Latina or Hispanic may experience distinct forms of female microaggressions not represented in the FeMS. Future research should explore female microaggressions that may be unique to certain sociocultural identities (i.e., utilizing an intersectionality perspective).

## **Conclusions**

The current study contributes to the extant literature on microaggressions by developing and validating the Female Microaggressions Scale (FeMS). Results provided initial evidence for the reliability and validity of the scale within two current diverse samples of women. Furthermore, results indicated that the FeMS might help explain variance in mental health outcomes above and beyond that explained by another sexism measure. The scale can be used to further quantitative research on female microaggressions and better understand the impact of female microaggressions on women's psychosocial functioning.

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APPENDIX A  
83-ITEM FEMALE MICROAGGRESSIONS SCALE

Instructions: Think about your experiences related to your gender. Please indicate how frequently you have experienced each item DURING YOUR LIFETIME utilizing the following scale: 1 = Never, 2 = A little/rarely, 3 = Sometimes/a moderate amount, and 4 = Often/frequently

1. A man said something to me that me feel unsafe
2. Someone did not believe me when I said I experienced sexism
3. Someone gave me compliments about my appearance before talking about something else
4. Someone referred to me as a "chick"
5. Someone catcalled me (e.g., whistled at me) while I was walking down the street
6. Someone told me that I am too pretty to look unhappy
7. I observed someone stare at a woman's body
8. I observed in the media that women are portrayed as sex objects
9. Someone called me a "whore"
10. Someone called me a "bitch"
11. Someone assumed that I could not lift a heavy object because of my gender
12. Someone told me that men also experience discrimination when we were discussing sexism
13. Someone told me that women are being too sensitive when they say they experience gender discrimination
14. Someone looked at my body (i.e., instead of my eyes) while we were talking
15. Someone told me that I need to be more feminine
16. I observed in the media that people excuse men's behavior by saying "boys will be boys" (or something similar)
17. Someone told me to have some form of self-defense (e.g., pepper spray) when going out in a public place
18. Someone assumed that I want children because of my gender
19. Someone placed the bill closer to a male friend/partner while at a restaurant
20. I observed that women who do not fit traditional gender stereotypes (e.g., caregiver) are viewed more negatively than women who do
21. Someone told me not to walk alone because I might be raped or assaulted
22. A man became angry when I denied his romantic or sexual advances
23. Someone described me as being too "emotional" while expressing a strong opinion because of my gender
24. Someone told me that women have the same opportunities as men
25. Someone (a stranger) called me "baby"
26. A man interacted with me in a threatening way
27. Someone did not hire me for a position because of my gender
28. Someone assumed that I would act based on my emotions instead of intellect because of my gender
29. Someone told me that sexism is no longer an important social issue
30. A man followed me in a public place

31. Someone treated me with less respect than a man
32. Someone called me "bossy" when I was being assertive because of my gender
33. Someone ignored my ideas because of my gender
34. Someone assumed that I am nurturing because of my gender
35. Someone told me to watch my drink when I am in a social setting
36. Someone implied that it was my fault for being sexually harassed
37. Someone told me that I should have a safety plan when going on a first date (e.g., tell a friend where I am going)
38. Someone assumed that I lacked skills in technology (e.g., computers) because of my gender
39. Someone called me a "slut"
40. Someone assumed I was playing "hard to get" when I denied her/his advances
41. I observed in the media that oftentimes women are not believed when they report being sexually harassed
42. I observed a woman's appearance being emphasized over her other qualities
43. Someone thought I had a romantic interest in him/her because I was nice to him/her
44. Someone assumed a man was in charge
45. Someone ignored my success and achievement because of my gender
46. Someone utilized sexist language towards me
47. Someone told me that "girls or women can't do that"
48. Someone did not ask me about my career or accomplishments when first meeting me because of my gender
49. Someone told me I am too opinionated for a woman
50. Someone assumed that I am not intelligent because of my gender
51. I observed that men (more than women) tend to hold leadership positions in society
52. An employer paid me less than a male colleague for the same position because of my gender
53. Someone called me a "tease"
54. Someone assumed that I am not good at math because of my gender
55. Someone assumed that I am not athletic because of my gender
56. I observed that women do not often hold high-ranking government positions
57. Someone ignored my abilities because of my gender
58. Someone asked a man to help with physical tasks instead of me because of my gender
59. Someone expected that I should cook and clean because of my gender
60. Someone (a stranger) called me "sweetie" or "sweetheart"
61. Someone ignored me during an experience where negotiation was involved (e.g., buying a cellphone or car) when I was with a man
62. I received messages in the media that I should place my family's needs above my own
63. Someone told me that I am more attractive when I smile

64. Someone told me that being sexually harassed (e.g., being whistled at) is a compliment
65. Someone touched me without my consent
66. Someone assumed that I do not like sports because of my gender
67. Someone made unwanted sexual or romantic advances towards me
68. Someone told me that "not all men are like that" (or something similar) when we were discussing sexism
69. I observed that women are underrepresented in STEM (i.e., science, technology, engineering, and math) fields
70. I observed that women who are perceived as attractive get treated differently than women who are perceived as less attractive
71. Someone told me that males are the stronger gender
72. Someone incorrectly attributed my work to a man
73. I observed in the media that women are blamed for being sexually assaulted
74. A man stared at me in a threatening manner
75. I observed women portrayed as housewives on T.V.
76. Someone told me a sexist joke
77. Someone assumed that I want to get married because of my gender
78. Someone told me that I should cover up my body because it is distracting
79. I overheard someone making sexual comments about women's bodies
80. Someone (a stranger) made a comment about my body
81. Someone implied that I performed a sexual act in order to receive a job or promotion
82. Someone questioned my ability to have a successful career and family because of my gender
83. I heard a song that used offensive language about women in its lyrics

APPENDIX B  
DEMOGRAPHIC QUESTIONNAIRE

1. How old are you?
2. What gender do you identify with?
  - a) Man
  - b) Woman
  - c) other:
3. What is your sexual orientation?
  - a) Bisexual
  - b) Heterosexual or straight
  - c) Gay
  - d) Lesbian
  - d) Other (please specify)
4. What is your highest level of education?
  - a) Primary or high school
  - b) Some college
  - c) Associate's degree
  - d) Bachelor's degree
  - e) Graduate or professional degree (e.g., MA, MBA, PhD, JD, MD)
5. What is or was your major and/or graduate program if applicable?
6. What is your current employment status
  - a) Full-time
  - b) Part-time
  - c) Unemployed/not working
  - d) Retired
7. What is your current occupation (if applicable)?
8. What was your occupation before retiring?
9. What type of career would you like to have in the future if different from your current career or you are currently unemployed?
10. What is or was your mother's occupation if applicable?
11. What is or was your father's occupation if applicable?
12. What is your racial/ethnic heritage?  
(Check all that apply)
  - a) American Indian or Alaska Native
  - b) Asian
  - c) Black or African American
  - d) Hispanic or Latina/o
  - e) Native Hawaiian or Other Pacific Islander
  - f) White (non-Hispanic)
  - g) Other (please specify)
13. Were you born in the U.S.?
14. Please indicate your YEAR OF ARRIVAL TO THE U.S. if applicable

15. What is your relationship status?
- a) Single
  - b) In a relationship, not married
  - c) Married
  - d) Other
16. What is your household income?
- a) Below \$15,000
  - b) 15,000 - 24,999
  - c) 25,000 – 34,999
  - d) 35,000 – 49, 999
  - e) 50,000 – 74,999
  - f) 75,000 – 99,999
  - g) over 100,000

\* 17. What is your height?

\* 18. What is your approximate weight?

\* = only included in Study 2



APPENDIX C  
SCHEDULE OF SEXIST EVENTS (SSE)

*Instructions:* Please think carefully about your life as you answer the question below. For each question, read the question and then answer it twice: answer once for what your ENTIRE LIFE (from when you were a child to now) has been like, and the once for what the PAST YEAR has been like. Circle the number that best describes events in YOUR ENTIRE LIFE, and in the PAST YEAR, using these rules:

1 = Never 2 = Once in a while (less than 10% of the time) 3 = Sometimes (10-25% of the time) 4 = A lot (26-49% of the time) 5 = Most of the time (50-70% of the time) 6 = Almost all of the time (more than 70% of the time)

1. How many times have you been treated unfairly by your teachers because you are a woman?
2. How many times have you been treated unfairly by your employer, boss or supervisors because you are a woman?
3. How many times have you been treated unfairly by your co-workers, fellow students or colleagues because you are a woman?
4. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics and others) because you are a woman?
5. How many times have you been treated unfairly by strangers because you are a woman?
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 principals, gynecologists and others) because you are a woman?
7. How many times have you been treated unfairly by neighbors because you are a woman?
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?
9. How many times were you denied a promotion, tenure, a good assignment, a job, or other such thing at work that you deserved because you are a woman?
10. How many times have you been treated unfairly by your family because you are a woman?
11. How many times have people made inappropriate or unwanted sexual advances to you because you are a woman?
12. How many times have people failed to show you the respect that you deserve because you are a woman?
13. How many times have you wanted to tell someone off for being sexist?
14. How many times have you been really angry about something sexist that was done to you?
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?
16. How many times have you been called a sexist name like a bitch, cunt, chick, or other names?

17. How many times have you gotten into an argument or fight about something sexist that was done or said to you or done to somebody else?
18. How many times have you been made fun of, picked on, pushed, shoved hit, or threatened with arm because you are a woman?
19. How many times have you heard people making sexist jokes, or degrading sexist jokes?
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, A little different, Different in a few ways, Different in a lot of ways, Different in most ways, or Totally different

APPENDIX D  
GENERAL ANXIETY DISORDER-7

Instructions: Over the last 2 weeks, how often have you been bothered by any of the following problems?

1 = Not at all, 2 = Several days, 3 = More than half the days, 4 = Nearly every day

1. Feeling nervous, anxious or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

1 = Not difficult, 2 = Somewhat difficult, 3 = Very difficult, 4 = Extremely difficult

APPENDIX E

PATIENT HEALTH QUESTIONNAIRE-9

Instructions: Over the last 2 weeks, how often have you been bothered by any of the following problems?

1 = Not at all, 2 = Several days, 3 = More than half the days, 4 = Nearly every day

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling or staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself –or that you are a failure or have let yourself or your family down
7. Trouble concentrating on things, such as reading the newspaper or watching television
8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual
9. Thoughts that you would be better off dead or of hurting yourself in some way

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

1 = Not difficult, 2 = Somewhat difficult, 3 = Very difficult, 4 = Extremely difficult

APPENDIX F

ROSENBERG SELF-ESTEEM SCALE



Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1. On the whole, I am satisfied with myself.
- 2.\* At times, I think I am no good at all.
3. I feel that I have a number of good qualities.
4. I am able to do things as well as most other people.
- 5.\* I feel I do not have much to be proud of.
- 6.\* I certainly feel useless at times.
7. I feel that I'm a person of worth, at least on an equal plane with others.
- 8.\* I wish I could have more respect for myself.
- 9.\* All in all, I am inclined to feel that I am a failure.
10. I take a positive attitude toward myself.

Items with an asterisk are reverse scored, that is, SA = 0, A = 1, D = 2, SD = 3.

APPENDIX G

EYSENCK PERSONALITY QUESTIONNAIRE-REVISED-NEUROTICISM  
SUBSCALE

Instructions: Please answer each question by marking "YES" or "NO" following the question. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question

1. Does your mood often go up and down?
2. Do you ever feel 'just miserable' for no reason?
3. Are you an irritable person?
4. Are your feelings easily hurt?
5. Do you often feel 'fed-up'?
6. Would you call yourself a nervous person?
7. Are you a worrier?
8. Would you call yourself tense or 'highly strung'?
9. Do you worry too long after an embarrassing experience?
10. Do you suffer from 'nerves'?
11. Do you often feel lonely?
12. Are you often troubled about feelings of guilt?

APPENDIX H

FINAL FeMS

Instructions: Think about your experiences related to your gender. Please indicate how frequently you have experienced each item DURING YOUR LIFETIME utilizing the following scale: 1 = Never, 2 = A little/rarely, 3 = Sometimes/a moderate amount, and 4 = Often/frequently

1. Someone told me that sexism is no longer an important social issue
2. Someone told me to watch my drink when I am in a social setting
3. Someone incorrectly attributed my work to a man
4. Someone touched me without my consent
5. Someone told me that "not all men are like that" (or something similar) when we were discussing sexism
6. I observed women portrayed as housewives on T.V.
7. Someone told me that women are being too sensitive when they say they experience gender discrimination
8. Someone called me a "whore"
9. Someone assumed that I am not intelligent because of my gender
10. Someone assumed that I am not athletic because of my gender
11. Someone called me a "slut"
12. Someone assumed that I want to get married because of my gender
13. A man (a stranger) followed me in a public place
14. Someone assumed that I am not good at math because of my gender
15. Someone told me not to walk alone because I might be raped or assaulted
16. Someone told me that I am too pretty to look unhappy
17. A man stared at me in a threatening manner
18. I observed in the media that women are not believed when they report being sexually harassed
19. I observed in the media that people excuse men's behavior by saying "boys will be boys" (or something similar)
20. Someone told me that I should have a safety plan when going on a first date (e.g., tell a friend where I am going)
21. Someone called me a "bitch"
22. Someone called me a "tease"
23. Someone gave me compliments about my appearance before talking about something else
24. Someone catcalled me (e.g., whistled at me) while I was walking down the street
25. Someone told me to have some form of self-defense (e.g., pepper spray) when going out in a public place
26. A man said something to me that made me feel unsafe
27. Someone assumed that I want children because of my gender
28. Someone did not ask me about my career or accomplishments when first meeting me because of my gender
29. Someone expected that I should cook and clean because of my gender
30. Someone told me that women have the same opportunities as men
31. Someone assumed that I am nurturing because of my gender
32. I observed someone staring at a woman's body
33. I observed that men hold more leadership positions in society than women
34. Someone told me that men also experience discrimination when we were discussing sexism

APPENDIX I  
SATISFACTION WITH LIFE

Instructions: Below are five statements that you may agree or disagree with. Indicate your agreement with each item. Please be open and honest in your responses.

1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Neither agree nor disagree, 5 = Somewhat agree, 6 = Agree, 7 = Strongly agree

1. In most ways my life is close to my ideal
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in life
5. If I could live my life over, I would change almost nothing

APPENDIX J

THE OBJECTIFIED BODY CONSCIOUSNESS SCALE-BODY SURVEILLANCE

SUBSCALE



Instructions: For each item below, please check the answer that best characterizes your attitudes or behaviors.

1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Neither agree or disagree, 5 = Somewhat agree, 6 = Agree, 7 = Strongly agree

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

\* = reverse-scored items

APPENDIX K

ARIZONA STATE UNIVERSITY IRB APPROVAL

EXEMPTION GRANTED

Giac-Thao Tran  
 CISA: Counseling and Counseling Psychology  
 480/727-4067  
 alisia@asu.edu

Dear Giac-Thao Tran:

On 5/24/2017 the ASU IRB reviewed the following protocol:

|                     |   |
|---------------------|---|
| Type of Review:     | Initial Study   |
| Title:              | Female Microaggressions Scale (FeMS): A comprehensive sexism scale  |
| Investigator:       | Giac-Thao Tran  |
| IRB ID:             | STUDY00006325   |
| Funding:            | None  |
| Grant Title:        | None  |
| Grant ID:           | None  |
| Documents Reviewed: | <ul style="list-style-type: none"> <li>• Female Microaggressions Scale_IRB_Measures.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Female_Microaggressions_IRB_Final.docx, Category: IRB Protocol;</li> <li>• Email script.pdf, Category: Recruitment Materials;</li> <li>• FeMS Consent Form.pdf, Category: Consent Form;</li> </ul> |

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 5/24/2017.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator