

# Examining the Moderating Role of Self-Esteem in the Link Between Experiences of Perceived Sexist Events and Psychological Distress

Bonnie Moradi  
University of Florida

Linda Mezydlo Subich  
The University of Akron

Perceived sexist events are recognized as stressors that are linked to psychological distress for those who experience such events (E. A. Klonoff & H. Landrine, 1995; J. K. Swim, 2001). In this study, personal self-esteem was examined as a moderator of the relation between perceived sexist events and psychological distress for a sample of 104 young women. Results clearly supported (a) the individual relations of frequency and appraisal of perceived sexist events and self-esteem to psychological distress and (b) the additional incremental contribution of the interaction of these variables to psychological distress. The additional variance accounted for by the interactions was substantial, ranging from 3% to 7%. As expected, self-esteem moderated the link between perceived sexist events and psychological distress such that this link was positive for participants with low self-esteem but nonsignificant for those with high self-esteem.

Counseling psychologists and other scholars have long theorized about the potential negative psychological implications of experiences of discrimination and oppression (e.g., Allport, 1954; Barret & Swim, 1998; Brooks, 1981; Clark, Anderson, Clark, & Williams, 1999; Enns, 1993; Landrine & Klonoff, 1996, 1997; Slavin, Rainer, McCreary, & Gowda, 1991; Smith, 1985). Indeed, in 1996 the Basic Behavioral Science Task Force of the National Advisory Mental Health Council stated that “Coping with [daily] discrimination can result in chronic levels of stress that have physical and mental health consequences” (p. 725).

Focusing specifically on women’s experiences of sexist discrimination, Klonoff and Landrine (1995) suggested that daily occurrences of sexist events are stressful and therefore related to psychological distress and symptoms. More specifically, Landrine, Klonoff, Gibbs, Manning, and Lund (1995) proposed that sexist events experienced throughout one’s life are distal predictors of psychological distress, whereas sexist events experienced within the past year and brutal or physical sexist discrimination (e.g., rape or battering), regardless of their time of occurrence, are proximal predictors of psychological symptoms. Landrine and Klonoff (1997) hypothesized that greater frequency of recent and lifetime perceived sexist events and the degree of perceived stress associated with sexist events (i.e., appraisal) are each related positively to psychological distress and symptomatology.

A series of studies by Landrine, Klonoff, and their colleagues examined and supported empirically the hypothesized link between perceived experiences of sexist events and psychological symptoms (e.g., Landrine & Klonoff, 1997; Landrine et al., 1995). For example, Landrine et al. (1995) reported that both recent and

lifetime perceived sexist events were related to total psychological symptoms, obsessive-compulsivity, interpersonal sensitivity, anxiety, and premenstrual symptoms above and beyond daily hassles and general stressful life events for a large sample of adult women. In addition, lifetime sexist events were related to somatic symptoms, and recent sexist events were related to depressive symptoms above and beyond daily hassles and other stressful life events.

Extending this work, Swim (2001) conducted a series of diary studies to examine the link between women’s perceived daily experiences of sexism and psychological distress. Female undergraduates enrolled in a psychology of gender course were recruited as participant–observers and asked to record over a 2-week period incidents that they observed involving themselves, someone else, or women in general being treated differently because of their gender. They also recorded their emotional responses to these incidents. On average, participants reported two sexist events during the 2-week period; the most common emotional reaction to sexist events was feeling angry or upset. In a follow-up, Swim developed a self-report measure of sexist events and used it in another diary study to collect data on women’s and men’s experiences of sexist events. In that research, Swim found that the number of reported sexist events predicted anger, anxiety, and social state self-esteem beyond pretest measures of negative affect, state self-esteem, feminist beliefs, and feeling threatened by the possibility of being stereotyped. Swim’s work is particularly notable as it lent support to the hypothesis that reported experiences of sexism contribute in a predictive manner to greater feelings of distress.

Recent work by Corning (2002), however, found mixed support for a link between perceptions of gender inequity, as conceptualized from the perspective of relative deprivation theory (Davis, 1959) and psychological distress. Relative deprivation theory posits that a sense of social inequity or relative deprivation results from subjective assessment of one’s own social status, situation, and resources compared with that of other groups (Davis, 1959). In

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Bonnie Moradi, Department of Psychology, University of Florida; Linda Mezydlo Subich, Department of Psychology, The University of Akron.

Correspondence concerning this article should be addressed to Bonnie Moradi, Department of Psychology, University of Florida, P.O. Box 112250, Gainesville, FL 32611-2250. E-mail: moradib@ufl.edu

two separate studies, Corning assessed young women's perception of the inequity between their own life experiences and their perception of men's life experiences. She found support for a relation between these perceptions and psychological distress in two of six tests. This weaker pattern of support for the relation of gender inequity and distress may be a function of the different approach Corning took to assessing perceived discrimination; instead of asking about specific recalled instances of unfair treatment or events, Corning's respondents reported more general perceptions of their access to valued resources relative to men's access to those same resources.

Corning's (2002) findings notwithstanding, support has generally mounted for the link between perceived sexism and psychological distress and symptoms. A reasonable next step that has begun to emerge in the literature (e.g., Corning, 2002) is the investigation of potential moderators of this link. Such research could advance the understanding of women's mental health by identifying subgroups of women for whom the link between perceived sexism and psychological distress may be more pronounced and could ultimately inform interventions targeted to these women.

Baron and Kenny (1986) distinguished a moderator from a mediator with the following definitions: A moderator "affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" (p. 1174). In contrast, a variable functions as a mediator "to the extent that it accounts for the relation between the predictor and criterion" (p. 1176). In addition to the conceptual distinction between a moderator and a mediator, the statistical requirements for examining such variables differ. For example, a mediator by definition must be correlated with the predictor and criterion variable, but a moderator may or may not be related to the predictor or criterion.

Self-esteem may be a viable construct to explore as a moderator of the perceived sexist events–psychological distress link based on extant theoretical and empirical conceptualizations. The literature on resilience, for example, identifies self-esteem as an important attribute of resilient individuals, that is, individuals who are able to thrive despite adverse life experiences (Masten & Coatsworth, 1998). Relatedly, studies from the life stress and hassles literature have conceptualized self-esteem and related constructs as potential moderators of the link between life stress and psychological symptoms (e.g., Curbow & Somerfield, 1991). Indeed, Kliewer and Sandler (1992) found that self-esteem moderated the link between negative life events and psychological symptoms for adolescent girls such that the relation between negative life events and symptoms was stronger for girls with low levels of self-esteem than for girls with high levels of self-esteem. Similarly, in two separate studies with undergraduates, Lightsey (1994a, 1994b) found support for the notion that positive thoughts about oneself moderated the link between negative life stress and depressive symptoms. Again, the relation between life stress and depressive symptoms was stronger for those with lower levels of positive self-cognitions. Additionally, Fernandez, Mutran, and Reitzes (1998) found that adults' self-esteem moderated the link between interpersonally related stressful events and depressive symptoms in the expected direction.

This literature suggests, then, that self-esteem is reasonable to investigate as a moderator of the link between perceived experiences of sexist events, an adverse interpersonal stressor (cf. Klonoff & Landrine, 1995), and psychological distress. Support

for conceptualizing self-esteem as a moderator of this relation rather than as a mediator is based on the lack of consistent empirical support for the link between self-esteem and perceived sexist events (e.g., Highlen, Tom, Ashton, & Thompson, 1998; Utsey, Ponterotto, Reynolds, & Cancelli, 2000). That is, self-esteem does not meet the statistical requirements for being examined as a mediator because of its inconsistent relation to the predictor in the model (Baron & Kenny, 1986).

To date, however, self-esteem has most typically been included in studies of the link between perceived experiences of discrimination and mental health as a criterion variable (i.e., an indicator of mental health) and not a moderator. In other words, researchers have explored the extent to which perceived experiences of discrimination (e.g., racism and sexism) relate to self-esteem, but not whether self-esteem moderates the link between perceived experiences of discrimination and psychological distress. For example, Utsey et al. (2000) examined participants' appraisal (i.e., how "upset") of racist events and self-esteem, and Highlen et al. (1998) explored the relation between self-esteem and perceived appraisal and frequency of sexist events for European American and African American women.

Fischer and Shaw (1999), however, broke new ground when they explored personal self-esteem as a moderator and as a mediator in the link between perceived experiences of racist events and mental health. In this study, mental health was operationalized with a single measure that combined psychological distress and well-being. Fischer and Shaw found no direct link between perceived experiences of racist events and mental health. They did find, however, a significant interaction between self-esteem and perceived experiences of racist events in predicting mental health. The direction of this interaction was inconsistent with their expectation; the link between perceived experiences of racist events and mental health was stronger for persons with high levels of personal self-esteem. Rather than playing a protective role, self-esteem seemed to exacerbate the link between perceived racist events and mental health in their sample. The authors noted that this interpretation was made with extreme caution, however, because they used a one-tailed test of significance (given that they had a directional hypothesis in the direction opposite their findings) and their results would not have reached significance if they had used a two-tailed test. Further, although the consideration of both psychological distress and well-being was a strength of this study, collapsing these constructs into a single index of mental health adds complexity to interpretations of the findings related to the moderating role of self-esteem given that self-esteem itself at times has been conceptualized as an indicator of well-being.

The only other research found to have examined self-esteem as a moderator of the link between perceived discrimination and mental health is that of Corning (2002). As mentioned previously, Corning operationalized sexist discrimination as participants' perception of the inequity between their own experiences and their perception of men's experiences and found limited support for a relation between distress and discrimination. She also found, however, some support for self-esteem as a moderator of this link, such that young women with lower levels of self-esteem evidenced a stronger relation between perceived gender inequity and depression than did those with higher levels of self-esteem. This moderator effect was not found, however, when anxiety and somatization were examined. Corning's mixed findings offer some

support for self-esteem as a moderator of the link between perceived sexist events and psychological distress but point to the need for further examination of this issue.

In summary, based on prior literature, the suggestion that self-esteem moderates the relation between experiences of perceived sexist discrimination and psychological symptomatology seems reasonable to propose but remains relatively unexplored. This study addressed this gap and extended the current limited literature by examining whether personal self-esteem moderates the link between women's perceived experiences of sexist events and their overall psychological symptomatology.

## Method

### Participants

One hundred four female college students from a large midwestern university participated in this study. Approximately 75% of the sample identified themselves as White, 15% as African American, 6% as Asian American, 2% as Latina, 1% as Native American, and 3% as multiracial or other racial ethnic minority. Participants ranged in age from 16 to 49 years ( $M = 23.95$ ,  $SD = 7.86$ ,  $Mdn = 21$ ). About 72% of the sample reported that they were single, and the remaining 28% reported that they were married or in a committed relationship. In terms of current social class, 41% identified themselves as middle class, 35% as working class, 17% as upper middle class, and 7% as lower class. The majority of the sample (93%) reported that they had a high school diploma, 5% had an associates degree, and the remaining 2% had a bachelors degree.

### Instruments

**Brief Symptom Inventory (BSI).** The BSI (Derogatis, 1993), a shortened version of the Symptoms Checklist-90—Revised, is a 53-item Likert-type scale (0 = *not at all*, 4 = *extremely*). The BSI yields a General Severity Index (GSI), which indicates overall level of psychological distress and ranges from 0 to 4. Participants are instructed to indicate the extent to which they experience symptoms such as “the idea that something is wrong with your mind,” “feeling easily annoyed or irritated,” and “nervousness or shakiness inside.” The nonclinical adult normative sample for the BSI consisted of 974 participants (approximately 49% women). The GSI mean and standard deviation for women in the nonclinical normative sample were .35 and .37, respectively (Derogatis, 1993). For nonclinical adults, Derogatis (1993) reported a 2-week test–retest reliability of .90 for the GSI. In terms of validity, Derogatis reported high convergence between the subscales of the BSI and corresponding Minnesota Multiphasic Personality Inventory and Symptom Checklist-90—Revised scales.

**Rosenberg Self-Esteem Scale (RSE).** The RSE is 10-item self-report measure (Rosenberg, 1965). Items are rated on a 4-point Likert-type scale (1 = *strongly disagree*, 4 = *strongly agree*). Five items are reverse scored, and item ratings are summed to yield a total score that ranges from 10 to 40; higher scores indicate higher self-esteem (Wylie, 1989). Wylie (1989) reported alphas ranging from .74 to .87 and test–retest reliabilities ranging from .63 to .91. In terms of validity, RSE scores have been linked negatively to depressive affect, anxiety, psychosomatic symptoms, and interpersonal insecurity (Wylie, 1989).

**Schedule of Sexist Events (SSE).** The SSE (Klonoff & Landrine, 1995) is a rationally developed self-report instrument consisting of 20 items that assess the perceived frequency and appraisal of sexist events. Sample items include the following: “How many times have you been treated unfairly by your co-workers, fellow students or colleagues because you are a woman?” “How many times have people made inappropriate or unwanted sexual advances to you because you are a woman?” and “How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are a woman?” Using a Likert-type scale (1 = *the event*

*never happened*, 6 = *the event happened almost all of the time* [more than 70% of the time]), participants rate the items once for the frequency of sexist events within one's lifetime (SSE–Lifetime) and once for the frequency of sexist events within the past year (SSE–Recent). Participants also appraise the first 19 items in terms of their stressfulness (1 = *not at all stressful*, 6 = *extremely stressful*). Ratings across items are added to obtain scores that range from 20 to 120 for SSE–Lifetime and SSE–Recent subscales and from 19 to 114 for SSE–Appraisal. Higher scores indicate greater frequency of, or stress associated with, perceived sexist events.

Internal consistency reliability estimates for the SSE–Lifetime, SSE–Recent, and SSE–Appraisal subscales were .92, .90, and .93, respectively (Landrine & Klonoff, 1997). Klonoff and Landrine (1995) found that SSE scores correlated significantly and positively with the reported frequency of daily hassles and major stressful life events. Further, Fischer and Shaw (2000) reported nonsignificant or negligible correlations between SSE scores and self-deceptive enhancement and impression management. Factor analysis of the SSE–Lifetime and SSE–Recent subscales indicated that each was composed of four substantially interrelated factors (i.e., sexist degradation, sexism in distant relationships, sexism in close relationships, and sexism in the workplace), and the correlations of the factors within their subscale ranged from .43 to .93, with a median correlation of .59 (Klonoff & Landrine, 1995).

### Procedure

Data for the current study were part of a larger dataset collected in a program of research on feminist identity development (Moradi & Subich, 2002a, 2002b). The current study's participants were recruited from undergraduate psychology courses and received extra course credit for their participation. Persons willing to participate attended scheduled sessions and only these persons received a survey packet to complete. Procedures were described to participants and written consent was obtained. The instruments used in the present study were embedded among other instruments in the survey packet. The BSI appeared first followed by the SSE and the RSE scales to minimize potential distortion in reported distress (the criterion variable) as a result of reactivity to sexist events and self-esteem items. After completing the instruments, all participants were debriefed.

## Results

Descriptive statistics, internal consistency reliability estimates, and intercorrelations among the variables of interest are presented in Table 1. The zero-order correlations among the variables indicated that each of the three perceived sexist events measures was related positively and significantly to overall psychological distress. Perceived experiences of sexist events, however, were not related to self-esteem.

To test our hypothesis regarding the moderating role of self-esteem in the link between perceived sexist events and psychological distress, we followed Baron and Kenny's (1986) recommendation to use hierarchical multiple regression procedures to test moderator effects. In light of conceptual distinctions that Landrine and Klonoff (1997) made among the three dimensions of perceived sexist events (i.e., Lifetime, Recent, and Appraisal), we conducted three separate analyses, one for each of the three dimensions of perceived sexist events. We followed Aiken and West's (1991) suggestion for using centered variables (i.e., mean deviation scores) to reduce multicollinearity between the interaction term and the main effects when testing for moderator effects. In each of these analyses, we entered the main effects (i.e., SSE subscale and self-esteem) at Step 1 and the interaction term (i.e., SSE Subscale  $\times$  Self-Esteem) at Step 2 of a hierarchical multiple regres-

Table 1  
*Summary Statistics and Intercorrelations Among Primary Variables*

Variable	1	2	3	4	5	<i>M</i>	<i>SD</i>	$\alpha$
1. General Severity Index	—	-.49**	.32**	.39**	.27**	0.90	0.68	.97
2. Rosenberg Self-Esteem Scale		—	-.02	-.08	.07	32.83	6.17	.88
3. SSE–Lifetime			—	.85**	.81**	50.24	16.32	.91
4. SSE–Recent				—	.69**	40.95	14.73	.90
5. SSE–Appraisal					—	47.55	18.08	.91

*Note.* SSE = Schedule of Sexist Events.

\*\*  $p < .01$ .

sion. Significant change in  $R^2$  for the interaction term indicates a significant moderator effect.

As shown in Table 2, we found significant moderator effects in each of the three analyses, indicating that self-esteem moderated the links of perceived Lifetime, Recent, and Appraisal of sexist events to psychological distress. As indicated by the adjusted  $R^2$  for the regression equations examining Lifetime, Recent, and Appraisal of sexist events, the main and interaction effects together accounted for 35%, 39%, and 39% of the variance in psychological distress, respectively. The interaction terms of self-esteem with the SSE–Lifetime, SSE–Recent, and SSE–Appraisal subscales accounted for 3%, 4%, and 7% of incremental variance in psychological distress, respectively.

To explore patterns underlying these significant interaction effects, we used the regression equations obtained in the previous analyses to calculate and plot GSI scores for SSE scores of two standard deviations above and below the mean (Aiken & West, 1991). To examine whether the slope of the simple regression lines at high and low self-esteem were significantly different from zero, we conducted simple regression analyses as outlined by Aiken and West (1991). In this procedure, the criterion variable is regressed on the predictor, the moderator at a conditional value (e.g., high or low), the interaction of the predictor, and the moderator. The  $t$  test

for the regression coefficient of the predictor variable (i.e., SSE subscale) in this equation reflected the significance of the simple slope (i.e., whether the slope is significantly different from zero). As indicated in Table 3, for each SSE subscale we found that the relation between perceived sexist events and psychological distress was significant and positive for those with low self-esteem but nonsignificant for those with high self-esteem. The difference between these two regression lines was also significant, as indicated by the significant regression coefficients found for the interaction terms in the tests of the moderator effects (Aiken & West, 1991).

## Discussion

The present findings extend the sparse literature on self-esteem as a moderator of the relation between perceived discrimination events and psychological distress. Regression findings uniformly supported the moderating effect of personal self-esteem, regardless of whether sexism was assessed in terms of recent events, lifetime events, or the perceived stressful nature of the events. This moderating effect of self-esteem is consistent with general conceptualizations and data emerging from the resilience literature (e.g., Masten & Coatsworth, 1998) and from the life stress and hassles

Table 2  
*Moderating Effect of Self-Esteem on the Relation Between Perceived Sexist Events and Psychological Distress*

Step and variable	<i>B</i>	$\beta$	<i>t</i>	Total $R^2$	Adj. $R^2$	$R^2$ inc.	<i>F</i> inc.	<i>df</i>
Step 1								
SSE–Lifetime	.01	.27	3.29**	.34	.33	.34	26.00***	2, 101
Self-esteem	-.06	-.51	-6.40***					
Step 2								
SSE–Lifetime $\times$ Self-Esteem	.00	-.18	-2.23*	.37	.35	.03	4.99*	3, 100
Step 1								
SSE–Recent	.01	.31	4.03***	.37	.36	.37	29.73***	2, 101
Self-esteem	-.05	-.45	-5.80***					
Step 2								
SSE–Recent $\times$ Self-Esteem	.00	-.20	-2.52*	.41	.39	.04	6.36*	3, 100
Step 1								
SSE–Appraisal	.01	.26	3.35**	.33	.32	.33	25.26***	2, 101
Self-esteem	-.06	-.56	-7.15***					
Step 2								
SSE–Appraisal $\times$ Self-Esteem	.00	-.28	-3.49**	.41	.39	.07	12.21**	3, 100

*Note.* *B*,  $\beta$ , and *t* reflect values from the final regression equation. SSE = Schedule of Sexist Events; Adj. = adjusted; inc. = increment.

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

Table 3  
*Simple Slope Regression Analyses of Lifetime, Recent, and Appraisal of Sexist Events Predicting Psychological Distress at Low and High Self-Esteem*

Variable	<i>B</i>	$\beta$	<i>t</i>	<i>df</i>
Link between sexist events and distress at low self-esteem				
SSE–Lifetime	.03	.67	3.72***	3, 100
Self-esteem	–.06	–.51	–6.40***	
SSE–Lifetime × Self-Esteem	–.00	–.41	–2.23*	3, 100
SSE–Recent	.04	.76	4.28***	
Self-esteem	–.05	–.45	–5.80***	3, 100
SSE–Lifetime × Self-Esteem	–.00	–.45	–2.52*	
SSE–Appraisal	.03	.78	4.95***	3, 100
Self-esteem	–.06	–.56	–7.15***	
SSE–Lifetime × Self-Esteem	–.00	–.55	–3.49**	
Link between sexist events and distress at high self-esteem				
SSE–Lifetime	–.01	–.14	–.64	3, 100
Self-esteem	–.06	–.51	–6.40***	
SSE–Lifetime × Self-Esteem	–.00	–.48	–2.23*	3, 100
SSE–Recent	–.01	–.13	–.62	
Self-esteem	–.05	–.45	–5.80***	3, 100
SSE–Lifetime × Self-Esteem	–.00	–.52	–2.52*	
SSE–Appraisal	–.01	–.26	–1.45	3, 100
Self-esteem	–.06	–.56	–7.15***	
SSE–Lifetime × Self-Esteem	–.00	–.62	–3.49**	

Note. *B*,  $\beta$ , and *t* reflect values from the final regression equation. SSE = Schedule of Sexist Events.  
 \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

(e.g., Curbow & Somerfield, 1991; Kliewer & Sandler, 1992) literature. Perhaps adverse interpersonal experiences (e.g., sexist remarks or responses) are more easily dismissed by women who hold a stronger sense of their own worth but are more damaging to women with a more uncertain or negative sense of self-worth. The validity of such an explanation, however, waits on research to determine the causal mechanisms driving the observed pattern of relations. Such work may yield valuable therapeutic information, as well as explain important social psychological processes.

Such research is also important because the present findings are somewhat inconsistent with the only two studies that previously examined specifically self-esteem's role as a moderator in the relation between sexist or racist discrimination and psychological distress. Fischer and Shaw's (1999) finding that African American women's and men's experiences of racist events related more strongly to mental health status in cases of higher self-esteem is complicated to interpret and extension of it to the present study is uncertain. First, Fischer and Shaw's operationalization of mental health as psychological distress and well-being differs from the present research in which only distress was assessed; this conceptual distinction may be important. Second, their focus on African American women's and men's perceived experiences of racist events may not be comparable with the present research on sexist events; the dynamics of racism may differ from those of sexism such that those persons with higher self-esteem may be more (realistically) sensitive to, and consequently more adversely affected by, racist discrimination.

Corning's (2002) work on gender inequity, however, seems more conceptually and methodologically similar to the present project. Similar to the present study, she surveyed an undergraduate female sample, used the RSE to assess personal self-esteem, and assessed psychological symptoms with symptom checklists

not unlike the BSI. However, across her two studies, Corning found perceived gender inequity to have a direct link to her criterion variable (i.e., depression, anxiety, and somatization) in only two of the six regressions, with personal self-esteem moderating this relation in only one of three regressions.

As noted previously, Corning's (2002) manner of conceptualizing and assessing perceived sexist discrimination may account for these different findings. Her assessment of women's feelings of being deprived of access to valued resources as compared with men may tap more global perceptions of gender inequity than the present SSE assessment, and such global perceptions may be a less immediate and powerful determinant of mental health than specific reports of experiences with sexism. Supportive of this interpretation is the fact that the present findings, based on the more behaviorally grounded SSE, are quite consistent with prior work on specific stressors in relation to mental health and personal self-esteem as a moderator of this stress–health relation (e.g., Curbow & Somerfield, 1991; Kliewer & Sandler, 1992). Clearly, further research on and comparison of such different measures of sexist discrimination is needed.

Another measurement issue that needs exploration is the observation of strong correlations ( $r = .69-.85$ ) among the Recent, Lifetime, and Appraisal subscales of the SSE. These correlations are not surprising; Klonoff and Landrine (1995) noted a correlation of .75 between the SSE–Lifetime and SSE–Recent sexist event scores but determined that the conceptual distinction between the two subscales was important enough to warrant retaining both of them. Indeed, given that recent experiences contribute to lifetime experiences, a somewhat high correlation may be expected between these SSE subscales. Similarly, it is perhaps not surprising that SSE events are appraised as being more stressful when they are recalled as having occurred with great frequency. Still, until the

conceptual distinctiveness of the subscales has been established to have real practical value, concerns about redundancy (e.g., that they reflect general perceptions of experienced sexism) likely will remain. Studies of the subscales' construct validity and the overall SSE factor structure are needed to derive data-based recommendations regarding whether to continue to use separate subscales, to combine the subscales into one index, or to use only the best subscale.

Despite these measurement issues, there is much to consider in the present findings. The moderating effect of personal self-esteem on the relation between perceived sexist discrimination and psychological distress is more supported than not if we consider the general pattern of the present findings and those of Corning (2002). Indeed, the magnitudes of the interaction effects found in the present study are generally consistent with the interaction effect found by Corning, and these magnitudes are particularly noteworthy in the context of the substantial difficulties of detecting moderator effects in nonexperimental research as compared with experimental research (McClelland & Judd, 1993). In nonexperimental research, limited control of variables of interest results in greater measurement error, and this measurement error is magnified when interaction terms are computed. Further, the actual nature of interactions that exist in nonexperimental settings makes their detection difficult; for example, in nonexperimental research, social support may reduce a positive link between life stress and depression, but it is unlikely to change the direction of that relation by making life stress have an antidepressant effect. Change in the direction of the relationship examined is characteristic of interaction effects in experimental research but does not occur often in nonexperimental research (McClelland & Judd, 1993). These difficulties and others limit the magnitude of the moderator effects observed in nonexperimental research with such effects typically accounting for approximately 1% to 3% of the variance in criterion variables (McClelland & Judd, 1993). Thus, explaining 3% to 7% of the variance in psychological distress with the interaction of self-esteem and sexist discrimination (and 35% to 39% of the variance overall in the present research) is notable in the context of social science research. The strength of the observed interaction effects in the present study suggests that targeting self-esteem in future research, and even clinical interventions, may provide considerable explanatory and therapeutic power.

Other limitations of this research are that we focused on life experiences perceived as sexist events and that our findings are correlational. Individual differences certainly exist in judgments about what constitutes a sexist event, with a person's judgments about whether and/or the extent to which events constitute discrimination (e.g., sexism or racism), depending on a range of individual and contextual variables, such as perpetrators' gender and race, the intensity and impact of the event, and the target person's knowledge about prejudice (Barret & Swim, 1998). Exploring the process by which women and other groups make attributions of discrimination and the mental health consequences of such attributions are extremely important areas for research. Such research may identify points for intervention prior to judgments about events. For example, perhaps making an external attribution to sexism rather than an internal attribution serves a protective function (e.g., Crocker & Major, 1989; Dion, 1975). Alternatively, an attribution to sexism may result in the target person feeling that she has less control over her fate, resulting in

greater psychological distress (Branscombe, Schmitt, & Harvey, 1999).

Affect is another individual difference variable that may play a role in women's interpretations of events as sexist. Although Swim's (2001) diary studies suggested causality flowed from sexism to distress, Sechrist, Swim, and Mark (2003) recently reported that under certain circumstances mood contributed to women's interpretation of events as reflecting gender-based discrimination in a laboratory setting. Given the nonexperimental nature of the present research, the sexism–distress relation noted could just as easily be interpreted as indicating that more distressed women view their interpersonal experiences as being more hostile. Experimental and longitudinal research with larger and more representative samples may clarify the causal directions in the relations of these variables.

Nevertheless, the present research is one early step in exploring potential risk and protective factors in accordance with the National Advisory Mental Health Council's Basic Behavioral Science Task Force's (1996) call for such research. Additional work to replicate and extend this research to other samples, other forms of discrimination (e.g., racism, heterosexism, and ageism), and other moderators is important if we are to improve our understanding and treatment of persons who experience discrimination and oppression in our society.

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