

Gender and Stress Generation: An Examination of Interpersonal Predictors

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The goal of the current study was to examine interpersonal predictors of stress generation as well as explore gender differences. Two hundred and six (67 male and 139 female) college students completed an initial online assessment of reassurance seeking and sociotropy and maintained a 14-day diary of their mood and stressful life events. Logistic regression analyses examined male and female participants separately, and results indicated that reassurance seeking and sociotropy predicted stress generation in women but not men. More specifically, whereas greater reassurance seeking predicted a greater occurrence of dependent interpersonal stress, greater sociotropy predicted lower levels of such stress. It is important to note that irrespective of gender, neither reassurance seeking nor sociotropy predicted significant fluctuations in achievement dependent or independent stress. Overall, the results indicated that there are significant gender differences when examining interpersonal predictors of stress generation and thus, underscores the need to examine gender explicitly.

An important extension to diathesis-stress models in depression research has been the recent emphasis on transactional processes that consider the role a person plays in shaping his/her environment. Hammen (1991) demonstrated a stress generation effect such that, compared to healthy women, unipolar depressed women experienced higher levels of stressful life events to which the individual contributed at least in some part (i.e., dependent stress). While depression is a robust predictor of stress generation (as reviewed in Hammen, 2006; Hammen & Shih, 2008), additional predictors have been identified including clinical factors such as comorbidity (Daley et al., 1997), number of prior depressive episodes (Harkness, Monroe, Simons, & Thase, 1999), and Axis-II symptomatology (Daley, Hammen, Davila, & Burge, 1998). Researchers have also found support for enduring vulnerability factors such as neuroticism (e.g., Kendler, Gardner, & Prescott, 2003), attachment cognitions (e.g., Hankin, Kassel, &

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Abela, 2005), negative cognitive style (Auerbach, Eberhart, & Abela, 2010; Safford, Alloy, Abramson, & Crossfield, 2007), and dependency/self-criticism, sociotropy/autonomy (e.g., Shih, Abela, & Starrs, 2009) as predictors of stress generation. Beyond enduring vulnerability factors, specific self-reported behavioral predictors of stress generation include excessive reassurance seeking (Eberhart & Hammen, 2009; Potthoff, Holahan, & Joiner, 1995), social disengagement (Caldwell, Rudolph, Troop-Gordon, & Kim, 2004) and avoidance coping (Holahan, Moos, Holahan, Breenan, & Shutte, 2005).

One caveat that should be considered in interpreting this body of literature is the generalizability of the results to men. A significant portion of the research has utilized female only samples (e.g., Daley et al., 1997, 1998; Eberhart & Hammen, 2009; Hammen, 1991) or mixed adult samples that did not test gender directly (e.g., Potthoff et al., 1995). This gender gap in the literature raises the question of whether stress generation occurs in men.

There is mixed evidence for a gender main effect of stress generation. Rudolph and Hammen (1999) and Shih, Eberhart, and Hammen (2006) found that adolescent girls experienced more dependent interpersonal events. In contrast, Shih, Abela, and Starrs (2009) found that adolescent boys experienced more dependent interpersonal stress. Using an adult clinical sample, Harkness and Stewart (2009) did not find a gender difference in levels of dependent stress. Hence, more research is needed in various samples to further elucidate the role of gender in stress generation.

In addition, two recent studies have indicated that gender may be a moderator of the stress generation process. Shih (2006) found a significant gender-by-sociotropy effect in predicting higher dependent interpersonal stress. Sociotropy, defined as an excessive investment in interpersonal relationships, predicted dependent interpersonal stress in women but not men. Safford et al. (2007) examined negative cognitive style as a predictor of stress generation and found that it predicted dependent stress (and dependent interpersonal stress) in women but not men. These studies suggest that some predictors of stress generation may only be significant in women and not men. Finally, it should be noted that both of the above studies utilized an extreme-group design in which high and low risk individuals were oversampled. Thus, the findings need to be replicated in unselected samples. Examining stress generation in both men and women is important for generalizability and has implications for explaining gender differences in rates of depression. For example, both of these studies illustrate the idea of a double-bind: not only are vulnerable individuals more likely to develop depression following stress but they may, in part, be contributing to stressors that can trigger, maintain, or exacerbate their depression.

While numerous predictors have been found to predict stress generation, research findings have indicated the interpersonal domain to be particularly important (as reviewed in Hammen, 2006; Hammen & Shih, 2008). For example, while Hammen (1991) found that depression diagnosis predicted higher levels of dependent stress, she noted that those events are largely interpersonal in nature. Subsequent studies that distinguished between dependent interpersonal stress and non-interpersonal or achievement stress have tended to find significant findings for interpersonal stressors but not non-interpersonal stressors (Harkness & Stewart, 2009; Rudolph & Hammen, 1999; Shih, 2006). Thus, the present article focuses on two interpersonal predictors as candidates for stress generation: excessive reassurance seeking and sociotropy.

Excessive reassurance seeking is operationalized as the tendency to seek reassurance from others in order to determine if such individuals care and value the rela-

tionship. Coyne (1976) theorized that excessive reassurance seeking, or repeatedly demanding more validation of care, disrupts interpersonal relations, and research suggests that such disruptions may lead to interpersonal rejection and/or conflict thereby resulting in stress generation. In the earliest study to test reassurance seeking as a predictor of stress generation, Potthoff et al. (1995) demonstrated that reassurance seeking prospectively predicted increased social stressors over a period of 5 weeks in a college sample. While this sample consisted of both men and women, gender was not considered in the study analyses. Shahar, Joiner, Zuroff, and Blatt (2004) provided further evidence of reassurance seeking as a predictor of stress occurrence also over a 5-week period, controlling for gender. Both of these studies consisted of both men and women but neither tested for gender effects on stress generation explicitly. Eberhart and Hammen (2009) extended the reassurance seeking finding by demonstrating its effect on stress generation in a sample of college women. While this study was not able to examine gender differences, it did utilize a contextual threat-based assessment of stress, so that a distinction can be made between dependent and independent stressors. It should be noted that this study focused on women who were in exclusive romantic relationships and specifically assessed romantic conflict stressors. In sum, several studies have demonstrated that reassurance seeking behaviors predict increased stress over time. However, research is needed to determine whether the effect reassurance seeking has on stress generation also applies to men.

A second interpersonal vulnerability factor that has garnered attention is sociotropy and the closely related construct of dependency. Both sociotropy and dependency stem from excessive reliance and investment on interpersonal relationships (e.g., Beck, 1983; Blatt & Zuroff, 1992). Research findings examining sociotropy/dependency as predictors of stress generation has found no support (Eberhart & Hammen, 2009; Priel & Shahar, 2000; Shahar et al., 2004). However, research that specifically tested sociotropy/dependency with gender as a moderator found support for predicting stress generation in women but not men. Mongrain and Zuroff (1994) examined how dependency may relate to interpersonal and achievement events differently for men and women. They found that for women, dependency predicted increased romantic stressors whereas for men, dependency predicted increased academic stressors and a marginal increase in romantic stressors. Accordingly, Shih (2006) examined sociotropy's effect on dependent interpersonal and achievement events with gender as a moderator. Sociotropy significantly predicted dependent interpersonal stress for women but not men. Given that Shih (2006) used an extreme group design oversampling men and women high on sociotropy, research in unselected samples is needed. Given that Mongrain and Zuroff (1994) found dependency predicting academic stressors, the present study also included dependent achievement stress to further test whether the stress generation effect of interpersonal vulnerability factors is specific to interpersonal stress.

Research to date highlights the need to examine how the relationship between vulnerability factors and stress may differ for men and women in unselected samples. Further, much of the existing research has relied on checklist measures of stress (e.g., Mongrain & Zuroff, 1994; Priel & Shahar, 2000). Self-report checklists are limited in that they are open to individual participants' interpretation of what constitutes a stressful life event, reflect subjective appraisals of event severity, and are more significantly impacted by an individual's personality and mood than an interview measure of stressful life events (Duggal et al., 2000). The present study sought to capture the occurrence of significant life events by utilizing a modified contextual threat procedure

to assess stress within a daily diary design in an unselected sample of men and women. Specifically, we examined reassurance seeking and sociotropy as predictors of stress generation and addressed the question of specificity in the stress generation process by examining dependent interpersonal, dependent achievement, and independent stressful life events.

METHOD

Participants

The sample consisted of 206 college students (67 males and 139 females) recruited from introductory psychology classes from two university campuses ($n = 66$ and $n = 140$) in partial fulfillment of course requirements. The majority of the participants (67.4%) were freshmen and sophomores. The sample was predominantly non-Hispanic (95.3%). The sample was 72.6% Caucasian, 17.9% Asian, .9% Native Hawaiian/Other Pacific Islander, .9% Black/African American, and 7.5% Other/More than one race. The sample was predominantly middle to upper middle class with 65.1% reporting family income greater than \$80,000. While the two university samples did not differ in terms of income and class year, the two samples did differ significantly in the distribution of ethnicity ($\chi^2 = 6.96, p = .013$), and gender ($\chi^2 = 38.76, p < .001$). The sample from the state university was more diverse and had more male participants than the private university. Due to these differences, "school" was entered as a covariate in all analyses.

Measures

Excessive Reassurance Seeking. The 4-item subscale of the Depressive Interpersonal Relationship Inventory (DIRI; Joiner & Metalsky, 2001) assesses one's tendency to seek feedback from others regarding whether they truly care about oneself. The scale consists of two items of habitual reassurance seeking (e.g., "do you frequently seek reassurance from the people you feel close to as to whether they really care about you?") and two items on excessive reassurance seeking (e.g., "do the people you feel close to sometimes get 'fed up' with you for seeking reassurance from them about whether they really care about you?"). Each item is scored on a 6-point scale ranging from 0 (not at all) to 5 (extremely often). Scores from the four items were summed, with higher values indicating greater levels of reassurance seeking. The Cronbach's alpha was .88 indicating good internal consistency.

Sociotropy. The revised Personal Style Inventory (PSI-II; Robins et al., 1994) was used to assess sociotropy. The sociotropy subscale consists of 24 items scored on a 6-point Likert scale based on level of agreement with the question stem. Higher scores indicate greater levels of sociotropy. The three subscales of sociotropy include: concern over what others think (e.g., "I am very sensitive to criticism by others"), dependency (e.g., "I find it difficult to be separated from the people I love"), and pleasing others (e.g., "I often put other people's needs before my own"). Cronbach's alpha for the present sample was .87.

Daily Depressive Affect. Items from the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971) were used to assess depressive affect. Nine mood adjectives

tives from the depression-dejection factor (e.g., “blue”) were used in the present study. Participants rated on a 5-point scale the extent to which each adjective reflected how they felt that day. Mean values were calculated with possible scores ranging from 0 to 4 and higher scores indicating greater dysphoria. The Cronbach’s alpha was .87 suggesting good internal consistency.

Daily Stressful Life Events. Participants were asked to write about the most stressful life event they experienced that day, no matter how small. The goal of assessing stressful life events in this fashion was to minimize the potential underreporting of stressful life events—especially by males who might not be as likely as females to view an event as sufficiently “stressful” to report if asked just to report on occurrence of a stressful event. By asking everyone to report one event, the concern about gender differences in threshold of judging “stressfulness” is mitigated. The open-ended descriptions were rated by two research assistants, who were unaware of participant characteristics (e.g., mood, personality) and were trained and supervised by the first author in rating these stressful life events following the guidelines developed by Hammen and colleagues for the episodic stress interview (Hammen, Marks, Mayol, & deMayo, 1985). Participants were asked to elaborate on what made the event stressful, and the raters used their open-ended response to weigh the context of the event and provide an impact rating for how much negative impact such an event would have for a typical individual. Furthermore, the judgment of whether an event has enough impact to be considered a negative stressful life event was made by trained raters rather than by study participants. In addition to rating the negative impact of the event on a 0 to 4 scale, the raters also determined whether the events were interpersonal, achievement and/or dependent in nature. Dependent events were defined as events in which individuals may have played a role in its occurrence. For example, an argument with a friend would be considered a dependent interpersonal event, and death of a close family member would be considered an independent interpersonal event. Stress impact scores for events that were both interpersonal and dependent in nature were used in the present analyses. Similarly, events that were both achievement and dependent in nature were included in the analyses for dependent achievement stress and events that were independent in nature were included in the analyses as independent stress.

In all, events from 2,835 days were examined. Participants on most days noted no stressful event (e.g., indicated “nothing stressful happened today”), so only 528 narratives were rated for stress impact. Of the 528 narratives, 331 (62.69%) received a stress impact rating of 0. Events receiving a rating of 0 did not cross the impact threshold to be considered events (e.g., “my roommate’s clothes were on the floor,” “too much work”). Furthermore, given the daily nature of the assessment and our desire to sample significant events, events that are normative for college students (e.g., “had an exam and a presentation today,” “went on a date”), events that did not directly involve the participant (e.g., “My friend broke up with her boyfriend”), and ongoing stressors (e.g., “broke up with boyfriend a month ago and trying to make friendship work”) also received a rating of 0. Of the 197 events with a stress impact rating above 0, 87 events were rated a 1 (e.g., “my friend broke a promise,” “I realized I had to write a check and don’t have sufficient funds to cover it”), 22 events were rated a 2 (e.g., “I got into an argument with my boyfriend,” “I broke my cell phone (dropped in water) and lost all of my contacts”), 67 events were rated a 3 (e.g., “I had the biggest fight with my boyfriend . . . nearly broke up,” “I always planned to go to graduate school but realized today that my grades are not good enough to get in”), and 21 events were rated a 4 (e.g., “my boyfriend and I broke up after a year and 7 months,” “a friend of

mine died this morning”). The small number of events that meet our rating criteria is likely an indication of the strictness of the criteria used and the low likelihood that the analyses reflect minor hassles or normative events. Two raters were trained by the first author to rate the events. Both raters independently rated all 528 narratives, yielding an *ICC* of .90. In the few instances when discordant ratings emerged, the first author also rated that stressor in order to ensure a consensus was reached. The two raters agreed perfectly on the dichotomous ratings of dependence, interpersonal, and achievement (*ks* = 1.00).

Procedure

Participants completed all measures online through the encrypted Survey Monkey website. The study consisted of a baseline measure and 14 consecutive daily diary entries. The baseline survey consisted of demographic questions and vulnerability factors. For the daily diary portion of the study, participants were instructed to complete the survey as close to their bedtime as possible to capture their entire day. The survey was open from 9 P.M. to 12 P.M. to accommodate the late schedule many college students keep, and thus, participants were provided only this finite time to submit daily information. The daily diary included questions on their daily mood and asked them to describe the most stressful event that occurred that day, no matter how trivial. Participants were e-mailed a daily reminder in the evening along with the survey link at 9 P.M. Those participants who failed to complete the survey by 9 A.M. were sent a reminder e-mail to complete the survey before noon based on their experiences of the previous day.

RESULTS

Overview of Analytic Plan

The distribution of stress-impact ratings for participants' self-reported "most stressful" event was examined for the most appropriate method of analysis. In the overall sample, 66% of the sample did not report a single event that qualified as a dependent interpersonal stressor for the duration of the study. Similarly 91.7% and 41.3% of the sample did not report a single dependent achievement event or a single independent stressor, respectively. It is likely that the number for dependent achievement event was low because normative achievement stressors for college students (e.g., had to take an exam) were excluded in the rating process. The contrast is even more remarkable when examined by gender. For example, 42% of women reported dependent interpersonal stress compared to 18% of men, $\chi^2 = 11.43$, $p = .001$. Furthermore, this is based on the overall 14-day period, resulting in even lower levels of stress reports on a daily level. As such, multilevel modeling of within and between-day effects was not appropriate given the distribution of the dependent variables. Logistic regression was utilized to analyze the data with 0 = no stressors over the study period and 1 = one or more stressors over the study period. Three separate dependent variables were identified: Dependent Interpersonal Stress, Dependent Achievement Stress, and Independent Stress.

Six logistic regression analyses were conducted with each of the three types of stress variables serving as the dependent variables and with analyses being conducted

TABLE 1. Means, Standard Deviations, and Intercorrelations of Study Predictors

Study Variables	1	2	3	4
1. Gender	—			
2. Poms — Depression	0	—		
3. Sociotropy	.17*	.20**	—	
4. Reassurance-Seeking	.19**	.29**	.45**	—
Mean	.67*	0.73	96.91	5.81
Standard Deviation	—	0.68	15.47	4.80

Note. *proportion. * $p < .05$; ** $p < .01$.

separately for men and women. Continuous predictors were standardized for easier interpretation of odds ratios. For each analysis, four predictors were entered simultaneously: school, POMS-Depression, Sociotropy, and Reassurance Seeking. School was entered as a covariate because of site-differences, and POMS-Depression was included as a covariate to partial out the effect of dysphoria. Sociotropy and reassurance seeking were the interpersonal predictors in the present analyses.

Descriptive Analyses

Means, standard deviations, and correlation among study predictors are presented in Table 1. Overall, the study predictors were significantly but not highly correlated with the exception of sociotropy and reassurance seeking which were correlated at $r = .45$, $p < .001$.

Table 2 presents the gender differences in the study variables. Men and women did not differ in baseline POMS-Depression scores, $t(205) = .03$, $p = .976$. However, women had higher sociotropy and reassurance seeking scores compared to men, $t(205) = -2.40$, $p = .017$ and $t(205) = -2.74$, $p = .007$ respectively. In terms of the stress variables, compared to men, significantly more women reported having experienced a dependent interpersonal stressful event ($\chi^2 = 11.43$, $p = .001$) as well as an independent event ($\chi^2 = 7.99$, $p = .005$), but not a dependent achievement event ($\chi^2 = .63$, $p = .427$).

Predicting Stress Generation in Women

Results from the three logistic regressions conducted for the female subsample ($n = 139$) are included in Table 3. In terms of predicting dependent interpersonal stress, neither School ($OR = 1.25$, $W = .21$, $p = .645$) nor POMS-Depression ($OR = 1.11$, $W = .30$, $p = .584$) was a significant predictor. Higher scores for Sociotropy predicted a lower likelihood of experiencing dependent interpersonal stress, $OR = .66$, $W = 4.16$, $p = .041$. Reassurance seeking predicted a higher likelihood of experiencing dependent interpersonal stress, $OR = 1.69$, $W = 6.07$, $p = .014$. None of the variables predicted changes in dependent achievement or independent stress.

TABLE 2. Examination of Gender Differences in the Study Variables

Study Variables	Women		Men		<i>t</i>	<i>p</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>		
Poms – Depression	0.73	0.65	0.78	0.76	0.03	0.976
Sociotropy	98.68	15.35	93.22	15.17	-2.40**	0.017
Reassurance-Seeking	6.43	4.92	4.51	4.29	-2.74**	0.007
	Women		Men		χ^2	<i>p</i>
Dependent Interpersonal Stress	41.73%+		17.91%		11.43**	0.001
Dependent Achievement Stress	7.19%		10.45%		0.63	0.427
Independent Stress	65.47%		44.78%		7.99**	0.005

Note. +percentage of individuals who experienced at least 1 of this type of stressful event. * $p < .05$; ** $p < .01$.

Predicting Stress Generation in Men

The bottom of Table 3 presents results for the male subsample ($n = 67$). None of the four study predictors predicted greater likelihood of occurrence for any of the three types of stress.

DISCUSSION

The present study examined the role that sociotropy and reassurance seeking play in stress generation. In order to explore gender differences, each of these predictors was examined separately for men and women. Both reassurance seeking and sociotropy predicted dependent interpersonal stress in women but not men, underscoring the need to examine gender differences more explicitly. Interestingly, while reassurance seeking predicted a greater likelihood of interpersonal stress generation, high sociotropy predicted a *lower* likelihood of interpersonal stress generation. Furthermore, as hypothesized, the interpersonal predictors did not predict achievement dependent stress or independent stress in men or women.

A stringent test of the stress generation hypothesis would demonstrate vulnerability factors significantly predicting dependent but not independent stress (Hammen, 2005). Furthermore, to demonstrate the specificity of the prediction, predictors were examined in their prediction of both interpersonal and achievement dependent stress. As predicted, both sociotropy and reassurance seeking significantly predicted dependent interpersonal stress but not dependent achievement or independent stress. Of interest, a gender difference emerged in that women were more likely to have experienced both dependent interpersonal and independent stressors but not dependent achievement stressors as compared to men. Such differences are noteworthy given that the methodology used to assess stress in the study aimed to reduce the likelihood that gender differences are due to reporting biases (e.g., over or underreporting by one gender). Participants were asked to report the worst event of the day and to elaborate on why this event was stressful so that contextual information may be obtained. The

TABLE 3. Examination of Predictors of Stress Generation by Gender

Predictor	Predicting Dependent Interpersonal Stress				Predicting Dependent Achievement Stress				Predicting Independent Stress						
	<i>b</i>	<i>SE</i>	<i>OR</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>OR</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>OR</i>	<i>p</i>			
Model For Females (<i>n</i> = 139)															
School	0.22	0.48	1.25	0.21	0.645	-0.75	1.10	0.48	0.46	0.497	-0.21	0.48	0.81	0.19	0.667
POMS - Depression	0.10	0.19	1.11	0.30	0.584	0.23	0.33	1.26	0.50	0.480	0.17	0.20	1.18	0.70	0.401
Sociotropy	-0.42	0.21	0.66	4.16*	0.041	-0.04	0.35	0.96	0.01	0.918	0.24	0.21	1.28	1.42	0.234
Reassurance-Seeking	0.52	0.21	1.69	6.07*	0.014	-0.27	0.39	0.76	0.49	0.484	-0.39	0.21	0.68	3.30	0.069
Model For Males (<i>n</i> = 67)															
School	1.31	0.84	3.72	2.44	0.118	1.48	1.12	4.30	1.69	0.193	-0.36	0.51	0.70	0.50	0.482
POMS - Depression	0.41	0.30	1.51	1.92	0.166	-0.24	0.47	0.79	0.27	0.604	0.21	0.26	1.24	0.68	0.409
Sociotropy	0.02	0.39	1.02	0.00	0.959	0.06	0.47	1.06	0.01	0.905	-0.05	0.29	0.03	0.86	0.950
Reassurance-Seeking	0.27	0.35	1.30	0.57	0.449	0.06	0.47	1.06	0.02	0.896	-0.07	0.29	0.94	0.05	0.823

**p* < .05.

study aimed to reduce underreporting by asking participants to report 1 stressful event every day, and to reduce overreporting by having a team rate whether an event satisfies the threshold of a stressful life event (as opposed to minor hassles). On the other hand, in contrast to past research (e.g., Hammen, 1991), women in the current study reported greater levels of independent stress. The present findings are consistent with research suggesting that women may experience more stress in general (as reviewed in Nolen-Hoeksema, 2002) as well as Rudolph and Hammen's (1999) results that indicated girls experienced higher levels of independent stress compared to boys. Furthermore, research has shown that women are more likely than men to report events that happen to close others (friends experiencing difficulty) as personal events (Kessler & McLeod, 1984), which were coded as independent stressors in the present study. Thus, it appears that the gender difference in independent stress may be due to the methodology of coding personal events as independent stress.

Gender differences in the stress generation process were further highlighted in that interpersonal variables predicted dependent interpersonal stress in women but not men. To date, much of stress generation research has consisted of female-only samples (e.g., Daley et al., 1997; Eberhart & Hammen, 2009; Hammen, 1991) or did not test gender explicitly (e.g., Pothoff et al., 1995). The two studies that have tested gender as a moderator explicitly have found that cognitive vulnerability and sociotropy only predicted interpersonal stress generation in women but not men (Safford et al., 2007; Shih, 2006). Using an unselected sample, the present finding substantiates the need to examine predictors of stress generation separately for men and women. The stress generation process may differentially impact women compared to men with implications for explaining the gender differences seen in rates of depression. However, more research is needed in men before concluding that stress generation is not an important component of depression in males. One possibility is that men may have lower levels of reassurance seeking and do not meet the threshold for excessive reassurance seeking that would predict stress generation. However, the extreme group design utilized by Shih (2006) and Safford et al. (2007) sought out highly vulnerable men and could not demonstrate a stress generation effect. Even so, it may be possible that a different process is at play for men. For example, the marital literature has found a gender effect such that the wife is more likely to demand and the husband is more likely to withdraw when contentious issues arise (e.g., Christensen & Heavy, 1990). This finding suggests that if the stress generation process is present in men, it may be due to different behaviors. More studies are needed to examine other types of vulnerabilities (e.g., avoidance coping) as predictors of stress generation for men and to generalize beyond college samples.

With regard to the specific interpersonal vulnerability factors tested in the present study, excessive reassurance seeking predicted dependent interpersonal stress in women. This finding replicates and extends past research on reassurance seeking and stress generation by utilizing a more stringent assessment of stressful life events (e.g., Pothoff, Holahan, & Joiner, 1995; Shahar, Joiner, Zuroff, & Blatt, 2004), generalizing the stress generation effect beyond romantic conflict stress (Eberhart & Hammen, 2009), and clarifying that it is a process that is found in women but not men. Across various studies, excessive reassurance seeking has been consistent in predicting stress generation. It appears that the effect may be largely seen in women and in the prediction of dependent interpersonal stress. One implication of the current finding may be that researchers and therapists can more readily identify individuals at risk for stress generation. While identification of at-risk individuals is a necessary first step, the next

frontier lies in understanding which psychotherapeutic approach (e.g., interpersonal or cognitive behavioral therapy) most effectively attenuates stress generation.

With regard to sociotropy as a predictor of stress generation, an unexpected finding emerged where higher sociotropy predicted a *lower* likelihood of experiencing dependent interpersonal stress. Shih, Abela, and Starrs (2009) found a similar pattern of results in that dependency in children and adolescents predicted less dependent interpersonal stress in boys compared to girls. As indicated in the earlier review, the support for sociotropy as a predictor of stress generation without considering gender has been weak. One possibility for this pattern of results is that sociotropy may be a broad personality characteristic that has both adaptive and maladaptive components. That is, for some individuals, investment in interpersonal relationships may lead to behaviors that foster positive relationships or avoid conflict whereas for others investment in interpersonal relationships may lead to maladaptive behaviors such as reassurance seeking. Consequently, sociotropy, as a single construct, may not have the capacity to distinguish between individuals who generate interpersonal stress versus who do not. Recent research on the related construct of interpersonal dependency suggests that it is a multifaceted construct with both adaptive and maladaptive components (e.g., Shahar, 2008). Of note, attachment style, which is an interpersonal vulnerability that is more closely related to a concern for rejection and abandonment (as opposed to investment in interpersonal relationships), has yielded more consistent findings as a risk factor of stress generation (Eberhart & Hammen, 2009; Hankin, Kassel, & Abela, 2005). Hence, future research may benefit from focusing on more specific interpersonal predictors and elucidating the mechanisms through which these predictors generate interpersonal stress.

Overall, the present study extended previous stress generation research by examining gender differences in how interpersonal predictors of sociotropy and reassurance seeking relate to the occurrence of dependent interpersonal, dependent achievement, and independent stress. Several limitations should be noted. First, with the use of a college sample, it is unclear if the findings will extend to other populations or age groups. Second, the distribution of men and women reflect the percentages typically found in psychology subject pools with women outnumbering men. As a result, the nonsignificant findings for men may be attributed to lower power to detect an effect. Nevertheless, extreme group designs that overselected vulnerable men also have not demonstrated a significant stress generation effect in men (e.g., Safford et al., 2007). Third, in an attempt to minimize reporting biases (e.g., underreporting by one gender), participants were asked to report the most stressful event of the day. This assessment method has limitations in that it does not capture the *frequency* of stressors experienced and could have introduced personality confounds with individuals high in sociotropy being more likely to report interpersonal stressors given competing achievement stressors. Fourth, because normative achievement events (e.g., having exams) were excluded, there was a low base rate of achievements in the present study. Hence, more research on the specificity of stress generation to interpersonal versus achievement domains is needed. Last, the follow-up period is extremely short, spanning over two weeks. Thus, the type of events noted in daily reports may differ substantially in magnitude of stress impact compared to reports over a longer follow-up period. However, the methodology used to assess stress minimized the likelihood of inclusion of minor hassle events. It is also remarkable that the stress generation finding can be replicated in a study with such a short time period, illustrating the potential daily impact stress generation can have in individuals' lives.

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