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To the Graduate Council:

I am submitting herewith a thesis written by Sarah Elizabeth Mauck entitled "Masculine Gender Role Stress and Shame Proneness as Serial Mediators in the Relation Between Intimate Partner Aggression Victimization and Psychological Symptom Status in Men." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

Todd M. Moore, Major Professor

We have read this thesis and recommend its acceptance:

Kristina C. Gordon, Derek R. Hopko

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Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)



Masculine Gender Role Stress and Shame Proneness as Serial Mediators in the Relation between Intimate Partner Aggression Victimization and Psychological Symptom Status in Men

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Sarah Elizabeth Mauck May 2013



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Abstract

The current study examined the indirect effect of male intimate partner aggression victimization on psychological symptom status through masculine gender role stress (MGRS) and shame proneness operating as serial mediators. Male college students (N = 74) completed self-report measures of intimate partner aggression, psychological symptoms, MGRS, and shame proneness. Results indicated a significant indirect effect of physical victimization on psychological symptom status through MGRS and shame proneness operating in sequence; results showed no significant indirect effect for psychological victimization. These results suggest that, perhaps, physical victimization creates increased MGRS, which, in turn, leads to greater shame proneness, which, likewise, produces increased psychological symptoms. Possible interpretations of differential findings for physical and psychological victimization are discussed in relation to differential threat to masculinity. Additionally, exploratory analyses for specific psychological symptom clusters (i.e., depression, anxiety, and hostility) are presented and discussed.



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Chapter 1

Introduction and Literature Review

Historically, intimate partner aggression, typically defined as the presence of acts of psychological, physical, or sexual aggression within a romantic relationship (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), has been conceptualized as a problem by which men are perpetrators of violence and women are victims (Bograd, 1988; Dobash, Dobash, Wilson, & Daly, 1992; for discussion of this issue, see Dutton, 2010; Langhinrichsen-Rohling, 2010). In recent decades, however, the field of intimate partner aggression has expanded to include the study of male victims (Langhinrichsen-Rohling, 2010). While this expansion has not occurred without controversy (Langhinrichsen-Rohling, 2010), numerous studies suggest that the experience of intimate partner aggression is both common (Archer, 2000; Cunradi, Ames, & Moore, 2008; Hines & Douglas, 2011; Mills, Mills, Taliaferro, Zimbler, & Smith, 2003; Schafer, Caetano, & Clark, 1998) and damaging (Hines & Douglas, 2011a; Hines & Douglas, 2011c; Shorey et al., 2011) for men.

Despite varying and often discordant conceptualizations of intimate partner aggression throughout the field, (Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, Hamby, & Warren, 2003), partner aggression is often measured by the reported frequency of acts of physical, sexual, and psychological aggression (e.g., Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, Hamby, & Warren, 2003). Although acts of partner aggression perpetrated by women against men¹ tend to be perceived as more acceptable (Sorenson & Taylor, 2005) and less "abusive" than the same acts perpetrated by men against women (Brasfield et al., 2012- under review; Follingstad, 2004), researchers have found consistently that



when examining the reported frequency of acts of intimate partner aggression (e.g., punching, shoving against a wall, calling a bad name), both perpetration and victimization are endorsed at similar rates across gender (Shorey, Cornelius, & Bell, 2008). These findings reveal the often bidirectional nature of intimate partner aggression (Archer, 2000; Straus, 2008).

Nevertheless, research revealing the pervasiveness of male victimization is criticized by those who believe examination of the frequency of aggressive acts inadequately measures the construct of intimate partner aggression. These researchers advise the examination of contextual factors (e.g., motivations, fear, control, consequences, etc.) when considering the construct of intimate partner aggression (Heyman, Feldbau-Kohn, Ehrensaft, Langhinrichsen-Rohling, & O'Leary, 2001; Langhinrichsen-Rohling, 2010; Pence & Paymar, 1993; Stark, 2010). Along these lines, some researchers insist that male victimization occurs predominantly within the context of male perpetration (i.e., males are assailed only in instances of female self-defense; e.g., Pence & Paymar, 1993). Other researchers suggest that male victimization is less physically and psychologically injurious (Tjaden & Thoennes, 2000), as well as less likely to be characterized by fear (Tjaden & Thoennes, 2000) and control (Felson & Cares, 2005) than female victimization (Phelan et al., 2005). However, more recent research has provided contradictory evidence, suggesting that male victims may sustain more serious injuries (Felson & Cares, 2005) than female victims and male victims may have similar experiences of fear (Hines, Brown, & Dunning, 2007) and dominance by their partner (Straus, 2008) when compared to female victims. The significance of the problem of intimate partner aggression for male victims is increasingly acknowledged by researchers (e.g., Hines, 2011; Coker, 2002; Straus, 2008) and further study of male victimization is warranted (Hines, 2011; Langhinrichsen-Rohling, 2012).

Prevalence and Severity of Intimate Partner Aggression against Men

The prevalence of behaviors classified as intimate partner aggression varies among samples (e.g., college students, emergency rooms, helplines, etc.; e.g., Fass, Benson, & Leggett, 2008; Johnson, Haider, Ellis, & Hay, 2003; Hines, Brown, & Dunning, 2007; Cunradi, Ames, & Moore, 2008); however, prevalence is consistently high across samples, including young adult relationships, with perpetration of physical aggression occurring in 20% to 45% of such relationships and psychological aggression occurring in 60% to 90% of such relationships (Shorey et al., 2008). Across gender, reported rates of victimization are similar to those of perpetration (Shorey et al., 2008; Straus, 2008). Further, in one review of the literature examining physical victimization in industrialized, English-speaking nations, Desmarais and colleagues (Desmarais, Reeves, Nicholls, Telford, & Fiebert, 2012) found that nearly 1 in 5 men report intimate partner physical violence victimization, compared to one in four women. Other researchers find that, although bidirectional violence is most common, unidirectional violence perpetrated by women is more common than unidirectional violence perpetrated by men (Langhinrichsen-Rohling, Selwyn, & Rohling, 2012; Straus, 2008). Thus, with the exception of research that, due to reliance on patriarchal theory, does not conceptually allow for the occurrence of male victimization (e.g., Bograd, 1990; Dragiewicz, 2012), many studies suggest that rates of victimization are comparable for men and women (Archer, 2000; Follingstad & Edmundson, 2010; Renner & Whitney, 2010; Straus, 2008).

Additionally, recent research suggests that male victimization can be severe in nature (Hines & Douglas, 2011b), leading to detrimental physical and mental health consequences (Coker et al., 2002; Hines & Douglas, 2011c). For example, Hines and colleagues (Hines et al.,



2007) examined callers to the Domestic Abuse Helpline for Men and found that all participants indicated both physical and psychological victimization. Some callers endorsed related feelings of fear of their female partner's violence, as well as experience of controlling behaviors (93.4%) and, to a lesser extent, stalking (Hines et al., 2007).

Hines and Douglas (2011b) further suggest that men are not only victims of common couple violence (i.e., partner aggression found in community-based samples, which is often bidirectional and is characterized by relatively low frequency and severity), as proposed by Johnson (2005), but also report experiences consistent with intimate terrorism victimization (i.e., partner aggression found in clinical and shelter samples that is often uni-directional and is characterized by high frequency, severity, injury, and control of one partner over the other). Many (90.4%) callers reported severe physical victimization and a majority (77.5%) of men who called the Helpline indicated minor injuries inflicted by their female partners. Over one-third of men in this sample indicated serious injuries perpetrated by their partners (Hines & Douglas, 2011a).

Physical and Psychological Effects of Male Victimization

As may be reasonably expected given the reported severity with which these aggressive acts occur, such victimization is associated with negative outcomes for both physical and mental health (Coker et al., 2002). A wealth of research indicates that intimate partner aggression against men has damaging physical and psychological effects, including increased depression and anxiety (Shorey et al., 2011), poor physical health and chronic disease (Coker et al., 2002), post-traumatic stress disorder and substance abuse and dependence (Hines & Douglas, 2011a; Hines & Douglas, 2011), and chronic mental illness (Coker et al., 2002).



Additionally, Shorey and colleagues (2011) found that gender moderated the relationship between victimization and anxiety and depression such that both physical and psychological victimization were associated with greater anxiety and depression for men, but not for women. Further, research suggests that psychological victimization is more strongly associated with these health consequences than is physical victimization for both men and women (Coker et al., 2002; Coker, Derrick, Lumpkin, Aldrich, & Oldendick, 2000). Given the serious consequences of intimate partner aggression with which male victims must contend, there is need for further examination of factors that may place male victims at increased risk for psychological problems, as well as for further examination of the mechanisms by which male victimization leads to negative outcomes.

Masculine Gender Role Stress

One possible link between male victimization and psychological difficulty is the experience of masculine gender role stress (MGRS). MGRS can be described as the stress men experience in response to perceived pressure to adhere to prescribed gender norms and expectations, which are often dysfunctional (e.g., Eisler, 1995; O'Neil, Helms, Gable, David, & Wrightsman, 1986). Theoretically, when men experience such stress, they may perceive failure in fulfilling their expected roles as men (e.g., exhibiting physical strength, excelling in competition, etc.), which may lead to decreases in psychological and physical health (Eisler, 1995). The relation between MGRS and psychological and physical health problems may be explained by the increased arousal experienced during situations that challenge masculinity for those who are susceptible to MGRS and the lack of healthy coping strategies available for those who adhere to a masculine gender role. Indeed, much research has linked MGRS with



psychological difficulties, including general psychological distress (Hayes & Mahalik, 2000), shame (Thompkins & Rando, 2003), hostility (Watkins, Eisler, Carpenter, Schechtman, & Fisher, 1991), increased severity of alcohol and drug dependence (Lash, Copenhaver, & Eisler, 1998), increased post-traumatic stress disorder symptom severity (McDermott, Tull, Soenke, Jakupcak, & Gratz, 2010), as well as anger, anxiety, and health-risk behaviors (Eisler, Skidmore, & Ward, 1988). Moreover, Arrindell and colleagues (Arrindell, Kolk, Martin, Kwee, & Booms, 2003) found that MGRS significantly predicted agoraphobic fears, social fears, blood-injury fears, and compulsive checking. Further, past research suggests that individuals with high levels of MGRS report less satisfaction with social support systems than those with low levels of MGRS, perhaps due to limited emotional expression (Saurer & Eisler, 1990), as well as lower overall life satisfaction (Watkins et al., 1991).

Whereas many researchers have examined MGRS as a predictor of aggression (Jakupcak, 2003; Parrott, 2008; Moore & Stuart, 2004; Jakupcak, Lisak, & Roemer, 2002), none have explored MGRS as a response to intimate partner victimization. As aggression perpetrated by women towards men might increase MGRS by reversing expected gender roles within relationships (i.e., women as the "strong" partner and men as the "victim"), and given the multitude of psychological implications of MGRS noted above, it may be the case that MGRS operates as a mediator of the relationship between partner aggression victimization and psychological symptoms for men. That is, theory and past research document the known negative effects of both male victimization and MGRS on psychological functioning, along with the potential for masculine gender role stress inherent in male victimization (e.g., male partner as weaker, subordinate, physically and intellectually inferior, etc.) perpetrated by a female partner.



Therefore, it is possible that MGRS is a mechanism through which male victimization and psychological symptoms are linked indirectly, with victimization leading to increased MGRS, which, in turn, may lead to increased psychological symptoms.

Shame Proneness

Another possible mechanism linking male victimization with increased psychological symptoms is shame proneness. Proneness to shame, defined as the tendency to form negative evaluations of the self (e.g., "I am a bad person"), can be distinguished from proneness to guilt, defined as the tendency to form negative evaluations about a specific behavior (e.g., "My behavior was wrong"; Tangney, Wagner, & Gramzow, 1992). Whereas guilt may bring about a desire to change behavior, shame brings about self-criticism and a sense of worthlessness.

Researchers have examined the role of shame in relation to mental health outcomes (e.g., Harper & Arias, 2004) and shame proneness has been associated with increased psychological symptoms, including In samples of undergraduate students and prison inmates, shame proneness has been positively correlated with problematic alcohol and substance use (Dearing, Stuewig, & Tangney, 2005). Additionally, reduction in shame proneness has been associated with psychological symptom improvement (e.g., Fergus et al., 2010). Shame proneness has also been associated with problematic interpersonal relationships (Tangney, 1995) and with poor interpersonal problem-solving skills (Covert, Tangney, Maddux, & Heleno, 2003).

Further, a great deal of research suggests that victims of intimate partner aggression often experience shame (e.g., Beck, McNiff, Clapp, Olsen, Avery, & Hagewood, 2011; Street & Arias, 2001; Buchbinder & Eisikovits, 2003). Recent research suggests that shame proneness moderates the relationship between victimization and the experience of mental health problems for men,



such that male victims who possess higher levels of shame proneness experience greater mental health problems than those with low levels of shame proneness (Shorey et al., 2011). Although Shorey and colleagues (2011) found that shame proneness operates as a moderator between male victimization and mental health problems, the association between shame proneness and victimization, as well as between shame proneness and psychological symptoms, suggest that shame proneness may also function as a mediator between these variables. That is, due to the known effects of both male victimization and shame on psychological functioning, as well as the effects of intimate partner victimization on shame noted above, it is possible that shame proneness is a mechanism through which male victimization and psychological symptoms are linked, with victimization leading to increased shame proneness, which in turn, might bring about increased psychological symptoms. Men, in particular, may feel shame as a result of victimization, as they may feel alone due to the lack of public attention on male victimization and the lack of community support.

Masculine Gender Role Stress and Shame Proneness

In addition to psychological symptoms, shame proneness has been positively associated with MGRS (Efthim, Mahalik, & Kenny, 2001; Segalla, 1996; Thompkins & Rando, 2003), perhaps because MGRS may lead one to form negative evaluations about the self "as a man" when faced with situations that challenge the fulfillment of gender role expectations (e.g., female-perpetrated aggression against men), which may, in turn, increase one's tendency to form negative evaluations about the self as a whole. More specifically, male victimization may lead to MGRS due to the nature of female-perpetrated male victimization described above, which, in turn, may lead to increased shame proneness as male victims begin to see themselves as inferior,



which might bring about increased psychological symptoms due to the damaging effects of shame noted above. Thus, it is hypothesized that MGRS and shame proneness will operate as serial mediators of the relationship between male victimization and psychological symptoms, such that physical and psychological victimization will each positively relate to MGRS, which will be positively related to shame proneness, which, in turn, will be positively associated with psychological symptom status.

Summary of the Current Study

The aim of the current study is to more fully examine the relationships among intimate partner aggression against men, shame proneness, MGRS, and psychological symptoms in a college student population. More specifically, this study seeks to investigate MGRS and shame proneness as the mechanisms by which victimization leads to psychological symptoms. A serial mediation analysis will be conducted to evaluate the hypothesized model (Figure 1) representing the indirect effect of victimization on psychological symptom status through MGRS and shame proneness for both psychological and physical victimization. Thus, the following hypotheses will be examined:

Hypothesis 1a: Psychological victimization will be significantly positively related to psychological symptom status. Specifically, increased psychological victimization will be related to increased global severity of psychological symptoms.

Hypothesis 1b: Physical victimization will be significantly positively related to psychological symptom status. Specifically, increased physical victimization will be related to increased global severity of psychological symptoms.

Hypothesis 2a: MGRS and shame proneness, in sequence, will significantly mediate the relationship between psychological victimization and psychological symptom status.

Specifically, increased psychological victimization will be related to increased MGRS, which will be related to increased shame proneness, which, in turn, will be related to increased global severity of psychological symptoms.

Hypothesis 2b: MGRS and shame proneness, in sequence, will significantly mediate the relationship between physical victimization and psychological symptom status. Specifically, increased physical victimization will be related to increased MGRS, which will be related to increased shame proneness, which, in turn, will be related to increased global severity of psychological symptoms.

Chapter 2

Method

Participants

Participants were 74 male college students at a large southeastern public university who reported on their current or most recent dating or marital relationship. Participants' age ranged from 17 years to 26 years, with an average age of 19.90 years (SD = 2.26). The sample was predominantly freshmen (52.7%), followed by sophomores (24.3%), juniors (13.5%), seniors (6.8%), and post-baccalaureate/graduate (2.7%). As only those reporting on an opposite-sex relationship were included in analyses, the sample identified almost entirely as heterosexual, with one participant identifying as bisexual. The majority (83.8%) of the sample identified as Caucasian (non-Hispanic), followed by black or African American (9.5%), Asian American (4.1%), Hispanic or Latino (1.4%), and one participant identifying as biracial. Sixty-four participants reported that they were currently dating someone at the time of the study, whereas 9 participants indicated that they were not in a relationship and 1 participant indicated that he was married. Average length of relationship was 17.86 months (SD = 17.64).

Procedure

Participants in this study were students enrolled in undergraduate psychology courses at a large southeastern public university. In order to participate, interested students were required to be at least 18 years of age and to be in a relationship at the time of the study or to have been in a relationship within the previous year. Through an online human participation website, potential participants registered for the study and answered questions to determine their eligibility to participate in the study. Eligible and interested participants were then sent a link via email to an



online survey website where they were provided a brief description of the study, informing them of the content of the information that would be collected (e.g., thoughts, feelings, strategies for handling conflict, substance use, etc.) and the goals of the study (e.g., to determine eligibility for participation in a second study). Participants provided informed consent and qualified participants completed the measures described above through an online survey website that uses encryption to ensure confidentiality of participant responses. Participants received partial course credit for their participation. The university's Institutional Review Board approved all procedures.

Measures

Demographics. Participants were asked to indicate their age, gender, academic level, race, sexual orientation, and the length of their current or most recent relationship. Participants were also asked to indicate the gender of their current or most recent dating partner. Only one participant reported being in a same-sex relationship; therefore, data from this participant were not included in the analyses.

Intimate Partner Aggression. The Revised Conflict Tactics Scales (CTS2; Straus et al., 1996; Straus et al., 2003) physical (12 items) and psychological (8 items) aggression subscales were used to measure participants' victimization and perpetration of aggressive acts. The CTS2, the most widely used measure of partner aggression (CTS2; Straus et al., 1996; Straus et al., 2003), is a self-report measure in which participants are asked to indicate the frequency with which they have engaged in (e.g., "I insulted or swore at my partner"; "I threw something at my partner that could hurt") or experienced (e.g., "My partner did this to me") several conflict tactics over the past 6 months on a scale from 1 ("once") to 6 ("more than 20 times"). Scores are

calculated by taking the mid-point for each response (e.g., a "4" for items which occurred "3 to 5 times in the past 12 months") and summing items within a particular subscale. The physical (α = .83) and psychological (α = .87) victimization subscales demonstrated adequate reliability in this study. To correct for positive skew, all CTS2 subscales were logarithmically transformed (natural log) prior to analyses.

Shame Proneness. Participants' shame proneness was measured with the Test of Self-Conscious Affect (TOSCA). The TOSCA presents 15 situations (e.g., "You break something at work and then hide it"; "While out with a group of friends, you make fun of a friend who's not there") and provides potential responses to each situation (e.g., "You would think: 'This is making me anxious. I need to either fix it or get someone else to" or "You would think about quitting"; "You would feel small...like a rat" or "You would apologize and talk about that person's good points"; Tangney, Wagner, & Gramzow, 1989). The participants rate (1-5; ranging from "not likely" to "very likely") each response item to indicate the likelihood that they would respond accordingly. The response options suggest a tendency to respond with shame, guilt, externalization, detachment, and pride; however, only the shame and guilt scales were used for this study. The shame ($\alpha = .74$) and guilt ($\alpha = .83$) scales both demonstrated adequate reliability.

Psychological Symptoms. Psychological symptom status was measured using the Global Severity Index (GSI) of the Brief Symptom Inventory (BSI; Derogatis, 1983). The BSI is a 53-item self-report measure of psychological symptoms that is designed for use in both clinical and non-clinical populations. Participants responded to items based on their level of distress (0-4; ranging from "not at all" to "extremely") associated with each symptom over the past week. Nine primary symptom subscales (i.e., Somatization, Obsessive-compulsive, Interpersonal Sensitivity,



Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism) and 3 global indices of distress (i.e., GSI, Positive Symptom Distress Index (PSDI), and Positive Symptom Total (PST)) are calculated by summing responses for each scale. In the current study, the BSI GSI was employed and demonstrated good reliability ($\alpha = .97$).

Masculine Gender Role Stress. MGRS was measured using the MGRS Scale (Eisler & Skidmore, 1987). The MGRS Scale is a 40-item measure that assesses the self-reported stressfulness of various situations that are potentially threatening to gender role expectations (e.g., "Being outperformed at work by a woman"). Participants are instructed to rate "how stressful the situation would be for [them]" (0-5; ranging from "not at all stressful" to "extremely stressful"). Responses to all 40 items are summed to calculate the total MGRS score and scores for the 5 subscales (Physical Inadequacy, Emotional Inexpressiveness, Subordination to Women, Intellectual Inferiority, and Performance Failure) are calculated by summing corresponding items.

The Physical Inadequacy subscale reflects failure to meet physical standards of masculinity (e.g., "Losing in a sports competition"), whereas the Intellectual Inferiority subscale reflects questioning of one's rational abilities (e.g., "Talking with a feminist."). The Emotional Inexpressiveness, Subordination to Women, and Performance Failure subscales reflect stress related to emotional tenderness (e.g., "Admitting that you are afraid of something"), being outperformed by women (e.g., "Having a female boss"), and failures with work and sex (e.g., "Not making enough money"), respectively (Eisler & Skidmore, 1987). In the current study, the MGRS Total Scale demonstrated good reliability (α = .92). The Physical Inadequacy (α = .77),



Emotional Inexpressiveness (α = .70), Subordination to Women (α = .77), Intellectual Inferiority (α = .68), and Performance Failure (α = .78) subscales each demonstrated adequate reliability.

Analysis

The serial mediation model (Figure 1) was analyzed using the PROCESS (Hayes, in press) macro for SPSS, as the PROCESS macro aids in the application of bootstrapping methods recommended by Preacher and Hayes (2008) for testing mediation hypotheses. Bootstrapping offers advantages over the traditional Sobel test in that bootstrapping does not assume a normal sampling distribution and provides more statistical power than the Sobel test (Preacher & Hayes, 2008). Further, unlike the causal steps approach, the bootstrapping method does not require significant individual paths in order to test mediation.

Chapter 3

Results

Missing data for participants who completed greater than 80% of scale items were treated as missing at random and were imputed using mean substitution prior to analysis. Means, standard deviations, and bivariate correlations among all study variables are presented in Table 1. Means and standard deviations reflect raw scores, whereas correlations and all further analyses employ natural log transformed scores for the CTS2 physical and psychological subscales and the BSI GSI in order to correct for positive skew. Guilt proneness was entered as a covariate for all mediation analyses to control for the shared variance between shame proneness and guilt proneness.

Psychological Victimization

In support of Hypothesis 1a, psychological victimization was significantly associated with psychological symptom status as measured by the GSI (B = .12, t = 4.63, p < .001) when analyzed without mediators or covariates, suggesting a significant total effect for psychological victimization (path c1). As suggested by Preacher and Hayes (2008), mediation analyses with psychological victimization as the independent variable were conducted with physical victimization entered as a covariate, as both of these variable will be analyzed as an independent variable.

Results of serial mediation analyses (hypothesis 2a) indicated that there is no significant association between psychological victimization and MGRS (path a1; B = .03, t = .01, p = ns). Path d was significant, indicating a significant positive association between MGRS and shame proneness (B = .09, t = 3.00, p < .001). Path b was also significant, indicating a significant

positive association between shame proneness and psychological symptom status (B = .01, t = 2.16, p < .05). Further, results revealed a significant direct effect (path c1') between psychological victimization and psychological symptom status (B = .07, t = 2.85, p < .01). No significant indirect effect between psychological victimization and psychological symptom status through MGRS and shame proneness operating in sequence (B = .00, 95% bootstrap confidence interval (CI) -.01 to .01) was indicated, as evidenced by the 95% bootstrap confidence interval containing zero. Thus, our hypothesized mediation model (Hypothesis 2a) for psychological victimization was not supported. Further, analysis of the indirect effect of psychological victimization on psychological symptom status through MGRS (B = .00, 95% bootstrap CI -.02 to .03) and through shame proneness (B = .00, 95% bootstrap CI -.01 to .02) operating individually indicated no significant mediating effect for either variable. In conclusion, no significant simple or serial mediation effects were indicated among study variables for the relationship between psychological victimization and psychological symptom status.

Exploratory analyses of the depression, anxiety, and hostility subscales of the BSI examined within this model indicated no significant indirect effects of psychological victimization on psychological symptoms through MGRS and shame proneness for all 3 subscales. These results are consistent with findings for overall psychological symptomatology and provide further evidence that psychological victimization does not operate significantly through MGRS and shame proneness to influence psychological health.

Physical Victimization

In support of Hypothesis 1b, physical victimization was significantly associated with psychological symptom status (B = .16, t = 4.21, p < .001) when analyzed without mediators or



covariates, suggesting a significant total effect for physical victimization (path c2). Consistent with analyses for psychological victimization, mediation analyses utilizing physical victimization as the independent variable were conducted with psychological victimization entered as a covariate.

Results from mediation analyses with physical victimization as the independent variable (hypothesis 2b) indicate a non-significant a2 path, suggesting no significant relationship between physical victimization and MGRS (B = 6.59, t = 1.69, p = ns). As reported above, results suggest a significant d path, representing a significant association between MGRS and shame proneness (B = .09, t = 3.00, p < .001). Also reported above, path b was significant, indicating a significant positive association between shame proneness and psychological symptom status (B = .01, t =2.16, p < .05. In contrast to psychological victimization, results indicated a significant indirect effect between physical victimization and psychological symptom status through MGRS and shame proneness operating in sequence (B = .01, 95% bootstrap CI .00 to .03), as evidenced by the 95% bootstrap confidence interval excluding zero. Thus, our hypothesized mediation model (Hypothesis 2b) for physical victimization was supported. Further, tests of indirect effect through both MGRS (B = .01, 95% bootstrap CI -.00 to -.06) and shame proneness (B = .02, 95%bootstrap CI -.00 to .06) individually were nonsignificant and results indicated no significant direct effect between physical victimization and psychological symptom status (B = .06, t = 1.67, p = ns). Therefore, only the indirect effect of physical victimization on psychological symptom status through MGRS and shame proneness in sequence was significant.

Exploratory analyses of the depression, anxiety, and hostility subscales of the BSI examined within this model indicated significant indirect effect of physical victimization on



depression (B = .01, 95% bootstrap CI .00 to .03) and hostility (B = .01, 95% bootstrap CI .00 to .04) operating through MGRS and shame proneness in sequence. This indirect effect was not significant for anxiety (B = .00, 95% bootstrap CI -.00 to .03).



Chapter 4

Discussion

The goal of this study was to examine the indirect effects of both psychological and physical victimization on psychological symptom status through MGRS and shame proneness in a serial mediation model. Based on past research indicating the deleterious effects of both psychological and physical victimization (e.g., Coker et al., 2002; Hines & Douglas, 2011a, Shorey et al., 2011), we hypothesized that a significant indirect effect would exist for both types of victimization when controlling for the other, such that victimization would predict increased MGRS, leading to increased shame proneness, which, in turn would bring about increased psychological symptoms. Our hypotheses were partially supported, with results indicating a significant indirect effect of victimization on psychological symptom status through MGRS and shame proneness for physical victimization but not for psychological victimization. Additionally, examination of MGRS and shame proneness as lone mediators for psychological victimization yielded nonsignificant results. As simple mediation results for both MGRS and shame proneness for physical victimization were also nonsignificant, we conclude that only through MGRS and shame proneness together, in sequence, does mediation occur among these variables.

These findings suggest that physical victimization may lead to increased MGRS, which, in turn, may lead to increased shame proneness, bringing about increased psychological symptoms. Whereas previous research has suggested that shame proneness may intensify the relationship between physical victimization and psychological dysfunction for men (Shorey et al., 2011), our findings suggests that, through MGRS, physical victimization may increase one's overall proneness to shame, which, likewise, may bring about psychological symptoms. This



potential effect of physical victimization on one's overall tendency to experience shame speaks to the potency of the impact of intimate partner aggression for male victims.

Further, results of exploratory analyses of symptoms of depression and hostility were consistent with findings for global psychological symptoms for both psychological and physical victimization, such that serial mediation was significant for physical victimization and nonsignificant for psychological victimization. Results were nonsignificant for anxiety for both psychological and physical victimization. These findings suggest that, through MGRS and shame proneness, physical victimization may cause increased depression and hostility. Significant findings for depression may reflect a tendency for these men to internalize shame and negative emotions related to victimization, bringing about a traditional depressive response (i.e., feelings of worthlessness, sadness, etc.), whereas significant findings for hostility may reflect a tendency to experience anger in relation to victimization and to externalize negative emotions related to victimization. Perhaps, as emotional expression is not a coping strategy available to these individuals due to the MGRS that expressing emotions might bring about by violating expectations for masculinity, this negative affect is expressed through hostility, as hostility is a more acceptable expression of emotion for men. Further, the nonsignificant findings for anxiety may be explained by the shared variance between MGRS and anxiety. Alternatively, the nonsignificant findings for anxiety may suggest a weaker relationship between shame and anxiety as compared to the relation between shame and depression, as shame brings about selfcriticism and feelings of worthlessness (Tangney, Wagner, & Gramzow, 1992). Indeed, results indicate that shame is more strongly correlated with symptoms of depression (r = .34, p < .01)than with anxiety symptoms (r = .25, p < .05).



In addition, as regression analyses indicated that psychological and physical victimization were both significantly positively associated with psychological symptoms, our findings suggest that the mechanisms by which victimization is related to psychological symptoms differ between physical and psychological victimization. That is, it is not the case that psychological victimization is unrelated to psychological symptom status, but, rather, psychological victimization effects psychological symptom status through different mechanisms than physical victimization. As a possible explanation for the discrepancy between results for psychological and physical victimization, it may be the case that physical victimization creates greater MGRS than does psychological victimization because psychological aggression often occurs through verbal expression. Men may not expect to excel verbally because it is not a traditionally masculine sphere (e.g., work and sexual performance; Eisler, 1995); that is, because the feminine gender role indicates expertise in verbal expression, psychological aggression may not be perceived as a threat to masculinity and, as such, may not bring about MGRS to the extent of physical victimization. Additionally, MGRS associated with psychological victimization may not evoke shame to the same degree as physical victimization for male victims, as victims of psychological aggression may retain the ability to view themselves as superior in more physical and performance spheres, which are more closely tied to the masculine gender role. In sum, physical victimization may pose a greater threat to masculinity than psychological victimization, leading to increased MGRS and increased shame.

Further, whereas a great deal of past research has examined MGRS as a causal factor for violence perpetration (e.g., Jakupcak, 2003; Parrott, 2008; Moore & Stuart, 2004; Jakupcak, Lisak, & Roemer, 2002), our findings suggest that MGRS, along with shame, may explain the



relationship between physical victimization and psychological symptom status. As such, when working with male victims of intimate partner aggression, it might be important to explore the psychological effects of victimization under the lens of MGRS and shame proneness.

Psychoeducation regarding the prevalence and common effects of male victimization might be help to mitigate the effects of MGRS and shame proneness that link male victimization with psychological symptoms. Additionally, when working with couples who are at high risk for violence, it is important to explore MGRS and shame proneness comprehensively, as examining the impact of MGRS only as it relates to potential for perpetration ignores the complexity of the construct. Our findings could shed light on a possible cycle through which, for some couples, aggression perpetration may occur in response to the MGRS, shame, and psychological symptom sequence brought about by victimization.

Implications for Future Work

In the current study, physical and psychological victimization of intimate partner aggression were examined within the same serial mediation model. Much of the existing literature on male intimate partner victimization omits psychological victimization or, similarly to this study, examines psychological victimization within the same conceptual framework as physical victimization (e.g., Shorey et al., 2011). Results of the current study suggest that the field may benefit from examining these constructs separately as unique, albeit it related, phenomena. Further examination of how physical and psychological victimization each influence psychological health will aid in developing specialized treatment interventions for male victims of various types and combinations of intimate partner aggression. Additionally, as will be addressed in the limitations discussed below, this serial mediation model should be examined

longitudinally in order to allow for inferences regarding causality. While this study explored specific effects for depressive and anxiety symptoms, as well as for hostility, future research should utilize diagnostic tools, such as structured interview, to examine this mediation model for specific psychological disorders.

Limitations

Some limitations must be acknowledged in accurately interpreting the findings of this study. One limitation of this study lies in the cross-sectional nature of the data. As such, potential causal relationships were contemplated but could not be inferred from the results of this study. Secondly, the sample we employed for this study is comprised of primarily non-Hispanic Caucasian, heterosexual college students. Thus, the findings presented in this study may not be generalizable to a broader population of men. Despite the limited scope of this study, the significant findings and the overall level of victimization suggest that this is a population worthy of further study. The relatively young age of the typical college student population may make this population particularly well-suited for intervention prior to potential exacerbation of the problem.

Additionally, although the examination of both psychological and physical victimization while controlling for the effects of the other is a strength of the current study, this examination also presents a limitation in that it fails to account for the combined effects of physical and psychological victimization. As psychological and physical victimization often co-occur, future research should examine the roles of MGRS and shame proneness for individuals who may experience the collective effects of both types of victimization.



Conclusion

In spite of the limitations discussed above, these findings suggest that MGRS and shame proneness, operating in sequence, are important mechanisms by which physical victimization of intimate partner aggression may influence psychological symptom status. Few studies have examined the relationship between MGRS and shame proneness; far fewer studies have examined these factors within the context of partner aggression victimization. As the current study suggests that this process may lead to deterioration of mental health, the relations among and effects of these variables are worthy of further study. Further, as this model was not supported for psychological victimization, future work should more closely examine the unique, as well as the combined effects of these two types of victimization.



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Appendix



Table 1

Means, Standard Deviations, and Bivariate Correlations among Study Variables.

	Mean	SD	1	2	3	4	5	6	7	8	9	10
CTS2												
 Psychological Victimization 	10.58	22.33										
Physical Victimization	2.77	13.45	.48**									
BSI												
3. Global Severity Index	.58	.64	.48**	.45**								
MGRS Scale												
4. Physical Inadequacy	24.19	8.05	.24*	.32**	.37**							
Intellectual Inferiority	13.62	4.89	01	.13	.32**	.60**						
6. Emotional Inexpressiveness	14.84	5.38	.06	.05	.30**	.57**	.62**					
7. Subordination to Women	15.49	5.97	.00	.02	.12	.63**	.66**	.48**				
8. Performance Failure	28.32	8.10	.10	.29*	.26*	.68**	.53**	.49**	.38**			
9. MGRS Total	96.46	26.22	.11	.23*	.34**	.89**	.81**	.76**	.76**	.80**		
TOSCA												
10. Shame Proneness	27.83	7.00	12	.30**	.34**	.43**	.21	.31**	.17	.31**	.37**	
11. Guilt Proneness	41.87	7.79	17	.00	19	03	01	08	02	.06	01	.27*

Note. * p < .05; ** p < .01. Raw scores were used to calculate all means and standard deviations. To correct for positive skew, correlations were calculated using natural log transformed scores for the CTS2 subscales and the BSI GSI.

Table 2Regression Results for Serial Mediation

					Bootstrap CI	
Variable	В	SE	t	p	LL	UL
Direct, total, and indirect effects						
Psychological victimization regressed on MGRS (a1)	.03	2.74	.01	.99		
MGRS regressed on shame proneness (d) Shame proneness regressed on psychological symptom status	.09	.03	3.00	.00		
(b) Psychological victimization regressed on psychological symptom status	.01	.00	2.16	.03		
Total (c1)	.12	.03	4.63	.00		
Direct (c1')	.07	.03	2.85	.01		
Indirect1	.00	.00			01	.01
Physical victimization regressed on MGRS (a2) Physical victimization regressed on psychological symptom status	6.59	3.91	1.69	.10		
Total (c2)	.16	.04	4.21	.00		
Direct (c2')	.06	.04	1.67	.10		
Indirect2	.01	.01			.00	.03

Note. n = 74. Unstandardized regression coefficients are reported. Bootstrap sample size= 5,000. LL = lower limit; CI = confidence interval; UL = upper limit.



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