The Nexus of Domestic Violence and Poverty

Resilience in Women's Anxiety

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This study extends past research by examining the mediating role of cognitive and social resilience in the domestic violence—anxiety relation. Mediation is tested on a sample of 100 impoverished women from the Women's Health Outcomes in Urban and Rural Environments (Women's HOUR) Study. Regression analysis and structural equation modeling provide consistent support for the proposed model: poor women's violence experience impairs support and self-esteem, which in turn influences their anxiety levels. Results demonstrate the dynamic role impaired resilience may play in the violence process, highlighting implications for research, practice, and policy at the nexus of violence and poverty.

Keywords: domestic violence; poverty; resilience

Domestic violence is a considerable social and public health problem (Gelles, 1997), particularly for women in poverty. An estimated 4.4 million adult women are abused by a spouse or partner in the United States each year (Plichta, 1996), and one quarter of women are assaulted by a current or former spouse, cohabiting partner, or date in their lifetime (Tjaden & Thoennes, 1998). Although violence is present at all socioeconomic status (SES) levels (Wiehe, 1998), domestic violence tends to be more frequent and severe in low SES women (Hotaling & Sugarman, 1990). This prevalence is all the more sobering in light of consequences following violence. Research has shown that domestic violence can cause negative physical and mental health outcomes (e.g., Orava,

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McLeod, & Sharpe, 1996; Plichta, 1996). Yet research on resilience posits that negative consequences are not inevitable following adversity (Masten, Best, & Garmezy, 1990). The present study examines whether cognitive and social resilience factors mediate the domestic violence–anxiety relation. Although violence is associated with a plethora of mental health problems, research has shown a particularly strong relation between domestic violence and anxiety (e.g., Tolman & Rosen, 2001), possibly because of victims' fears and nervousness related to threatened or actual loss of safety (Walker, 1977).

Resilience has traditionally been defined as achievement of successful outcomes despite threatening circumstances (Masten et al., 1990). Although resilience has been primarily studied in children and as an outcome, researchers have recently suggested that studies focus on the resilience process in battered women (Stewart & Robinson, 1996). Unraveling this process may uncover why some women emerge from violence unscathed and others have a host of mental health problems.

Resilience can be classified into the following two categories: (a) cognitive (e.g., high self-esteem and self-efficacy) (Masten & Coatsworth, 1998) and (b) social (e.g., access to social support and a stable emotional relationship with a close other) (Moen & Erickson, 1995). Although some have argued that resiliency transcends social class boundaries (Werner, 1995), empirical research typically finds protective resources differentially distributed by social class, with impoverished individuals having fewer cognitive (e.g., Brown & Harris, 1978; Mirowsky & Ross, 1986) and social resources (e.g., Mickelson & Kubzansky, in press; Turner & Marino, 1994). Research has suggested these resources may buffer individuals from the negative effects of life events; yet, this way of testing resilience assumes orthogonality between stress and resources. Because of the link between violence and potential resources (Janoff-Bulman & Frieze, 1983), some have begun to examine resilience as a mediator of violence and mental health (Thompson et al., 2000). Anticipated results of our study will show how violence is linked with anxiety by focusing on the role of impaired resilience. Furthermore, because of poverty's strong connection with impaired resilience and high levels of violence, we believe it is crucial to study this process in a poverty sample.

METHOD

SAMPLE

One hundred poor women aged 18 to 65 (69% White, 22% African American, 9% Hispanic) were interviewed face to face for the Women's Health Outcomes in Urban and Rural Environments (Women's HOUR) Study. Poor women (defined as having an annual income 200% or less of the poverty threshold) were recruited from government and social service agencies. Women were, on average, in their mid-30s (M = 33.7, SD = 10.1), high school graduates (M = 12.3 years, SD = 2.7), and with monthly incomes under \$1,000 (M = \$952.91, SD = \$545.50). Only 34.0% were employed, and the majority was not married (75.0%).

MEASURES

Domestic Violence Severity

Domestic violence in the past 12 months was assessed with an adapted form of the Conflict Tactics Scale (CTS) (Straus, 1979) to identify severity of violence experienced from a spouse/partner $(\alpha = .77)$. The scale consists of the following three sets of violence, increasing in coercion and aggression: (a) verbal and nonverbal acts by partners that function to hurt or threaten the individual, (b) minor physical violence, and (c) severe physical violence. Respondents used a four-point Likert-type scale from 0 (never) to 3 (often) for each list. A severity score was calculated by summing the number of subscales in which women met criteria for violence with a potential range of 0 to 3. Meeting criteria for violence involved endorsing the most severe response for verbal aggression (i.e., 3), an intermediate response for minor physical violence (i.e., 2 or 3), or any endorsement of severe physical violence (i.e., 1, 2, or 3). Twenty-five percent of women experienced domestic violence in the past year.

Cognitive and Social Resilience

Social resilience included support satisfaction and problematic support, modified from the UCLA Social Support Inventory

(UCLA-SSI) (Dunkel-Schetter, Feinstein, & Call, 1986). Social support satisfaction ($\alpha = .65$) was assessed by asking respondents to rate separately for spouse, relatives, friends, and professionals how satisfied they were with the support they received in the past 6 months using a five-point Likert-type scale (M = 3.32, SD = .97). Problematic support ($\alpha = .78$) was assessed with four items (on a five-point Likert-type scale) about negative encounters (e.g., hurtful remarks) with the same four support sources (M = 2.53, SD = .80). Mean scores were obtained by collapsing across the four sources and scores were standardized prior to analysis, with higher scores indicating more satisfaction and problematic support, respectively. Cognitive resilience was assessed with selfesteem. Rosenberg's (1965) Self-Esteem Scale ($\alpha = .88$), which utilizes a four-point scale, was used to ascertain respondents' selfbeliefs. A mean standardized score was calculated, with higher scores indicating more self-esteem (M = 2.87, SD = .57).

Anxiety

Anxiety symptoms in the past 7 days were assessed with the anxiety subscale (α = .89) of the Symptom Checklist (SCL-90) (Derogatis, 1994). The 10 items were rated on a four-point Likert-type scale. Anxiety scores, obtained by summing responses (potential range: 0-30), were standardized prior to analysis, with higher scores indicating higher anxiety (M = 10.74, SD = 7.75).

RESULTS

Preliminary analyses revealed age was the only sociodemographic variable significantly related to anxiety, and therefore, it was used as a control variable in all analyses. First, in accordance with the paths of mediation (Baron & Kenny, 1986), results of multiple linear regression analyses showed women who experienced more severe violence reported higher anxiety levels (see first column of Table 1). Next, results of three separate regressions showed violence was associated with impaired self-esteem and support satisfaction, and marginally associated with greater problematic support (p = .07; second column of Table 1). Finally, each of the three mediators was related to anxiety (third column of Table 1).

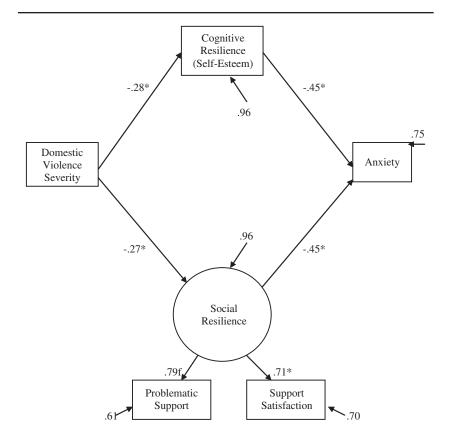
TABLE 1
Standardized Coefficients and Standard Errors of Paths Examining Mediating Effects of Resiliency Factors Between Domestic Violence Severity and Anxiety

	Violer (With	iolence to Anxiety Without Mediator)	xiety iator)	Violen	7iolence to Mediator	liator	Media	Mediator to Anxiety	ıxiety	Violen (Wit	7iolence to Anxiety (With Mediator) ^a	xiety cor) ^a	
Mediator	Р	b SE ΔR^2	$\Delta \mathbb{R}^2$	Р	b SE	$\Delta \mathrm{R}^2$	Р	b SE ΔR^2	ΔR^2	ф	b SE	$\Delta \mathbb{R}^2$	
Self-esteem Support satisfaction Problematic support	22 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	: 11: * * * * * * * * * * * * * * * * * * *	.05 .05 .05	30 25 .18	.11**	.09 .06 .03	52 38 .47	.08† .09† .09†	.27 .14 .22	.09	.10	.01 .02 .02	

NOTE: N = 100. All analyses controlled for participant age. a. ΔR^2 for this column represents the amount of change in anxiety variance accounted for by violence severity once mediators are added (e.g., without self-esteem, violence severity accounted for 5.0% of anxiety variance, whereas with self-esteem, violence severity accounted for 1.0% of anxiety variance). $^*p < .001$. $^*p < .001$. $^*p < .001$.

Mediation was then tested separately for self-esteem, support satisfaction, and problematic support using a series of multiple linear regression analyses, as suggested by Baron and Kenny (1986). Results showed the relation between violence severity and anxiety was completely mediated by self-esteem, support satisfaction, and problematic support (fourth column of Table 1). Although both cognitive and social resilience explained the relation, self-esteem emerged as the strongest mediator. Once selfesteem was added into the model, the amount of anxiety variance accounted for by violence decreased by 89.1% (from 5.5% to .06%), as opposed to 71.0% (5.5% to 1.6%) for support satisfaction and 56.4% (5.5% to 2.4%) for problematic support. Self-esteem was only moderately correlated with support satisfaction (r = .19)and problematic support (r = -.24), but the two support measures were strongly related to each other (r = -.56), reflecting potential multicollinearity. This issue, however, was addressed in the structural equation model (SEM) analysis below.

SEM was used to test model paths simultaneously using EQS (Bentler, 1995), which is a more conservative test of mediation because it takes into consideration interrelations between variables as well as measurement error. A latent factor composed of problematic support and support satisfaction was created for social resilience. Age was initially free to affect all variables, but was later dropped from the model because it was not significantly related to the study variables. Results indicated a good fit between the proposed model and data, χ^2 (4, N = 100) = 5.18, p =.27, CFI = .99, RMSEA = .05, and standardized estimates indicated all paths to mediation were significant, supporting the proposed model (see Figure 1). Furthermore, when a direct path between violence severity and anxiety was added to the model, the fit did not improve and the pathway itself was not significant. In addition, because of the cross-sectional design, an alternative model (anxiety as mediator, resilience as outcome) was tested, as recommended by Kline (1998); in further support of our proposed model, this alternative model did not fit the data as well, χ^2 (5, N =100) = 8.18, p = .15, CFI = .97, RMSEA = .08.



$$\chi^{2}_{(4)} = 5.18, p = .27, CFI = .99, RMSEA = .05$$

Figure 1: Structural Equation Model of Hypothesized Mediation Model NOTE: All pathways are significant at p < .05.

DISCUSSION

The present study extends past research by examining cognitive and social resilience as mechanisms involved in the violence process. Results provide initial support for the proposed model: self-esteem, support satisfaction, and problematic support all mediated the domestic violence—anxiety relation. Domestic violence is a particularly debilitating social issue because of its impairment of resources that are meant to buffer women from its deleterious consequences. Abused women in poverty may be at a

distinct disadvantage because of increased levels of violence and impaired resources; however, the exact process for women in poverty would be better understood by comparing various levels of socioeconomic status. Future work should explore whether social and cognitive resilience are impaired in the same ways for higher SES women who are experiencing violence, or whether distinct processes exist by social class. As such, we are currently replicating the proposed model in a nationally representative sample of women, stratified by income.

STUDY IMPLICATIONS

Although this study's results are preliminary in nature because of the small sample size and cross-sectional design, findings do highlight resilience not as a static state but rather one that is influenced by the social world. The finding that resilience can be impaired also implies that resilience can be enhanced. The most fundamental implication of our study is that we should strive to bolster poor women's support and self-esteem through interventions. Our results suggest that violence affects relationships with family, friends, and professionals, and that this impaired or problematic support from others may partially explain how women develop anxiety. Other research has shown that women receive negative reactions when disclosing violence, which can create a sense of revictimization (Hoff, 1992). Network members may even unintentionally perpetuate partner conflict by failing to find it inappropriate (Klein & Milardo, 2000), especially if network members are related to the perpetrator. Ideally, interventions for women's network members would be implemented to provide them with information about the role they may play in the violence and with ways to provide supportive, not problematic, assistance to abused women. Large-scale educational programs to reach the population at large might be most effective in helping people, in general, understand the violence process and ways they might support loved ones. In addition, programs for abused women should involve support receipt from and provision to similar others that can provide these women with additional supportive and satisfying relationships.

Through women's opportunities to help others, such interventions may also naturally foster efficacy and esteem, which is

imperative based on our finding that impaired self-esteem was the strongest mechanism for increased anxiety. Although women might benefit from programs incorporating systematic training to modify self-beliefs, their perceptions of stigma associated with violence could make such interventions more difficult. Further complicating this issue, the cycle of violence is often exacerbated by poverty because of women's economic dependence on abusive partners (Kurz, 1998). Thus, it is apparent that our results must also be applied to social policy and reform. Because women are experiencing anxiety due to impaired resilience, which is only intensified by the complex role of poverty, women's impaired levels of cognitive and social resilience must be addressed (perhaps using the above suggestions) prior to cutting services to the poor. In fact, our results imply that additional services, such as mental health counseling and child care, for these women may be necessary.

Although we have made recommendations about women's personal and social lives, it is necessary to acknowledge that lives and relationships occur within a larger context. Economics not only play a role in violence and resilience; also, a society that denies violence against women is a problem for all people. Until violence is eradicated, we must continue discussing ways to promote resilience in women at the nexus of violence and poverty.

REFERENCES

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.

Bentler, P. M. (1995). EQS structural equations program manual. Encino, CA: Multivariate Software.

Brown, G. W., & Harris, T. O. (1978). Social origins of depression: A study of psychiatric disorder in women. New York: Free Press.

Derogatis, L. R. (1994). Symptom Checklist-90-R: Administration, scoring, and procedures manual. Minneapolis, MN: National Computer Systems.

Dunkel-Schetter, C., Feinstein, L., & Call, J. (1986). *UCLA social support inventory*. Los Angeles: University of California.

Gelles, R. J. (1997). Intimate violence in families (3rd ed.). Thousand Oaks, CA: Sage.

Hoff, L. A. (1992). Gender-specific network influences on battered women. In T. L. White-head & B. V. Reid (Eds.), Gender constructs and social issues (pp. 235-250). Urbana: University of Illinois Press.

Hotaling, G. T., & Sugarman, D. B. (1990). A risk marker analysis of assaulted wives. *Journal of Family Violence*, 5, 1-13.

- Janoff-Bulman, R., & Frieze, I. H. (1983). A theoretical perspective for understanding reactions to victimization. *Journal of Social Issues*, 39, 1-17.
- Klein, R. C. A., & Milardo, R. M. (2000). The social context of couple conflict: Support and criticism from informal third parties. *Journal of Social and Personal Relationships*, 17, 618-637
- Kline, R. B. (1998). *Principles and practice of structural equation modeling*. New York: Guilford. Kurz, D. (1998). Old problems and new directions in the study of violence against women.
- In R. K. Bergen (Ed.), Issues in intimate violence (pp. 197-207). Thousand Oaks, CA: Sage.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2, 425-444.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, 53, 205-220.
- Mickelson, K. D., & Kubzansky, L. D. (in press). Social distribution of social support: The mediating role of life events. *American Journal of Community Psychology*.
- Mirowsky, J., & Ross, C. (1986). Social patterns of distress. *Annual Review of Sociology*, 12, 23-45.
- Moen, P., & Erickson, M. A. (1995). Linked lives: A transgenerational approach to resilience. In P. Moen, G. H. Elder, & K. Luscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 169-211). Washington, DC: American Psychological Association.
- Orava, T. A., McLeod, P. J., & Sharpe, D. (1996). Perceptions of control, depressive symptomatology, and self-esteem of women in transition from abusive relationships. *Journal of Family Violence*, 11, 167-186.
- Plichta, S. B. (1996). Violence and abuse: Implications for women's health. In M. M. Falik & K. S. Collins (Eds.), Women's health: The Commonwealth Fund survey (pp. 237-272). Baltimore: Johns Hopkins University Press.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Stewart, D. E., & Robinson, G. E. (1996). Violence and women's mental health. *Harvard Review of Psychiatry*, 4, 54-57.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. *Journal of Marriage and the Family*, 41, 75-88.
- Thompson, M. P., Kaslow, N. J., Kingree, J. B., Rashid, A., Puett, R., Jacobs, D., et al. (2000). Partner violence, social support, and distress among inner-city African American women. *American Journal of Community Psychology*, 28, 127-143.
- Tjaden, P., & Thoennes, N. (1998). Prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey. Washington, DC: National Institute of Justice and the Centers for Disease Control and Prevention.
- Tolman, R. M., & Rosen, D. (2001). Domestic violence in the lives of women receiving welfare. Violence Against Women, 7, 141-158.
- Turner, R. J., & Marino, F. (1994). Social support and social structure: A descriptive epidemiology. *Journal of Health and Social Behavior*, 35, 194-212.
- Walker, L. E. (1977). Battered women and learned helplessness. Victimology, 2, 525-534.
- Werner, E. E. (1995). Resilience in development. Current Directions in Psychological Science, 4, 81-85.
- Wiehe, V. R. (1998). Understanding family violence: Treating and preventing partner, child, sibling, and elder abuse. Thousand Oaks, CA: Sage.

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