Relationship Violence and Psychological Distress Among Low-income Urban Women

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ABSTRACT *In this paper, we examined the association between relationship violence and psychological distress among low-income urban women. Extending prior research, we considered the effects of relationship violence within the context of other chronic stressors that are common in the lives of these women. Using data from the Welfare, Children, and Families project (1999), a probability sample of 2,402 low-income women with children living in low-income neighborhoods in Boston, Chicago, and San Antonio, we predicted psychological distress with multiple measures of relationship violence, a wide range of sociodemographic variables, and several chronic stressors. Our results show that relationship violence is associated with higher levels of economic hardship, neighborhood disorder, and household disrepair. We also find that relationship violence is associated with higher levels of psychological distress, net of these other chronic stressors. Finally, we observe that the effects of relationship violence do not vary according to the chronic stressors under study. Because the adverse effects of relationship violence are similar for women despite other adverse circumstances, interventions and treatment efforts focused exclusively on relationship violence may make a unique contribution to the psychological well-being of low-income urban women.*

KEYWORDS *Chronic stress, Mental health, Psychological distress, Relationship violence.*

INTRODUCTION

Relationship violence is a major public health concern for women living in the United States, affecting nearly 22% of women in their lifetime and roughly 1.3% of women each year.¹ Although relationship violence is an important issue for women in all segments of society, studies consistently show that women of low socioeconomic status exhibit higher rates of violence victimization than their more affluent counterparts.²⁻⁶ In their review of the literature, Tolman and Raphael⁵ estimate that between 34 and 65% of women receiving welfare report some form of relationship violence in their lifetime, and between 8 and 33% experience some form of relationship violence each year,⁵ levels that surpass those for women overall.¹

Given that rates of relationship violence are disproportionately high among women of low socioeconomic status, attention must be directed to the patterns and health consequences of violence in the lives of these women. Indeed, existing research underscores the importance of focusing on women of low socioeconomic status. Using data collected from a probability sample of women living in a low-

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income Chicago neighborhood, Leone et al.⁷ show that relationship violence is associated with physical injuries, poor self-rated health, and higher rates of psychological distress. In their study of welfare recipients, Tolman and Rosen⁸ report that recent victims of relationship violence have significantly higher rates of depression, anxiety, posttraumatic stress disorder, poor self-rated health, and drug and alcohol dependence than women with no violence in their lives.

In the present study, we focus on the association between relationship violence and psychological distress. Numerous studies show that relationship violence during childhood and adulthood is associated with poorer mental health in adulthood.^{8–20} Although it is difficult to establish the temporal order of the association between relationship violence and mental health status,²¹ available longitudinal research is generally consistent with the idea that violence experiences may actually lead to greater psychological distress.¹² The effects of relationship violence on mental health are also generally consistent across a wide range of violence measures, including nonspecific violence and victimization, violence during childhood, physical assault, psychological aggression, and sexual coercion.

Although prior research has made significant contributions to our understanding of the association between relationship violence and psychological distress, studies often fail to consider the effects of relationship violence within the context of other chronic stressors that are common in the lives of low-income urban women. This tendency in the literature raises the question of whether psychological distress is the result of relationship violence per se or the consequence of women living in urban poverty.^{22,23} Because many stressful experiences are rooted in people's locations within various systems of stratification, including those based on socioeconomic disadvantage,^{24,25} low-income urban women rarely, if ever, encounter stressful circumstances in isolation. Low-income urban women are regularly confronted with the trials of economic hardship, which extend to nearly every aspect of ordinary life, from difficulties meeting essential financial obligations, to the dangers of living in substandard housing and poor neighborhood environments. To more accurately assess the association between relationship violence and psychological distress, it is important to test whether the effects of violence are independent of other common adversities.²⁶ Moreover, because relationship violence is often comorbid with other chronic stressors, additional research is needed to describe the psychological consequences of this intersection.

In this paper, we examine the association between relationship violence and psychological distress among low-income urban women. We build on prior research by considering the effects of relationship violence within the context of other chronic stressors that are common in the lives of these women. We first test whether relationship violence is associated with other chronic stressors that are common in the lives of low-income urban women. We then test whether relationship violence is associated with higher levels of psychological distress, net of other chronic stressors. If relationship violence predicts psychological distress over and above other significant stressors, this analysis will further emphasize the importance of violence interventions and treatment efforts within disadvantaged urban contexts. Finally, we test whether the effect of relationship violence varies as a function of other chronic stressors. More specifically, we consider whether the adverse effect of relationship violence is exacerbated within the context of other chronic stressors. If the effect of relationship violence is amplified when experienced in combination with other stressors, violence policy initiatives may be advised to take these patterns into account. If the adverse effects of relationship violence are similar for

women despite other adverse circumstances, interventions and treatment efforts focused exclusively on relationship violence may make a unique contribution to the psychological well-being of low-income urban women.

To address these issues, we analyze data collected from a large probability sample of low-income women with children living in low-income neighborhoods in three cities. With these data, we predict psychological distress with multiple measures of relationship violence, a wide range of sociodemographic variables, and several chronic stressors.

METHODS

Sample

The data for this study come from the Welfare, Children, and Families (WCF) project (see <http://www.jhu.edu/~welfare/>). The WCF project is a household-based, stratified random sample of 2,402 low-income women living in low-income neighborhoods in Boston, Chicago, and San Antonio. The data were collected in 1999. The WCF first sampled census blocks (or neighborhoods) with at least 20% of residents below the Federal Poverty line based on the 1990 census. Within these neighborhoods, households under 200% of the poverty line were sampled, with an oversample of households below 100% of the poverty line. Because one of the goals of the WCF project is to assess the impact of welfare policy and work on children, households were screened for the presence of children. Households with infants and young children (aged 0–4) and young adolescents (aged 10–14) were sampled. The children's caregivers, all women age 18 and older, were interviewed face-to-face.

Measures

We use the Brief Symptom Inventory (BSI) 18 developed by Derogatis²⁷ to assess psychological distress. The BSI contains subscales for depression, anxiety, and somatization. The total BSI is measured as the mean response to 18 items ($\alpha=0.92$). For example, respondents were asked to indicate how much in the past 7 days they were distressed or bothered by “feeling no interest in things,” “feeling tense or keyed up,” and “nausea or upset stomach.” Response categories for all psychological distress items are coded (1) not at all, (2) a little bit, (3) moderately, (4) quite a bit, (5) or extremely.

Relationship violence during childhood and adolescence is measured with two separate items. These items capture physical assault and sexual coercion before the age of 18. Respondents were asked to indicate whether they were ever hit, beaten up, burned, assaulted with a weapon, or whether their life had been threatened by an adult in their family or household before the age of 18. Respondents were also asked to indicate whether anyone—a stranger, friend, acquaintance, date, or relative—ever tried or succeeded in doing something sexual to them or made them do something sexual against their wishes. Original response categories for these items were coded (0) never, (1) once or twice, (2) several times, and (3) often. To assess possible threshold effects, items were recoded into three dummy variables: (1) never, (2) once or twice, (3) several times or often. In subsequent analyses, never is the reference value against which all other levels of violence are compared.

Measures of relationship violence during adulthood are drawn from the Revised Conflict Tactics Scales (CTS2) developed by Straus et al.²⁸ Drawing on the work of Straus et al., relationship violence in adulthood is divided into four

types of violence: psychological aggression, minor physical assault, severe physical assault, and sexual coercion.

Psychological aggression captures nonphysical or verbal acts of violence and is measured with three items. Respondents were asked to indicate how often in the past 12 months a romantic partner had threatened to (1) hit them, (2) use a weapon on them, and (3) hurt their child or take (him/her) away. *Minor physical assault* assesses nonsevere or acts of “situational couple violence” and is measured with two items. Respondents were asked to indicate how often in the past 12 months a romantic partner had (1) thrown something at them and (2) pushed, grabbed, or shoved them. *Severe physical assault* is measured with three items. Respondents were asked to indicate how often in the past 12 months a romantic partner had (1) slapped, kicked, bit, or punched them, (2) beaten, and (3) choked or burned them. Finally, *sexual coercion* is intended to capture forced sexual acts of violence and is measured with a single item. Respondents were asked to indicate how often in the past 12 months a romantic partner had forced them into any sexual activity against their will.

Original response categories for all adult violence items were coded (0) never, (1) once or twice, (2) several times, and (3) often. With the exception of sexual coercion, which is measured with a single item, indices were computed by averaging across corresponding items. To assess possible threshold effects, indices were recoded into three dummy variables: (1) never, (2) once or twice, (3) several times or often. In subsequent analyses, never is the reference value against which all other levels of violence are compared. For example, the dummy variables for psychological aggression measure (1) no acts of psychological aggression, (2) one or two acts of psychological aggression, and (3) several or more acts of psychological aggression. Because of limited incidence rates, sexual coercion was recoded into a single dummy variable, measuring (1) one or more acts of sexual coercion and (0) no acts of sexual coercion.

To isolate the effects of relationship violence from other chronic stressors, subsequent analyses include adjustments for economic hardship, neighborhood disorder, and household disrepair. These particular stressors are common in the lives of low-income urban women and are known correlates of poor health status.^{29–33}

Economic hardship refers to the inability to meet essential material needs.²⁹ Economic hardship is measured as the mean response to 13 items ($\alpha=0.83$). For example, respondents were asked to indicate how often they had to “borrow money to pay bills.” Respondents were also asked to indicate whether they had enough money to “afford housing, food, and clothing,” and whether any adults or children in the household were “unable to eat for a whole day because there wasn’t enough money for food.” The original hardship items were measures with mixed question formats and response categories; as a result, each of these items has been standardized to account for metric differences.

Perceived neighborhood disorder refers to conditions and activities that signify the breakdown of social order.³⁴ Neighborhood disorder is measured as the mean response to ten items ($\alpha=0.89$). For example, respondents were asked to rate their neighborhood environment in terms of “assaults and muggings,” “abandoned houses,” and “high unemployment.” Response categories for these items are coded (1) not a problem, (2) somewhat of a problem, and (3) a big problem.

Household disrepair refers to potentially stressful and/or dangerous household conditions. Household disrepair is measured as a summed response to eight items.

For example, respondents were asked to indicate whether any of the following conditions were present in their households: “a leaky roof, a toilet, hot water, or other plumbing that doesn’t work,” “broken windows,” and “rats, mice, cockroaches, or other pests.” Responses to these items are dummy coded (0) no and (1) yes.

Numerous background factors have been identified as significant correlates of relationship violence and psychological distress. Women who experience relationship violence are more often young than old, black than white or Hispanic, less educated than well educated, unemployed than employed, on welfare than off, single than married, and with children than without.^{2-5,6,8,35,37-44} These same general patterns also tend to hold for psychological distress.^{43,44}

In accordance with prior research, subsequent analyses include controls for age (in years), race (non-Hispanic white, Mexican, and other Hispanic compared with black), education (in years), employment status (1 = worked for pay in past week), current welfare status (1 = currently receiving welfare), marital status (1 = married and living with spouse), cohabiting status (1 = cohabiting, not married), and number of children (1 to 5 or more). Because city of residence is correlated with several of these measures (e.g., race, employment status, and neighborhood disorder), subsequent analyses also control for city (Boston and San Antonio compared with Chicago).

Statistical Procedures

The analyses begin with the presentation of descriptive statistics for the study sample. Table 1 provides minimum and maximum values, and as appropriate, sample percentages or means and standard deviations for psychological distress and selected sociodemographic characteristics and chronic stressors. Table 2 provides incidence rates for all violence measures, including physical assault and sexual coercion before age 18 and past year reports of psychological aggression, minor physical assault, severe physical assault, and sexual coercion.

In the second stage of the analyses, we estimate bivariate associations. In addition to sample percentages for all violence measures, Table 2 presents chronic stressor and psychological distress means within each category of relationship violence. Bivariate mean comparisons were computed using two-tailed independent sample *t* tests.⁴⁵

The third stage of the analyses estimates multivariate associations. Because the BSI is measured as continuous, we use ordinary least squares (OLS) regression to model psychological distress.⁴⁵ Table 3 presents unstandardized OLS regression coefficients for corresponding independent variables. Model 1 of Table 3 includes relationship violence before the age of 18, relationship violence in the past year, and all sociodemographic characteristics. This model tests whether relationship violence predicts psychological distress over and above other known correlates of relationship violence and psychological distress. Model 2 of Table 3 adds the chronic stressors to the regression equation. This model tests whether relationship violence predicts psychological distress over and above other potentially comorbid stressors. This model also allows us to consider the extent to which the effects of relationship violence are shared with other stressors that are common in the lives of low-income urban women.

The final stage of the analyses estimates a series of interaction terms, which test whether the effect of relationship violence on psychological distress varies as a function of economic hardship, neighborhood disorder, and household disrepair.

TABLE 1 Descriptive statistics for sociodemographic characteristics, chronic stressors, and psychological distress

	Range	Percentage	Mean	SD
Sociodemographic characteristics				
Age	18–74	–	32.79	9.93
Non-Hispanic white	0–1	9.0	–	–
Black	0–1	43.0	–	–
Mexican	0–1	24.0	–	–
Other Hispanic	0–1	24.0	–	–
Education	0–14	–	10.49	2.40
Employed	0–1	41.0	–	–
Receiving welfare	0–1	37.0	–	–
Cohabiting, not married	0–1	6.4	–	–
Married, spouse in house	0–1	13.5	–	–
Married, no spouse in house	0–1	11.5	–	–
Single	0–1	68.6	–	–
Number of children	1–5	–	2.64	1.43
Boston residence	0–1	38.0	–	–
Chicago residence	0–1	32.0	–	–
San Antonio residence	0–1	30.0	–	–
Chronic Stressors				
Economic hardship	–1–3		0.00	0.57
Neighborhood disorder	1–3		1.85	0.51
Household disrepair	0–8		1.25	1.48
Psychological Distress	1–5		1.43	0.55

n=2,337

Table 4 presents unstandardized OLS regression coefficients for corresponding independent variables and interaction terms. Each interaction term was added separately to model 2 from Table 3. Thus, all interaction terms were tested separately for each category of relationship violence. For example, the first interaction model tests whether the effect of physical assault before age 18 on psychological distress varies as a function of economic hardship. In the next interaction model, we test whether the effect of physical assault before age 18 varies as a function of neighborhood disorder.

Because different forms of relationship violence are positively correlated, we addressed the issue of multicollinearity by estimating variance inflation factors (VIFs) for all variables included in our analyses. Variance inflation factors over 10 are thought to indicate problematic multicollinearity.⁴⁶ All VIFs estimated in our analyses are well under 10. In fact, throughout our analyses, only psychological aggression (several times or often) and minor physical assault (several times or often) exceed 2.00, 2.34, and 2.20, respectively.

RESULTS

Descriptive Statistics

Table 1 provides descriptive statistics for psychological distress and selected sociodemographic characteristics and chronic stressors. With respect to the focal outcome measure, the average respondents reported low levels of psychological

TABLE 2 Relationship violence incidence rates and bivariate mean comparisons

	Percentage	Economic hardship	Neighborhood disorder	Household disrepair	Psychological distress
Physical assault (before age 18)					
Never	80.00	-0.04	1.83	1.17	1.36
Once or twice	8.00	0.03	1.90*	1.38*	1.52***
Several times or often	12.00	0.24***	2.00***	1.71***	1.88***
Sexual coercion (before age 18)					
Never	76.00	-0.04	1.83	1.13	1.34
Once or twice	12.00	0.10***	1.92**	1.49***	1.63***
Several times or often	12.00	0.20***	1.96***	1.75***	1.84***
Psychological aggression (past year)					
Never	82.00	-0.03	1.82	1.18	1.37
Once or twice	11.00	0.07**	1.95***	1.50**	1.55***
Several times or often	7.00	0.21***	2.04***	1.61***	1.82***
Minor physical assault (past year)					
Never	78.00	-0.03	1.82	1.18	1.36
Once or twice	12.00	0.07*	1.94***	1.45**	1.55***
Several times or often	10.00	0.06***	1.93***	1.51***	1.65***
Severe physical assault (past year)					
Never	88.00	-0.02	1.83	1.19	1.38
Once or twice	7.00	0.12***	1.89	1.37	1.57***
Several times or often	5.00	0.15***	2.03***	1.79***	1.75***
Sexual coercion (past year)					
Never	93.00	-0.01	1.84	1.21	1.40
Once/twice/several times/often	7.00	0.21***	2.05***	1.73***	1.90***

n=2,337
Asterisks indicate statistically significant mean differences from corresponding nonviolence groups (two-tailed *t*-tests).
**p*<0.05
***p*<0.01
****p*<0.001

distress. These results also indicate that most respondents live in Boston (38%), followed by Chicago (32%), and San Antonio (30%). The sample consists of blacks (43%), Mexicans (24%), other Hispanics (24%), and non-Hispanic Whites (9%). The average respondent is nearly 33 years of age, with approximately 10 years of formal education. Less than half (41%) of the respondents are employed or currently receiving welfare benefits (37%). Most respondents (70%) are single, and very few respondents are either cohabiting (6%) or married and living with a spouse (13%). On average, respondents are responsible for nearly three children.

Table 2 presents incidence rates for all violence measures. Before we consider these results, it is important to recall that approximately 22% of all women have been physically assaulted by an intimate partner in their lifetime, and roughly 1.3% of all women are physically assaulted by an intimate partner each year.¹ The results from Table 2 indicate that reports of physical assault (20%) and sexual coercion (24%) before age 18 are similar to national lifetime prevalence rates. Twelve-month incidence rates for psychological aggression (18%), minor physical assault (22%), severe physical assault (12%), and sexual coercion (7%) are consistent with prior

TABLE 3 Psychological distress regressed on relationship violence, sociodemographics, and chronic stressors

	Model 1	Model 2
Physical assault (before Age 18)		
Once or twice	0.05	0.05
Several times or often	0.29***	0.24***
Sexual coercion (before Age 18)		
Once or twice	0.18***	0.16***
Several times or often	0.30***	0.26***
Psychological aggression (past year)		
Once or twice	0.03	0.01
Several times or often	0.19**	0.13*
Minor physical assault (past year)		
Once or twice	0.10*	0.08*
Several times or often	0.10*	0.11*
Severe physical assault (past year)		
Once or twice	0.01	0.00
Several times or often	0.09	0.07
Sexual coercion (past year)		
Once/twice/several times/often	0.15**	0.14**
Chronic stressors		
Economic hardship	—	0.22***
Neighborhood disorder	—	0.09***
Household disrepair	—	0.02**
Model statistics		
Global F	26.09***	33.16***
Nested F	3.88***	69.97***
R-square	0.20	0.27

n=2,337

All models include controls for age, race/ethnicity, education, work status, welfare, marital status, number of children, and city.

**p*<0.05

***p*<0.01

****p*<0.001

studies of welfare recipients⁵ and noticeably higher than expectations derived from national estimates.

Bivariate Analysis

Table 2 also provides chronic stressor and psychological distress means within each category of relationship violence. Bivariate mean comparisons were computed using two-tailed independent sample *t* tests. In general, these results suggest that respondents who report higher levels of relationship violence also tend to report higher mean levels of economic hardship, neighborhood disorder, household disrepair, and psychological distress. These general patterns are consistent across all forms of relationship violence before the age of 18 and in the past year.

Multivariate Analysis

The multivariate analysis (Table 3) estimates the effects of relationship violence and other chronic stressors on the expected value of psychological distress, net of a range of sociodemographic characteristics. Model 1 of Table 3 includes relationship

TABLE 4 The effect of relationship violence on psychological distress as a function of economic hardship, neighborhood disorder, and household disrepair

Violence categories predicting distress	A. violence main effect	B. violence X hardship	C. violence main effect	D. violence X disorder	E. violence main effect	F. violence X disrepair
Physical assault (before age 18)						
Once or twice	0.47	-0.07	0.48	-0.01	0.44	0.02
Several times or often	0.23***	0.02	0.22***	0.13*	0.23***	0.01
Sexual coercion (before age 18)						
Once or twice	0.16***	-0.06	0.16***	0.06	0.16***	0.02
Several times or often	0.26***	-0.04	0.25***	0.12	0.26***	0.02
Psychological aggression (past year)						
Once or twice	0.01	0.04	-0.00	0.11	0.01	-0.01
Several times or often	0.12*	0.06	0.14*	-0.07	0.13*	0.01
Minor physical assault (past year)						
Once or twice	0.09*	-0.08	0.09*	-0.02	0.08*	0.02
Several times or often	0.10*	0.01	0.10*	0.11	0.11*	0.00
Severe physical assault (past year)						
Once or twice	0.01	-0.06	0.00	-0.04	0.00	-0.00
Several times or often	0.06	0.01	0.06	0.04	0.08	-0.01
Sexual coercion (past year)						
Once/twice/several times/often	0.13*	0.05	0.12*	0.11	0.14**	-0.01

n=2,337

Columns A, C, and E present the main effects of corresponding violence categories.

Columns B, D, and F present the interaction terms between corresponding violence categories and designated chronic stressors.

Each interaction term was added separately to model 2 of Table 3. Thus, all interaction terms were tested separately for each category of violence. For example, we first tested whether the effect of physical assault before age 18 on psychological distress varied as a function on economic hardship.

All results include controls for age, race/ethnicity, education, work status, welfare, marital status, number of children, city, economic hardship, neighborhood disorder, and household disrepair.

*p<0.05

**p<0.01

***p<0.001

violence before the age of 18, relationship violence in the past year, and all sociodemographic characteristics. The results for this model indicate that physical assault (several times or often) and sexual coercion before age 18 are indeed associated with higher levels of psychological distress. That is to say, respondents who experience several acts of physical assault or at least one or two acts of sexual coercion before age 18 tend to exhibit higher levels of psychological distress in adulthood than respondents who report no experiences with either form of violence. The results for model 1 show that relationship violence in the past year is also associated with higher levels of psychological distress. This general pattern holds for experiences with psychological aggression (several times or often), minor physical assault, and sexual coercion in the past year. According to model 1, severe physical assault is not associated with higher levels of psychological distress.

Model 2 adds the chronic stressors to model 1. The results for this model indicate that each chronic stressor under study is associated with higher levels of psychological distress. Although the results for relationship violence are substantively identical to those presented in model 2, there are noticeable patterns of attenuation once other chronic stressors are taken into account. From models 1 to 2, coefficients are reduced ($(b_1 - b_2)/b_1$) by 17% for physical assault before age 18 (several times or often), 11 and 13% for sexual coercion before age 18 (once or twice and several times or often, respectively), 31% for psychological aggression (several times or often), and 20% for minor physical assault (once or twice). We observe very little change in the coefficients for minor physical assault (several times or often) and sexual coercion in the past year.

Interaction Analysis

Table 4 presents the results of the interaction analysis. More specifically, Table 4 presents a series of interaction terms, which test whether the effect of relationship violence on psychological distress varies as a function of economic hardship, neighborhood disorder, and household disrepair. The results of this analysis suggest that the effects of relationship violence on psychological distress are similar across levels of other chronic stressors, as indicated by several insignificant interaction terms. The only exception to this general pattern is the interaction between physical assault before age 18 (several times or often) and neighborhood disorder. The results for this particular interaction term indicate that the adverse effect of physical assault before age 18 (several times or often) on psychological distress is amplified with increasing levels of neighborhood disorder.

DISCUSSION

In this paper, we examined the association between relationship violence and psychological distress among low-income women with children living in low-income neighborhoods in Boston, Chicago, and San Antonio. Building on prior research, we considered the effects of relationship violence within the context of other chronic stressors that are common in the lives of low-income urban women. We first tested whether relationship violence is associated with other chronic stressors. We then tested whether relationship violence is associated with higher levels of psychological distress, net of other chronic stressors. Finally, we tested whether the effect of relationship violence varies as a function of other chronic stressors.

Our bivariate results showed that women who report higher levels of relationship violence also tend to report higher mean levels of economic hardship, neighborhood disorder, household disrepair, and psychological distress. These general patterns were consistent across all forms of relationship violence, including physical assault and sexual coercion before age 18, psychological aggression, minor physical assault, severe physical assault, and sexual coercion in the past year. Our multivariate results indicated that physical assault and sexual coercion before age 18 and psychological aggression, minor physical assault, and sexual coercion in the past year were associated with higher levels of psychological distress, net of a range of sociodemographic characteristics and other chronic stressors. Contrary to expectations, severe physical assault was not statistically significant in our multivariate models. Finally, our interaction results suggested that the effects of relationship violence on psychological distress are similar across levels of economic hardship, neighborhood disorder, and household disrepair.

With the exception of severe physical assault, our multivariate results are generally consistent with prior research on the effects of relationship violence during childhood^{10,14,47} and adulthood.^{12,48,49} Our results for severe physical assault are plainly inconsistent with what other studies have found.^{8,9,19} It is unclear why severe physical assault is uncorrelated with psychological distress in our multivariate models, when other (seemingly less traumatic) forms of violence like psychological aggression and minor physical assault are correlated with distress. One possibility is that small sample sizes across levels of severe physical violence may have limited our ability to detect statistically significant differences. Another possibility is that psychological forms of violence are actually more detrimental to the mental health of women than physical forms of violence. This perspective is supported by qualitative evidence, suggesting that waiting and worrying about future incidents may be more damaging than direct acts of physical violence.⁵⁰

To the best of our knowledge, we are among the first to test whether the effects of relationship violence vary as a function of other chronic stressors. We expected that the adverse effects of relationship violence on psychological distress would be exacerbated when experienced in combination with other chronic stressors. Although it is reasonable to expect that experiences with financial hardship, dangerous neighborhood environments, and substandard housing might render women especially vulnerable to the adverse effects of relationship violence, our results suggest that this is not the case. These results are contrary to expectations, but not entirely surprising. Taken together, our main effect and interaction analyses suggest that the impact of relationship violence is statistically independent of other adverse circumstances. Theoretically, these results emphasize the important and unique influence of relationship violence on the psychological well-being of low-income urban women.

Limitations

The present study has several limitations that should be addressed. First, the data are restricted to Boston, Chicago, and San Antonio. This characteristic of the data clearly limits the extent to which our results are generalizable beyond these cities. Second, because of limitations of the CTS2, we were unable to consider the effects of witnessing violence and other important components of psychological aggression, including dominance, control, and isolation. Future research should take advantage of more comprehensive and contextual measures of violence, such as the

Women's Experience with Battering scale.⁵¹ Finally, although the bulk of prior research assumes that relationship violence leads to greater psychological distress, we would like to acknowledge that poor mental health might also lead to violence.²¹ For example, prior mental health status could influence retrospective accounts of violence experiences. Preexisting mental health problems might also contribute to stressful intimate relationships and, as a consequence, lead to violence. Because our results are based on an analysis of cross-sectional data, we are unable to eliminate these possibilities.

Research Implications

Although prior research has made significant contributions to our understanding of the association between relationship violence and psychological distress, studies rarely ever consider the effects of relationship violence within the context of other chronic stressors that are common in the lives of low-income urban women. The results of our study clearly speak to the limitations of this analytic strategy. For the women under study, relationship violence is often accompanied by other chronic stressors, including economic hardship, neighborhood disorder, and household disrepair. These patterns are important because each of these chronic stressors is also associated with higher levels of psychological distress. The results of our study suggest that the effects of relationship violence may be overestimated in the absence of other chronic stressors. Although the effects of relationship violence remained statistically significant once other chronic stressors were taken into account, our results underscore the importance of adequate model specification, especially the need to isolate the effects of violence from other common adversities.

Based on the results of the present study, we recommend that future research continue to examine the effects of relationship violence among low-income urban women. Our analyses suggest that relationship violence is one of the stronger correlates of psychological distress among these women. To better understand the adverse effects of relationship violence, studies should continue to consider the effects of violence within the context of other potentially comorbid stressors. Although the present investigation is limited to economic hardship, neighborhood disorder, and household disrepair, future research may also consider, for example, the roles of daily hassles, discrimination, and nonintimate criminal victimization. Research along these lines would no doubt lead us to a more contextual understanding of the association between relationship violence and psychological distress among low-income urban women.

Policy Implications

The results of the present study provide striking evidence to suggest that relationship violence is associated with higher levels of psychological distress, over and above other theoretically relevant and statistically significant chronic stressors. Policy recommendations can be formulated to address any number of social problems within disadvantaged urban contexts, including financial hardship, dangerous neighborhood environments, and substandard housing. Our analyses merely emphasize the need for additional policies, interventions, and treatment programs focused directly on the problem of relationship violence.

Beyond the basic need for violence-related policy initiatives, the results of our interaction analyses provide some indication concerning the design of future policies. We tested whether the effect of relationship violence varies as a function of other chronic stressors and showed that the adverse effects of violence are similar

for women despite other adverse circumstances. In our view, these results suggest that interventions and treatment efforts focused exclusively on relationship violence may indeed make a unique contribution to the psychological well-being of low-income urban women. However, we would like to emphasize that the veracity of this conclusion is contingent upon replication and further testing of chronic stressors not included in the present study.

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