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Consequences of Male Partner Violence for Low-Income Minority Women

The current study used a random sample of 563 low-income women to test Johnson's (1995) theory that there are two major forms of male-partner violence, situational couple violence and intimate terrorism, which are distinguished in terms of their embeddedness in a general pattern of control. The study examined the associations between type of violence experienced and respondents' physical health, psychological distress, and economic well-being. Analyses revealed three distinct patterns of partner violence: intimate terrorism, control/no threat, and situational couple violence. Compared to victims of control/no threat and situational couple violence, victims of intimate terrorism reported more injuries from physical violence and more work/activity time lost because of injuries. Compared to women who experienced no violence in the previous year, victims of inti-

mate terrorism reported a greater likelihood of visiting a doctor, poorer health, more psychological distress, and a greater likelihood of receiving government assistance.

We explore the dynamics of violent relationships by testing Johnson's (1995) control typology among a sample of relatively poor minority women. The two main goals of the current study are to validate empirically the distinct types of partner violence specified by Johnson and to examine how these types are differentially related to women's well-being. First, we distinguish between types of partner violence based on the violent partner's use of nonviolent controlling behaviors. Second, we examine how women's physical, psychological, and economic well-being are associated with the type of violence they experienced.

AN INTEGRATION OF TWO CONCEPTUALIZATIONS OF PARTNER VIOLENCE

Prior to 1995, two distinct perspectives regarding the nature of partner violence, referred to as the *family violence perspective* and the *feminist perspective*, existed within the social science literature (Johnson, 1995; Kurz, 1989). Differences in sampling methods led to different conclusions

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about gender, violence, and power, and ignited rancorous debates among researchers (Kurz; Straus, 1993; Yllo, 1993). Family violence researchers, relying primarily upon large national data sets, have found that women are as likely as their male counterparts to initiate and carry out physical violence against an intimate partner. On average, this gender-symmetric violence tends to be relatively low in frequency and severity. In sharp contrast, feminist researchers focus primarily on clinical populations and use data collected from hospitals, police logs, and safe houses to show that physical violence is only one of many tactics used to control a partner (Kirkwood, 1993) and that batterers (almost always men) increasingly dominate their partners through both frequent and severe violent and nonviolent controlling behavior.

Johnson's (1995) conceptual framework attempts to resolve the debate between family violence researchers and feminist researchers. Johnson theorized that family violence and feminist researchers study two very different populations, thereby uncovering different phenomena. Johnson labeled these types of partner violence *common couple violence* and *patriarchal terrorism*, subsequently referred to as *situational couple violence* (Johnson & Leone, in press) and *intimate terrorism* (Johnson & Ferraro, 2000). The importance of categorizing types of violence, rather than viewing partner violence as a continuum of severity or frequency of physical violence, rests on the assumption that intimate terrorism and situational couple violence involve qualitatively different patterns of control rather than high or low levels of physical violence. According to Johnson, the central difference between situational couple violence and intimate terrorism is the motivation underlying the physical violence, rather than severity or frequency.

One way to determine an individual's motivation to use physical violence in an intimate relationship is to examine its context, specifically the broad pattern of nonviolent controlling behaviors within which the violence is exerted. Intimate terrorism is a violent partner's attempt to exert general control over his partner by using a broad range of power and control tactics, which include physical violence (Johnson, 1995; Johnson & Leone, in press). Examples of nonviolent control tactics include emotional abuse, economic abuse, threats, intimidation, and isolation (see Pence & Paymar, 1993). When used in the context of a physically violent relationship, these nonviolent

control tactics reflect not only one's desire to dominate a partner's behaviors and feelings but also the notion that if the victim does not comply with the violent partner's demands or wants, then he may resort to physical violence as a means of enforcing control. In contrast, situational couple violence is defined as physical violence that does not exist within a general pattern of controlling behavior. This form of violence is not motivated by a desire to control and overpower a partner or a relationship, but rather occurs when specific conflict situations escalate to violence (Johnson).

Johnson's (1995) control-based typology has been empirically supported with studies of two different populations of women. Johnson (1999) used a sample of women in violent relationships, some of whom had been in contact with a shelter or court, and others who were living in the same neighborhood. Results of a cluster analysis indicated two distinct types of partner violence: one resembling a general pattern of controlling behavior (intimate terrorism) and one not (situational couple violence). Intimate terrorism was shown to involve, on average, more per-couple incidents of violence that were less likely to be mutual and more likely to involve serious injury and escalation. In another study, Johnson and Leone (in press) analyzed data from 4,967 married female respondents who participated in the 1994-1996 National Violence Against Women Survey to determine whether these different types of violence could be identified in a representative random sample of adults. Even after controlling for the severity of violence experienced, victims of intimate terrorism (women who reported at least three types of nonviolent control) were more likely than victims of situational couple violence (women who reported fewer than three types of nonviolent control) to report violence-related injuries, higher levels of posttraumatic stress and depressive symptoms, and injuries resulting in missed work.

Johnson (1999) and Johnson and Leone (in press) both found that intimate terrorism was associated with more severe, frequent physical violence than was situational couple violence. This correlation between severity/frequency of physical violence and violence type suggests an alternative hypothesis to the one presented in the current study: Differences in well-being between groups could be more a function of differences in severity and frequency of violence than of differences in motives for the violence. Although this

alternative hypothesis is reasonable and will be tested in the current study, empirical evidence suggests that intimate terrorism does not *necessarily* involve more severe/frequent physical violence, and that women's physical and psychological well-being, with the exception of violence-related injuries, is not predominantly a function of the severity and/or frequency of violence experienced.

First, despite the overall average differences in physical violence found between the two types, there remains considerable variation within groups. For example, Johnson and Leone (in press) found one case of situational couple violence in which the husband had been violent 20 times, and 19 cases of intimate terrorism in which the husband had been violent only once. Further, 52% of the perpetrators of intimate terrorism had never committed an act of severe violence, whereas 32% of the perpetrators of situational couple violence had committed at least one act of severe violence. In fact, other evidence indicates that for many victims of terroristic violence, one survival tactic is to attempt to minimize the severity and frequency of the violent attacks by focusing their attention almost entirely on the violent partners' needs and demands, in such cases allowing the perpetrator to maintain control over the victim without continuing to resort to physical violence (Kirkwood, 1993). Second, if physical violence were the central determinant of differences in well-being, then including severity and/or frequency of physical violence in statistical analyses would eliminate the significant association between violence type and health consequences. Two studies show that this is not the case. Johnson and Leone (in press) found that even after accounting for differences in physical violence, intimate terrorism was associated with significantly poorer physical and psychological health for women. Further, Coker, Smith, Bethea, King, and McKeown (2000) found that experiencing psychological abuse (without physical violence) was as strongly related to adverse health outcomes as was experiencing physical violence with or without nonviolent control. Thus, nonviolent control tactics, accompanied by physical violence or not, can differentially predict health outcomes for women. Nevertheless, examining the validity of this alternative hypothesis will enhance our understanding of the relative contributions of violence type and physical violence severity and/or frequency for women's well-being.

PARTNER VIOLENCE AMONG MINORITY AND LOWER INCOME POPULATIONS

Research reveals contradictory findings regarding the prevalence of partner violence among minority populations. For example, community and national studies consistently show that compared to Anglo Americans, there are higher rates of partner violence among African Americans (Anderson, 1997; Straus & Gelles, 1986; Tjaden & Thoennes, 1999) and Latino Americans (Straus & Smith, 1990). In contrast, clinical and shelter studies have shown no ethnic differences in rates of partner violence (O'Keefe, 1994; Torres, 1991). One potential explanation for these contrasting results rests in the variations in sampling strategies (Johnson & Ferraro, 2000). In other words, it is unclear whether the higher rates of violence among minority populations in national surveys reflect higher rates of intimate terrorism or higher rates of situational couple violence. Considering the sampling schemes used, these findings most likely suggest a higher rate of situational couple violence, not intimate terrorism, among minority groups (Johnson & Ferraro). A second potential explanation for the contrasting findings is a confounding effect of race and socioeconomic status. In fact, some research shows no racial differences in rates of violence once income level is controlled (Cazenave & Straus, 1990; Lockheart, 1991).

Partner violence among low-income women has recently been explored with respect to how that violence relates to women's labor force participation and economic self-sufficiency (Lloyd, 1997; Raphael, 1995; Riger, Ahrens, & Blickenstaff, 2001). Studies consistently show a higher rate of partner violence among women who receive public assistance (for a review, see Tolman & Raphael, 2000), and suggest that recent welfare reform policies (e.g., work requirements, time limits on benefits) may be especially detrimental for women in violent relationships. For example, Browne, Salomon, and Bassuk (1999) found that female victims of male partner violence had one third the odds of maintaining employment for at least 3 months compared to women who did not experience violence. Women who cannot maintain employment because of a partner's violent, disruptive, and threatening behavior may be denied benefits and/or forced to stay in abusive relationships for economic reasons (Riger et al., 2001).

*Effects of Partner Violence
on Women's Well-Being*

Physical health. Injuries sustained from physical violence can be severe and life threatening. Common injuries range from black eyes, fractures, and broken noses to head trauma, miscarriages, unconsciousness, and death (Dobash & Dobash, 1979; Sutherland, Bybee, & Sullivan, 1998). In addition to the obvious health problems caused by injuries, victims of partner abuse also report less visible, noninjury-related physical health problems, including sleep problems (Jaffe, Wolfe, Wilson, & Zak, 1986), headaches and chest pains (Domino & Haber, 1987), and gastrointestinal problems (Drossman, Talley, Leserman, Olden, & Barreiro, 1995; Follingstad, Brennan, Hause, Polek, & Rutledge, 1991).

Psychological distress. Women in severely violent, controlling relationships are at high risk for depression. Research suggests that 70% to 85% of women in shelter samples experience at least mild depression, and 30% to 55% suffer from severe depression (Campbell, Sullivan, & Davidson, 1995; Follingstad et al., 1991). Further, the depressive symptoms of shelter populations are shown to be comparable to those of psychiatric outpatients, and significantly more severe than those of nonpatient women (Mitchell & Hodsen, 1983). Additional psychological effects include anxiety (Campbell et al., 1995; Sutherland et al., 1998), loss of identity and self-esteem, and posttraumatic stress (Kirkwood, 1993).

Employment and economic independence. Women in violent relationships characterized by intimate terrorism report economic dependency and lack of economic resources as the most common barriers to leaving abusive relationships (Kirkwood, 1993). Violent partners create economic dependency by depriving their partners of access to economic resources, including family and personal income (Dobash & Dobash, 1979; Kirkwood, 1993; Ptacek, 1997). Violent partners may also purposely sabotage a woman's employment status by physically preventing her from working, injuring her so that she is either too debilitated or too embarrassed to work, promising child care or transportation and then failing to provide it, destroying items or clothing needed for work (Kirkwood), harassing her at work (Riger et al., 2001), or causing lateness or missed work (Shepard & Pence, 1988). As previously

discussed, these effects on employment may also increase the risk of dependence upon government assistance.

Although the physical, psychological, and economic consequences of partner violence are well documented, the generalizability of these findings may be limited by the lack of distinctions made between types of violence. A large portion of research examining the effects of partner violence uses clinical samples of women, most likely victims of intimate terrorism. Findings from survey data generally do not distinguish between types of violence and consequently provide ambiguous results concerning the consequences of partner violence. In addition, there is still relatively little research exploring the consequences of partner violence among minorities, particularly differences between African Americans and Hispanics. The research that does exist tends to show that differences in health consequences for minority women are most likely a function of their access to resources. For example, Gondolf, Fisher, and McFerron (1988) found that among a sample of shelter residents, Hispanics had fewer economic resources to leave relative to Whites and African Americans, and consequently endured violence for a longer period of time.

Rationale and Hypotheses for the Current Study

The current study replicates and extends the research of Johnson (1999) and Johnson and Leone (in press) by using Johnson's (1995) model to create a typology of partner violence among low-income minority women and by exploring differences in the association between different types of violence and women's well-being. Unlike previous research that tested Johnson's typology, we examine well-being among women who, because of economic deficiency and minority status, are particularly susceptible to being entrapped in violent, controlling relationships. We address two main research questions. First, can Johnson's (1995) typology of intimate terrorism and situational couple violence be empirically supported with data from a random sample of low-income ethnic minority women? We found no other studies that examine specific types of partner violence among this population. We hypothesized that two subgroups of women who experienced partner violence could be identified: one group of women who experienced physical violence and a variety of other control

tactics (intimate terrorism), and another group who experienced physical violence and few to no other control tactics (situational couple violence).

Second, if these types can be identified, is well-being differentially associated with these two types of partner violence? Three domains of well-being were examined: physical health, psychological distress, and economic well-being. First, because intimate terrorism is associated with more severe, frequent physical violence (Johnson, 1999; Johnson & Leone, in press), it seems likely that this type of violence would also be linked to relatively more violence-related injuries. Second, the control tactics used by intimate terrorists create fear and anxiety among victims, factors that can ultimately lead to short- and long-term psychological distress and related physical symptoms. Finally, the association between a woman's well-being and her ability to obtain and maintain self-sufficiency is well established. Poorer health and more violence-related injuries would result in lost work time and a decreased ability to maintain gainful employment. We hypothesized, therefore, that within each domain, victims of intimate terrorism would report the poorest well-being compared to both women who experience situational couple violence and women in nonviolent relationships. Thus, an important implication of this research is that for low-income women dependent upon public assistance, the consequences of intimate terrorism (such as psychological and physical health problems, and a decreased ability to obtain and maintain employment) can further entrap them in violent relationships.

Expectations about differences between victims of situational couple violence and women in nonviolent relationships are less clear. Nonetheless, because physical violence of any kind can be dangerous and even life threatening, we expect that women who experience situational couple violence will report significantly poorer well-being compared to women in nonviolent relationships. We expect that violence type will be significantly associated with women's well-being regardless of scores on the physical violence scale. Finally, as previously discussed, research shows that differences among racial groups regarding experiences of partner violence may be primarily a function of socioeconomic differences. Because our sample is relatively homogeneous with respect to socioeconomic status, we do not expect to find differences

between Black and Hispanic women concerning their likelihood of experiencing either type of violence, or their well-being as a function of type of violence experienced.

METHOD

Design and Participants

The data come from the Effects of Violence on Work and Family Study (Lloyd, 1997), a cross-sectional study conducted to examine the association between low-income ethnic minority women's labor force participation and their experiences of partner violence. Participants were a random sample of 824 women, 18 years or older, who lived in Humboldt Park, a low-income neighborhood in Chicago. The sampling frame consisted of the total number of housing units by block and census tract in the community area, which contained 299 blocks with a mean number of 57 housing units per block (Lloyd). Humboldt Park was chosen primarily because of its relatively equal distribution of African Americans (51%) and Hispanics (43%). Data were collected over an 8-month period, September 1994 through April 1995, yielding an overall response rate of 54%. Households were randomly selected to participate in the study, and recruitment consisted of up to five attempts to screen each household. There were 642 instances in which a screening instrument could not be administered because no one answered the door. It can be assumed that 85% of these women would have been eligible for the survey, yielding an additional 546 of the *eligible respondents* who were nonresponsive (Lloyd). The 54% response rate was calculated as the total number of completed interviews ($n = 824$) divided by the total number of respondents known to be eligible ($n = 989$), plus the total number of respondents assumed to be eligible ($n = 546$). Had the 546 cases been excluded from this ratio, a response rate of 83% would have been obtained. Interviews took place within the women's homes and were conducted by female interviewers in either Spanish or English depending on the preference of the respondent. Finally, questionnaires were read aloud by the interviewers so that all women could participate regardless of literacy skills, and whenever possible, interviewers were matched with respondents in terms of language, race, and ethnicity.

Respondents who were not currently in an intimate relationship with a man ($n = 187$), did not answer all of the violence or control questions described below ($n = 41$), or were not of Hispanic or Black origin ($n = 41$) were excluded from our analyses, yielding a sample of 563 women in the current study (these numbers do not sum to 824 because a woman may have been characterized by more than one exclusion criterion). Respondents who were married but separated from their spouses at the time of the study were included in the analyses because partner violence often continues even after women escape from or end violent relationships (Campbell, Rose, Kub, & Nedd, 1998).

As shown in Table 1, respondents represent a relatively low-resource population. Nearly half of the respondents had neither completed high school nor earned a GED, and more than half reported that they were unemployed at the time of the survey. Further, respondents reported that there were, on average, four people residing in the household, two of whom were children. According to the U.S. Census Bureau (1994), the 1994 poverty threshold for a household with these demographics was \$15,029. The median household income for the women in this study, therefore, was slightly above the poverty threshold. Only 37% of respondents reported their

household incomes, however; 61% reported not knowing their household incomes and 2% refused to provide this information.

Measures

Physical violence. Physical violence was assessed by means of a modified version of the Conflict Tactics Scales (Straus, 1979). Respondents answered the following 10 questions: “In the past 12 months, when you’ve had an argument, how often did your husband/boyfriend throw something at you,” “push, grab, or shove you,” “slap you,” “kick, bite, or hit you with his fists,” “hit or try to hit you with an object,” “beat you up,” “choke you,” “force you to have sex or do sexual things you didn’t want to do,” “burn you,” or “cut you with a knife or fire a gun at you?” Responses ranged from *Never* (1) to *Very Often* (5). The *Physical Violence Scale* was the mean of responses to the 10 violence items (Cronbach’s $\alpha = .85$). This scale combines both the severity and the frequency with which each form of violence was used, and therefore reflects women’s overall experiences of physical violence. Respondents who reported *Never* on all of the physical violence items ($n = 452$) were coded as *Nonviolent*; all others ($n = 111$) were coded as *Experienced Violence*.

TABLE 1
RESPONDENT DEMOGRAPHIC CHARACTERISTICS ($N = 563$)

Variables	<i>M</i> or %	<i>SD</i>	Range
Age	36.44	12.31	19–77
Household Income	\$18,000 (median)	\$16,924	\$2,500–84,000
Household Size	4.21	1.85	1–14
Number of Children in Household	2.42	1.42	1–11
Race (%)			
Black	56		
Hispanic	44		
Education (%)			
Less than high school	43		
High school graduate/GED	49		
Some college/advanced degree	8		
Relationship Status (%)			
Dating relationship	45		
Legally married	47		
Separated from husband	8		
Employment Status (%)			
Unemployed	52		
Working part time	10		
Working full time	38		

Control tactics. Two control tactics scales were constructed from the following eight items: "In the past 12 months, when you've had an argument, how often did your husband/boyfriend insult you, swear at you, or call you out of your name," "accuse you of being with another man," "do or say something just to spite you," "try to control your every move," "withhold money, make you ask for money, or take yours," "threaten you with a knife or gun," "threaten to kill you," or "threaten to hurt your family or friends?" Please note that the phrase "call you out of your name" implies a violent partner referring to a woman as a derogatory word (e.g., slut, bitch) rather than her real name. This tactic is used to both objectify the victim and to diminish her sense of self (Pence & Paymar, 1993). Responses for all items ranged from *Never* (1) to *Very Often* (5). An exploratory principal components factor analysis suggested that the items loaded onto two factors. Factor 1 (eigenvalue = 3.34) consisted of items representing verbally aggressive, coercive, and degrading behavior toward women (e.g., "accuse you of being with another man," "withhold money, make you ask for money, or take yours"). We called this factor *Verbal Abuse and Coercion* (Cronbach's $\alpha = .78$). Factor 2 (eigenvalue = 1.39) included items representing the threat of violence against the women or against the women's family or friends (e.g., "threaten to kill you," "threaten to hurt your family or friends"). We called this factor *Threats* (Cronbach's $\alpha = .68$).

Physical health. There were three indicators of physical health: one question specific to partner violence and two broader questions about women's health. First, the *frequency of seeking medical treatment for injuries* was assessed by the question, "In the past 12 months, when you've had an argument, how often did your boyfriend/husband injure you so that you needed medical treatment?" Responses ranged from *Never* (1) to *Often* (4). Second, whether the respondent *visited a doctor in the past 12 months* was determined by her response to the dichotomous (0 = *No*; 1 = *Yes*) question, "In the past 12 months, have you visited a doctor, outpatient clinic, or emergency room for your own health reasons?" Finally, *poor health* was assessed by responses to the question, "In general, how would you describe your health?" Response categories were *Poor*, *Fair*, *Good*, *Very Good*, and *Excellent*. Responses were coded into two categories: 0 = *Excellent* or *Very Good*; 1 = *Good*,

Fair, or *Poor*. The latter two questions are not direct indicators of violence-related health consequences, yet they capture a broader conceptualization of women's physical health and thereby allow for assessment of differences in women's general health as it relates to experiences of partner violence.

Psychological distress. The *Psychological Distress Scale* was the mean score of responses to the following four questions: (1) "In the past 12 months, have you seen a social worker, psychologist, psychiatrist, or other counselor or therapist for help with any nervous, emotional, or mental health problems?" (2) "In the past 12 months, have you had a problem with depression?" (3) "In the past 12 months, have you had a problem with anxiety or with being worried a lot of the time?" and (4) "In the past 12 months, have you had a problem with being angry a lot of the time?" Responses were reverse coded (0 = *No*; 1 = *Yes*) so that a higher score indicates more psychological distress (Cronbach's $\alpha = .71$).

Economic well-being. There were two indicators of economic well-being. One question assessed the extent to which health-related problems caused the respondent to miss work or daily activities. This question assessed the *frequency of missing work/activities because of injuries* by asking: "In the past 12 months, when you've had an argument, how often did your boyfriend/husband injure you so that you needed to stay home from work or your other activities?" Responses ranged from *Never* (1) to *Very Often* (5). Although health-related in nature, this question reflects the short- and potentially long-term consequences of partner violence on women's labor force participation, and ultimately their ability to achieve gainful employment and economic self-sufficiency. As such, it is conceptualized here as an indicator of economic well-being. Receipt of government assistance was assessed using the dichotomous (0 = *No*; 1 = *Yes*) question, "In the past 12 months, have you or anyone else in your household *received AFDC* (Aid to Families with Dependent Children) or public aid?"

Demographic characteristics. Respondent *race* was assessed by the question, "What is your racial background?" To increase the homogeneity of the sample, we included only women who responded *Black, but not of Hispanic origin* or *Hispanic*. Five percent of the sample was excluded by this criterion. Respondent *age* was a continuous variable.

Plan of Analysis

The first goal of the current study was to determine whether we could identify two distinct types of male-partner violence, one accompanied by a general pattern of nonviolent controlling behavior, the other not. We focused on making distinctions between types of partner violence based on nonviolent control tactics that accompanied the violent behavior, rather than on differences in severity or frequency of physical violence. Thus, only the *Experienced Violence* respondents ($n = 111$) were included in the process of distinguishing between types; the *Nonviolent* group ($n = 452$) was not included.

We distinguished between types of violence by using respondents' standardized scores on the two dimensions of control: *Verbal Abuse and Coercion* and *Threats*. A Ward's Method cluster analysis of the two control tactics scales was performed to identify natural clusters of partner behavior. This grouping method is consistent with the approach of Johnson (1999) and Johnson and Leone (in press), who used cluster analysis to distinguish between groups of women based on their experiences of nonviolent control tactics. Ward's Method of cluster analysis is a hierarchical agglomerative clustering process that selects each new case to add to a cluster based on its effect on the overall homogeneity of the cluster (Aldenderfer & Blashfield, 1984). This type of clustering minimizes the amount of variance within each cluster.

The second goal of the current study was to examine whether types of partner violence are differentially associated with women's well-being. There were three indicators of physical health, one indicator of psychological distress, and two indicators of economic well-being. Independent variables were race, violence type (as determined by the cluster analysis), and the Physical Violence Scale. We included respondent age as a covariate because it was differentially associated with violence type and with some of the outcome measures. Race and violence type were dummy coded (0, 1). Hierarchical ordinary least squares regression analyses were conducted on continuous dependent variables, and hierarchical logistic regression analyses were conducted on dichotomous dependent variables. All independent variables were mean-centered prior to analyses.

Two sets of analyses were conducted for each of the six dependent variables. The first set of analyses used the entire sample ($N = 563$) and examined differences in well-being among

women in nonviolent and in various types of violent relationships. The second set of analyses used only women in violent relationships ($n = 111$) and examined differences in well-being among types of violence. The difference between these two sets of analyses is that the Physical Violence Scale was included in the second set of analyses only. By definition, all women in the nonviolent group scored 1 on the Physical Violence Scale, resulting in perfect collinearity between these two variables. Therefore, the Physical Violence Scale could not be included in analyses examining differences between women in nonviolent relationships and women in violent relationships. In the first set of analyses, using the entire sample, each dependent variable was regressed onto the independent variables hierarchically, as follows: violence type, race, and age were entered into the first model (Model 1), followed by all two-way interactions (Model 2), and finally by the three-way interaction (Model 3). For these analyses, the nonviolent group was used as the reference category. These results are presented in the text rather than in tables, and only significant interactions are discussed.

In the second set of analyses, using only women who experienced violence, each dependent variable was regressed onto the independent variables hierarchically, as follows: violence type, race, and age were entered into the first model (Model 1), followed by the Physical Violence Scale (Model 2), followed by the violence type \times Physical Violence Scale interaction (Model 3), and finally, by the violence type \times race interaction and the violence type \times age interaction (Model 4). Results are presented in table format, and Models 3 and 4 are presented only if the interaction was significant. Two dependent variables, *frequency of seeking medical treatment for injuries* and *frequency of missing work/activities because of injuries*, were relevant only to women in violent relationships. Thus, only women who experienced physical violence were used in these analyses. Follow-up contrast analyses were conducted for all dependent variables so that all three violence types could be compared to each other. These results are presented in the text.

Three points regarding the analyses on women's well-being should be noted. First, hierarchical analyses were conducted to first assess the association between violence type and women's well-being, and then to determine whether this association changed after including

the Physical Violence Scale and the interactions. In particular, we were interested in identifying changes in the model following the inclusion of the Physical Violence Scale, because this would indicate that the Physical Violence Scale is a potential mediator between type of partner violence and women's well-being. Second, although odds ratios are presented for all of the hierarchical logistic regression analyses, they should be interpreted cautiously given the relatively small sample of women who experienced violence ($n = 111$). When logistic regression analyses are conducted on relatively small samples, data become sparse among the cells, which can result in inflated, inefficient estimations of the model parameters (Menard, 1995). Third, because of the modest sample size, we were limited in the number of independent variables that we could include in the analyses. As previously stated, race was included as an additional factor, and age was included as a covariate in all analyses. To help clarify the relative importance of type of violence and the severity of physical violence, the Physical Violence Scale was included as a factor in all analyses of differences among the violence types.

RESULTS

Typology of Partner Violence

Results of the cluster analysis indicated that a three-cluster solution was optimal for these data. Our decision concerning the number of clusters was based both on theory and assessment of changes in the average squared Euclidean distance within clusters as the clusters were combined. The index of dissimilarity exhibited a large increase between the three- and two-cluster solutions. Cluster 1 ($n = 19$) was a high control cluster; respondents reported high levels of both Verbal Abuse and Coercion ($M = 3.49$, $SD = .69$) and Threats ($M = 2.39$, $SD = .69$). Cluster 2 ($n = 35$) was a specific type of control; respondents reported high levels of Verbal Abuse and Coercion ($M = 3.02$, $SD = .40$) but not Threats ($M = 1.00$, $SD = .00$). Cluster 3 ($n = 57$) was a low control cluster, with respondents reporting low levels of both Verbal Abuse and Coercion ($M = 1.62$, $SD = .40$) and Threats ($M = 1.03$, $SD = .13$). We labeled Cluster 1 *intimate terrorism*, Cluster 2 *control/no threat*, and Cluster 3 *situational couple violence*.

The four groups of women (three violent groups and the nonviolent group) differed signifi-

cantly on two demographic variables and on scores on the Physical Violence Scale. First, a significantly higher proportion of women in the intimate terrorism group (42.1%) reported being separated from their husbands at the time of the survey, compared to women in the control/no threat group (17.1%), women in the situational couple violence group (10.5%), and women in the nonviolent group (5.8%), $\chi^2 (6, N = 563) = 50.9$, $p = .001$. Second, women in the nonviolent group ($M = 37.8$, $SD = 12.6$) were significantly older than women in the situational couple violence group ($M = 29.8$, $SD = 9.2$) and women in the control/no threat group ($M = 30.5$, $SD = 8.3$), but not women in the intimate terrorism group ($M = 35.9$, $SD = 10.3$), $F (3, 557) = 10.43$, $p = .001$. Finally, the three violence groups differed on the Physical Violence Scale. Women in the intimate terrorism group ($M = 2.03$, $SD = .62$) scored the highest, followed by women in the control/no threat group ($M = 1.57$, $SD = .38$), and finally, by women in the situational couple violence group ($M = 1.25$, $SD = .22$), $F (2, 108) = 33.65$, $p = .001$.

Women's Physical Health

Frequency of seeking medical treatment for injuries. The frequency of seeking medical treatment for injuries because of partner violence was only asked of women who experienced partner violence. As shown in Table 2, results indicated that intimate terrorism was associated with a significantly higher frequency of seeking medical treatment for injuries compared to situational couple violence even after considering race and age (Model 1). Including the Physical Violence Scale in the model (Model 2) significantly decreased the effect of intimate terrorism. As shown in Model 3, however, there was a significant interaction between intimate terrorism and the Physical Violence Scale, indicating that for victims of intimate terrorism, the frequency of seeking treatment increased more as severity/frequency of violence increased, as compared to victims of situational couple violence. Control/no threat was not significantly different from situational couple violence in its association with frequency of seeking medical treatment for injuries. As shown, age was positively associated with seeking medical treatment for injuries. Finally, when control/no threat was the reference category (not shown), there was a significant interaction between intimate terrorism and the

TABLE 2
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING SEEKING MEDICAL
TREATMENT FOR INJURIES (N = 111)

Predictor	Model 1				Model 2				Model 3			
	B	SE B	CI	β	B	SE B	CI	β	B	SE B	CI	β
Age	.07	.04	.01-.14	.16	.07	.03	.01-.13	.17*	.08	.03	.02-.14	.20*
Race (Hispanic)	.10	.10	-.09-.29	.09	-.02	.09	-.19-.15	-.02	.08	.08	-.15-.17	.01
Violence Type												
Control/no threat	.13	.10	-.08-.33	.11	-.08	.10	-.28-.11	-.07	.04	.10	-1.17-.52	.04
Intimate terrorism	.49	.13	.23-.76	.36**	-.02	.15	-.32-.27	-.02	-1.33	.39	-2.43-.67	-.97
Physical Violence Scale					.65	.11	.43-.89	.58**	.27	.15	-.39-.58	.24
Intimate terrorism × Physical Violence Scale									.79	.21	.39-1.53	1.23**
R ²	.17				.37				.45			
F for change in R ²	7.08**				32.71**				7.39**			

Note: For violence type, reference category is *situational couple violence*. For race, reference category is *Black*. CI = 95% confidence interval for B.
p* < .05. *p* < .01.

Physical Violence Scale (*B* = .69; *SE* = .24, *β* = 1.08, *CI* = .23 – 1.16, *p* = .004), suggesting again that as physical violence increased, victims of intimate terrorism sought treatment significantly more frequently than did victims of control/no threat.

Visited a doctor in the past 12 months. The first set of analyses examined the likelihood of visiting a doctor among women who did not experience violence and women who experienced the three types of violence. Findings revealed that only women who experienced situational couple violence differed significantly from those in the nonviolent group, but not in the expected direction; victims of situational couple violence were *less* likely to visit a doctor than were women who experienced no violence (*B* = -.68; *SE* = .32; *e^B* = .51, *CI* = .27 – .95, *p* = .03). As shown in Table 3, the second set of analyses, among only the violent groups, revealed a positive trend for intimate terrorism compared to situational couple violence (Model 1). This positive trend for intimate terrorism remained even after including the Physical Violence Scale (Model 2). Finally, as shown, Hispanic women were significantly less likely than their African American counterparts to visit a doctor. There were, however, no significant interactions between violence type and the Physical Violence Scale, violence type and race, or violence type and age; thus, Models 3 and 4 are not presented. Further contrasts using the control/no threat group as the reference

category (not shown) revealed no significant difference between intimate terrorism and control/no threat after considering age, race, and the Physical Violence Scale (*B* = 1.52; *SE* = 1.00, *e^B* = 4.58, *CI* = .64 – 32.62, *ns*).

Poor health. The first set of analyses, which examined poor health among women in the nonviolent group and women who experienced violence, indicated that compared to experiencing no violence, intimate terrorism was associated with significantly poorer health (*B* = 1.82; *SE* = .76, *e^B* = 6.20, *CI* = 1.40 – 27.45, *p* = .02). Poor health was positively associated with age and was more likely among Hispanic women. There was, however, no significant violence type × age interaction or violence type × race interaction. As shown in Table 4, the second set of analyses, using only the three violent groups, revealed that intimate terrorism was associated with significantly poorer health compared to situational couple violence (Model 1). A positive trend for intimate terrorism remained even after including the Physical Violence Scale (Model 2). In fact, including the Physical Violence Scale did not increase the explained variance in the model. There continued to be significant main effects for age and race, with Hispanic women being more likely to report poor health. There were no significant interactions between violence type and the Physical Violence Scale or violence type and age or race; therefore, Models 3 and 4 are not presented. Finally, additional contrast analyses

TABLE 3
SUMMARY OF HIERARCHICAL LOGISTIC REGRESSION ANALYSIS FOR VARIABLES PREDICTING VISITED A DOCTOR
IN PAST YEAR (N = 111)

Predictor	Model 1				Model 2			
	B	SE	e ^B	CI	B	SE	e ^B	CI
Age	.15	.18	1.16	.81–1.65	.14	.18	1.15	.80–1.64
Race (Hispanic)	–1.58	.46	.21**	.08–.51	–1.48	.47	.23**	.09–.57
Violence Type								
Control/no threat	.39	.50	1.48	.55–3.94	.60	.56	1.83	.61–5.46
Intimate terrorism	1.54	.84	4.68†	.90–24.29	2.12	1.10	8.36†	.96–72.60
Physical Violence Scale					–.62	.70	.54	.14–2.13
Constant	1.45	.38	4.27**		2.22	.96	9.17*	
Model χ^2		17.78**				18.55**		
df		4				5		
Nagelkerke R ²		.21				.22		

Note: e^B = exponentiated B. For violence type, reference category is *situational couple violence*. For race, reference category is *Black*. CI = 95% confidence interval for e^B.
†p < .10. *p < .05. **p < .01.

(not shown) revealed that intimate terrorism was associated with significantly poorer health compared to control/no threat ($B = 1.70$; $SE = .85$, $e^B = 5.46$, $CI = 1.04 - 28.59$, $p = .04$); although reduced, this trend remained after the Physical Violence Scale was included ($B = 1.55$; $SE = .88$, $e^B = 4.70$, $CI = .83 - 26.67$, $p = .08$).
In sum, results supported the study predictions that type of partner violence would be significantly associated with all three indicators of physical health, with victims of intimate terrorism faring the worst among the three violence types. Victims of intimate terrorism were more likely than victims of situational couple violence to

have visited a doctor in the 12 months prior to the survey, and were more likely to report poorer health compared to victims of situational couple violence and to women who experienced no violence. More severe/frequent physical violence moderated the association between violence type and seeking medical treatment for injuries. That is, as physical violence increased, victims of intimate terrorism sought medical treatment for injuries more frequently than both victims of situational couple violence and victims of control/no threat. Finally, Hispanic women were significantly more likely to report poor health but were significantly less likely to visit a doctor.

TABLE 4
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING POOR HEALTH (N = 111)

Predictor	Model 1				Model 2			
	B	SE	e ^B	CI	B	SE	e ^B	CI
Age	.42	.18	1.52*	1.06–2.17	.41	.18	1.51*	1.06–2.16
Race (Hispanic)	1.13	.46	3.08*	1.26–7.54	1.07	.47	2.90*	1.16–7.29
Violence Type								
Control/no threat	.19	.46	1.21	.49–2.99	.08	.51	1.08	.40–2.93
Intimate terrorism	1.89	.82	6.62*	1.34–32.79	1.62	.95	5.08†	.80–32.36
Physical Violence Scale					.37	.69	1.45	.37–5.63
Model χ^2		22.17**				22.46**		
df		2				5		
Nagelkerke R ²		.24				.25		

Note: For violence type, reference category is *situational couple violence*. For race, reference category is *Black*. CI = 95% confidence interval for e^B.
†p < .10. *p < .05. **p < .01.

This pattern of results suggests that victims of intimate terrorism were most at risk for immediate and longer-term physical health problems. Indeed, even when experiences of physical violence were considered, intimate terrorism still predicted poorer physical health, particularly more frequent doctor visits and poor health. These results provide strong empirical evidence that physical violence is more strongly associated with poor physical health when committed in the context of emotionally abusive and threatening behavior.

Respondents' Psychological Distress

The first set of analyses, which examined psychological distress among women in the nonviolent group and women who experienced violence, indicated that both intimate terrorism and control/no threat were associated with significantly higher scores on the Psychological Distress Scale ($B = .35$; $SE = .07$, $\beta = .20$, $CI = .09 - .30$, $p = .001$; and $B = .20$; $SE = .05$, $\beta = .15$, $CI = .21 - .49$, $p = .001$, respectively), whereas the association was weaker and not statistically significant for situational couple violence ($B = .08$; $SE = .04$, $\beta = .08$, $CI = -.01 - .17$, $p = .07$). Table 5 shows that among only the three violent groups, intimate terrorism was associated with significantly higher scores on the Psychological Distress Scale compared to situational couple violence (Model 1). Although this association was no longer statistically significant after including the Physical Violence Scale (Model 2), a positive trend was indicated. Further, as shown, the Physical Violence Scale

was not associated with more psychological distress, nor did it change the explained variance of the model. This finding suggests that the change in statistical significance of intimate terrorism is more likely due to the loss of a degree of freedom when the Physical Violence variable was added into the model, rather than a mediational effect of the severity of physical violence. Age was positively associated with psychological distress, whereas race was not associated. Finally, there were no significant interactions between violence type and the Physical Violence Scale, violence type and race, or violence type and age, so Models 3 and 4 are not presented. Additional contrasts using the control/no threat group as the reference category (not shown) revealed that intimate terrorism was not significantly associated with higher scores on the Psychological Distress Scale after considering age, race, and the Physical Violence Scale ($B = .09$; $SE = .10$, $\beta = .11$, $CI = 1.10 - .29$, ns). Together, these results support the proposed hypothesis and suggest that whereas there was a positive trend toward psychological distress among all three types of partner violence, intimate terrorism was most strongly associated with this outcome.

Women's Economic Well-Being

Frequency of missing work/activities because of injuries. The frequency of missing work/activities because of injuries was only relevant to women who experienced partner violence, and was therefore not examined with women in nonviolent relationships. As shown in Table 6, compared to situational couple violence, intimate

TABLE 5
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING PSYCHOLOGICAL DISTRESS (N = 110)

Predictor	Model 1				Model 2			
	B	SE B	CI	β	B	SE B	CI	β
Age	.05	.03	.00-.10	.20*	.05	.02	.01-.10	.20*
Race (Hispanic)	.09	.06	-.03-.21	.14	.08	.06	-.04-.21	.12
Violence Type								
Control/no threat	.11	.07	-.03-.24	.15	.09	.07	-.06-.23	.12
Intimate terrorism	.23	.08	.06-.40	.27**	.18	.11	-.04-.39	.21 [†]
Physical Violence Scale					.06	.08	-.10-.23	.10
R ²		.15				.15		
F for change in R ²		4.08*				.63		

Note: For violence type, reference category is situational couple violence. For race, reference category is Black. CI = 95% confidence interval for B.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

TABLE 6
SUMMARY OF HIERARCHICAL REGRESSION ANALYSIS FOR VARIABLES PREDICTING FREQUENCY OF MISSING WORK/
ACTIVITIES BECAUSE OF INJURIES (N = 110)

Predictor	Model 1				Model 2				Model 3			
	B	SE B	CI	β	B	SE B	CI	β	B	SE B	CI	β
Age	-.03	.05	-.13-.06	-.06	-.02	.04	-1.06-.06	-.05	-.10	.04	-.08-.06	-.02
Race (Hispanic)	.26	.13	.01-.51	.18*	.07	.11	-.15-.29	.05	.12	.10	-.08-.31	.09
Violence Type												
Control/no threat	.09	.14	-.18-.37	.06	-.24	.13	-.48-.01	-.16 [†]	-.01	.12	-1.70-.32	-.01
Intimate terrorism	.73	.17	.38-1.07	.40**	-.07	.19	-.43-.30	-.04	-2.30	.45	-3.75-1.64	-1.27**
Physical Violence Scale					.99	.15	.70-1.28	.67**	.32	.18	-.56-.59	.22
Intimate terrorism × Physical Violence Scale									1.35	.25	.99-2.34	1.59**
R ²			.17				.43				.56	
F for change in R ²			8.84**				46.60**				15.44**	

Note: For violence type, reference category is *situational couple violence*. For race, reference category is *Black*. CI = 95% confidence interval for B.
[†]p < .10. *p < .05. **p < .01.

terrorism was significantly associated with missing work/activities more frequently (Model 1). Including the Physical Violence Scale decreased the significance of intimate terrorism in the model (Model 2). There was, however, a significant interaction between intimate terrorism and the Physical Violence Scale (Model 3). Compared to situational couple violence, intimate terrorism was more strongly associated with missing work/activities as severity/frequency of physical violence increased. Thus, the Physical Violence Scale moderated the association between violence type and missing work/activities because of injuries. The collinearity among intimate terrorism, the Physical Violence Scale, and the violence type × Physical Violence Scale interaction is most likely responsible for the subsequent negative main effect of intimate terrorism. Control/no threat and situational couple violence did not significantly differ in their association with missing work/activities. Additional contrast analyses using control/no threat as the reference category (not shown) revealed a significant interaction between intimate terrorism and the Physical Violence Scale ($B = 1.17$; $SE = .28$, $\beta = 1.39$, $CI = .61 - 1.74$, $p = .001$), suggesting once more that as physical violence increased, intimate terrorism was more strongly associated with missing work/activities compared to control/no threat.

Received AFDC. Compared to experiencing no violence, intimate terrorism and control/no threat were both significantly associated with a higher

likelihood of receiving AFDC ($B = 1.32$; $SE = .50$, $e^B = 3.75$, $CI = 1.41 - 9.96$, $p = .001$ and $B = 1.30$; $SE = .39$, $e^B = 3.66$, $CI = 1.41 - 9.96$, $p = .001$, respectively), whereas situational couple violence was not ($B = .31$; $SE = .32$, $e^B = .33$, $CI = .73 - 2.54$, *ns*). As shown in Table 7, intimate terrorism and control/no threat were both associated with a higher likelihood of receiving AFDC, compared to situational couple violence (Model 1). The association between intimate terrorism and receiving AFDC significantly decreased after including the Physical Violence Scale (Model 2). Considering that including the Physical Violence Scale, however, did not affect the strength of the model, the change in significance may be a methodological rather than substantive result. The main effect of control/no threat remained significant even after considering the Physical Violence Scale. Moreover, results revealed that age was negatively associated with receiving AFDC, and that Hispanic women were less likely than African American women to receive AFDC. There were no significant interactions between violence type and the Physical Violence Scale, or violence type and race or age. Additional contrasts (not shown) revealed that compared to control/no threat, intimate terrorism was not associated with a higher likelihood of receiving AFDC ($B = .01$; $SE = .69$, $e^B = 1.00$, $CI = .26 - 3.89$, *ns*).

In sum, violence type was significantly associated with both measures of economic well-being. As the severity/frequency of physical

TABLE 7
SUMMARY OF HIERARCHICAL LOGISTIC REGRESSION ANALYSIS FOR VARIABLES PREDICTING RECEIVING AFDC (N = 110)

Predictor	Model 1				Model 2			
	B	SE	e ^B	CI	B	SE	e ^B	CI
Age	-.60	.19	.55**	.38-.80	-.60	.19	.55**	.38-.80
Race (Hispanic)	-1.46	.47	.23**	.09-.59	-1.46	.48	.23**	.09-.60
Violence Type								
Control/no threat	1.07	.51	2.93*	1.09-7.87	1.07	.54	2.90**	1.01-8.39
Intimate terrorism	1.09	.61	2.98†	.90-9.81	1.07	.77	2.92	.65-13.09
Physical Violence Scale					.02	.58	1.03	.33-3.17
Constant	-.17	.33	.85		-.17	.34	.85	
Model χ^2			23.28**				23.29**	
df			4				5	
Nagelkerke R ²			.26				.26	

Note: e^B = exponentiated B. For violence type, reference category is *situational couple violence*. For race, reference category is *Black*. CI = 95% confidence interval for e^B.
†p < .10. *p < .05. **p < .01.

violence increased, intimate terrorism was more strongly associated with missing work because of injuries compared to situational couple violence and control/no threat. Moreover, intimate terrorism and control/no threat were both associated with a significantly higher risk of receiving AFDC, compared to experiencing no violence; situational couple violence was not. Finally, compared to situational couple violence, control/no threat was associated with a significantly higher risk of receiving AFDC.

DISCUSSION

Types of Partner Violence

The first objective of the current study was to create a typology of male-partner violence using women's reports of nonviolent control tactics within a sample of low-income ethnic minority women. Informed by Johnson's (1995) typology of partner violence, we hypothesized that two types would emerge: *intimate terrorism*, characterized by a systematic use of nonviolent control tactics, including emotional abuse, coercion, and threats, and *situational couple violence*, characterized by little use of nonviolent control tactics. Three types of partner violence emerged from these data, two corresponding to intimate terrorism and situational couple violence and a third characterized by relatively high levels of emotional abuse and coercion but not threats.

The control/no threat group raises important questions regarding patterns of nonviolent control

in physically violent relationships. There are theoretical and methodological explanations for the emergence of the control/no threat group in the current study but not in previous studies. First, the basic theoretical distinction in Johnson's typology is between physical violence enacted in the context of general control over one's partner (intimate terrorism), and physical violence as a more situationally based response to a particular conflict (situational couple violence). On the one hand, it is possible that intimate terrorists vary in their skills and in access to the resources needed to facilitate the use of particular nonviolent control tactics, suggesting a *differential resources* explanation. That is, the particular combination of nonviolent control tactics used to gain general control might vary as a function of the effectiveness of the control tactics. For example, intimate terrorists who are unable to make their violent threats credible might seek to gain control by employing additional tactics such as economic abuse. On the other hand, it may be that once the pattern of intimate terrorism is established, some control tactics such as the threat of violence are no longer necessary, suggesting a *shifting tactics* explanation. For example, once an intimate terrorist's partner complies, the violent partner may no longer need to make explicit threats to maintain control. Undoubtedly, distinguishing between a differential resources explanation and a shifting tactics explanation necessitates longitudinal research. Nonetheless, the logic of the argument suggests that the control/no threat group may be a variation of intimate terrorism.

The second explanation for the emergence of the control/no threat group is methodological. Other tests of Johnson's typology have not examined the specific role of threatening behavior. For example, Johnson's (1999) cluster analysis used seven items, only one of which focused on the violent partner's use of threatening behavior, and Johnson and Leone (in press) did not include any threatening behavior items in their analysis. Our cluster analysis, using two input variables (the scales derived from factor analysis), gave *Threats* essentially the same weight as *Verbal Abuse and Coercion*. Thus, the current study relied more heavily on experiences of threatening behavior to distinguish between types of partner violence. Another possibility concerns the nature of the population studied. Women in the current study had access to few economic resources, thereby increasing their risk of being entrapped in a violent relationship. It is possible that this economic vulnerability enabled some violent partners to effectively control and ultimately entrap their partners without having to resort to threats of physical violence.

Prevalence of Violence and Violence Types

Twenty percent of the women in the current study reported at least one incident of physical violence in the prior 12 months, a rate that is higher than the rates reported in other survey data (e.g., about 12% was reported in the 1985 National Family Violence Survey). The difference is particularly striking in light of Straus's (1999) argument that surveys framed in terms of safety, like the one used in the current study, are likely to elicit considerably *lower* rates of violence than those framed in terms of family conflict. The relatively high rates of partner violence reported in the current study may indicate that low-income minority women are at higher risk of experiencing partner violence than the general population. In the current study, there is no way to determine whether this higher rate of partner violence is due to lower income or to minority status. We note, however, that we found no ethnic/racial differences (Black versus Hispanic) in the proportion of women who experienced each type of violence, suggesting that perhaps the difference is due more to poverty than to minority status. This finding is consistent with research showing no ethnic differences in rates of partner violence in a shelter sample (Gondolf et al., 1988) and in a national sample after controlling for social class (Lockheart, 1991).

Among the women who experienced physical violence, 51% experienced situational couple violence, 32% experienced control/no threat, and 17% experienced intimate terrorism. Thus, the proportion of intimate terrorism found in the current study is similar to the 11% found in the survey data examined by Johnson (1999) but considerably lower than the 35% found in Johnson and Leone's (in press) analysis of the National Violence Against Women Survey. The discrepancy among the rates of intimate terrorism may be explained by the three different operationalizations of intimate terrorism used across the studies. Nevertheless, similarities across the three studies regarding the associations between violence type and other variables (such as severity and frequency of physical violence, and women's health) imply the validity of the basic model. In fact, with respect to such causal and correlational findings, the methodological differences suggest even stronger conclusions; that is, even across different operationalizations and different samples, we find similar correlations of violence type with other variables.

With respect to prevalence estimates, however, the operational differences make it difficult to draw conclusions about the proportion of women who experience intimate terrorism. The next step in this line of research is to develop a standard operationalization of intimate terrorism, situational couple violence, and the other major types of partner violence. To achieve this, we must move away from cluster analysis approaches to the creation of typologies and develop standard operationalizations that can be replicated across studies. One empirical method is to develop a standardized instrument that contains a battery of questions regarding the various dimensions of nonviolent control that is both reliable and valid across populations. Moreover, qualitative research is needed to assess differences in victims' experiences of being controlled, and general experiences of coerciveness within the context of a physically violent relationship.

In addition to the advancements in research methodology, standard operationalizations would have great utility concerning the development and implementation of intervention strategies. As we better understand the interpersonal dynamics of types of partner violence and their differential effects on victims, we can develop strategies for interventions targeted to specific types of violence. Our results suggest the possibility that a small number of nonviolent control

TABLE 8
SUMMARY OF MAJOR FINDINGS FOR WOMEN'S WELL-BEING VARIABLES

Variables	Main Effects	Interactions
Physical Health		
Seeking medical treatment for injuries		IT × Physical Violence Scale > SCV; IT × Physical Violence Scale > CNT
Visited a doctor in the past 12 months	IT > NV; SCV < NV; IT > SCV (trend); Hispanic < Black;	
Poor health	IT > NV; IT > SCV (trend); Hispanic > Black	
Psychological Distress		
	IT, CNT > NV; SCV > NV (trend); IT > SCV (trend)	
Economic Well-Being		
Missing work/activities because of injuries		IT × Physical Violence Scale > SCV; IT × Physical Violence Scale > CNT
Received AFDC	IT, CNT > NV; CNT > SCV; Hispanic < Black	

Note: IT=intimate terrorism; CNT=control/no threat; SCV=situational couple violence; and NV=nonviolent. Differences between violence types based on $p < .05$. Differences between violence types based on $p < .10$ denoted as (trend).

items might provide some guidance for clergy, emergency room personnel, primary care physicians, and other people with whom women interact, allowing them to provide appropriate resources depending on the type of violence experienced.

Women's Well-Being as a Function of Partner Violence

The second goal of the current study was to demonstrate the importance of distinguishing among types of partner violence by examining differences in respondents' well-being as a function of violence type. As shown in Table 8, three general patterns emerged from the data. First, for five of the six indicators of well-being, women experiencing intimate terrorism reported poorer well-being than did women experiencing situational couple violence. Second, victims of intimate terrorism and victims of control/no threat differed significantly from each other on two of the dependent variables. These two patterns suggest that whereas intimate terrorism and control/no threat were different forms of partner violence (as indicated by the cluster analysis), they were less different than were intimate terrorism and situational couple violence (as indicated by the

correlates), a conclusion that supports the argument that intimate terrorism and control/no threat may be similar phenomena.

The third pattern involves differences in well-being between women in nonviolent relationships and women experiencing each type of violence. On four indicators, encompassing all three domains of well-being, women experiencing intimate terrorism reported significantly poorer well-being than women experiencing no violence. In contrast, women experiencing situational couple violence reported poorer well-being on one of the outcomes compared to women experiencing no violence. Our hypothesis that situational couple violence would be associated with poorer well-being on all indicators was not supported. The more transient nature of situational couple violence compared to intimate terrorism, which is a more entrenched pattern of violence, may account for the milder than expected consequences of situational couple violence. Victims of situational couple violence were more similar to women who experienced no violence than to victims of intimate terrorism. This does not diminish the potential seriousness of situational violence in intimate relationships, as any form of violence can be lethal. Rather, it illustrates that

well-being cannot simply be studied by comparing women in violent relationships with women in nonviolent relationships. Studies that lack distinctions among types would be unable to uncover important differences among women in violent relationships. Moreover, combining all types of partner violence would underestimate the significant effect of intimate terrorism, the form of violence that most people assume is studied in partner violence research.

With regard to racial/ethnic differences in the association between violence type and well-being, we found no differences between Black and Hispanic women, as indicated by the lack of interaction effects. These findings support our expectations that, among these data, partner violence and its consequences do not significantly differ between Black and Hispanic women. Regardless of violence type, Black women were significantly more likely to receive AFDC. Interestingly, Hispanic women were significantly more likely to report poor health but were significantly less likely to visit a doctor. One explanation for these divergent results is that some Hispanic women may feel uncomfortable seeking medical care because of language barriers.

We considered the alternative hypothesis that violence type is merely a proxy for severity or frequency of physical violence. We found that in no case was the Physical Violence Scale significantly associated with well-being while controlling for violence type. Results show, however, that the Physical Violence Scale did moderate the association between violence type and both outcomes concerning violence-related injuries (i.e., *frequency of seeking medical treatment for injuries* and *frequency of missing work/activities because of injuries*). These findings suggest that more severe and frequent physical violence may more strongly predict immediate health consequences (e.g., injuries) when it exists within the context of a verbally abusive and threatening relationship (intimate terrorism). Further, results indicate that severity/frequency of physical violence may be a potential mediator in the association between violence type and some of the outcomes examined (e.g., poor health, psychological distress, receiving AFDC). That is, in some cases, the main effect of intimate terrorism was significantly reduced after the Physical Violence Scale was included. Based on the criteria described by Baron and Kenny (1986), however, physical violence should not be considered a significant mediator because it was not significantly

associated with these outcomes once violence type was controlled. On the one hand, including the Physical Violence Scale in the model influences the predictive power of intimate terrorism. Therefore, it cannot be ignored in future attempts to understand the effects of violence on women's lives. Methodologically, it may be that more statistical power is needed to demonstrate a mediational model in these data. On the other hand, although these moderating and mediating effects indicate that severity/frequency of physical violence is important when determining how violence type is associated with victim's well-being, there is not sufficient evidence that severity/frequency of physical violence is a proxy for violence type. As shown, both violence type and differences in severity/frequency of associated physical violence are necessary to realize the association between partner violence and women's well-being.

One limitation of this study is its relatively small sample size, particularly in our examination of well-being across violence types. In several of the analyses, results indicated trends in the associations between violence type and well-being, but given the modest sample size we cannot determine whether those trends are indeed only trends or whether they are the result of modest statistical power. Nonetheless, despite the modest statistical power, the current study demonstrated a consistent pattern of results regarding differences in well-being as a function of violence type and severity/frequency of physical violence.

Another potential limitation of this study is the conflation of violence frequency with violence severity. The Physical Violence Scale used in the current study combines both the severity of violent acts and the frequency with which each act was committed. Consequently, findings reflect women's general experiences of physical violence. Unfortunately, this limitation is common among studies of partner violence because it is often difficult to disentangle a perpetrator's use of various forms of physical violence from the severity with which each form is enacted.

Public Policy Implications

This study extends previous research by exposing the interconnectedness of partner violence, poverty, and minority status among low-income, relatively uneducated minority women, a population largely ignored in scientific research. The high proportion

of women experiencing either intimate terrorism or control/no threat suggests that poor minority women may be at high risk of experiencing partner violence that is both physically and emotionally abusive. In these 1994–1995 data, experiencing partner violence was associated with an increased likelihood of receiving government assistance, a finding that is consistent with prior research. Yet, unlike previous research, the current study revealed that the higher likelihood was not the same for all women in violent relationships. Compared to women in nonviolent relationships, only victims of intimate terrorism and control/no threat were significantly more likely to receive AFDC; victims of situational couple violence were not. In addition, victims of intimate terrorism experienced significantly more barriers to economic self-sufficiency, such as a higher frequency of injuries and missing work because of health and/or injuries and more psychological distress. Consequently, victims of intimate terrorism may be at an increased risk of losing their jobs because they are more likely to miss work because of health and/or injuries. This was not necessarily the case for victims of control/no threat or victims of situational couple violence.

With the enactment of the 1996 Personal Responsibility and Work Opportunity Reconciliation Act, which placed time limits on welfare receipt, welfare recipients in violent relationships may face additional barriers to self-sufficiency. Because of their lack of economic resources, women who “use up” their eligibility and are denied further benefits may be less able to escape abusive relationships. To offset this possibility, some states have amended their statutes to include the *Wellstone/Murray Family Violence Provision*, which grants states the option to screen for and identify partner violence among individuals receiving assistance. Once victims of partner violence are identified, they may receive waivers from program requirements such as time limits. The development of screening devices that can adequately distinguish between intimate terrorism and situational couple violence would enable states to accurately and efficiently target those victims who are most at risk for being entrapped in violent relationships.

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