

# *The Mediation Role of Relationship Efficacy and Resource Utilization in the Link Between Physical and Psychological Abuse and Relationship Termination*

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*This study examines the roles of physical and emotional abuse and resource utilization, relationship efficacy, and childhood abuse on relationship status (together or separated) in a sample of 69 low-income, nonsheltered battered women. Separate path models were conducted for physical and psychological abuse. Increased physical abuse was related to separated status, increased resource utilization, and decreased efficacy. The effect of physical abuse on status was mediated by resource utilization and efficacy, whereas the effect of psychological abuse on status was partially mediated only by utilization. Increased childhood abuse was associated with together status. Baseline psychological but not physical abuse predicted a longer term separated status thereby suggesting that the effects of psychological abuse may be enduring.*

**Keywords:** *domestic violence; efficacy; relationship status; resource utilization*

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*Violence between intimate partners is estimated to occur annually in 1 of every 6 households (Straus & Gelles, 1990). Women are more likely to be injured or killed by a spouse or a partner than by any other perpetrator (A. Browne & Williams, 1993). Although leav-*

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ing an abusive partner may not always be an option for some women, or may place her in even greater danger, often a desirable recourse is to separate from the abuser. However, despite significant advances in the field of interpersonal violence, one aspect of domestic violence that continues to perplex practitioners and researchers alike concerns when and why women terminate abusive relationships (e.g., Jacobson, Gottman, Gortner, Berns, & Shortt, 1996; Strube, 1988). This lack of clarity is probably as much due to the overwhelming array of factors that may influence a woman's decision (Feldman & Ridley, 1995) as it is to a dearth of studies in which the main purpose was to systematically identify factors influencing relationship termination (Strube, 1988). Furthermore, the relationships between predictive factors and relationship status (i.e., staying with or separating from the violent partner) may not always be direct and may be better understood through more complex indirect or mediational relationships. One of the goals of this inquiry was to explore the potential roles of two variables—women's efficacy in managing a violent relationship and women's use of resources to help them deal with relationship violence—in mediating the relationship between abuse and relationship status in a sample of nonsheltered women.

The level and severity of physical abuse have traditionally been considered two of the most important factors in determining why a woman chooses to end a relationship. However, the association between relationship termination and the severity and frequency of violence is mixed with some studies finding that women were more likely to stay in less violent relationships (e.g., Gelles, 1976) and other studies finding the opposite (e.g., Pagelow, 1981; Snyder & Fruchtmann, 1981). One reason for these mixed findings may be methodological; study participants have been recruited from sources that range from domestic violence shelters, emergency rooms, and the legal system with only a few studies drawing samples from the general community thus making it difficult to compare findings across studies. A woman may also realistically appraise the situation and decide that it is safer to stay with the abuser regardless of the level of abuse, because leaving him may result in more serious violence leading to death or permanent disability (e.g., Walker, 1984). Finally, factors other than

physical abuse may play an important role in the woman's tendency to stay with or leave the abusive partner. Gortner, Berns, Jacobson, and Gottman (1997) suggested that treating physical violence as the most important factor in women's decisions to terminate an abusive relationship is a clinical myth and that psychological abuse may in fact be as, if not more, important. To this end, increasingly sophisticated research suggests that the psychological consequences of domestic violence (Arias & Pape, 1999), women's experiences of childhood abuse (e.g., Cohen et al., 2000), and environmental barriers and supports (Horton & Johnson, 1993) provide a more comprehensive framework for understanding how women make the decision to stay or leave an abusive situation (Lerner & Kennedy, 2000).

The purpose of this study was to examine a set of factors drawn from interpersonal, cognitive, and environmental domains that we believe may predict relationship status. In doing so, we wished to explore two important, understudied issues. First, we distinguish between psychological and physical abuse in the prediction of relationship status. The importance of considering psychological abuse in addition to physical abuse in violent relationships has been noted (Arias & Pape, 1999; Follingstad, Rutledge, Berg, Hause, & Polek, 1990; O'Leary, 1999; Tolman, 1989). Psychological abuse refers to repeated incidents of criticism, verbal aggression, and acts of domination and isolation that serve to control the woman (O'Leary, 1999). It can include such acts as extreme rages, fits of jealousy, and severe criticism intended to demean the victim (Tolman, 1989). Psychological abuse may have as great an impact on the victim as physical abuse (O'Leary, 1999) and has been shown to predict marital separation to a greater extent than physical abuse (Gortner et al., 1997; Jacobson et al., 1996). Accordingly, we examined separate models for psychological and physical abuse in the prediction of relationship status.

Second, we explored particular variables that we believe may act as potential mediators of the relationship between abuse and relationship status. Self-efficacy may be one such mediator. Experiencing trauma as a result of violence has been associated with shaping particular cognitive schemas that can influence decision making and behaviors that may lead to terminating a violent rela-

tionship (Arias & Pape, 1999; Lerner & Kennedy, 2000). In this context, self-efficacy has been proposed as a cognitive schema that reflects an important aspect of a woman's readiness for change (Bandura, 1977). Self-efficacy as described by Bandura (1977, 1986) reflects beliefs about one's ability to perform in a particular set of situations. Self-efficacy is suggested to be task and situation oriented, such that an individual may feel efficacious in one situation but not in another. Bandura suggested that efficacy expectations of an individual influence whether a particular task will be executed and may be the strongest predictor of behavioral change. To date, there appears to be only one published study examining the role of self-efficacy in women's decisions to stay with or leave their domestic partners (Lerner & Kennedy, 2000) where women's efficacy related to leaving a violent relationship increased over time and was related to the length of separation from the abuser. We examine a different type of efficacy—relationship efficacy—and its association with relationship status.

#### RELATIONSHIP EFFICACY

Relationship efficacy refers to the extent to which a woman believes she can manage the relationship successfully, for example, by controlling her own and her partner's performance within the relationship (Lopez & Lent, 1991). We believe that relationship efficacy is particularly important to examine, because couples will come together and remain together with beliefs about how they are able to negotiate tasks and problems within the relationship. Types of efficacious beliefs within a relationship include expecting to handle conflicts successfully, negotiating differences with the partner, and asserting personal rights to the partner. Accordingly, we suggest that the more efficacious a woman feels about her relationship, the more likely it is that she will *stay* with the partner (Lopez & Lent, 1991), because she believes that she is able to manage the relationship. A woman's belief that she can successfully handle her partner is likely to change when she is constantly confronted by uncontrollable abuse (Campbell & Soeken, 1999). When a woman no longer expects to successfully negotiate problem or difficult situations within the relationship, she may be more likely to leave the abuser.

## RESOURCE UTILIZATION

The growing recognition for the necessity of practical solutions to resolve abusive relationships has sparked an interest in examining environmental factors that may aid women in leaving a violent situation. The availability of resources in the environment and how women use these resources is one such factor (Rhodes & McKenzie, 1998). Resource utilization refers to a woman's formal and informal help-seeking behaviors including talking to friends, calling the police, using social services, and visiting the emergency room. Similar to self-efficacy, resource utilization appears to be an important factor that is associated with change in women's relationships—one that appears to be influenced by abuse levels. Research indicates that most battered women do not pursue formal or legal assistance (although they may pursue other types of help such as talking to close friends or family) at the onset of physical abuse but typically seek formal help when they have experienced multiple episodes of violence, have suffered a high number of injuries (Coben, Forjuoh, & Gondolf, 1999), or have been in a longstanding abusive relationship (Dobash & Dobash, 1979). Additionally, women who utilize a variety of resources, including professional and paraprofessional services and some form of legal services (Horton & Johnson, 1993), are more likely to terminate their abusive relationships than those who do not.

It is important to note that these studies may not generalize across all populations, both because studies differ widely on which types of help seeking were assessed and because studies were conducted among sheltered and nonsheltered populations. However, these results suggest that battered women tend not to seek a wide range of assistance during the early stages of abuse. However, when they do seek multiple forms of help, they are more able to end abusive situations than women who do not seek help. Accordingly, we suggest that the relationship between abuse and relationship status is mediated by resource utilization in the following way: When abuse severity increases, a woman is more likely to use all resources available to her to obtain help and support. Forms of help seeking may include health care utilization, traditional social services, advocacy, legal help, or help finding employment (Hutchison & Hirschel, 1998), all of which may increase her ability to terminate a violent relationship.

Resource utilization is also likely to be influenced by relationship efficacy. If a woman expects to be able to successfully negotiate her relationship (high relationship efficacy), she is less likely to ask for outside help (low resource utilization). In turn, because she seeks fewer outside resources, she may have lesser means to terminate the relationship.

Finally, research has indicated that women who experience abuse during childhood may be at higher risk for later adult violence (Cohen et al., 2000; Gibert, El-Bassel, Schilling, & Friedman, 1997; Hirsch, 2001; Wyatt, Axelrod, Chin, Carmona, & Loeb, 2000). Women who experienced child abuse may remain or may remain longer in violent relationships compared to women who did not, although this association has not been examined sufficiently to draw definitive conclusions. Accordingly, we sought to explore the association between childhood abuse and both adult abuse and relationship status.

## STUDY MODEL

This study examines a complex set of associations between childhood abuse, relationship efficacy, resource utilization, and relationship status in the context of both physical and psychological abuse. We made the following five predictions to test these models:

*Hypothesis 1:* A higher incidence of physical and psychological abuse will predict decreased relationship efficacy and increased resource utilization.

*Hypothesis 2:* Decreased relationship efficacy will predict higher resource utilization.

*Hypothesis 3:* Decreased relationship efficacy will predict separated status and will mediate the relationship between physical and psychological abuse and relationship status.

*Hypothesis 4:* Higher levels of resource utilization will predict separated status and will mediate the relationship between physical and psychological abuse and relationship status.

*Hypothesis 5:* Higher levels of childhood abuse will predict higher levels of adult victimization and will be negatively associated with separated status.

Finally, as an additional exploratory component of this study, we obtained follow-up data from 46 women who participated at

the first time point to examine relationship status 2 to 3 months after initial contact. Although no specific predictions were made regarding these longitudinal analyses, we wished to test whether efficacy and resource utilization predicted women's relationship status at follow-up.

## METHOD

### PARTICIPANTS

Seventy-six participants were recruited using both flyers and in-person recruitment from two community health centers. Women who reported being in a heterosexual relationship involving physical or psychological abuse within the 6 months prior to recruitment were invited to participate. Informed consent was obtained from all participants. Seven participants were dropped from the study because subsequent inquiry revealed that they had been separated from their partners for more than 6 months thereby resulting in a total sample of 69. About a third of the sample (33.3%) was recruited directly from a community center specializing in the needs of women and children, and at the time of interview these women were either in a violence self-help group or in individual therapy for family violence issues. The remainder was recruited from a community health care center and thus was not specifically seeking care for domestic violence issues. At the time of the interview, all women were residing in a midsize Northeastern city. Analysis of variance indicated that women from the two sites did not differ in terms of income, race, or level of violence but did differ in terms of age with participants from the community sample being somewhat older ( $M = 34.3, SD = 9.5$ ) compared to participants from the women's center ( $M = 28.8, SD = 6.7$ ). Overall, participant ages ranged from 17 to 62 years of age ( $M = 32.5, SD = 9.0$ ); 59.4% were African American, 31.9% were Caucasian, and 8.7% were Latina. More than half the sample reported an income less than \$10,000 a year (65.2%) with 15.9% reporting between \$10,000 and \$19,000 and the remaining 18.9% reporting more than \$20,000 a year. At the time of the interview, 60.9% were unemployed, 8.7% had full-time employment, 24.6% had part-time employment, and the remainder was unable to work due to illness or disability.

## MEASURES

Participants completed a comprehensive set of questionnaires including questions about mood, relationship attributions, and coping. Only those measures pertinent to the current study will be discussed.

*Physical abuse.* Physical aggression was measured using items from the Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996). These included minor violence (threw something that could hurt, pushed, grabbed or shoved, and slapped participant) and acts of severe violence (used a knife or gun, punched with something that could hurt, beat up participant, choked participant). Participants indicated the frequency of each violent act on a 6-point scale (0 = *never happened* to 5 = *happened more than 10 times in the past 6 months*). Internal consistency measured by Cronbach's alpha was good (alpha = .87).

*Psychological abuse.* Five items from the CTS-2 (Straus et al., 1996) and 10 items from Tolman's (1989) Psychological Maltreatment of Women Scale were used to form a 15-item Psychological Abuse Index. Items from the CTS-2 included insulting or swearing, destruction of property, stomping out of the room during a disagreement, spiteful behavior, and threatening to throw something at or hit the participant. Items from Tolman's scale included being insensitive to the participant, yelling and screaming, treating the participant as an inferior, ordering the participant around, and acts of domination, isolation, and jealousy. Participants indicated the frequency of each psychologically abusive act on a 6-point scale (0 = *never happened* to 5 = *happened more than 10 times in the past 6 months*). Internal consistency for the psychological abuse scale was high (alpha = .87).

*Relationship efficacy.* Relationship efficacy was measured using five selected items from the Self-Efficacy subscale of the Relationship Efficacy Scale (Lopez & Lent, 1991). These items consisted of dealing with important disagreements openly and directly, dealing with the partner when he is angry or upset, telling the partner that she would prefer to spend time with other friends, finding ways to work out everyday problems, and expressing views and

preferences regarding sex to the partner. Scores ranged from 0 (*not at all efficacious*) to 5 (*very efficacious*). Internal consistency was high ( $\alpha = .85$ ).

*Resource utilization.* A new 14-item measure of resource utilization was created for this study based on a semistructured interview (Swan & Gill, 1998). Participants were asked to indicate utilization of different types of resources. Participants who were separated were asked about resources they used preceding relationship termination. Participants were also asked to indicate how many times they used these resources. Resources pertained to both formal and informal help seeking and included items such as talking to friends and family about the abuse, calling a hotline, staying at a women's shelter or in any safe place, involvement with a support group, counseling, seeking legal help, seeking health care services, housing, and police intervention. In addition to seeking actual services, women were also asked to report whether they had developed a safety plan in the event of an abusive episode. Items assessing preparation included having an immediate safe place to go, having important telephone numbers handy, and putting money aside specifically in anticipation of having to leave as a result of an abusive episode. Internal consistency was high ( $\alpha = .86$ ).

*Childhood abuse.* Childhood physical and sexual abuse was measured using 10 items from the Early Trauma Inventory (ETI; Bremner, Vermetten, & Mazure, 2000). An index of childhood abuse was formed such that high scores on the index reflected more severe abuse and low scores reflected lower abuse. Scores for each item ranged from 0 (*no abuse/insignificant abuse*) to 3 (*severe abuse*). High reliability and internal consistency were reported by the original authors. Likewise, internal consistency in this study was good ( $\alpha = .83$ ).

## RESULTS

About half the women (56.5%) were currently in an abusive relationship, and the remainder had recently terminated an abusive relationship. The time since termination ranged from 3 days to 6 months ( $M = 10.2$  weeks,  $SD = 8.9$ ) with about one third of the

sample having separated (29.3%) 1 month or less from their domestic partners at the time of the interview. About 24.3% had been separated between 1 and 4 months, and the remainder had been separated about 6 months. Overall, participants' violent experiences varied considerably with the majority of the women reporting some violence. Of the total sample, 10.2% reported not experiencing any physical abuse but reported experiencing sexual coercion and injury, whereas 18.8% reported no violence, injury, or sexual coercion resulting in a total of 20 women (29%) who did not experience physical violence in the last 6 months. Of the 71% (49) who reported physical violence, participants reported an average of one act in the last 6 months ( $M = 1.4$ ,  $SD = 1.1$ ). Specifically, a little more than half (59.2%) reported at least 1 act of violence, 30.6% reported 2 to 5 acts of violence, and the remaining 10.1% reported 5 to more than 10 acts of violence in the last 6 months. Of those who reported violence, 40.8% reported at least 1 act of severe violence including being choked, threatened with a gun or knife, and being beaten up, and 24.6% reported 2 to 5 instances of severe violence.

All participants reported experiencing some form of psychological abuse with an average of more than two acts ( $M = 2.5$ ,  $SD = 1.2$ ) in the past 6 months. On average, women felt moderately able to manage their relationships (efficacy score:  $M = 2.83$ ,  $SD = 1.20$ ). The majority of women (76.8%) reported using at least one resource available to them in the last 6 months. The average number of resources used was about four ( $M = 4.1$ ,  $SD = 3.6$ ), and almost half the sample (46.4%) reported using five or more resources. Of the different resources available, most women reported talking to a friend or family member after an abusive episode (66.7%), followed by calling the police (49.3%). Women were least likely to seek help at a shelter (15.9%) or contact a lawyer (13.2%). Finally, all women in this sample reported at least one act of childhood physical or sexual abuse ( $M = 1.3$ ,  $SD = 0.5$ ).

As the next step, we examined bivariate correlations between the study variables. Higher levels of physical and psychological abuse and higher resource utilization were all related to separated status. In contrast, the more efficacious women felt about the relationship, the more likely they were to be with the partner. We also included race and age to explore possible relationships; as can be

**TABLE 1**  
**Correlations Between Relationship Status and**  
**Selected Variables and Between All Model Variables**

	1	2	3	4	5	6	Race	Age
1. Relationship status	—	-.30*	.35**	-.29*	.27*	.36**	.14 <sup>a</sup>	.10
2. Relationship efficacy		—	-.27*	-.08	-.27*	-.44**	—	—
3. Resource utilization			—	.02	.35**	.40***	—	—
4. Child abuse				—	.11	.18	—	—
5. Physical abuse					—	.58***	—	—
6. Psychological abuse						—	—	—

NOTE: Relationship status is coded 0 = with partner, 1 = separated.

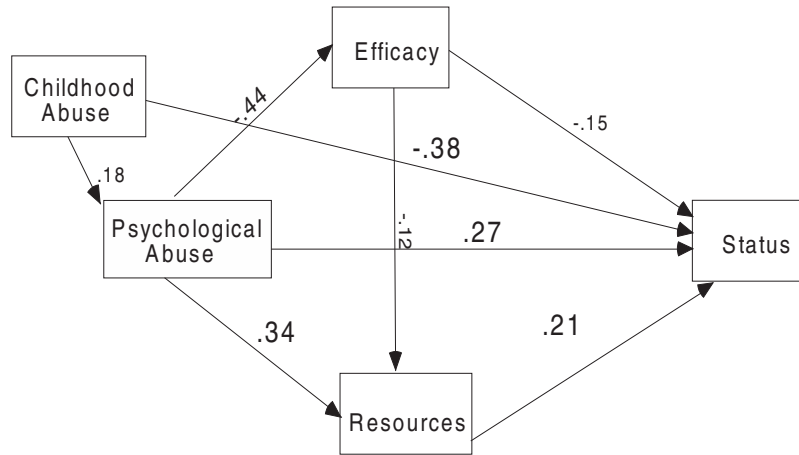
a. A chi-square test conducted to examine if there were racial group differences across the three ethnic groups was not statistically significant.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

seen in Table 1, race and age were not related to relationship status.

We next tested the two proposed path models, which were identical except that one included physical abuse and the other psychological abuse. We used path analysis, which permits testing of multiple paths simultaneously and mediation effects. Analyses were conducted using AMOS (version 4.0; Arbuckle & Wothke, 1999). Given that all associations were estimated simultaneously in the model, the presence of significant paths indicates that the significant parameters explained variation above and beyond that explained by other associations in the model. The full models were required to estimate 13 parameters. With a sample size of 69, both models fulfilled the recommended minimum 5:1 participant-to-parameter ratio (Bentler & Chou, 1987).

Because there are limitations to all the criteria used to assess overall model fit using structural equation modeling, five indices pertaining to fit and error were examined (Biddle & Marlin, 1987; Loehlin, 1992): (a) the chi-square goodness-of-fit test and the related chi-square/*df* ratio; (b) the goodness-of-fit index (GFI), which assesses the amount of variance and covariance predicted by the matrix; (c) the adjusted goodness-of-fit index (AGFI); (d) the root mean square residual (RMR); and (e) the root mean square error of approximation (RMSEA) that indicates the error per degree of freedom. In general, a good fit to the data is indicated by (a) a nonsignificant chi-square and a ratio of chi-square/*df* less than 3; (b) GFI and AGFI values that are closest to 1; (c) an



**Figure 1: Path Model With Physical Abuse**

NOTE: Resources = resource utilization; Efficacy = relationship efficacy; Status = relationship status. Bolded coefficients indicate statistical significance.

RMR value that is close to 0 and at least smaller than .05 (Anderson & Gerbing, 1988); and (d) an RMSEA that is smaller than .08 (M. Browne & Cudeck, 1993).

### TEST OF THE FULL PHYSICAL ABUSE MODEL

We tested the physical abuse model in two steps. The main purpose was to examine the direct, indirect, and mediational paths that predicted relationship status. Accordingly, we first ran the complete physical abuse model (Figure 1), which indicated an excellent fit to the data  $\chi^2(2, N = 69) = 0.25, p = .88$ , with  $\chi^2/df = 0.12$ , GFI = .99, AGFI = .97, RMR = .01, and RMSEA = 0. Statistical significance of individual paths was indicated by a critical ratio of  $\pm 1.96$  or greater. Physical abuse was not a direct predictor of relationship status in this model. However, as predicted in Hypothesis 1, greater levels of physical abuse were related to decreased relationship efficacy and increased resource utilization (see Figure 1). Although decreased relationship efficacy predicted greater resource utilization (Hypothesis 2), this relationship was only significant at a trend level ( $p = .10$ ). Both decreased relationship efficacy (Hypothesis 3) and increased resource utilization predicted being separated from the partner (Hypothesis 4). Finally, childhood abuse contributed directly to relationship status (Hypothe-

sis 5). The more one had been abused as a child, the less likely one would be to leave an abusive relationship. However, childhood abuse was not associated with adult physical abuse as predicted.

#### TEST OF THE MEDIATIONAL EFFECTS OF THE PHYSICAL ABUSE MODEL

A mediating relationship would be indicated if the following three conditions hold true: (a) abuse predicts both efficacy and resources; (b) when efficacy and resources are entered into the model, abuse does *not* predict relationship status but efficacy and resources do; and (c) when the paths from efficacy and resources to relationship status are restricted (i.e., are set to 0), abuse will predict relationship status.

The next step was to test whether efficacy and resource utilization operated as mediators between abuse and relationship status. We thus ran a restricted version of the model depicted in Figure 1.

In the first version, we set the path between efficacy and relationship status to 0 while allowing both resource utilization and abuse to freely predict relationship status. The relationship between physical abuse and relationship status was not statistically significant ( $\beta = .20$ ) indicating that this association was fully mediated by the relationship between resource utilization and relationship status ( $\beta = .29$ ). In the second version, we set the path between resource utilization and relationship status to 0 while allowing efficacy and abuse to freely predict relationship status. The relationship between physical abuse and relationship status, although reduced, remained statistically significant ( $\beta = .23$ ). Although a path remains statistically significant, a significant reduction in the size of the path once the mediator is included may indicate a partial mediational effect (Baron & Kenny, 1986). Therefore, we next tested the hypothesis that the reduction in beta weights from .30 to .23 was statistically significant using the formula provided by Baron and Kenny (1986). The score obtained ( $Z = 1.75$ ) indicated that this difference was statistically significant ( $p < .05$ , one-tailed). Thus, overall, these results indicate that the association between physical abuse and relationship status is partially mediated by the relationship between efficacy and relationship status ( $\beta = -.26$ ) and fully mediated by resource utiliza-

tion. Furthermore, these two variables contribute independently of each other as mediators.

#### TEST OF THE FULL PSYCHOLOGICAL ABUSE MODEL

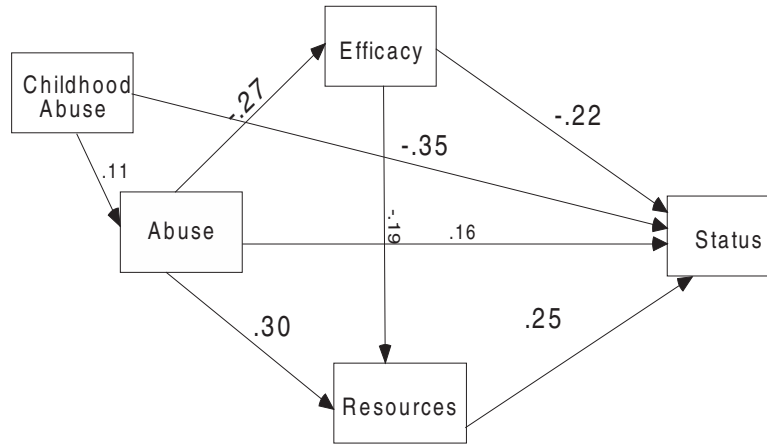
We next tested the full psychological abuse model depicted in Figure 2. This model indicated an excellent fit to the data,  $\chi^2(2, N = 69) = 0.19, p = .91$ , with  $\chi^2/df = .09$ , GFI = .99, AGFI = .99, RMR = .02, and RMSEA = 0. As predicted (Hypothesis 1), greater levels of psychological abuse were related to increased resource utilization and decreased relationship efficacy. In turn, increased resource utilization (Hypothesis 4) predicted being separated from the partner. However, efficacy was not related to resource utilization (Hypothesis 2) and was not a significant predictor of relationship status (Hypothesis 3). Furthermore, psychological abuse directly predicted relationship status ( $\beta = .27$ ) even with the inclusion of both resource utilization and relationship status. As in the case of physical abuse, childhood abuse was not related to psychological abuse but did predict relationship status.

#### TEST OF MEDIATIONAL EFFECTS OF THE PSYCHOLOGICAL ABUSE MODEL

To test possible mediational effects of resource utilization, we again ran a reduced path model where the paths from resource utilization to relationship status were set to 0. All other paths were identical. In this model, the beta coefficient between psychological abuse and relationship status was again significant but substantially higher ( $\beta = .42$ ). We next tested whether this increase in the value from .27 to .42 was significant, which would indicate a partial mediational effect of resource utilization. Using the procedure recommended by Baron and Kenny (1986), we obtained a score for resource utilization indicating that resource utilization partially mediated the relationship between psychological abuse and relationship status ( $Z = 1.77, p < .05$ , one-tailed).

#### FOLLOW-UP ANALYSES AT TIME 2

Efforts were made to contact all participants between 2 and 3 months following the first interview. Forty-six women were contacted and agreed to participate in a follow-up interview. The



**Figure 2: Path Model With Psychological Abuse**

NOTE: Resources = resource utilization; Efficacy = relationship efficacy; Status = relationship status. Bolded coefficients indicate statistical significance.

remainder either could not be traced or refused to participate. An identical interview to that at Time 1 was conducted with appropriate modifications made to the questionnaires to reflect the 2- to 3-month timeframe between the baseline and the follow-up interview. Of the 46 women contacted, most remained in the status that they had reported at baseline. Specifically, 21 participants remained with the same partner (45.7%), 13 remained separated (28.3%), 7 who had been with their partner were now separated (15.2%), and 5 (10.9%) who were separated were now in relationships. None of the women reported physical abuse between the first and second interviews; however, women reported experiencing at least one act of psychological violence in the last 2 months ( $M = 1.14$ ,  $SD = 1.0$ ).

We explored change related to status in two ways. First, we examined if any of the predictor variables from baseline (i.e., abuse, efficacy, resources) were able to predict whether women were with or separated from the abuser at follow-up. Because the sample size was too small to permit path modeling, separate regression analyses were conducted for physical abuse and psychological abuse via efficacy and resource utilization. Physical abuse at baseline did not predict separated status at follow-up thereby indicating no possibility of mediational effects; consequently, we will limit the results to the psychological abuse model. Psychological abuse at baseline significantly predicted separated status ( $\beta =$

**TABLE 2**  
**Descriptive Statistics at Baseline and Follow-Up for Relationship Status Change**

Variable	Final Status	Baseline		Follow-Up	
		M	SD	M	SD
Efficacy	Together-together ( <i>n</i> = 21)	3.22	1.1	3.91	1.0
	Separate-separate ( <i>n</i> = 11)	2.67	1.12	3.36	1.1
	Together-separate ( <i>n</i> = 6)	3.17	1.4	3.97	1.0
	Separate-together ( <i>n</i> = 5)	1.80	1.0	4.36	0.9
	Total ( <i>N</i> = 42)	2.89	1.2	3.83	1.0
Resource	Together-together	2.95	3.4	1.67	2.4
	Separate-separate	4.27	2.7	2.7	3.1
	Together-separate	2.17	3.0	1.17	2.0
	Separate-together	9.40	1.3	2.4	3.6
	Total	3.99	3.7	2.0	2.7

.36,  $p < .05$ ), indicating that the more psychological abuse one experienced at baseline, the more likely it was that the woman was separated at follow-up. Resource utilization showed a trend to predict relationship status ( $\beta = .29$ ,  $p = .09$ ), but efficacy showed no relationship to status.

## DISCUSSION

Most previous studies have examined direct relationships of cognitive and socioeconomic variables as predictors of why a woman decides to stay or leave an abusive relationship. Such models, although useful, do not fully capture the complex interrelationships of factors that influence a woman's decision to terminate an abusive relationship. This is one of the first studies to examine a model in which two types of variables—one reflecting a woman's beliefs about her relationships and the other pertinent to active help seeking—were examined as potential mediators between abuse and relationship status. We also examined both physical and psychological abuse in the prediction of relationship status rather than focusing exclusively on physical abuse as is typically done. Another strength of the study is that we used nonsheltered women, whereas most studies typically recruit participants from domestic violence shelters.

Overall, the results provided support for the physical abuse model and the utility of assessing resource utilization and rela-

tionship efficacy in the relationship between physical abuse and relationship status. We suggested that relationship efficacy is important to assess, because most of us have beliefs about how to manage and maintain our relationships, and an important goal in an intimate relationship is the successful maintenance of that relationship (Brockner & Rubin, 1985). We found that an increased frequency of physical abuse decreased women's beliefs in their ability to manage their relationships. In turn, decreased beliefs about their ability to manage their relationships were related to a greater likelihood of separating from the partner. Although efficacy did not fully mediate the relationship between physical abuse and relationship status, it was a significant, indirect pathway of influence. In contrast, resource utilization did emerge as a significant mediator of the relationship between physical abuse and status. Women who experienced a higher frequency of abuse sought more help than women experiencing lower frequencies of abuse. Higher levels of resource utilization ranging from informal help seeking to counsel with a lawyer were related to a separated status. These results are similar to those of other studies that found that women who sought help were better able to terminate abusive relationships than women who did not (Horton & Johnson, 1993). Finally, although efficacy and resource utilization were correlated, they functioned independently and in different ways in the model—efficacy providing an indirect pathway and resource utilization serving to mediate the relationship between physical abuse and status. Both were important predictors of relationship status. These results may help explain why in some cases physical abuse is related to relationship termination but in other cases it is not. The results indicate that when a woman's expectations about her relationship are low (which is significantly influenced by the level of abuse), she is more likely to leave her partner. At the same time, these conditions lead to greater use of a range of resources that promote relationship termination. It is important to note that because the study is cross-sectional, the direction of the relationship between resource utilization and relationship termination is not by any means definitive. Thus, although we hypothesized that resource utilization would predict relationship status, the reverse may also be true. That is, women may not seek resources until they have begun to consider terminating the relationship and thus recognize the need for assistance.

The role of relationship efficacy was different with respect to psychological abuse. It appears that why a woman leaves her psychologically abusive partner is directly related to levels of psychological abuse and is unrelated to her feelings of efficacy. One post hoc explanation for this could be related to the frequency of psychological abuse; this form of abuse occurs more frequently compared to physical violence, which appears to be more sporadic. As a result, psychological abuse may be less tolerable to women and may directly prompt termination.

Although we predicted a relationship between physical and sexual abuse during childhood and adult psychological and physical abuse, we did not find these relationships. It does not appear that these early experiences influence the level of abuse in the women's relationships. However, childhood abuse did predict relationship status in both models. Women who experienced abuse as children were more likely to stay with their partners. As a post hoc explanation, we explored the possibility that early abuse would affect later relationship efficacy and that the relationship between childhood abuse and relationship termination may be in part mediated by relationship efficacy. However, the data did not support this prediction. Further research investigating pathways through which childhood abuse affects relationship status would be helpful in clarifying this relationship.

The traditional notion that battered women are passive or masochistic (and therefore enjoy or request violence) has been increasingly criticized and countered in recent years (e.g., Campbell, Rose, Kub, & Nedd, 1998). The findings in this study similarly challenge the traditional notion that battered women who stay in abusive relationships do so because of learned helplessness (Walker, 1984) or psychological entrapment (Strube, 1988) or even a false sense of control resulting from defensive behaviors. Such types of conceptualizations suggest that women, either as a result of violence or as a result of some internal motivation, become passive and thus are unable to help themselves. The reverse of this theory suggests that women develop a false sense of control to explain their passive actions or justify their inability to act. Rather than conceptualizing women's sense of control as pathological or as a defensive reaction to a socially shameful condition, we prefer to approach the sense of efficacy from an ordinary consideration; all individuals entering a relationship pos-

sess certain personal expectations about how relationships can and should be managed. Women who experience violence are no different. However, this efficacy can bind couples together in both good and bad relationships and can even be inappropriate or dangerous in violent situations. From this perspective, the findings indicate that women who stay in abusive relationships do so because they believe they will be able to negotiate the relationship with the abuser. Furthermore, women do not seek help not because they are passive but because they believe that they are able to manage on their own.

To follow up the cross-sectional study, we conducted several longitudinal analyses. The greatest limitation to these analyses was sample size. Thus, we consider these findings to be quite exploratory. We found that 2 months after the initial assessment, most women held the same status they held at baseline: One half were in the same abusive relationships, and one fourth were separated at both time points. The remainder (6 women) had left their partners or had begun new relationships (5 women). None of the women reported any physical abuse between the first and second interview. We did not replicate any mediation effects in the longitudinal model; however, psychological abuse from Time 1 remained robust in its prediction of separated status. These results are quite similar to Arias and Pape (1999) who found that psychological abuse predicted the commitment to leave an abusive partner, whereas physical abuse did not, and to that of others (Gortner et al., 1997; Jacobson et al., 1996) who found that over time, increased levels of psychological abuse predicted separation, although physical abuse did not. One reason for this could be that the effects of psychological abuse continue to affect women over time, whereas the effects of physical abuse are proximal or immediate, again perhaps because women experience psychological abuse more frequently than physical abuse. In line with this thinking, psychological abuse has been found to be more harmful and therefore less tolerable than physical abuse (Follingstad et al., 1990). Women's experience of psychological abuse can be worse than physical abuse, because abuse such as ridicule, threats of abuse, and jealousy can destroy women's sense of self-worth, mastery, and integrity. Finally, it is also possible that if physical abuse is very severe, a woman may be too afraid to leave the relationship. The fear that separation will

increase subsequent violence is often appropriate (Walker, 1983), and victims who return to abusive relationships suffer higher rates of abuse (Johnson, 1992). Thus, a realistic fear of retaliation may mitigate a direct relationship between physical abuse and relationship status.

Although the results of this study are promising, several limitations should be noted. One concerns the nature of the study design. Although care was taken to obtain information about efficacy and resource utilization prior to relationship termination, these variables were assessed retrospectively at baseline. Therefore, we cannot make any causal inferences pertaining to the results. Furthermore, the data on efficacy were collected after the relationships had been terminated thereby allowing for the possibility that the efficacy assessed was in fact a result of relationship termination rather than an antecedent to relationship termination.

Although the sample size was adequate for the models tested, it is still quite modest. A larger sample would allow more conclusive statements about the findings and would permit including both psychological and physical abuse within the same model. Finally, we chose to define physical abuse in a traditional way and did not include sexual abuse or sexual coercion. Because marital rape is common in coercive contexts, research that includes sexual coercion in its definition of physical abuse will enrich our understanding of when and why a woman chooses to leave her abuser.

Women's decisions to stay or leave are made over time (Barnett & LaViolette, 1993) and are shaped by both ongoing changes as well as pivotal points in the course of a relationship (Burke, Gielen, McDonnell, O'Campo, & Maman, 2001; Campbell et al., 1998). Longitudinal research examining the timing of events and behavioral change (e.g., Lerner & Kennedy, 2000; Prochaska et al., 1994) can help clarify the interrelationships between factors believed to influence relationship termination. Potential areas of research can include how relationship efficacy may change during the course of an abusive relationship and how these changes relate not only to women's decisions about separation but also subsequently to enter new, nonviolent relationships. Efficacy may be amenable to change through structured interventions that would carefully take into account women's needs. Such a conceptualization would allow practitioners to tailor areas for

intervention depending on the length of time a woman reports being in an abusive relationship, the type of abuse she reports primarily experiencing, and whether she is seeking to separate from, maintain, or enter a relationship. Similarly, programs could be aimed at intervening in the beginning stages of violent relationships. For example, programs could train health care and emergency room professionals who may routinely come in contact with domestic violence victims to provide more assertive outreach. The aim would be to promote the use of a wider range of resources while taking into account matters such as safety planning.

Because domestic violence is a serious threat to a woman's health and well-being and because a woman's decision to stay or leave is highly complex, the urgency for accurate and efficient interventions becomes all the more salient. These data suggest that both physical and psychological abuse, but particularly psychological abuse, are related to relationship termination. The results also indicate that the mechanisms that influence women's decisions to leave differ depending on the type of abuse being experienced, and they highlight the importance of examining variables that serve to moderate or mediate these relationships over time.

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