

Factors Moderating Physical and Psychological Symptoms of Battered Women

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Physical and psychological symptoms of battered women were investigated based on the theory that their ongoing victimization would produce stress-related symptoms. It was hypothesized that moderating variables (e.g., frequency and severity of abuse, predictability and controllability of abuse, social support networks) would influence the effects of abuse. Battered women (N = 234) were interviewed according to a structured format which allowed for behavioral indices of the data and categorization of the women's responses. Results indicated that frequency of abuse was a strong predictor of the number and severity of symptoms. Those women who could predict abuse experienced more symptoms. Severity of physical and psychological symptoms was predicted by a model including women with more injuries requiring medical attention, women adhering to traditional sex role values, and the presence of one type of emotional abuse. Battered women perceived their physical and emotional health as deteriorating during the relationship and during the abuse, but as getting healthier after the abuse ended. Future research needs to replicate these findings with a representative group of battered women who are still in the battering relationship.

KEY WORDS: moderators; physical symptoms; psychological symptoms; spouse abuse.

INTRODUCTION

Investigators in the area of spouse abuse have discussed the physical and psychological symptoms which battered women exhibit (e.g., Martin, 1976; Walker, 1984). Certainly, physical symptoms would occur in light of

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the injuries which many battered women incur. However, other psychophysiological symptoms have been postulated as being present as well (Walker, 1979). In addition to these physical problems, psychological symptoms (e.g., anxiety, depression) have been reported by battered women (Martin, 1976; Walker, 1979). Some researchers are now suggesting that the symptoms may be a reaction to the abuse (see Follingstad, 1980; Walker, 1984) similar to features of the stress response syndrome (Everly and Rosenfeld, 1981) or the post-traumatic stress disorder (Scrignar, 1988). The main features of these syndromes appear to be anxiety-related symptoms in response to stressors, which may be evidenced through physical or psychological problems.

Rabkin and Struening (1976) and Holmes and Rahe (1967) provided some of the pioneering investigations concerning the relationship between psychological and physical symptoms and general life stressors. Laboratory findings (e.g., Seligman, 1975) as well as studies of the effects of natural and other disasters (Fritz and Marks, 1954) have produced "relatively strong evidence that environmental stress causes somatic and psychological disorders. . ." (Dohrenwend and Dohrenwend, 1982, p. 92). Since there is a consensus that traumas are most likely to produce stress-related symptoms, even in normal persons, it is easy to postulate that battered women who undergo repeated victimization would be likely to evidence physical and psychological symptoms over time. Dohrenwend and Dohrenwend (1982) further considered the idea of physical symptoms resulting from stress. However, they suggested that the effects of stress may be influenced by factors in the environment. Further, they viewed these factors as moderating and determined that they could be subjective or objective. First they considered the repetition of an event, such that undesirable events repeated quickly were expected to increase the stressfulness of that event. Second, relying on past observations that social bonds reduced the impact of life events, they hypothesized social support to provide a buffer for stress. "Anticipation of a noxious stimulus" was also suggested as influencing the impact of stress based on their review of laboratory studies of stress. In addition, when laboratory subjects could control when a noxious stimulus occurred, their stress reactions were not as severe. Therefore, for battered women undergoing abuse on a continual basis, such moderators as frequency of the abuse, severity of the abuse, perceived predictability of the abuse, perceived controllability of the abuse, and social support resources available to the women were expected to influence the extent of the abused women's physical and psychological reactions.

Bowker (1983) was interested in social support for battered women as a variable affecting their reactions to abuse as well as in relation to their ability to deal with the abuse. He found that almost any strategy or help-source can ultimately work in aiding the women. Donato and Bowker (1984) also considered social support for its effectiveness in decreasing abuse and determined that families and agencies appeared more effective in the short-run and shelters and women's groups were more helpful in the long-run. Thus, the possible influence of presence or absence of significant social figures in a person's life may be important for reducing the stress symptoms associated with experiencing abuse on a continuing basis.

Frieze *et al.* (1980) investigated differences in battered women who received differing severity of abuse. They found severely battered women to be more traditional, less assertive, more isolated and restricted, and more likely to have come from a violent family. The men these women were married to were more violent generally and also tended to come from violent homes. Synder and Fruchtman (1981) found severity of abuse to be a discriminating factor in their cluster analysis of women utilizing a shelter for abused women. Their way of operationalizing this variable, however, was to consider the usual extent of injury resulting from physical abuse with categories of none, minor injury, or major injury. What they were unable to know from this operationalization was whether sporadic yet severe injuries would occur which would certainly influence the women's reactions but would not be known because the researchers collected data on the *usual* extent of injury. Thus, it would make sense to include severity of abuse assessed in various ways as a possible moderating variable for resulting physical and psychological symptoms. Snyder and Fruchtman (1981) also found frequency of abuse to be an important factor discriminating the clusters of battered women; therefore, frequency of abuse was also hypothesized to mitigate physical and psychological symptoms.

Anecdotal reports of abused women sometimes indicate that the abuse is sudden and unexpected with the women having no clue that it is about to occur (e.g., Walker, 1979). This inability to predict the abuse would be expected to result in more anxiety symptoms for these women due to their on-going expectation of attack with little relief. A contrast would be abused women who could identify a pattern to the abuse and therefore might be able to modify or control what occurs during an abuse incident. Having some control over an abuse episode may allow battered women to feel fewer anxiety symptoms because of their perception that they can exhibit some mastery over what will happen to them.

To date there has been a lack of empirical research in the area of battered women which attempted to: (1) measure the extent and severity of physical and psychological effects; or (2) relate the severity and frequency of the effects to "moderating" variables. For the purposes of their study, subjects were classified as having few or many symptoms as well as having high versus low symptom severity. Women's use of medical treatment for injuries and their use of psychological treatment was assessed. Presence of emotional abuse in the relationship was included in an effort to understand more fully the existence of psychological effects in abused women. Models predicting whether battered women had many versus few symptoms and whether they had high versus low symptom severity were expected to yield more severe symptoms for women: (a) with high frequency and severity of abuse, (b) unable to predict or control abuse, and (c) having few social supports. In addition, it was expected that greater emotional abuse would be related to more symptoms and that women in short-term abusive relationships would exhibit fewer effects than abused women in long-term relationships.

METHOD

Subjects

Subjects were 234 women with some history of physical abuse who volunteered to answer questions about the battering relationship in an interview format. Physical abuse was defined as an aggressive physical act which either caused or had the potential to cause physical harm. Sixty-one (26%) of the women had only three or fewer incidents of abuse with no further incidents for at least 2 years. The remainder of the women were classified as experiencing long-term, ongoing abusive relationships. The mean age of the women was 36.6 years (range of 19 to 64 years). The aggressive male partners were slightly older with a mean age of 39.2 years (range of 21 to 80 years). Eighty-one percent of the sample was White with 17% Black women and 2% Oriental women. The mean number of children was 1.85 with a range of 0 to 6 children. Two hundred and one women reported being currently out of the relationship with 33 still remaining in the relationship. Although women were solicited from a wide variety of sources, the women were all asked about types of services they had utilized while the battering relationship was ongoing. For example, even though subjects were recruited from a local shelter, women recruited from other sources were asked if they had ever used a shelter. Thus, 24 women had utilized a woman's shelter, 12 had attended support groups sponsored

by the shelter to deal with abuse issues, 151 had used a variety of social services and societal agents (e.g., police, hospitals) for problems related to the abuse, and 40 had not used any services.

Interviewers

Interviewers were female undergraduate psychology students and clinical psychology graduate students. In addition, two women from the community, with experience in counseling or interviewing, volunteered to be involved. All interviewers were required to complete training, which consisted of reading selected books and articles on domestic violence, reading a review of suggested interview techniques with abused women by Frieze (1978), attending the local shelter sessions for volunteers, becoming familiar with the research questionnaire, and rehearsing interview situations with an experienced interviewer to practice handling problem situations. Supervision was ongoing in order to handle any difficulties that arose and to ensure consistency of coding of data.

Measure

A questionnaire was designed to test the hypotheses which could be used in an over-the-phone interview format. The questionnaire was pilot-tested with six abused women to determine the average time for completion, which items proved difficult to answer, whether wording of the items was appropriate, and whether the items seemed to produce the necessary information to answer the hypotheses. Accordingly, items were reworded or the format changed as was indicated by the pilot testing. The average time necessary to complete the questionnaire was approximately 2-1/2 hr.

The strengths of this questionnaire included the following: (a) The study started with specific hypotheses which questions were designed to answer; (b) While some subjective questions were included, most were developed to collect objective, factual, and statistical indicators as a way to avoid recording opinions only. Therefore, concrete and specific behavioral indices were the measurement variables (e.g., asking about actual injuries instead of opinions as to how severe injuries were); (c) Data were coded at the time of questionnaire administration with the subject's assistance rather than *post hoc* coding. Thus, the woman's subjective response was placed into a category with the women helping to determine which category most closely corresponded to her response.

While a self-report inventory has inherent problems due to a lack of validation, there are many problems of collecting information with abused women which makes this approach necessary. Direct observation is impossible to conduct, especially when a long-term problem with historical roots is being evaluated. Frequently, anonymity prevents a variety of assessment procedures from being carried since some women could suffer additional negative consequences if their partner knew of their research participation. Collecting corroborative information from other individuals who might know of the abuse is also difficult to obtain. Investigators emphasize the "privacy" of the abuse experience, while individuals outside the couple rarely know of the existence or extent of the abuse (Star, 1980; Walker, 1979). Therefore, neighbors, friends, or even family are often poor sources for information concerning abuse. The abusive individual has much to lose from honestly reporting abusive behavior toward his partner, so he is generally not a reliable source. Additionally, the high correlation of alcohol use with abuse incidents (Rosenbaum and O'Leary, 1981; Walker, 1979) would suggest that the abusive person may have difficulty recalling abuse episodes. Thus, information is typically collected from the female victim of abuse.

The presently employed questionnaire included the following content areas: demographics; relationship history and quality; specific chronological history of abuse in terms of frequency, types of physical force, specific injuries; events surrounding abuse incidents; changes over time in terms of severity of the abuse pattern; physical and psychological symptoms; frequency of types of emotional abuse; beliefs about abuse and physical force in relationships; and beliefs about assertiveness and beliefs about sex roles. Frequency of abuse was assessed by determining the following: frequency during the first 6 months of abuse; highest frequency of abuse during any 6-month period; duration of abuse; the amount of time from initial involvement with the partner until the first incident of abuse. Severity of abuse was also ascertained in several ways: the typical severity of force used in terms of the *type* of force (e.g., hitting, use of weapon, choking); the number of injuries requiring medical attention; the severity level (i.e., mild, moderate, severe) of the usual injuries; and most severe injuries. Physical and psychological symptoms were obtained in the following categories: headaches; back and limb problems; frequent colds; fainting and dizziness; stomach and gastrointestinal problems; gynecological problems; heart and blood pressure problems; lung and breathing problems; skin problems; anxiety; depression; and alcohol and drug abuse.

Procedure

Women who volunteered for participation were contacted by phone at times that they designated as safe to call. Interviewers identified themselves only to the women who volunteered.

Verbal informed consent was obtained before the interview commenced. Included in the informed consent were statements giving basic information regarding the project and types of data to be collected, confidentiality and anonymity of the data, plans for discontinuing the call should the women be concerned for her safety, the amount of time involved, the woman's right to discontinue the interview or not answer specific questions, and a caution to the women not to volunteer information regarding child abuse unless she wanted to have the abuse reported. Interviewees also were told they could arrange for a face-to-face interview at another location if they so desired.

The questionnaire was then utilized to conduct the interview which lasted from 2-3 hr. Some of the interviews were conducted in two segments.

RESULTS

There were 12 categories of physical and psychological symptoms which women could report having experienced that were related to the stress response syndrome. Only 3% of the 230 women reported no symptoms, while 65.3% of the women reported 3-7 symptoms, and only one women reported all 12 symptoms. The most frequently noted symptoms were depression (76.7%), anxiety (75.0%), persistent headaches (56.5%), back and limb problems (54.5%) and stomach problems (54.5%). Each of the 12 symptoms was present for at least 21% of the subjects.

Subjects reported the state of their *physical* health at different stages. These were (a) during their childhood, (b) their life prior to involvement with the abusing partner, (c) early involvement with the partner before abuse occurred, (d) during the abuse, and (e) since the abuse ended. Planned comparisons were used to determine whether significant changes occurred during these time periods. All stages were significantly different from each other except for subjects' physical state during childhood compared with their health just prior to their involvement with the abusive partner. However, a deterioration in physical health occurred for these women both from childhood and their life prior to involvement with the partner to the early stage of the relationship before abuse ($t(225) = -1.92$,

$p < 0.05$, and $t(225) = -2.17$, $p < 0.03$, respectively). Not surprisingly, childhood and life prior to involvement with the partner both were significantly healthier stages than during the abuse ($t(225) = -12.79$, $p < .0001$, and $t(225) = -12.88$, $p < 0.0001$), as well as healthier than the period of time after abuse ended ($t(225) = -5.11$, $p < 0.0001$; and $t(225) = -4.85$, $p < 0.0001$), suggesting that effects may continue after the actual abuse ceases. In fact, even the period of involvement prior to the abuse was a significantly healthier physical period than after the abuse ended ($t(225) = -3.60$, $p < 0.0004$). Even so, a significant increase in physical health occurred once the woman was out of the abuse from when the abuse was occurring ($t(225) = 7.66$, $p < 0.0001$). Thus, the picture is one of increasingly worsening physical health until finally the abuse ceases.

The same planned comparisons for the five stages in the women's lives, but looking at their subjective report of *emotional* health, suggested a very similar pattern of worsening emotional health until the abuse ended. Early life emotional health was significantly different from all other stages, except for the time period since abuse ended ($t(225) = -1.92$, $p < 0.05$; $t(225) = -3.59$, $p < 0.0004$; $t(225) = -21.08$, $p < 0.0001$; and $t(225) = -0.73$, $p = n.s.$, respectively). Emotional health just prior to involvement with the partner showed the same pattern, being significantly healthier than the period of early involvement with the partner until the beginning of the abuse ($t(225) = -2.09$, $p < 0.03$), healthier than the period of abuse ($t(225) = -19.09$, $p < 0.0001$), but not healthier than the period of time since abuse ended ($t(225) = 0.93$, $p = n.s.$). As expected, the early phase of the relationship before abuse began was healthier emotionally than during the abuse ($t(225) = -18.38$, $p < 0.0001$), but actually less healthy than the phase after the abuse ended, $t(225) = 2.33$, $p < 0.02$). Also as predicted, emotional health greatly improved after abuse ended as opposed to the period during which abuse was ongoing ($t(225) = 21.17$, $p < 0.0001$).

A multiple regression analysis to determine predictive factors for women with many physical and psychological symptoms (MS) vs. women with few symptoms (FS) included: frequency and duration of abuse variables; severity variables; beliefs; presence and frequency of six types of emotional abuse; predictability and controllability of the violence; and social support variables. Five of the variables entered into the stepwise regression procedure accounted for 23% of the variance and were significant at the 0.05 level. The typical most severe type of physical force directed toward the woman discriminated MS vs. FS women, accounting for 7% of the variance. When a woman typically experienced more severe types of force, she was likely to have more symptoms. The frequency with which abuse occurred in the first 6 months of abuse contributed 3.8% of the variance

and predicted that a higher frequency of abuse at the onset was related to more psychological and physical symptoms for the women. A third significant predictor of many vs few symptoms (3.8% of the variance) suggested that those women experiencing the highest frequency of abuse experienced the greatest number of symptoms. Whether the woman could predict the occurrence of abuse accounted for 3.5% of the variance; the direction of this finding was such that women who usually *could* predict the occurrence of abuse experienced more symptoms. This was supported by a similar finding in which a higher number of symptoms occurred when subjects *could* use emotional abuse to predict physical abuse (variance accounted for was 2.2%). Controllability of the abuse, frequency of emotional abuse, and social support variables were not significant predictors in this model.

The same predictor variables were included in a multiple regression to predict high vs low *severity* of the psychological and physical symptoms which women reported. One hundred fifty-eight long-term battered women were included in the analysis and three variables, accounting for 9.1% of the variance, were significant at the 0.05 level for this regression. Women experiencing a high frequency of destruction to their personal property as a form of emotional abuse were more likely to experience high severity of physical and psychological symptoms (3.6% of the variance); low frequency of destruction to property was related to lower severity of the symptoms. For women who had traditional sex role orientation, physical and psychological symptoms were likely to be rated as more severe as compared to nontraditional women (3.1% of the variance). And third, a high number of injuries for which the woman required medical attention was associated with high severity of psychological and physical symptoms (2.4% of the variance).

As expected, women who experienced short-term vs long-term abuse reported discrepancies in levels of physical and emotional health during the time of the abuse as determined by a MANOVA ($F(2,228) = 7.65, p < 0.0006$). Univariate analyses determined that both physical ($F(1,229) = 14.56, p < 0.002$), and emotional ($F(1,229) = 4.64, p < 0.03$) health were significantly different for the groups. Short-term women reported being more physically and emotionally healthy during the abusive period than long-term battered women.

Another MANOVA utilized the most severe type of physical force the women typically experienced as the independent variable. The dependent variables were: changes in physical and emotional health, frequency and severity of physical and psychological symptoms, the typical most severe injuries, psychological treatment sought, and number of incidents requiring medical attention. The overall results were significant ($F(20,318) = 2.05$,

$p < 0.005$). Subsequent univariate analyses suggested that the total number of physical and psychological symptoms discriminated the groups in that women experiencing severe forms of physical force had more symptoms than women experiencing moderate forms of physical abuse ($F(2,167) = 5.16, p < 0.006$). The number of incidents where the woman required medical attention indicated that women undergoing severe types of physical force had more incidents requiring medical attention than both women experiencing moderate or mild forms of physical force ($F(2,167) = 7.84, p < 0.0006$). Severity of usual injuries was the third variable which discriminated the groups of women ($F(2,167) = 7.75, p < 0.0006$). The group of women typically experiencing the most severe forms of physical violence had more severe typical injuries than women receiving the moderate and mild types of force.

The same dependent variables were used again in a MANOVA; however, the independent variable was the frequency of abuse that the women had experienced (four levels). The overall result was significant ($F(30,474) = 1.70, p < 0.01$). For this analysis, subsequent univariate analyses revealed (a) that the women's subjective report of changes in physical state from before they became involved with the abusers to the period of time during which abuse occurred was different for groups of women with differing frequency levels of abuse ($F(3,165) = 4.22, p < 0.006$). LSD tests indicated that women with the highest frequency of physical abuse reported the largest change in physical health from healthy to unhealthy and were significantly different from the two lowest abuse frequency groups of women. In addition, the second highest frequency group reported a significant change in physical health in an unhealthy direction different from the next lower frequency group. (b) The number of physical and psychological symptoms women experienced also was different for the four groups of women for whom the highest frequency of abuse had been determined ($F(3,165) = 4.14, p < 0.007$). While in a linear direction, the major significant difference was between the women with the highest frequency of abuse experiencing the greatest number of symptoms and the women with the lowest frequency of abuse experiencing the fewest symptoms. (c) Also differentiating the groups of women classified as to the highest frequency of abuse they experienced was the variable of the typical most severe injury they received ($F(3,165) = 2.87, p < 0.03$). Women experiencing abuse at least several times a month reported significantly more severe typical injuries than women experiencing abuse once a month or less.

The change in severity of the injuries the woman received over time was used as the independent variable in a MANOVA and the dependent variables were the same as listed above. The overall MANOVA was

significant ($F(30,477) = 1.58, p < 0.02$). The variables contributing to the significant MANOVA were as follows: Women who sustained fewer injuries requiring medical attention were more likely to experience a pattern of nonfluctuating abuse severity as opposed to the women for whom severity fluctuated or increased who had experienced more injuries requiring medical attention ($F(3,166) = 4.87, p < 0.002$). Women who experienced a stable pattern were more likely to seek psychological help for the abuse than women whose severity level had decreased or increased over time ($F(3,166) = 2.56, p < 0.05$). Women whose severity level of abuse decreased over time were most likely to seek out psychological services for problems *other* than abuse compared with the women whose severity level fluctuated or became more severe ($F(3,166) = 3.49, p < 0.01$).

Again, the physical and psychological symptoms, changes over time, and treatment were used as dependent variables with the independent variable being the total number of types of emotional abuse the woman experienced. The MANOVA was significant ($F(60,930) = 1.35, p < 0.04$). The number of physical and psychological symptoms a woman reported increased linearly as she experienced more types of emotional abuse, such that the women reporting between one and three types of emotional abuse showed fewer reactive symptoms than the women reporting five or six types of emotional abuse.

DISCUSSION

The self-report of battered women suggested that they viewed their physical health as beginning to decline during initial stages of their relationship even before the abuse began; it reached its worst level during the abuse and improved after the abuse ceased (although not to the level evident before they entered the relationship). Their perceptions, therefore, are such that aspects of the early relationship were already detrimental to their health, even without the physical abuse. Due to the high level of emotional abuse present for many women in the study (Follingstad *et al.*, 1990), it is very likely that this other form of abuse may be responsible for a decrease in their physical health by increasing the women's anxiety level. Because the study demonstrated that those subjects experiencing more types of emotional abuse had more physical *and* psychological symptoms, experiencing emotional abuse is a possible reason for early deterioration of health in the women prior to physical abuse occurring. The effects of the decline in physical health appeared to persist to some extent even if the abuse ceased, as women reported their health as not having returned to pre-relationship levels. What needs to be investigated further is whether

some of this effect is due to advancing age for subjects, although the decline and recovery of health appeared to follow predicted patterns.

Self-reported emotional health demonstrated a similar pattern to changes in physical health for battered women except for the battered women's return to pre-relationship levels of emotional stability when abuse ceased. Part of this effect may be due to the fact that many women in the sample were no longer in the abusive relationship, allowing them to recover from the psychological toll the physical abuse caused and possibly not having to continue to deal with emotional abuse.

Subjective report of the women was supported by the objective data in terms of designation of specific symptoms the women experienced over time. It was also supported in analyses using behavioral indices of frequency and severity of abuse rather than the women's subjective determination as to whether the frequency and severity of abuse were high or low. Not all of the expected factors, however, predicted whether women would have *more* physical and psychological symptoms and which women would have *more severe* symptoms. As expected, frequency variables were important for predicting more problems with health. However, the only significant severity variable was the level of severity of the type of force typically directed toward the woman rather than injury variables. Because more severe types of force included such things as choking and aiming a weapon at the woman (along with beating up the woman and attacking with a weapon), it is possible that actual injuries would not be present, but that the stress and anxiety from the attack would be very high. It is surprising that the injury variables were not significant predictors since they were significant for predicting whether women received severe, moderate, or mild types of force and which women had the highest frequency of abuse. These variables in turn predicted how many physical and psychological symptoms a battered woman reported.

Contrary to expectations, whose women who *could* predict the occurrence of physical abuse reported *more* physical and psychological symptoms. These women were able to predict its occurrence either from events or from the presence of emotional abuse. A possible explanation is that an awareness of impending violence might not necessarily mean that the violence takes place in the near future. According to Walker's (1979) theory of the cycle of violence, women might recognize the "tension-building" phase, yet have no idea when the abuse incident will occur. As Walker states, the cycle could even last several years with minor battering incidents along the way, while all that time the woman knows a very violent incident *will* happen. Waiting months or longer for the physical abuse to occur could produce much anxiety and stress during the waiting period. In contrast, sudden violence might be

very frightening but would not be preceded by long weeks of vigilance and anxiety on the part of the woman.

When a separate analysis investigated factors influencing *severity* of the battered women's physical and psychological symptoms, different factors emerged. Most intuitively obvious was the higher number of injuries requiring medical attention which would seem to be directly related to ensuring physical problems and which would seem to influence psychological problems as well. Less clear was the adherence to traditional sex roles on the part of the women with more severe symptoms. It is uncertain whether these women would *perceive* what was happening to them as more severe or whether women adhering to these values would be more susceptible to feeling increased anxiety symptoms based on their perceptions that they had no alternatives but to be submissive in their relationships. This would be consistent with Seligman's (1975) description of anxiety and depression symptoms in those experiencing "learned helplessness." The presence of one type of emotional abuse in the form of destruction of the woman's property is certainly understandable for predicting more severe symptoms for battered women. The existence of that form of emotional abuse would very likely lengthen anxiety resulting in physical and psychological symptoms. However, it is unclear from these data why that particular form of emotional abuse would increase the severity of symptoms while others (i.e., threats of abuse, restriction, jealousy, ridicule/verbal harassment, or threats to change the relationship) would not produce such an effect. Because a separate analysis of variables predicted that women with more types of emotional abuse had more symptomatology (physical and psychological), it may be that different configurations of emotional abuse differentially affect frequency versus severity of symptoms.

Changes in severity of the abuse over time were predicted by whether battered women utilized psychological services. It is possible for the women for whom abuse became more severe over time that they experienced a sense of helplessness or possibly increased fear of the abusing partner and thus did not seek out psychological services to the same extent as women for whom the severity of abuse remained the same. The same feelings may have been present to also influence who sought psychological services for problems not directly related to the abuse, as women for whom the abuse became less severe sought out services more. While the popular conception is that people seek psychological services as problems increase, battered women may be an exception to the rule. For them, the possibility that things can improve may need to be evident for them to be able to seek out services which they would consider helpful.

The purpose of this study was to obtain information to suggest factors battered women could use to reduce physical and psychological symptoms should they still be in the abusive relationship while making decisions about it. Because being able to predict abuse resulted in findings contrary to expectations, it would seem strange to train battered women *not* to be able to predict when abuse might occur. Because controllability of the abuse was assessed in only one way, future research could investigate battered women's perception of control over the abuse using other strategies to determine whether this factor might still be a viable moderating variable. The finding that traditional women (in terms of sex role attitudes) experienced more severe symptoms requires further study to clarify this relationship in order to suggest what type intervention might be useful.

One caution for utilizing the results from this study lies in the fact that so many of the subjects were women who were now out of the relationship. While they seemed to be a very representative sampling of battered women, their perceptions about predictability and controllability of the violence may be less reliable than those of women still dealing with the abuse. It is recommended that the data be replicated on a sample of women that are equally representative, but who are currently in the abusive relationship.

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