To my sister – the
artist and adventurer of the
three of us. I hope that when
you get to my advanced age you
have a milestone like this is for me to
mark your progress and see a course by.
I have loved watching you shape your
life these last 5 years (when I finally
started paying attention) and I am so
impressed with what you are doing and
how you are doing it. Here's to winner
like us!

Love,
Jackie
1986

A NURSING STUDY OF TWO EXPLANATORY MODELS OF WOMEN'S RESPONSES TO BATTERING

By

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Biographical Sketch

The author was born in Camden, New Jersey on August 2, 1946 and graduated from high school in Jamestown, New York in 1964. A baccalaureate degree (Magna Cum Laude) in nursing was earned at Duke University in 1968. After practicing nursing in a hospital, an inner city high school, and a community mental health center, she earned a master's degree at Wright State University, Dayton, Ohio, in 1982. The thesis research was a study of homicide of women indicating battering as a significant risk factor. This finding led to a career devoted to advocacy for battered women, clinical practice with battered women, and research, publication and nursing education centered on violence against women.

The author began teaching in an associate degree nursing program and has continued as a faculty member at Wayne State University College of Nursing (1980-82; 1984-86). Her doctoral education was supported by a National Service Research Award predoctoral fellowship and the dissertation research partially funded by Sigma Theta Tau Lambda Chapter and the University of Rochester School of Nursing Alumni Association. She is the co-author of Nursing Care of Victims of Family Violence and author of five articles published in nursing and interdisciplinary journals.

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The women who participated in this study exemplify the courage and resourcefulness of battered women and women in difficult situations everywhere. My debt to them is profound; I just hope I have at least begun to document adequately their strengths.

ABSTRACT

A Nursing Study of Two Explanatory Models of Women's Responses to Battering

The responses of women to battering as a serious health problem is an important area of nursing research from which to develop appropriate nursing interventions for these women. The purpose of this exploratory study was to compare: (a) the responses of battered women with those of other women also considering ending a marital or other significant intimate relationship, and (b) the relative applicability of two theoretical models in explaining these responses: a model of learned helplessness and a grief model. A sample of 193 women, generated through newspaper advertisement and bulletin board postings in two cities, was divided into two groups (battered and not battered) according to responses to the Conflict Tactic Scale. The battered women (N = 97) were significantly younger and poorer than the not battered women (N = 96) and more likely to be a member of a minority cultural group. The two groups were more similar than different on the majority of model variables. Both groups had significantly lower self-esteem scores (Tennessee Self-Concept Scale) than normative groups. The two groups did not differ on mean levels of depression (Beck Depression Inventory), but

the battered women were significantly more likely to be severely depressed than the not battered women. The battered women had more frequent and severe physical symptoms of stress and grief and had thought of or tried more solutions to the relationship problems. The two groups did not differ on self-care agency (Denyes Self-Care Agency Instrument scores), control in the relationship, attribution parameters, valuing of the wife-mother role, or solution efficacy. Cultural differences included more valuing of the wife-mother role and more tolerance of men hitting women by the partners of battered women. Multiple regression analyses indicated that both models had significant explanatory power, especially for battered women. From the results of five model comparisons, the grief and the learned helplessness models were equally applicable. Recommendations for nursing care of battered women included increasing self-care agency, assessing for sexual abuse, helping women formulate interactive (both self and partner) attributions of blame for relationship problems, and helping women perceive more control in relationships.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

INTRODUCTION

Significance and Purpose

Nursing has been defined as "the diagnosis and treatment of human responses to actual or potential health problems" (American Nurses' Association, 1980, p. 9). The battering of women is a serious health problem. In order to diagnose and treat the responses of women to battering, the knowledge base about these responses needs to be expanded. Theoretical formulations used to explain the behavior of battered women either have not been tested adequately or have not been supported fully by research.

It is estimated that at least 1.8 million women are seriously beaten by their husbands each year in the United States (Straus, Gelles, & Steinmetz, 1980). This figure does not take into account the women battered by boyfriends and former husbands and lovers. For the purposes of this study, the battering of female partners is considered to be: a process within which an adult woman has been the recipient of perceived intentional acts of physical violence resulting in physical pain or injury, at least twice during the previous year, by an adult man with whom she has or had an ongoing sexually intimate relationship. The women who are battered are

highly at risk to become homicide victims or perpetrators as well as frequently incurring serious injury and other health problems (Campbell, 1981).

Reports of physical problems resulting from battering ranged from bruises and broken bones to head injuries, internal injuries and miscarriages following beatings (Dobash & Dobash, 1979; Drake 1982). In addition, battered women frequently complained of stress related physical symptoms, experienced sexual abuse in addition to the physical beatings, and were subject to severe psychological abuse (Campbell & Humphreys, 1984). Abused women reported experiencing a variety of emotional problems, such as severe depression (Rounsaville, 1978), and low self-esteem (Walker, 1979).

Nurses see battered women in a variety of health care settings and can implement useful interventions. In order to provide such interventions, there is a need for nursing research upon which to base nursing care. Both appropriate theory concerning the responses of battered women and nursing interventions based on theory and tested by research are needed. Some preliminary work has been conducted toward these ends (e.g. Drake, 1982; Lichtenstein, 1981; Mahon, 1981), but the nursing research to date has used extremely small samples, inadequate theoretical frameworks, and is fragmented.

Research which builds on existing knowledge from nursing and other disciplines and establishes a theoretical base synthesized from nursing and other discipline theory is a critical need.

The research which has provided the basis for existing interventions with battered women generally has emanated from psychology. The research has been conducted primarily as a "search for differences," an approach aimed at discovering how battered women differ from the norm (Wardell, Gillespie & Leffler, 1983). In actuality, the findings consistently demonstrated neither significant differences nor personality problems (e.g. Arndt, 1981; Mahon, 1981; Star, 1980). A major limitation of the majority of research on battered women was its reliance on abused women residing in shelters or who are patients in the mental health system as subjects.

Although some battered women undoubtedly can be diagnosed as having identifiable mental illness, there are also indications from research that the physical, behavioral and emotional responses to battering in the majority of women may be a normative response process to stress and perceived loss similar to that experienced by women contemplating divorce. The purpose of this exploratory study is to compare (a) the responses of

battered women with those of other women considering ending marital or other significant intimate relationships, and (b) the relative applicability of two theoretical models in explaining these responses: a model of learned helplessness, and a normative response model of grief. The two models suggest very different kinds of nursing interventions which subsequently could be designed and tested. The results of this study would provide empirical support for the development of the nursing interventions.

The Theoretical Models

Guttentag and Salasin (1976) conceptualized depression in women as resulting from powerlessness and stress. Silverman (1981) has built upon this framework by adding loss and grief concepts and applying the model to battered women. Although this model has not been tested empirically, the literature concerning attachment and loss supports the applicability of the model to battered women as well as other women contemplating the dissolution of a relationship.

Attachment and Loss Theory

Theory and research concerning attachment, loss, and grief has been used as the basis for examination of the responses of adult humans when they were faced with the death or impending death of a spouse (Bowlby, 1980;

Glick, Weiss & Parkes, 1974; Hoagland, 1983; Lindemann, 1979; Marris, 1974). Research such as that by Marris (1974), Parkes (1972), and Weiss (1975) supported the contention that a similar grief reaction was elicited with similar losses, including the loss or impending loss of a spouse by divorce or separation. This body of knowledge was applied and expanded concerning divorced spouses (e.g. Kitson, 1982; Spanier & Casto, 1979; Wallerstein & Kelley, 1980) and wives of alcoholics (e.g. Jackson, 1954; O'Farrell, Harrison & Cutter, 1981; Paolino, McCrady, & Kogan, 1978).

There appears to be many conceptual similarities between a battered woman forced to consider the possible dissolution of the relationship with the person to whom she is the most attached and the wife of an alcoholic or any other spouse who is facing termination of the relationship. The most common reason women have given for staying in a battering relationship in many studies is that she still loves the man, an obvious tie to attachment theory. The frequently noted depression of battered women (e.g. Rosewater, 1984; Rounsaville, 1978; Walker, 1984) may be a reaction to the potential or anticipated loss of the relationship, similar to anticipatory grief.

Research on divorced spouses indicated that the majority felt attachment to their ex-spouses even when it was recognized that the marriage needed to be ended (Kitson, 1982; Weiss, 1975). These studies also suggested that once firm attachment was established, it was "extraordinarily resistive to dissipation" (Weiss, 1975, p. 45). The amount of time required to complete the process of grieving varied in the literature from six months to four years and the determinants of variations in time were not firmly identified. A similar long, involved process, which may involve leaving temporarily and returning, has been frequently critisized as pathological reluctance to finally separate from harmful spouses in battered women (Giles-Sims, 1983; Strube & Barbour, 1983). However, it can be seen as comparable to the expected and normal process of any marriage dissolution which also includes attempted reconciliations (Weiss, 1975).

Whether actual or threatened marital dissolution and the subsequent grief response was instigated by death, divorce or alcoholism, similar psychological, behavioral and physical effects were noted. Anxiety, depression, hostility, problem solving difficulties, loss of identity, self esteem and roles, health problems, psychosomatic symptoms and behavioral

expressions of these reactions were consistently reported in the literature concerning all of these groups (e.g. Berman & Turk, 1981; Glick et. al., 1974; Kohen, 1981; Bloom, White, & Asher, 1979; Lindemann, 1979; Paolino et. al., 1978; Parkes & Brown, 1972). These responses were generally considered to be situational in origin rather than existing previously. Many of the same responses were described in studies of battered women (Claerhout, Elder & Janes, 1982; Hilberman & Mahon, 1981; Munson, 1977; Rosewater, 1984; Rounsaville, 1978; Walker, 1979). Undoubtedly there are responses which relate solely to the experience of being battered, but research has not yet differentiated them from those which are common in other experiences of loss.

Whether or not permanent separation from the abuser has been decided on by a battered woman, she may feel loss in a variety of other aspects of her life. Theoretical explanations for the responses to victimization of any kind postulate the experience as causing a severe loss in terms of the expectations held about the world. Janoff-Bulman and Frieze (1983) conceptualized these expectations in terms of three assumptions: "1) the belief in personal invulnerability; 2) the perception of the world as meaningful and

comprehensible; and 3) the view of ourselves in a positive light" (p.3). Thus, a grief response could be precipitated in women when the experience of battering caused a similar loss in basic assumptions. Victims of various forms of violence and natural disasters showed common emotional reactions, similar to those of battered women (Frank & Stewart, 1983; Janoff-Bulman & Frieze, 1983).

Loss to self-esteem from victimization would be expected to increase if body image damage was involved. Such body image damage would be predicted to occur as a result of disfiguring physical injury, sexual abuse and/or disparaging remarks about the woman's lack of attractiveness. All of these frequently accompany battering (Dobash & Dobash, 1979; Russell, 1982; Walker, 1979, 1984). In addition, the blame battered women frequently incur from family and "helping" agencies for not ending the abuse could be damaging to self-esteem.

An additional area of loss related to self-esteem would be expected to be that of identity. Researchers such as Bloom and his associates (1979), Hancock (1980), and Parkes (1972) specified loss of identity as one of the major causes of distress after marital dissolution or the death of a spouse. Similarly, Silverman (1981) maintained that loss of identity as a good wife and/or

woman successful in intimate relationships was the impetus for a grief reaction in battered women regardless of whether she was planning to leave her partner. The importance of interpersonal relationships in identity formation in women supports the idea that even a perceived loss of competence in that sphere or perceived loss of the idealized marriage would precipitate a grieving response (Boynton, 1979; Gilligan, 1982; Hodgson & Fischer, 1981; Rubin, 1976).

In summary, the theory and research in the area of attachment, loss and grief demonstrated research findings and conceptual similarities with the research on battered women. Victimization research also indicated concepts of loss which could be applied to these women. The application of attachment and loss theory to battered women described by Silverman (1981) does not take into account all the aspects of the grief response indicated by the other literature. However, it does provide a model which is measurable in a cross-sectional design and which may indicate that further research into the responses to battering as a normative reaction to loss is indicated.

The Grief Model

As previously noted, the Silverman (1981) model of grief in battered women included the Guttentag and

Salasin (1976) conceptualization of depression in women resulting from powerlessness and stress. One contribution to the stress of a foundering relationship would be the amount of conflict involved. The stress would be expected to increase with increased frequency and severity of conflict. Two other causes of stress (stressors) which have been indicated by prior research are poverty and number of children (Pagelow, 1981; Straus et. al., 1980).

Powerlessness can be considered as a combination of a lack of agency beliefs and a lack of control beliefs as described by Skinner and Connell (1985). They describe agency beliefs as "generalized expectations" that the person has access to the conditions needed to produce certain outcomes (Skinner & Connell, p. 22). This is conceptually comparable to Orem's (1984) concept of self-care agency, or the perceived capability to care for one's own health. Orem (1984) describes health in a holistic sense, including physical, emotional, and social aspects, so that self-care agency would apply in this generalized sense.

Control beliefs are conceptualized by Skinner and Connell (1985) as perceived ability to influence outcomes. In the grieving model as applied to dissolving relationships, control beliefs specific to

the relationship will be measured. Thus, powerlessness would be reflected in low self-care agency and perceived inability to control the battering according to this model.

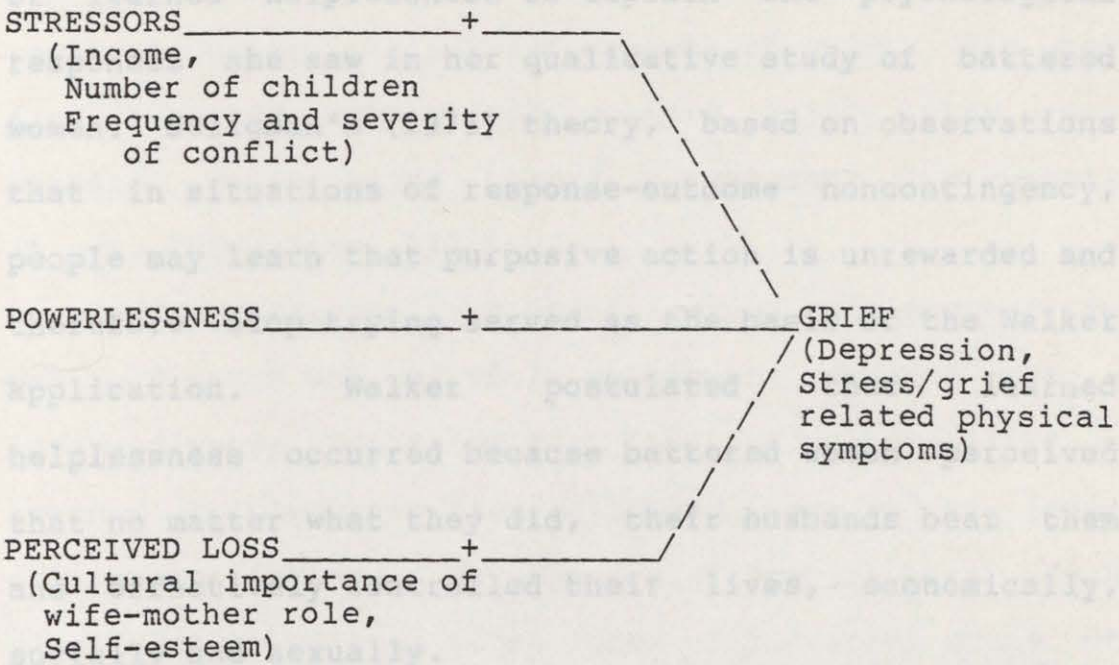
As well as contemplated loss of the woman's major attachment figure, the grief model postulates loss in several other areas. Perceived loss would be expected in terms of the culturally ascribed importance of the wife and mother role in the individual woman's culture. Loss of self-esteem is described as an important aspect of the grieving response in the literature (Bloom et. al., 1979; Hancock, 1980; Parkes, 1972) and would be expected to be increased by body image damage from sexual abuse and severe physical injury in the battering relationship.

The grief response in this model would be primarily shown by depression accompanied by a pattern of physical symptoms more characteristic of stress and grief than cognitively based depression. Thus, the outcome variable will be distinctive from that of the learned helplessness model. The model is presented in schematic representation in Figure 1 (p. 12).

The grief model would indicate nursing interventions of grief therapy, stress management, and measures to increase self-care agency and self-esteem as

Figure 1

The Grief Model



Note UPPER CASE: Underlying constructs
Lower case: Measured variables

well as working with the woman to decrease the frequency and severity of battering. The depression and physical symptoms, conceptualized as normative responses to a loss and stressful situation, would be expected to respond to such interventions without a need for specific therapy for depression. These kinds of interventions are different from those indicated by a model of learned helplessness.

Learned Helplessness and Attribution Theory

Lenore Walker (1979) used the theoretical framework of learned helplessness to explain the psychological responses she saw in her qualitative study of battered women. Seligman's (1975) theory, based on observations that in situations of response-outcome noncontingency, people may learn that purposive action is unrewarded and therefore stop trying served as the basis of the Walker application. Walker postulated that learned helplessness occurred because battered women perceived that no matter what they did, their husbands beat them and effectively controlled their lives, economically, socially and sexually.

Learned helplessness has been conceptualized as involving three major deficits: motivational, cognitive (difficulties in problem solving) and affective (depression) (Abramson, Seligman & Teasdale, 1978). As applied to battered women, the model has received some independent support. First, Claerhout, Elder and Janes (1982) found a small sample of abused women to generate significantly less total alternatives and effective alternatives than an appropriate control group. In addition, samples of mainly psychiatrically referred battered women (e.g. Hilberman & Munson, 1977; Rounsaville, 1978) have been found to exhibit more

depression and apathy than normal groups of women. However, these researchers used clinical impressions of depression rather than direct measurement. Other research using the related concept of guilt, did not find battered women feeling more guilty than not battered women using normed measurement instruments (Arndt, 1984; Star, 1978).

The Walker application of learned helplessness to battered women was tested in subsequent research using a large, diverse sample (Walker, 1983). A vulnerability to learned helplessness from childhood index and an index of noncontingency in the relationship were both significantly related to an index of a current state of learned helplessness in path analysis. Also supportive of the models was the finding that the battered women who were employed were considerably less depressed that those not employed. This result suggested that employed women would perceive themselves to have more control in their lives, thereby experiencing less noncontingency.

Findings which were interpreted by Walker (1984) as supportive of the model were that the battered women scored significantly higher than "normal" women on measures of powerful others and chance controlling outcomes. Somewhat contradictory was that they also scored significantly higher on the measure of internal

locus of control. External locus of control was postulated as similar to lack of controllability in the early learned helplessness model; however, later research has suggested that the relationship between helplessness and external locus of control is orthogonal (Abramson, Garber & Seligman, 1980). The relationship depends on the universal versus personal and external versus internal attributions, which were not measured by Walker.

Other aspects of the Walker (1984) application of learned helplessness were not supported in her research. A majority of the battered women scored higher than a normative group on measures of self-esteem and attitudes toward women. These measures also failed to differentiate women still in the relationship from those who had left. In addition, the self-esteem measure and the depression measure were moderately positively correlated, the opposite of what would be expected by the reformulated learned helplessness theory.

In addition, although the battered women as a group were at higher risk for depression than the norms on the Radloff CES-D scale, the abused women who had left the relationship scored higher on the depression measure than those still with the batterer. This finding was actually more consistent with a grief model than a

learned helplessness framework, which assumed there would be more noncontingency within the battering relationship.

Problems in Walker's model may have included the use of leaving the relationship as the dependent variable, assuming that not leaving was an indicator of learned helplessness. Contrasting research suggested an alternative explanation. The women might have been taking steps within the relationship to change the abuse or might have left and returned in a purposeful pattern, contrary to the apathetic, cognitively hindered attributes of learned helplessness (Bowker, 1984; Dobash & Dobash, 1979; Labell, 1979; Okun, 1983; Pagelow, 1981). Other difficulties may have included a failure to distinguish among domains of control (Skinner & Connell, in press) and the lack of measurement of attributions.

The reformulated view of learned helplessness suggested that depressed women made more internal, personal and stable attributions for failure (Abramson et. al., 1978). The aspect of self-blame was operationalized in research by Frieze (1979) as attributions of blame for the battering. The study supported the prediction that battered women who made external attributions would try more of a variety of

solutions but did not support other elements of the attributional model.

Miller and Porter (1983), in a descriptive study, indicated that self-blame for tolerance of the abuse was as salient (if not more so) for battered women than blame for causing the violence and probably inversely related. Their research report suggested that attributions concerning the battered women's evaluation of their character traits as positive or negative was a more predictive aspect of self-blame than distinguishing between characterological and behavioral self-blame as an indicator of stable versus unstable attributions. The authors also suggested that changes in attributions over time could be addressed by distinguishing between blaming the battering situation on the "current self" versus a "former self" (Miller & Porter, 1983).

The Learned Helplessness Model

The model of learned helplessness explored in this research proposes that the perception of lack of control in the relationship would constitute noncontingency specific to that domain. This perception of lack of control is considered conceptually equivalent to a belief in one's own inability to influence outcomes in the domain of the relationship.

The self-blame attributions of negative personality

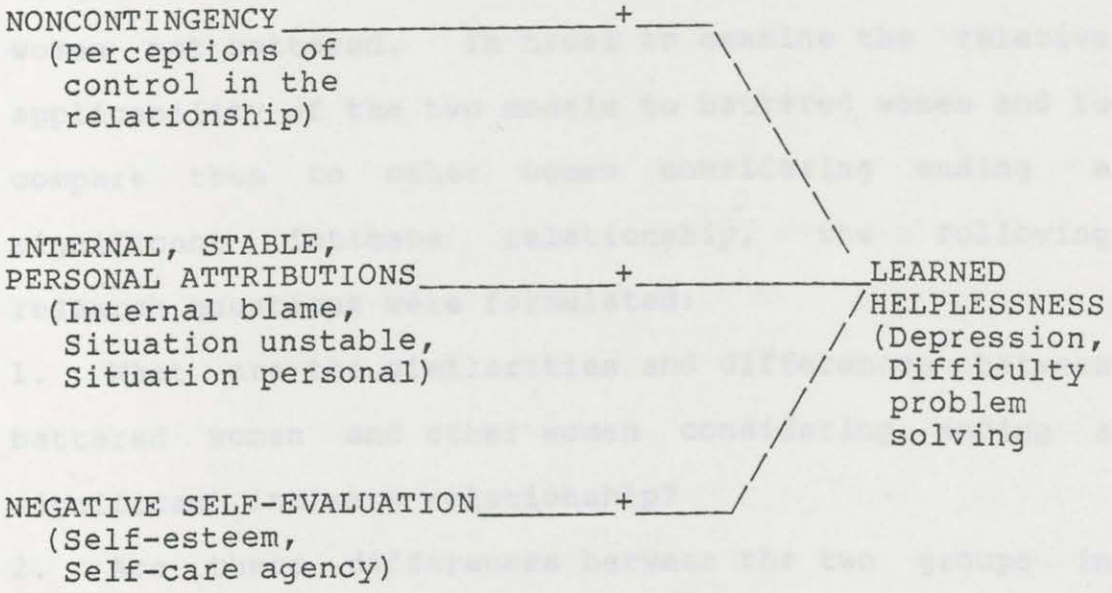
characteristic and current (versus former) self were expected to be examples of the internal attributions seen as predictive of learned helplessness (Miller and Porter, 1983). The Miller and Porter research was also built upon in terms of ascribing self-blame attributions in cases of either blame for causing the conflict or blame for continuation of the problematic relationship. If the conflict was seen as unchangeable, this was considered stable attributions. If the woman perceived the situation as unique to herself, personal helplessness was ascribed.

As well as perceived lack of control, a generalized low evaluation of the self (low self-esteem and low self-care agency) is predicted to increase learned helplessness (Abramson et. al., 1978). Thus the three independent variables for the model are: (a) perceptions of control specific to the relationship; (b) attributions; and (c) generalized self-evaluation.

The outcome variable of learned helplessness is indicated by two indices, depression and difficulties in problem solving related to the relationship problems. The depression is expected to include a pattern of physical symptoms characteristic of the depressive syndrome rather than stress and/or grief. A schematic representation of the model is presented as Figure 2.

Figure 2

The Learned Helplessness Model



Note UPPER CASE: Underlying constructs
Lower case: Measured variables

Nursing interventions suggested by data supporting this model would focus on changing the woman's attributions and perceptions of control. Specific therapy for depression would also be consistent with a learned helplessness perspective.

Summary and Research Questions

The responses of women to battering is a significant health problem amenable to nursing interventions. Depression frequently has been noted as

one of the responses to battering and has been explained by two theoretical models, grief and learned helplessness. Depression also has been noted as a frequent response to impending marital dissolution in women not battered. In order to examine the relative applicability of the two models to battered women and to compare them to other women considering ending a significant intimate relationship, the following research questions were formulated:

1. What are the similarities and differences between battered women and other women considering ending a significant intimate relationship?
2. Are there differences between the two groups in either outcomes or relative importance of variables in grief and learned helplessness models?
3. Within the battered women group, what is the relative applicability of the grief and learned helplessness models?

CHAPTER II

LITERATURE REVIEW

The purpose of the literature review is to present an overview of the state of knowledge about battering, with a major focus on research concerning the responses of the women. A brief description of the evolution of research in the area is first presented. A general overview of methodological problems concerning all of the battering research is included in this section.

The area which has been studied the most extensively, causation research, is briefly described. More germane to nursing care of battered women is the practice research literature from nursing and other disciplines. The latter is presented in detail and includes research describing the responses of battered women to the abuse and the theoretical frameworks from which this research is derived. Pertinent research findings from other areas which relate to the responses of battered women are included as they apply.

State of Research

The earliest research on battering was conducted in terms of psychiatric case studies of what was presumed to be a relatively rare phenomenon. Both the batterer and abused woman were presumed to have severe psychiatric problems which were causing the violence

(Snell, Rosenwald, & Robey, 1964; Faulk, 1974). The Freudian assumption of masochism in all women was used to explain the woman's part in the conflict. Partly in response to growing feminist awareness of the widespread nature of assault against wives and reaction against ideas of female masochism (Schechter, 1982), the 1970's saw a beginning of other kinds of research on battering. The first studies were appropriately concerned with documenting incidence so that wife abuse could receive public attention. The landmark research of O'Brien (1971) examined divorce application records and found violence spontaneously mentioned in 16.7% of the cases. The attempts at incidence documentation were culminated in the Straus, Gelles and Steinmetz (1980) random sample survey of couples demonstrating that one in four couples had ever used violence against each other and 4 of every 100 wives were seriously abused during the prior year.

Methodology

The research methodology reflected an appropriate progression beginning with early problem description. Most of the early studies of battering of female partners were descriptive studies of women known to be battered using their reports of the circumstances surrounding the abuse. Generally, the samples were drawn from women staying in wife abuse shelters, and a

variety of questionnaires and definitions of battering were used. The major intent of these studies were to inform the scientific world and general public that wife abuse was a widespread phenomenon and to give some indications of the characteristics of the abuser and the battered woman. They generally did not include a specific theoretical model. Studies such as those by Carlson (1977) and Gayford (1975, 1979) exemplified this research approach.

Attempts at determination of causation dominated the research efforts in the 1970's, once battering was established as a serious social problem. Due to the sensitivity of the problem and the newness of the area of inquiry, there were methodological problems in terms of sampling, design, conclusions drawn about causation from essentially correlational data analysis, and operationalization and measurement. These same methodological weaknesses influenced the findings in the research on battering and continue to some degree in more recent research; therefore, they will be described in some detail here.

Sampling

The limitations in sampling have continued to be a problem. There was one major national random sample, and two statewide random samples, but the rest of the

studies of battering of women started with known victims or perpetrators. The existing research also generally concentrated on the viewpoint of battered women to elicit the causes of abuse. There were some exceptions to this pattern, including studies of: (a) batterers (Faulk, 1974; Coleman, 1980), (b) divorcing couples (O'Brien, 1971), (c) undergraduate students asked about violence between their parents (Allen & Straus, 1980), (d) police records (Berk, Berk, Loseke & Rauma, 1983), and (e) violent couples (Carroll, 1977; Gelles, 1972). However, the majority of studies used samples of women from wife abuse shelters or in treatment in a mental health facility (e.g. Rounsaville, 1978; Pfouts, 1978).

This sampling pattern has resulted in an overrepresentation of women from lower socioeconomic classes in most research. One study (Prescott & Letko, 1977) used women answering an advertisement in a national magazine (MS) which resulted in a more middle class sample than most. However, the pattern of extrapolating evidence about the causes of marital violence from the woman's viewpoint only, and using samples unrepresentative of the whole population of battered women, generally has prevailed.

Design

The research using some form of convenience

sampling usually failed to use any form of comparison or control group. Gelles (1972) addressed this issue by randomly selecting neighboring families of violent families to compare on important variables. This kind of matching may have eliminated roughly such factors as socioeconomic class or culture, but there was no guarantee that other variables did not influence outcome. Both Carroll (1977) and Star (1978) used control groups, but both the battering groups and the controls were either in treatment or in a shelter, thereby limiting generalizability. A few studies used appropriate comparison groups (e.g. Appleton, 1980; Hornung, McCullough & Sugimoto, 1981; Peterson, 1980) by randomly sampling some existing group of women, determining those who were battered, and comparing these women with the remainder.

Essentially, some form of post hoc survey, using a combination of questionnaire, interview and/or psychometric measurement, was the design used in research on battering. Longitudinal research with couples who were identified as at risk from the current research findings was not conducted. Only four existing relevant longitudinal research studies were found in the literature. Suzanne Steinmetz (1977) studied methods of resolving conflicts in normal

families over time but did not specifically address the battering of women. The three remaining studies used follow-up interviews of women 6 to 18 months after original data collection (Giles-Sims, 1983; Snyder & Fruchtman, 1981; and Strube & Barbour, 1983). These research efforts were concerned primarily with the aftermath of battering rather than causation per se, but this kind of longitudinal research is a step toward the kind of study needed to establish causation. Theory building and theory testing research also are obvious needs to begin to establish causation. This kind of research has begun, but is as yet limited.

Operationalization

Another area of concern, especially in terms of comparison of findings, was the operationalization of variables. Major discrepancies existed in operational definitions of battering. The definitions varied on parameters of relationship of the partners, intentionality, stipulation of injury, inclusion of sexual abuse and psychological abuse, and/or repetition over time.

Some studies restricted the phenomenon to married couples (e.g. Parker & Schumacher, 1977; O' Brien, 1971); others widened the relationship to cohabiting couples (e.g. Dobash & Dobash, 1979) or any "intimate"

(Rounsaville, 1978) relationship. Recent findings of battering in dating situations raised the issue of whether this phenomenon should be considered as a form of battering of female partners (Makepiece, 1981).

Intent was included in some definitions. Several contained the word deliberate, but since the battered woman was usually the source of data, the intent of the spouse was difficult to ascertain with confidence. However, intention to harm or cause pain seems a necessary ingredient in order to preclude accidental injury being included in abuse research.

Another major differentiation found among the common operationalizations of battering was the extent of injury, if any, stipulated. Dobash and Dobash (1979) indicated that the beatings had to be "severe" but did not operationalize severity. Coleman (1980) divided "conjugal violence" into three categories (mild, moderate and severe) according to physical injuries incurred and number of physical fights per year. Other researchers (e.g. Hornung, McCullough & Sugimoto, 1981) used a similar continuum, but added psychological abuse at the less severe end. Even though emotional abuse can occur without physical injury, it was not demonstrated that psychological abuse is qualitatively a less severe form of physical battering. Determination

of psychological abuse except by self-report remained unresolved. It was well established that perceived emotional abuse frequently accompanied physical aggression, so that it was problematic to establish a category of emotional abuse at one end of a continuum.

The same sort of definitional imprecision accompanied sexual abuse. Research recently indicated that battered women frequently were abused sexually; however, women forced into sex in a marital relationship were not always physically abused. (Russell, 1982; Finkelhor & Yllo, 1982). Sexual abuse, as a variable, also was operationalized inadequately, especially as to whether or not physical injury was a necessary condition. A frequent solution of researchers was to include any woman who perceived herself to be battered (physically or psychologically) and/or sexually abused in the research sample (e.g. Prescott & Letko, 1977).

The final discrepancy in definition in the literature concerned repetition. Rounsaville (1978) indicated that a single incident of physical abuse constituted battering. Dobash and Dobash (1979) stated that the beatings must be repeated but did not stipulate how often. In contrast, Parker and Schumacher (1977) included the criteria of three incidents of battering. Most definitions did not include a time period within

which the stipulated number of beatings must occur. The comparability of abuse situations where beatings were separated by ten or more years with those where battering was occurring daily was suspect. However, the studies using the Conflict Tactics Scales, (e.g. Straus, Gelles & Steinmetz, 1980), avoided some of the operationalization problems.

Measurement

The only measurement instrument used in family violence which was developed according to established psychometric techniques is the Conflict Tactics Scale (CTS) developed by Murray Straus and his associates (1979). The instrument seeks to measure the modes of dealing with conflict within a family, ranging on a continuum from discussing the issue to using a knife or gun. There are 18 items, divided into three major categories: reasoning, verbal aggression and physical aggression. The respondent is asked how often she or he used each kind of conflict resolution during the last year and how often her or his spouse used that mode. The CTS thereby measures frequency as well as intensity and extent of violence. The instrument, in slightly modified form, also is used to determine violence against children and between siblings.

The Conflict Tactics Scale addressed the problem of

operationalization of abuse by designating a level of severity required to fit that category. It also eliminated the problems of repetition, since a time parameter (one year) was established. The concern of who could be considered the victim of spouse abuse was addressed by considering any cohabiting pair who perceived themselves as a couple to be such. However, significant problems with reliability and validity have not been resolved. Szinovacz (1983) reported little agreement between members of a dyad on how much violence occurred. The CTS was demonstrated to be insensitive to self defense actions, degree of injury and who committed the initial act of violence (Dobash & Dobash, 1981).

Several research studies used the scale since its introduction, and these tended to be the most sophisticated studies in regards to methodology. The sampling in research using the CTS was generally more representative, and the designs usually had appropriate control groups or used norms for the CTS. Data analysis in these studies was sophisticated, operationalization of variables comparable, and theory building about causation and continuation attempted (e.g. Kalmuss & Straus, 1982; Hornung, McCullough, & Sugimoto, 1981).

Causation Research

The possible causative factors most frequently

associated with the battering of female partners in the literature can be grouped under the headings: individual psychopathology or psychological factors (including alcohol abuse), history of abuse in childhood, lack of resources (including status inconsistency), and stress. These clusters of factors are described in the next section of the paper. Each of the causative factors is examined along with research evidence supporting and challenging their role. In addition two major theoretical models, proposing relationships between variables and combining causative factors, are presented. These two major models are the general systems theory of Straus (1973, 1974, 1978), and the feminist analysis of Dobash and Dobash (1979).

Individual Psychology

In contrast to the earliest psychiatric studies, the main body of research from 1970 forward concluded that wife batterers were no more likely to be mentally ill than the rest of the population and found no evidence of masochism in battered women (Rounsaville, 1978; Dobash & Dobash, 1979; Walker, 1979). Alcohol, however, has been consistently noted in connection with wife abuse. In the major descriptive studies of battered women, the percentages of batterers abusing alcohol varied from 25 to 85 percent (Carlson, 1977;

Dobash & Dobash, 1979; Gayford, 1975; Hilberman & Munson, 1978; Walker, 1979). Eberle (1982) reported a variable amount of alcohol use by batterers over four violent incidents, rather than the consistent pattern assumed previously. Earlier studies indicated only occasional alcohol use by the women, but they relied on reports from the women for their data. Recently completed research by Davies (1984), using the abuser as respondent, suggested that use of alcohol by both partners was higher than would be expected in a normal population.

There was indication from at least three studies that more serious injuries to the woman were associated with alcohol intoxication by the man (Coleman, 1977; Eberle, 1982; Snyder & Fruchtman, 1981). However, the association found in the multivariate analysis of a large sample in the Eberle (1982) study was not as strong as had been expected. In addition, Davies (1984) found less severe injuries with intoxication in her small sample.

Berk, Berk, Loseke, and Rauma (1983) found that men with a history of problem drinking were more likely to seriously injure their wives. Yet alcohol use on the part of either partner at the actual time of the violent incident was NOT related to severity of that incident.

The authors concluded that any causative role attributed directly to alcohol was "probably spurious" (p. 210). Studies indicated that the majority of known alcoholics did not beat their wives, and that the majority of wife abusers were not diagnosed alcoholics (Scott, 1974; Dobash & Dobash, 1979). Data from both Gelles (1972) and Eberle (1982) suggested that drinking did not necessarily lead to violence, and the men were not always drunk when violent.

However, Byles (1978), in a well designed study, found that violence was more than twice as likely to occur in families with alcohol problems than in those without. Alcohol abuse as a risk factor for battering perhaps is best considered as part of a cluster of psychological factors in men predisposing them to be abusive rather than as a separate causative factor.

Taking into consideration the methodological weaknesses of the majority of descriptive studies, a cluster of characteristics appeared consistently. The men generally were described as possessive, extremely jealous, controlling, and staunch supporters of the traditional male role in the family (Dobash & Dobash, 1979; Hilberman & Munson, 1978; Prescott & Letko, 1977; Rounsaville, 1978; Walker, 1979). Even the one recent study using batterers as respondents, reported the men

describing themselves in similar terms (Coleman, 1980).

Whether or not batterers tended to be violent in other contexts besides the intimate relationship was a matter of dispute in research. The majority (70%) of the men in the Coleman study (1980) reported no violence toward people other than their partners. However, these men were voluntarily in treatment for marital problems, and more violent batterers were noted as generally avoiding therapy (Pagelow, 1981).

The evidence from research using the wives as informants generally indicated that close to or slightly over half of the batterers were violent outside of the relationship and/or had been arrested or imprisoned because of violence (e.g. Appleton, 1980; Fagan, Stewart, and Hansen, 1983; Labell, 1979; Rounsaville, 1978; Gayford, 1975). The Appleton (1980) study used an appropriate control group, and batterers were significantly more likely to have been arrested for nonvehicular crimes than nonabusers. Fagan and his associates (1983) demonstrated a strong relationship between severity of violence toward partners and frequency of involvement in extradomestic violence. Lenore Walker (1983) found that a past history of violent behavior in the batterer, including childhood violence toward animals and people as well as adult

violence, was the best predictor of woman battering. Therefore, the most convincing evidence supported the contention that at least the most violent batterers also were likely to be violent outside of the home according to the reports of their wives.

Other researchers emphasized the interaction of psychological characteristics of both partners. Examples include conflicts over dependency and autonomy (Rounsaville, 1978) and increasing power of women interacting with unconscious fear of women in men (Gullattee, 1981). The evidence to support this approach, however, was mainly from case study (Gullattee, 1981) or interpretation of behavioral evidence according to psychiatric theory (Rounsaville, 1978). Both are difficult to replicate.

Some psychological approaches emphasized the effects of childhood violence on the mature psyche. However, the evidence pointing to linkages between violence in family of origin and conjugal violence were explained more prevalently by social learning theory.

Violence in Childhood

In applying social learning theory to family violence, Bandura (1973) stated that children exposed to physical aggression learned this behavior through modeling. Straus, Gelles and Steinmetz (1980)

postulated that children learned to use violence to resolve conflicts by observing parental violence, experiencing physical punishment, and watching violence on television. In almost all of the descriptive studies of battered women there were a high percentage of abusive men who experienced either child abuse and/or witnessed spouse abuse. The longitudinal study of Steinmetz (1977) showed consistency in methods of conflict resolution in families over three generations. Research conducted by Carroll (1977) used a control group of nonviolent individuals. His results showed a significantly higher incidence of physical punishment experienced in the childhood of those violent toward a spouse than those who were not.

Some authors also linked learning theory to the woman's role as victim. The prediction was that the more frequently a woman was hit by her parents, the more vulnerable she was to becoming the victim of marital abuse, having learned to be a victim by prior conditioning. The best designed study which supported this interpretation was Peterson's (1980) random sample of women in the state of Maryland. He found abused women to be significantly more likely to have come from homes where they observed or experienced violence than those who were not abused. However, the majority of

findings did not support the application of social learning theory to battered women nearly as strongly as the learning influence on male behavior.

The majority of descriptive studies consistently indicated a significantly lower percentage of battered women than spouses beaten or witnessing abuse as children (Dobash & Dobash, 1979; Gayford, 1979; Pagelow, 1981; Roy, 1977; Snyder & Fruchtman, 1981; Walker, 1979). Research by both Carroll (1977) and Star (1978) was reported as supporting the contention that battered women were LESS likely to have experienced or seen violence in their childhoods than control groups. The related study of Ulbrich and Huber (1981) using a large national probability sample found parental violence significantly related to men's but not women's approval of violence toward women.

Thus, the preponderance of evidence supported social learning theory as explanatory for the behavior of abusive men, but did not support childhood exposure to violence as a risk factor for women. However, the association of childhood violence and battering of female partners was generally fairly modest, even for men (Gelles, 1980). The majority of abusive men in most samples were neither victims of child abuse nor witnesses of violence between their parents.

Lack of Resources

The first theoretical approach applied explicitly to violence in the family was Goode's (1971) resource theory. He viewed the family as a power system like all other social units, which "all rest to some degree on force and its threat" to operate (Goode, 1971, p. 624). In the marriage relationship, battering behavior was predicted when persuasive mechanisms failed to maintain authority or the male felt his dominance was threatened by factors such as status inconsistency between partners or unemployment.

Status inconsistency was usually operationalized as substantial educational and occupational attainment discrepancies opposite to cultural norms (the wife having the higher status on one or both parameters). Several studies (Gelles 1974; McCullough & Sugimoto, 1981; O'Brien, 1971; Rounsaville, 1978) recorded such a status differential between batterers and their partners. However, the sample described by Pagelow (1981) did not show this pattern. In addition, Berk, Berk, Loseke and Rauma (1983) found that when the status differential was operationalized as racial differences, more severe battering was associated with the male belonging to a higher status racial group (Caucasian).

A secondary analysis of data from the Kentucky

statewide random sample (McCullough & Sugimoto, 1981) sample was conducted by Brown (1980). His research suggested that status inconsistency between partners was predictive only when the man exibited certain characteristics, such as compulsive masculinity and low socialization for egalitarian marriage. This research may explain some of the previously noted inconsistencies in findings.

Other evidence used to support that lack of resources was a causative factor in abuse of female partners was the prevalence of reported wife abuse in poor families and the frequently reported unemployment of batterers. Most of the data regarding these sociodemographic variables was gathered in the early uncontrolled descriptive studies of batterers, and there was some data which were contradictory (e.g. Flynn, 1977). Much of the literature pointed out that the sampling bias toward poor victims influenced the data on these variables.

However, the Straus, Gelles and Steinmetz (1980) national random sample found that husband unemployment or part time employment and family income below $6,000 were important predictors of violence between spouses. A random sample of women in the state of Maryland also supported these connections (Peterson, 1980). However,

the Schulman (1979) study of a representative sample of battered women in Kentucky found a far lower difference in rates of wife abuse between lower and middle/upper class couples than did the other more generalizable studies. In addition, the less generalizable control group research conducted by Appleton (1980) showed a nonsignificant difference in unemployment between batterers and other spouses.

Additional generalizable studies are needed before it can be said with any assurance that poverty is strongly predictive of female battering. Whatever connection exists between batterer unemployment and/or low income with battering of female partners, the association can be explained within a stress model as well as within the lack of resources framework.

Stress

Several researchers interpreted their findings as supportive of the hypothesis that stress increased the chances of wife abuse (Carlson, 1977; Gayford, 1979; Prescott & Letko, 1977; Straus, Steinmetz & Gelles, 1980). In addition to the just described factors of unemployment and poverty, variables associated with wife abuse such as pregnancy (Gelles, 1975), and abuser dissatisfaction with the job (O'Brien, 1971) were included as part of a stress operationalization.

However, it is important to point out that almost all of the research collected data on factors which the researcher assumed to be stressful; perceived stress was not measured. In addition, the previously noted lower income sample bias also may have affected the stress association in descriptive studies.

The most persuasive study was again that of Straus, Gelles and Steinmetz (1980). As well as the factors discussed in the previous section, this research revealed significant correlations between a family stress scale, number of children in the family and being non-white, and level of spousal violence. In addition, data analysis showed the stressors were predictive of conjugal violence when considered cumulatively. However, the uncontrolled, small sample study of Giles-Sims (1983) found evidence that although stressful events seemed important as a precipitating factor for the first incidence of battering, the importance of stress decreased over time. This finding needs replication but may be an important caveat to the stress relationship.

The finding that social isolation is associated with severe conjugal violence (Gelles, 1974) has not been extensively studied but may be related to the stress relationship. Social support is considered to be a mitigating factor in the relationship between stress

and other unhealthy outcomes (Pearlin, Lieberman, Menaghan, & Mullan, 1981). It is not known what relationship lack of social support represented by social isolation plays in the battering of female partners. It may be that the social isolation is an outcome of battering, that families keep themselves isolated in order to prevent outside interference.

Several descriptive studies (e.g. Walker, 1979) have reported that battered women perceived their husbands as keeping them isolated, a phenomenon thought to be related to the man's jealousy. Conversely, the lack of social support may be a factor which occurs previous to abuse. In this model, social isolation could be considered part of the stress as causation theory. A lack of social support would be one of the factors which makes a family under stress more likely to become abusive. Additional research obviously is needed to explicate these relationships.

Theoretical Models of Causation

Systems Model

Straus (1973; 1976) conceptualized the family as a goal directed social system with violence as a possible system product. His model was multifactorial in nature and sought to explain all of family violence. It emphasized societal tolerance for violence, the

influence of learning violence in childhood through exposure to physical aggression, and the effects of stress on families. The model proposed negative and positive feedback loops which discouraged or facilitated family violence.

Various aspects of the model were tested by research and received support in those studies (e.g. Giles-Sims, 1983; Peterson, 1980; Straus, Gelles & Steinmetz, 1980). The connections between wife and child abuse support the use of a total family violence model. These connections include: (a) an overlap in child abusing and wife abusing families (Appleton, 1980; Coleman, 1980; Gayford, 1979; Pfouts, 1978; Rounsaville & Weissman, 1977); (b) intergenerational consistency in how much physical aggression families use in the resolution of conflicts (Steinmetz, 1977); and (c) intercorrelations between severity of spousal violence, violence against children, and violence between siblings (Straus, Gelles, & Steinmetz, 1980).

However, the systems model as a whole has yet to be examined by multivariate theory testing analysis. The research conducted thus far provided explanation of very little of the total variance in family violence. In addition, the sheer numbers of variables present in this model made designing multivariate research prohibitive.

Feminist Model

The model proposed by R. Emerson and Russell Dobash (1979), postulated a single underlying causative factor for wife abuse, patriarchal societal organization. The research upon which this conclusion was based was a qualitative design, in the Frankfort School tradition. It combined interviews with a shelter population sample of 109 battered women with historical analysis. In this study, the individual characteristics of the batterer were interpreted in light of societal prescription and historical precedent of husband dominance under patriarchy. They enforced their control by force when they felt it necessary with relative impunity.

Dobash and Dobash (1981) proposed consideration of battering of female partners as a separate issue from general family violence. As was appropriate in research designed to advance critical theory, the study and others following the same approach analyzed the political (in the broad sense of forces of power) influences and outcomes inherent in a social situation (Held, 1980). The feminist analysis posited that to subsume wife abuse under the general rubric of family violence obscured the political forces operating.

Other research within this approach and supporting the feminist model included historical research (e.g.

Davidson, 1978; May, 1978), the emergency room medical records survey of Stark, Flitcraft and Frazier (1979), and the critical secondary analysis of existing data (e.g. Stark-Adamec & Adamec, 1982). Replication and evaluation of results of this kind of qualitative research is difficult. However, the finding by Straus and his associates (1980) of a significant correlation between a batterer's insistence on the final say in family conflicts and severity of abuse can be interpreted as supportive of the feminist model. Other corroborating data was the observation that batterers were generally traditionalists in their insistence on dominance in the marital relationship (e.g. Coleman, 1977; Walker, 1979).

The only study which claimed to test the relative utility of the systems and feminist models was that of Peterson (1980). In this investigation, a statewide random sample of women was used, but the operationalization of abuse was if the woman had ever been hit by her partner. Rather than multivariate analysis, each independent variable was examined separately with the dependent variable, weakening the ability to test theory. The results indicated statistical support for the association of abuse with childhood exposure to violence and the stressors of

poverty, unemployment and employment instability. Peterson (1980) rejected the feminist theory of causation, because the results supported the link between low socioeconomic class and abuse.

Many feminist researchers have interpreted the feminist model as predicting an equal incidence of abuse throughout the SES distribution since patriarchal familial structure is prevalent in most domestic arrangements (e.g. Martin, 1977; Davidson, 1978). However, both this interpretation and Peterson's conclusion fail to take into account the stronger patriarchal and machismo traditions manifested in the blue collar and poverty subcultures (Rubin, 1976; Wallace, 1978). Therefore, further comparitive testing of the two models by multivariate analysis is indicated before any definitive statements can be made about which or what combination of the two is the most explanatory concerning the causation of battering.

Summary

Causation research on the battering of female partners has been limited in methodology and replication, but the studies conducted provide a base of knowledge to use for future comparison and illustrate the need for further investigations to close gaps in knowledge. The research is not clear as to the

importance of societal versus individual factors in the causation of battering of female partners. The ideas of the battered women's behavior and personality contributing to abuse has disappeared from most of the literature. However, as pointed out by Wardell, Gillespie and Leffler (1983), research such as that seeking to establish the connection of a lack of resources with the battering of females can be subtle victim blaming. The implication is if a man becomes abusive because his partner has a better job than he does or more education, she is somewhat to blame for making him feel inadequate. Therefore, women should remain subordinate in order to avoid battering. The necessity of taking into account the effect of political forces on battering and the political ramifications of research, as advocated by the feminist researchers, is apparent. Societal and individual factors are clearly intertwined.

A related aspect of battering which has not been taken fully into account in the causation literature was the effects of culture on the occurrence of abuse. Straus, Gelles and Steinmetz (1980) found being nonwhite significantly related to severity of spouse abuse, but interpreted that finding as an indication of stress. Berk et. al. (1980) determined differences in severity

of battering when there were racial differences between battering partners but used that difference as an operationalization of status differential. An alternative explanation for both sets of findings, which was not investigated by the authors, is that there were important cultural influences operating.

The few cross-cultural studies of wife abuse (Lester, 1980; Levinson, 1983; Masamura, 1979) have been limited by reliance on secondary source cross-cultural data. Those focusing on our own society generally failed to study in depth any aspect of culture. The feminist analysis included culture in terms of patriarchy, but did not compare the variety of forms that patriarchal cultures could take in relationship to battering of female partners. One of the most patriarchal forms of family structure, Indian families observing purdah, was reported as generating almost no wife abuse (Jeffery, 1979) contrary to the predictions of the feminist model. The one research report which did focus on the varieties of American culture in respect to the battering of wives was that of Joseph Carroll (1980). He found the battering of women to be significantly more prevalent in Mexican-American couples than in Jewish-American couples, which he felt reflected the more egalitarian decision-making process considered

normative by the couples studies of Jewish background. While this study was a beginning, the cultural aspects of the battering of female partners needs more concerted research attention.

The relationship between proposed causal factors in wife abuse also has been largely unexplored. The one relationship which received enough support from research to be considered axiomatic was that battering generally increased in frequency and severity over time (Dobash & Dobash, 1979; Walker, 1983; Pagelow, 1981). The research upon which the assertion was based was conducted mainly with battered women from shelters; it may not hold true for other abused women. However, this finding, even if only applying to women in shelters, has important implications for the study of the responses of women to battering.

Responses to Battering

Nursing practice is concerned with the responses of human beings to health problems; therefore, the nursing care of battered women needs to be based on theory and research describing and explaining these responses. Research from both nursing and other disciplines which is important to this effort has been conducted. The review of this research can be divided according to physical, behavioral and psychological responses.

Physical Responses to Battering

The physical responses to battering have been addressed in research establishing problems in the health care system in meeting the needs of battered women, studies documenting the kinds of injuries battered women experience, and descriptions of physical symptoms other than injuries reported by abused women.

Health Care System and Battered Women

By examination of medical records and/or interviewing emergency department patients, several studies documented significant failure to diagnosis battering (Appleton, 1983; Drake, 1980; Goldberg & Tomlanovich, 1983; Stark, Flitcraft & Frazier, 1979). Lack of diagnosis of women as battered in other health care settings was found by DeBliek (1981), Hilberman and Munson (1977), and Pahl (1979).

Research also suggested that the needs of battered women were not met by the health care system. Stark et. al. (1979) reported that battered women in the emergency room were considerably more likely to be referred for psychiatric care, prescribed minor tranquilizers or pain medications and/or given psychosomatic labels. The prescription of mood altering medication as a common medical response was also reported in the descriptive study of Pahl (1979), but not supported by the findings

of Goldberg and Tomlanovich (1983). Pahl's research was based on the reports of battered women about the treatment of their general practicioner, while Goldberg and Tomlanovich studied all victims of domestic violence in an emergency room, not just women. Other descriptive studies (e.g. Dobash & Dobash, 1979; Walker, 1979) further documented that battered women generally found the health care system unsympathetic and/or unhelpful.

Survey design studies explored attitudes of health care workers in two hospital settings toward battered women (Davis & Carlson 1981; Shipley & Sylvester 1982). The results of both studies indicated that myths about battered women were still accepted by the majority of hospital personnel, even though they were sympathetic to the women. In addition, battered women were ascribed considerable responsibility for the abuse, although the partner was blamed the most by the health care workers.

Thus, these studies examining the health care system's response to battered women indicated a general lack of awareness of the possibility of battering, a lack of helpfulness to the women, and acceptance of myths about these women. Researchers concluded that battered women needed to be directly asked about the possibility of abuse and the pattern of injuries specific to battering should be recognized by health

care professionals (Drake, 1982; Hilberman & Munson, 1977; Stark, Flitcraft, Zuckerman, Grey, Robison, & Frazier, 1981).

Pattern of Injuries

Stark and his associates (1981) found that the majority of battering injuries were at multiple sites, especially the head, neck/face/throat, chest (especially breasts), and abdomen. In contrast, most emergency room trauma patients present with discrete injuries at more distal locations. The research by Pahl (1979) supported these findings, adding that the majority of the abdominal injuries were in the pelvic region. The findings that sexual abuse often accompanied battering indicated careful assessment for sexual organ trauma (Finklehor & Yllo, 1982; Russell, 1982).

Other Physical Symptoms

Battered women were noted as experiencing a range of physical symptoms not directly related to their injuries, such as headaches, menstrual problems, and sleep disturbances (Hilberman & Munson, 1977; Stark, et. al., 1981; Walker, 1979; 1984). Although these symptoms were not studied extensively nor their individual incidence compared with that of normal populations, Stark and her associates (1981) reported battered women complaining of more "vague medical complaints" than

control patients of emergency services in one metropolitan hospital (p. 19). Hilberman and Munson (1977) characterized these kinds of symptoms as evidence of psychopathology in their psychiatric patient sample. Yet similar symptoms were described in rape and other violence victims as well as in widows and divorcees (Burgess & Holmstrom, 1974; Kitson, Lopata, Homes, & Meyering, 1980; Kitson & Sussman, 1982; Parkes & Brown, 1972). These symptoms can be considered as part of a physical stress reaction common to all of those who have experience severe emotional trauma.

Behavioral Responses to Battering

Several studies examined research questions related to the question frequently asked by the public and caregivers, "Why does she stay?" These studies generally went beyond the descriptive studies in the use of a theoretical framework and were helpful in establishing knowledge on the behavioral responses of battered women. However, there are two concerns about the general category of research addressing the question why does a battered woman stay in the relationship which are important to discuss. First, there is the implication whenever the question is raised that she should leave rather than stay. Since most research on battering was conducted using shelter residents, the

body of knowledge actually did not include what happened with abused women who had never left their spouses. An exception to this pattern was the recent research of Bowker (1983) who explored the behavioral coping mechanisms of women who were able to end the abuse in the relationship by their own actions.

In addition, it is generallly not known what happens to women who return to their partners after they leave a shelter. Programs for batterers appear to be successful in teaching men other ways to express anger (Adams & McCormick, 1982; Watts & Courtois, 1981). Okun (1983) interpreted the data from his follow-up study of women from a shelter to suggest that the women who returned to the batterer exemplified "a progressive process in which women exert increasing leverage upon their violent mates to change..." (p. 403) Thus, there may be many ways to resolve battering besides permanently leaving the relationship.

A related concern is that leaving the relationship may not be a valid option for the woman for a variety of reasons. Some of these were included in the major studies attempting to answer this research question but some were not. In extreme cases, there was a realistic danger that the woman would be killed if she left (Campbell, 1981; Rounsaville, 1978). This danger was

not considered as a variable in the research to be described. The idea that the woman's culture prohibited her leaving without family and community sanction was suggested but not yet explored in research (Carroll, 1980). The women in the sample described by Lichtenstein (1981) reported being concerned about their children. They felt that the disadvantages to the children of being without a father might outweigh any advantages to leaving.

Undoubtedly, various combinations of these factors, along with others considered in the studies which used leaving as the outcome variable, entered into an individual woman's decision-making process. Thus, research directed at determining why women stay has an underlying assumption that to leave is more healthy. Without more research based understanding of the whole response to battering, this assumption is premature.

Stages of response. One of the investigations examining the reasons women stay in a battering relationship was conducted by Jean Giles-Sims (1983). The Giles-Sims research involved interviews with 31 battered women from a shelter with follow-up interviews of 24 of them after six months. A six stage process of battering tending to stabilize the relationship into an abusive pattern was formulated, using a grounded theory

approach. Working from a systems theory paradigm, Giles-Sims assumed that the couple as a system would exhibit a stable set of interacting patterns with negative feedback from both society and the dyad interactions maintaining the violence. However, there was evidence from her own data and other studies that both the behavioral and emotional responses of women to battering actually changed over time.

The initial interviews with the original 31 women indicated that the decision to leave was arrived at over time after several other attempts at resolution of the problem. The pattern of first seeking help from a variety of sources and then leaving the batterer and returning also was noted in several other studies of battered women (e.g. Bowker, 1983; Dobash & Dobash, 1979; Labell, 1979; Okun, 1983; Pagelow, 1981; Rounsaville, 1978). The leaving and returning was reported as frequently done in a purposeful manner in order to achieve one or more of the following: (a) pressure the abuser into meaningful change, (b) test external and internal resources, and/or (c) evaluate how the children were reacting without their father. Therefore, even the women in the Giles-Sims sample who were with the abusive partner at follow-up could be predicted to leave again if continued battering

necessitated such action.

Stages conceptually similar to those identified in battered women by Giles-Sims (1983) have also been documented in research reports on wives of alcoholics (Jackson, 1954; Lemert, 1960), divorced and separated women (Hackney & Ribordy, 1980; Hamen, 1982; Weiss, 1975), widows (Bowlby, 1980), and persons experiencing anticipatory grief (Kubler-Ross, 1969; Marris, 1974). Across groups the stages were described basically as periods of: (a) disbelief and denial, (b) yearning or attempts to normalize the situation, (c) disorganization and despair, and (d) reorganization or resolution. Descriptive studies of battered women supported similar kinds of stages of response (e.g. Dobash & Dobash, 1979. The reorganization or resolution phase was either leaving the battering situation or finding ways to cope with the abuse and/or taking action to end the violence (Bowker, 1983; Giles-Sims, 1983; Okun, 1983).

The research on battered women suggested that the entire process generally took many years to complete. This was perhaps a longer time period than in situations of death and divorce, since the partner seldom totally disappeared from the battered woman's life, even when she divorced him (Kelly, 1984; Walker, 1984). The final resolution in some cases appeared to be functionally

impaired passive resignation (Pagelow, 1981; Walker, 1979; 1984) or drastic measures such as suicide or homicide, but what factors influenced the relative healthiness of the outcomes have not yet been fully determined. The changing pattern of the behavior of the batterer was a major influence in several studies (e.g. Bowker, 1983, Browne, in press).

Walker (1979, 1984) proposed and tested a different kind of process of behavioral response whereby a pattern of violence repeated itself over time and the batterer's behavior reinforced the woman staying. This pattern of three phases was labeled the cycle of violence. The phases were described as: (a) the "tension-building stage," lasting weeks or even years, wherein the woman responded to minor battering incidents by being compliant hoping to avoid serious incidents; (b) "the acute battering incident," when an outbreak of serious violence of two to twenty-four hours left the woman powerless to affect the outcome and only able to try to protect herself or hide; and (c) the aftermath, described as a period of loving contrition, when the batterer was apologetic and promised change. Walker (1979) proposed that this phase reinforced the woman staying in the relationship, and immediately following the acute battering incident was when she was the most

likely to seek help.

The proposition that the time immediately following the acute battering incident is when the women are the most likely to be seen by professionals is important to health care providers. Both Appleton (1980) and Drake (1982) reported independent corroboration of the presence of such a point in time when the woman was likely to present in a health care setting.

Walker (1984) also found support for the occurrence of the first two stages of the cycle when she tested the model. However, other studies did not find a period of loving contrition to be typical for the batterer (e.g. Dobash & Dobash, 1979; Okun, 1983). Walker (1984) reported that the presence of a period of contrition decreased over time and that the tension-building stage shortened. Thus, changes in the process of battering and changes in the process of responses have both been indicated by research. The assumption that these processes are related is reasonable, but has not been explored.

Lack of resources. Several studies examined the influence of resources on women staying with a violent partner. Mildred Daly Pagelow (1981) used a survey design to explore this question with 350 battered women, primarily shelter residents. The explanatory

theoretical framework was derived from social learning theory. In spite of Pagelow's recognition that most battered women tried a variety of approaches to alter the situation, her dependent variable was operationalized as the number of years the couple cohabited after violence began.

Multiple regression data analysis resulted in only personal resources (youth and financial resources) explaining a large proportion (43%) of the variance in the dependent variable. Traditional ideology did not explain a significant portion of the variance; perhaps because it was not measured in terms of value orientation. Neither being the victim of physical aggression from parents, nor severity and frequency of abuse, variables suggested by Gelles (1976) to be causative, influenced the amount of time the women in this sample stayed in the violent relationship. In contrast, Rounsaville (1978) found severity of abuse to be significantly correlated to leaving while lack of resources was not in his smaller, psychiatric referral sample.

In the multivariate data analysis of a national random sample by Kalmuss and Straus (1982), objective dependence on the marriage (a similar concept to lack of material resources) was significantly related to severe

battering. Strube and Barbour (1983) reported lack of resources, in this case operationalized as the woman not being employed, as significantly related to her staying in the relationship.

The Strube and Barbour (1983) research also increased the knowledge base related to battering by taking into account the love involved in the relationship. Even though qualitative and descriptive studies of battered women mentioned that the women spoke about loving the batterer, this was considered impossible to operationalize or interpreted as a sign of unhealthy dependence or other pathology (e.g. Rounsaville, 1978). Strube and Barbour (1983) conceptualized psychological commitment to the relationship as including the love component. The number of years in the relationship was considered to reflect objective commitment, a measure of investment in the relationship. Almost no correlation was found between the two measures of commitment, which suggested conceptual independence, a useful finding in itself. In addition, both factors were significantly positively related to staying in the relationship, although the subjective measure accounted for more of the variance in multiple regression analysis.

Considerable support therefore was found for the

concept of lack of resources influencing the decision to stay in the abusive relationship. However, variations in operationalization of this variable as well as differences in the dependent variables and time of measurement of the outcome variable made interpretation and comparison of findings problematic. A possible explanation for the discrepancies in findings was provided by the research of Snyder and Fruchtman (1981). Data from 119 battered women in a wife abuse shelter plus follow-up information from 48 women was analyzed by cluster analysis. Five distinct typologies of battering resulted, with associated histories, patterns of abuse and responses to battering. As noted by the authors, this finding suggested that behavioral responses may differ according to the different patterns of relationships.

Support Systems

Only two studies explored the role of support systems in the behavioral responses of battered women. The findings of both Hoff (1983) and Bowker (1983) suggested that although natural or informal support systems (family, friends) were generally sympathetic and tried to help, they were less effective in ending the battering than formal systems (police, the courts, counselors). However, the formal systems were

unfortunately less likely to be sympathetic and willingly provide direct aid, a finding frequently noted in other research (e.g. Dobash & Dobash, 1979; Walker, 1979). The one exception to this pattern was wife abuse shelters, which have consistently been reported as both sympathetic and effective. Bowker described a pattern whereby the battered women who had successfully ended the violence against them first used personal action (e.g. threatening to leave, hiding), then went to informal support systems and finally resorted to formal systems.

A related factor to support systems is the personal culture or subculture of the woman. In research on battered women, Hoff's (1983) study examined this aspect the most closely, but her conclusions were mainly in regard to the traditional ideology or attitudes toward women of the woman's family of origin. Pagelow (1981) and Walker (1984) also explored this aspect of culture, and all three researchers found that the battered women themselves reported less traditional ideology about women and marriage than their families. Traditional ideology in the women themselves did not differentiate women who left the batterer from those who stayed in either the Walker or Pagelow research.

Traditional ideology was considered in these

studies as a cultural/value orientation as a whole without separating out the aspects of this stance. Cross-cultural analysis (Campbell, 1985) suggested that cultural or subcultural prescriptions about the primacy of the wife and mother role for women affected their behavioral responses to battering. Where women were sanctioned to consider other roles as primary or equal to the wife and mother role and could escape from marriage without violating cultural norms, they were more likely to be autonomous and less likely to stay in abusive relationships (Rubin, 1976; Schlegel, 1972; Shostak, 1983; Stack, 1974; Strathern, 1972).

The more qualitative study of Hoff (1983) suggested that the women's values about female roles changed as a result of their violent experience and/or their experience in a wife abuse shelter. Hoff also found the women's natural networks to disapprove of battering but was not sure if this reflected a desire for social approval. Greenblatt (1984) found that although people disapprove of wifebeating in the general sense, they are more likely to be tolerant of men hitting women in certain situations. Cross-cultural analysis (Campbell, 1985) did not show that cultural sanction of wifebeating was related to its occurrance. Yet it is reasonable to postulate that the women's personal cultural or

subcultural tolerance for battering would affect the quality and effectiveness of her informal support systems.

There has been a lack of research findings from which to further delineate the cultural factors involved. The vast majority of subjects in the research on battered women have been white, because black and minority women have been less likely to use shelters. The reasons for this lack of use of shelters by black women has not been explored in research. The less structured composition of poor black families reported by Stack (1974) may afford black battered women a number of alternatives other than shelters if they need to escape. This can be conceptualized as a level of support system not available to white battered women. Cultural barriers between the white middle class feminist orientation of most wife abuse shelters (Schecter, 1982) and women of other cultures may also discourage minority women from using this form of support system. The cultural influences on the responses of women to battering is an area which needs further research.

In conclusion, the most important inferences from the studies of behavioral responses to battering are: (a) the responses change over time resembling the

process of responses of other groups of women anticipating or experiencing loss; (b) lack of material resources is well supported as positively correlated with staying in the relationship, (c) different patterns of abuse may evoke different behavioral responses; and (d) support systems and cultural influences probably influence behavioral responses, but these factors have not been fully examined in research.

Psychological Responses to Battering

The emotional responses to battering have been conceptualized as resulting from a stress response syndrome similar to that experienced by other victims of violence (Janoff-Bulman & Frieze, 1983; Hilberman & Munson, 1977; Symonds, 1979), or learned helplessness (Walker, 1979, 1984), or a grieving response (Campbell & Humphreys, 1984; Silverman, 1981; Weinfourt, 1979). The psychological responses which have been described and explored most frequently in research include attributions, effects on self-esteem, problem-solving abilities, and depression. The research has indicated that most psychological difficulties in battered women outside of the mental health system were the result of the battering rather than occuring previously (Hoff, 1983; Rounsaville, 1978).

Attributions

The research of Frieze (1979) examined different outcomes of the battering situation depending on what kinds of causal attributions the woman made concerning the battering. Based on the attribution theory work of Weiner (1974), Frieze's (1979) application predicted that internal and stable attributions concerning the cause of the battering were more likely to be found in women who stayed in the relationship, were without hope for solution and felt ashamed. Women who blamed their spouses (external causation) for the battering and saw the situation as stable would be more likely to leave the relationship permanently since there was little expectation that the abuse would end. The same external causation attributions coupled with attributions of instability were seen as most likely to produce attempts at getting help for the batterer, including leaving temporarily. The branching nature of the model allowed for a variety of behavioral responses to battering, depending on combinations of the attributional dimensions. This was consistent with the kinds of variation in response suggested in other research.

Also consistent was the finding that the battered women tended to first respond to battering with a more internal attribution of causality and as the abuse

continued, change to a more external attribution (Frieze, 1979). This change in attributional responses over time was reflected in changes in behavioral attempts at solution. Giles-Sims (1983) also reported that the percentage of women who felt guilt about the battering and/or were inclined to "forgive and forget" the incident decreased greatly with the second and third violent episode. As time passed the battered women described by Miller and Porter (1983) blamed themselves less for causing the violence but more for allowing the abuse to continue.

The data which Frieze (1979) reported in support of the model came from an interview study of abused women in shelters which was not designed to directly test the attribution model. The differences between external and internal attributions were clearly operationalized, and there were some descriptive data indicating that the women who made external attributions had tried more of a variety of solutions. However, the attribution dimension of stability over time was not precisely investigated, and the resulting correlations of that parameter and consequent behavior were not as predicted.

Attributions of responsibility for victimization have been found to be important for healthy outcomes for survivors of other negative events. Contrary to the

reformed model of learned helplessness (Abramson, Seligman & Teasdale, 1978), self-blame correlated positively with subsequent coping in lat least two samples of victims (Baum, Fleming, & Davidson, 1983; Bulman & Wortman, 1977). Miller and Porter (1983) argued that self-blame gave victims a way of maintaining control over their lives. In fact, DuCette and Keane (1984) reported that patients who did not know what had caused a major illness, the epitome of no control, were making a poorer recovery from surgery than those who blamed either internal or external factors.

Self-blame also has been divided into characterological and behavioral blame, with characterological blame more predictive of depression since it is less stable and less controllable (Janoff-Bulman, 1979; Peterson, Schwartz & Seligman, 1981). However, Miller and Porter (1983) found that distinction almost impossible to make when questionning battered women about their attributions. They reported that former self/current self, and positive/negative character trait dichotomies were more useful in describing the self-blame parameters of battered women.

In summary, the attributions women made about the causation and continuation of battering have been demonstrated to be an important aspect of the

pscyhological responses to battering, a finding consistent with research into other types of victimization. There has been limited research exploring these attributions in battered women, but enough to provide a basis for further investigation.

Self-esteem

Descriptive studies of battered women (e.g. Lichtenstein, 1981; Walker, 1979) consistently mentioned low self-esteem as a characteristic, but studies using measurement instruments have shown mixed results. Using the normed Cattell 16 PF Personality instrument, Mahon (1981) and Star (1980) reported lower than normal ego strength in battered women, but Arndt (1981) found nonsignificant differences. Rosewater (1984) described feelings of inferiority in her sample of battered women from Minnesota Multiphasic Personality Inventory (MMPI) data. In contrast, Walker (1984) reported battered women as scoring higher than a sample of normal women on a semantic differential scale of self-esteem. Kelly (1984) reported that a greater proportion of the battered women in her qualitative study felt more independent and stronger than felt more "insecure in self" as a result of the abuse.

The Mahon (1981) and Star (1980) samples were from shelters, the Arndt (1981) study described women in a

community support group while the Kelly (1984), Rosewater (1984) and Walker (1984) data were from women in a variety of settings. Therefore, the variations in results were probably not due to sampling differences, but instrumentation differences may have interacted with sampling.

The original descriptions of battered women exhibiting low self-esteem may have been more related to the self-blame attributions described in the previous section than to generally seeing oneself as worthless. It may be necessary to conceptually separate the aspects of self-esteem before an explanatory model of responses related to self-esteem can be presented. Victimization research indicated that separate aspects of control, autonomy, weakness and deviance may be involved (Coates & Winston, 1983; Janoff-Bulman & Frieze, 1983).

Research in the area of loss and separation also suggested that various aspects of self-esteem were involved in women's responses. Berman and Turk (1981) found developing autonomy to be significantly related to post-divorce adjustment and Bowlby and Parkes (1977) identified a similar concept as a major buffer to deleterious effects of major loss. Loss of identity was specified as one of the major causes of distress after marital dissolution or the death of a spouse (Bloom,

White, & Asher, 1979; Hancock, 1980; Parkes, 1972). Kohen (1981) and Wallerstein and Kelley found a sense of identity more often in women who were the least troubled after divorce. Research indicating the importance of interpersonal relationships, especially the marital and motherhood relationships, to women's sense of identity supported the inclusion of this aspect of self-esteem in formulations about battered women (Boynton, 1979; Gilligan, 1982; Hodgson & Fischer, 1981; Morgan & Farber, 1982; Orlofsky, 1977; Rubin, 1979).

Body image is an aspect of self-esteem which could be logically predicted to be affected by battering. The disfiguring physical injuries to parts of the body important to female body image, the frequently occuring sexual abuse and/or the disparaging remarks about the woman's lack of attractiveness which are often made by batterers could all be expected to be damaging to body image. These different aspects of self-esteem may be more or less affected by battering in patterns similar to or different from other instances of victimization and loss.

Problem Solving Techniques

The only study which specifically addressed problem solving techniques in battered women was that of Claerhout, Elder and Janes (1982). These researchers

reported a lack of problem solving skills in a relatively small sample of abused women in a rural area. Descriptive studies such as those by Hilberman and Munson (1977) and Walker (1979) also emphasized the inability of battered women to figure out ways to extricate themselves from the situation. Other researchers described a variety of approaches used and factors considered by battered women, suggestive of appropriate decision making (e.g. Bowker, 1983; Dobash & Dobash, 1979; Frieze, 1979).

Undoubtedly, some battered women are so frequently and severely beaten and controlled that their ability to problem solve is severely and chronically affected. However, this response seems to be an extreme end of a continuum. It is not known whether it is related to the characteristics of the abuse, the abuser, the abused woman and/or the environment, including support systems and resources. This could be explained by the "posttraumatic stress disorder" described by the American Psychiatric Association (1980) as including symptoms of memory impairment or trouble concentrating. Problem solving difficulties also have been noted in widows and divorcees, in which case they were explained as normative responses to loss (Berman & Turk, 1981; Glick, Weiss, & Parkes, 1974). Such problems could be

be explained either as one of the deficits of the depressive learned helplessness syndrome or as one of the cognitive effects of depression.

Depression

Clinical signs of depression were noted in samples of battered women referred for psychiatric care described by Hilberman and Munson (1977) and Rounsaville (1978). Samples of battered women in a variety of settings were found to be more pessimistic and depressed on the MMPI (Rosewater, 1984) and at higher risk for depression as measured by Radloff's CES-D Scale (Walker, 1984) than normative groups. However, Walker's sample also reported a surprisingly large prevalence of childhood depression. Depression also has been noted in victims of other forms of violence as well as in divorcees and widows (Berman & Turk, 1981; Bowlby, 1980; Frank & Stewart, 1983; Janoff-Bulman & Frieze, 1983).

The Walker (1984) research most carefully examined variables associated with depression. A moderately strong (r =.46) positive correlation was found between scores on the depression scale and health problems. Surprisingly, a positive (r = .36) correlation was found between depression and self-esteem. This is a totally contrary finding to the reflormulated learned helplessness model. It can perhaps be explained by

Walker's use of an investigator developed measure of self-esteem.

The reformulated view of learned helplessness suggested that depressed women made more internal, global and stable attributions for failure (Abramson, Seligman & Teasdale, 1978). The battered woman who was depressed would therefore perceive that she was not in control of much of her life, had been in a noncontingent situation for a long period of time, and would blame herself for the abuse. As would be predicted with this model, Walker (1984) found moderate (.35 and .36) positive correlations between the depression score and the powerful others and chance subscales of the Levinson (1972) locus of control measure. In contrast, there was a weak positive correlation (.18) with the internal subscale.

Research reported by Pittman and Pittman (1979) and Zuroff (1980) indicating that subjects with external locus of control more quickly reached helplessness when exposed to noncontingency training were also predictive of these relationships. Walker (1984) further found that her index of childhood learned helplessness (measures such as uncontrollable life events and experiencing or witnessing violence) was significantly related by path analysis to current learned helplessness

(a similar index which included depression).

Also consistent with the formulation outlined above was the finding that employed battered women were considerably less depressed than those unemployed, suggesting that employed women felt they had more control in their lives. Age differences were noted, with the youngest women in the sample reporting the most depression. The latter might be discrepant with the idea of chronic (stable) duration of noncontingency, except that the age of the battered woman did not necessarily indicate the length of time in a battering relationship. Other explanations for age relating to depression, such as developmental stage impact, were not considered.

Walker (1979) considered not leaving a battering relationship as an indication of learned helplessness. Contrary to her prediction, the women who had left the relationship had higher scores on the depression measure than those still with the batterer. There may have been a problem with the assumption that battered women still in the relationship were exhibiting learned helplessness or the finding may indicate that the depression experienced by at least some of the women was a result of grieving rather than learned helplessness. Use of a grieving model would lead to the expectation that

battered women who had left their partner would be experiencing loss in a variety of areas more acutely and therefore feeling more depressed.

Summary

Other emotional responses to battering, such as inability to express anger, anxiety and submissiveness, have been noted in descriptions of battered women, but they have not been comparitively measured or explored in detail. The most important aspects of the psychological responses to battering in terms of extant explanatory theory seem to be the ones described in the foregoing section.

Important determinants of the incidence and amount of impairment from the responses for battered women included characteristics of the abuser and the abuse, attributions about the events, support systems, material resources, perceptions of control, prior experiences and time. Research on battered women, victims of other negative events and women experiencing the loss of a spouse indicated more similarities in responses than differences. The responses in all of these groups could generally be explained within a stress framework, a loss and grieving framework or a control/attribution/learned helplessness theoretical model.

Conclusions

The progress of research in battering appropriately has followed a course of initial documentation and description of battering as a significant health and social problem, followed by attempts to establish causative factors. These currently are being linked into theories of causation and tested. Similarly, the responses to battering were first described and are now being explored in more detail so that theoretical models of response can be used as the basis of interventions which can be experimentally verified. The early problems in methodology are being addressed more adequately in the current studies. The battering research can be strengthened by the inclusion of findings from related bodies of literature, such as attachment and loss and victimization. The cultural aspects of battering also need further exploration. The proposed research is designed to add to the knowledge base on battering by building on existing research into the physical, behavioral and psychological responses. It also is intended to provide empirical support for the relative applicability of two models of responses in battered women, the learned helplessness model and the grief model.

CHAPTER III

RESEARCH DESIGN AND METHODS

Purpose and Research Questions

The purpose of this exploratory study was to compare: (a) the responses of battered women with those of other women considering ending a marital or other significant intimate relationship, and (b) the relative applicability of two theoretical models in explaining these responses, a normative response model of grief and a model of learned helplessness. The specific research questions addressed were:

1. What are the similarities and differences between battered women and other women considering ending a marital or other significant intimate relationship?
2. Are there differences between the two groups in either outcomes or the relative importance of the variables in grief and learned helplessness models?
3. Within the battered group, what is the relative applicability of the grief and learned helplessness models?

In addition, qualitative data were gathered on the following dimensions: (a) severity of injury from battering, (b) sexual abuse, (c) cultural influences on the response perceived by the women, such as tolerance

for violence toward women by male partners and cultural groups. The qualitative data was used in this analysis to enrich the interpretation of findings and to further buttress quantitative findings. The sample women also were asked about their willingness to participate in a separate one year follow-up study.

Operational Definitions

For purposes of this study, the following operational definitions for the major concepts were used.

Significant intimate relationship: A sexually intimate relationship of at least one year's duration.

Battered woman: A woman who has been the recipient of at least one of the acts of severe violence on the Conflict Tactics Scale (items n. through r.) by her partner in a sexually intimate relationship more than once during the last year.

The Grieving Model

Conflict in the relationship: A combination of the frequency and severity of conflict used by both partners as determined by the Overall Violence Severity Weighted Index of the Conflict Tactics Scale (Straus, 1981).

Stressors. Demands which have the potential to evoke

the stress response, measured by a combination of the level of conflict in the relationship, family total yearly income, and the number of dependent children.

Powerlessness. A combination of low agency beliefs, generalized expectations that the person does not have access to conditions needed to produce outcomes, and low control beliefs, or perceived inability to influence outcomes. This construct, considered as a set of variables, was measured by a score on self-care agency (as measured by the Denyes Self-care Agency Instrument) and interview ascertained perceptions of amount of control in the relationship.

Perceived loss. The sense of being without or anticipating being without a sense of identity, a sense of self-esteem, a major role, a significant relationship and/or a major attachment figure. This underlying construct was indicated by a set of variables, self-esteem (measured by the Tennessee Self-Concept Scale) and perception of how much personal cultural groups valued the wife-mother role over other roles for women.

The grieving response. The dependent variable, an underlying construct representing the response to loss, stressors and powerlessness, was measured by amount of depression (score on the Beck Depression Inventory), and

number and severity of stress and/or grief-related physical symptoms considered as a set.

The Learned Helplessness Model

Noncontingency. Perception that within the relationship, actions do not predictably produce outcomes measured by interview ascertained perceptions of ability to influence outcomes in the relationship (control in the relationship).

Attributions. Who or what, if known, is perceived as primarily to blame for initiating and maintaining the problems in the relationship. In this study attributions included the parameters of: (a) internal (current or past self; negative or positive characterological attribute) or external, (b) stable (unchangeable) or unstable, and (c) personal (subject feels situation is unique to her) or universal.

Self-evaluation. A generalized perception of self worth and ability to care for self indicated by a set of variables, self-care agency (score on the Denyes Self-Care Agency Instrument) and self-esteem (score on the Tennessee Self-Concept Scale).

Learned helplessness. Debilitating effects of generalized expectations of outcomes being independent of personal actions taken. As the dependent variable set in this model, the construct was operationalized as

the amount of depression (score on the Beck Depression Inventory) and the number and perceived efficacy of the solutions considered or actually tried in order to decrease or end the problems in the relationship.

Sample

Sample Size and Power

Since there were no previous studies upon which to base effect size, and the proposed research was exploratory in nature, a conservative effect size of .20 was chosen (Cohen & Cohen, 1983). Following the suggestion of a convention of .80 for power (an 80% chance of correctly rejecting the null hypothesis), a sample size of 193 was required at .05. This sample size both satisfied the power requirements and assured a ratio of at least 10 subjects for each variable as needed for multivariate analysis.

Sample Recruitment

Two plans for the recruitment of subjects were proposed: (a) a preferred plan which would enhance the variability of subjects and (b) an alternate plan to ensure sample size adequacy if the first was only minimally successful.

A newspaper advertisement was placed in the major newspapers and all other local university, suburban, and special interest publications thought to be read by

women in two geographically separate and socioeconomically distinct metropolitan areas. A notice also was posted at institutions frequented by women (e.g. supermarkets, local universities). The first metropolitan area was a large, economically distressed city with a large black and ethnic population (Detroit, Michigan). The second (Rochester, New York) was a smaller, more affluent, and less ethnically diverse city, with a larger proportion of white collar workers. This selection of areas was chosen to provide diversity on a number of ethnic and socioeconomic parameters.

The advertisement asked women who were having serious problems in an intimate or marriage relationship, which had lasted at least one year, to respond in writing or by phone if they were willing to participate in a research study. The problems were described as including being beaten or other problems which have led the woman to consider ending the relationship. The advertisement also included the infomation that a stipend of $10 would be paid in return for the subjects' time and cooperation. The advertisement appeared first in the larger city for two weeks, at which time the number of respondents was counted. More than one half of the needed sample from that recruitment site was generated by the end of two

weeks, and newspaper advertisement was continued in both cities in an effort to obtain the total sample.

However, as interviews were conducted, it became apparent that less than one half of the sample was battered. Therefore, the alternate plan was instigated. Battered women were recruited by the same posted notice used on other bulletin boards in two shelters for abused women, one in each city, to make up the needed number of battered women.

The sampling plan was advantageous because the majority of women recruited as subjects were not the usual subjects from the mental health care system or battered women's shelters. The bias of self-selection, however, was unavoidable because of the possible danger to battered women recruited by other means.

Other Sampling Procedures

Both the newspaper advertisement and posted notices requested respondents to either call the number included or respond in writing, stating their address, phone number if they wish to be contacted by phone, and the major problem in the relationship. If the woman responded by mail and did not wish to be contacted by phone (or had no phone), a letter explaining the study, the stipend, the location, the time required and a choice of appointment times and dates was sent to her.

If telephone contact was established, the study was explained briefly, the remuneration procedure and approximate time required for the interview stated, and the woman asked if she would like to participate.

Upon consent, an interview appointment was arranged. As suggested by Walker (1984), a flexible scheduling process (including rescheduling once for those missing the first appointment) and confirmatory phone calls the day before the appointment were used to enhance retention of the sample.

Measurement

Measurement of the variables consisted of a combination of an orally administered standardized measurement instrument, self-administered standardized measurement instruments, and an interview questionnaire using a combination of forced choice and open ended questions.

Standardized Measurement Instruments

Conflict Tactics Scale

The Conflict Tactics Scale (CTS) was used to determine whether or not women were battered and the frequency and severity of conflict in the relationship. There are problems with the scale, both in its inability to determine severity of abuse except by incidence and prevalence and its lack of sensitivity to defensive

physical actions. However, as the only scale available to measure family violence which has been developed parametrically and used widely, it afforded the investigator the opportunity to compare findings of this research with other study results. The CTS also establishes a time parameter of one year which standardizes the amount of time considered in establishing battering. In addition, the scale is quickly administered orally and apparently acceptable to subjects in spite of the sensitivity of content. The author of the scale, Murray Straus (1980) set physical aggression or violence at the levels of:

Item Number	Descriptor
k.	Threw something at the other one
l.	Pushed, grabbed, or shoved the other one
m.	Slapped the other one
n.	Kicked, bit or hit with a fist
o.	Hit or tried to hit with something
p.	Beat up the other one
q.	Threatened with a knife or gun
r.	Used a knife or gun

Any incidence of items n. through r. was considered severe violence or spouse abuse. In an attempt to reflect the concept of battering as a process, this research considered an incidence of two of any combinations of items k. through r. or any incidence of items p. through r. on the CTS performed against the woman during the last year as evidence of battering.

The Overall Violence Index of Severity Weighted method of scoring the CTS (Straus, 1981) was adopted similarly to Hornung et. al. (1981) to take into account conflict in the nonviolent relationships also. Level of conflict was measured by a combination score of frequency of acts of conflict multiplied by weights to reflect the seriousness of the conflict tactics. There were seven levels of seriousness of tactic as follows: (a) only verbal tactics (items a. through j. only) during the last year weighted as 1; (b) minor physical aggression acts (presence of any of items k. through m.and absence of any of items n. through r.) weighted as 2; (c) violent acts of kicking, biting, and punching (items n. through o.) weighted as 3; (d) hit with object (o.) weighted as 4; (e) severe violence (p. beat up) weighted as 6; (f) threat with weapon (q.) weighted as 7; and (g) life-threatening violence (r. use of knife or gun) weighted as 9. The weights were multiplied by the appropriate midpoints of the ranges of frequency on the scale as suggested by Straus (1981).

Instrument reliability and validity. Internal consistency reliability of the instrument has been addressed by two approaches, both yielding acceptable results. An item analysis of correlation of items with the total score was performed (correlation means ranging

from .70 to .87) and an alpha coefficient for each of the three categories of conflict resolution strategies for the various members of the family was computed. The alpha coefficients for the strategies of verbal aggression and violence ranged from .62 to .88, while the lower range of correlations (.50 to .76) was explained by the idea that less serious conflicts would be remembered less well.

There is concern about one member of a dyad assessing the violence between the two members which can be considered an issue of inter-rater reliability. The major research by Straus, Gelles, and Steinmetz (1980), using the CTS, interviewed an equal number of husbands and wives and counted the data from each partner as representing the total dyad. In a separate study using the same instrument, Szinovacz (1983) compared individual couple husband and wife responses to the CTS and found "little agreement between spouses on the occurrence of specific violent behavior," with husbands especially reporting less personal use of physical aggression than their wives reported about them (p. 638). This research is concerned with women's responses to battering and therefore, the women's perceptions of the amount and severity of the conflict is needed rather than the actual conflict.

Establishment of validity, especially criterion related validity, establishment of the CTS has been hampered by the lack of any similar instrument and a dearth of reliable data about incidence which could have been compared with the scale. The only study reported addresses criterion related validity in the concurrent sense. Bulcroft and Straus (1975) had students and each of their parents complete the CTS. Data were analyzed in the aggregate (students, wives, husbands analyzed as groups), rather than by individual family. Correlational agreement varied from $\underline{r}$ = -.12 to .64. The agreement was highest for violent conflict resolution and low for reasoning again reflecting proclivity for better recall of violent episodes. However, there were still significant discrepancies in the amount of violence recalled by each of the three groups suggesting that additional criterion related validity studies are needed.

Straus (1980) claimed that his research and that of his colleagues provided evidence of construct validity. Associations consistent with that predicted from his theoretical framework were reported. However, these studies which used the scale yielded a far greater incidence of husband abuse than has been documented by police reports or other incidence estimates (Dobash &

Dobash, 1981). This may have reflected three problems with content validity and resulting operationalization of battering with use of the CTS: (a) insensitivity to amount of injury incurred; (b) inability to discriminate between the initial act of violence and resulting acts of self defense; and (c) lack of mutually exclusive categories.

Mutual violence. Because this study was designed to study the responses of battered women and other women in dissolving intimate relationships, battering of male partners was not included. Most scholars in the field of wife abuse agree that battering of male partners affects less than one tenth of the total spouse abuse victims. However, some of the women in this sample were involved in mutually violent relationships or relationships where the majority of the violence was directed at the male. Even if the male partners had been included in the study, their report of their violence toward the woman most likely would have been lower than the actual violence according to both Szinovacz (1983) and Okun (1984). In addition, the problems of operationalization of battering described above made it difficult to determine who was being abused when the violence was mutual.

In an effort to address these problems, the CTS was

administered as originally directed (Straus, 1980). The woman first was asked how often she did each of the items during the last year to her partner and then how often her partner did each of the items to her. Following administration of the CTS, the extent of injury and whether or not violence was used in self-defense was ascertained. Where there was evidence of violence toward the male which was not in self-defense and either resulted in serious injury or qualified as severe or life-threatening violence toward him (presence of any of items n. through r. on the CTS) during the last year, the category of mutual violence was used. This variable was scored as present or absent. Presence placed the woman in the non-battered category, no matter what violence she reported against herself. No attempt was made to determine if such violence reported against men constituted male battering or to determine a level of such, since it was assumed that violent women would behave similarly to most male batterers and underreport their violence.

Denyes Self-Care Agency Instrument

The Denyes Self-Care Agency Instrument (DSCAI) was developed to measure self-care agency in adolescents according to the nursing conceptual framework of Orem (1980, 1984). Self-care agency was described as the

capability for action to care for one's self in terms of regulating life processes, maintaining or promoting the integrity of human structure, functioning and human development, and the promotion of well-being (Orem, 1984). Denyes (1980) conceptualized self-care agency as the capability to decide what actions are needed to maintain or improve health and the capability to perform those actions. The instrument measures six factors of self-care agency: (a) ego strength and health decision-making capability; (b) relative valuing of health; (c) health knowledge and decision-making experience; (d) physical energy levels; (e) awareness and expression of feelings; and (f) attention to health.

Although the instrument has been used primarily with adolescents, it also has been used with young adult women, the population predicted to be involved in relationships that are the focus of this study the most frequently. The instrument was chosen as a way to operationally measure personal strengths of women in battering relationships within a nursing framework and also to reflect agency beliefs central to both models. The DSCAI also addresses capability for health decision-making, an essential aspect of the psychological (cognitive) response considered important in this research.

Instrument reliability and validity. Although the DSCAI was developed fairly recently, it has been used in several research studies. In the original instrument development, evidence supporting both alternate forms reliability and test-retest reliability was reported (Denyes, 1980). Internal consistency within the six factors was also established by consistent factor analyses of two random subsets of the original data and by evidence of significant split-half correlations on the factors with eight or more items. Further support for instrument reliability was provided by acceptable Coefficient Alpha measures of internal consistency (.70-.90) on the factors in two independent subsequent studies (Skinner, 1983; Mitchell, 1983). The coefficient alpha for the total instrument in the sample for this research was .88.

Content validity of the DSCAI was addressed by means of careful literature review, integration of theoretical perspectives and consultation with Dorothea Orem (Denyes, in press). Initial evidence for construct validity was demonstrated by the instrument development process and significant correlations between the majority of factors of the DSCAI and general health status and general health practice measures. Further support for construct validity has been provided by

significant correlations with convergent and divergent constructs as predicted in three independent research efforts (McGrath, 1981; Mitchell, 1983; Skinner, 1983).

Tennessee Self-Concept Scale

The Tennessee Self-Concept Scale is an extensively used normed instrument for measuring self-esteem. There is an overall measure of self-esteem which can be checked for defensive self-esteem and eight subscores which can be analyzed separately. Of particular interest for this study is the Physical Self Subscore which reflects body image and the Identity subscale. Body image is defined as the perception of one's body, state of health, physical appearance, physical skills and sexuality. As well as the physical self subscale of the TSCS, the perception of health and sexual interest items on the Beck Depression Inventory are expected to reflect body image. Body image is predicted to be negatively affected by physical battering and/or sexual abuse (perception of having been forced into sex which was not desired within the intimate relationship more than once during the last year). The identity subscore is described as a measure of what the person thinks he or she is.

Instrument reliability and validity. There is evidence of test-retest reliability (.61 - .92) over

both short and long periods of time (Fitts, 1965). In addition, reliability coefficients both of the total instrument and the subscores consistently fell between .80 and .90 in the large number of studies which computed the statistic.

Content validity was addressed in instrument development and has been supported by other experts in the field of self-concept (e.g. Wells & Marwell, 1976; Wylie, 1974). The instrument has been shown to discriminate between groups on the basis of psychological status, delinquency, alcoholism and other related parameters according to self-concept theory predictions (Fitts, 1965). It has been shown to correlate in expected directions with a variety of other personality measures and socioeconomic factors in an impressive number of research studies (Thompson, 1972).

The Beck Depression Inventory

The Beck Depression Inventory (BDI) measures enduring behavioral manifestations of the syndrome of depression rather than the more transitory mood state measured by some depression instruments. A measure of enduring depression was thought to be important for this study in order to reflect depression which may be part of the learned helplessness syndrome. The BDI was appropriate to measure the depression of learned

helplessness caused by an ongoing uncontrollable home environment rather than a noncontingent laboratory situation. It also was considered appropriate to measure depression caused by a grief reaction to anticipated or actual loss. The BDI also has been used in previous studies of attributional style and learned helplessness (e.g. Blaney et. al., 1980; Seligman, et. al., 1979; Alloy & Abramson, 1982). In addition, it has the advantage of being a normed instrument with ranges of scores for no, mild, moderate and severe depression (Beck, 1967, 1972).

Instrument reliability and validity. Internal consistency of the instrument was determined by both split-half reliability and internal consistency measuremnt (Beck et. al., 1961). Validity has been supported by the ability of the instrument to distinguish among groups and the agreement of clinical psychiatric evaluations of depression with the amount of depression shown by the instrument. In addition, the instrument has been used in numerous research studies which have shown associations in predicted directions with other constructs (Beck, 1972).

Physical Symptoms of Grief and Stress

The directions and format of the SCL-90 (Derogatis, 1977) were used in the measurement of physical symptoms

of stress and grief. The SCL-90 is a normed symptom self-report instrument (Derogatis, 1977). The SCL-90 five point scale was adapted to a four point scale to match the scale used by the BDI to measure physical symptoms associated with depression to enhance physical symptom data comparibility. The BDI measures symptoms of depression during the prior week; therefore, the same time frame was used for the other physical symptoms. The stem of the SCl-90 questions reads "How much were you distressed by:" This stem was retained. The responses were: 0-not at all; 1-a little; 2-some; 3-very.

Those symptoms on the SCL-90 which matched those identified in research as arising from stress and grief were retained. The stress-related physical symptoms identified by Seyle (1976) and Horowitz (1976) which appeared on the SCL-90 and were retained were: headaches, faintness/dizziness, restlessness, and weakness in parts of body. From the same sources, the following symptoms were added: increased smoking, overeating, heartbeat pounding or irregular, dryness of throat and mouth, trembling, urinary frequency, diarrhea, heartburn, and stiffness or pain in neck.

The physical symptoms associated with grieving (Bowlby, 1980; Glick et. al., 1974; Lindemann, 1979;

Parkes & Brown, 1972) taken from the SCL-90 were shortness of breath, faintness/dizziness and restlessness. Other symptoms associated with grief in research reports were added: tightness or a lump in the throat, pain in the chest, trembling, excessive fatigue, and an inability to get to sleep (as distinguished from the early awakening with inability to get back to sleep of moderate and severe depression measured on the BDI). Anorexia and sleep disturbances, additional symptoms associated with grieving, were measured with the BDI.

Although there was overlap in the symptoms associated with grief, depression and stress, the literature suggested that distinct patterns of symptoms would be recognizable. An attempt to identify by these patterns by factor analysis was undertaken.

Interview Questionnaire

A questionnaire was developed to address the remaining variables and collect the qualitative data. The questionnaire appears in its totality in Appendix B; the measurement of specific variables and aspects of qualitative data are described below.

Perceptions of Control in the Relationship

Perception of control in the relationship was considered as perceived ability to influence outcomes in the relationship. An adaptation of the question used by

Walker (1984) to ascertain relationship control was used. Each subject was asked, "Which of you, you or your partner, has more control over what happens in your life together?" and then "What percent of control do you have?"

Cultural Importance of Wife Role

The approval of primary roles of women other than wife and mother was ascertained by first determining with what culture or subculture the woman identified. Personal culture or subculture was considered to be the group, either dominant or in certain areas of values and beliefs deviant from the dominant, to which the subject saw herself as belonging to in terms of a combination of ethnic group (or religious group if that defined the woman's culture for her) and social class. The subject's culture or subculture was ascertained by asking her, "What groups do you consider yourself to be a member of in terms of values or what you believe in?" She was asked to identify both an ethnic and a social class group.

Subjects were then asked the following question, "Many cultural groups think that the only really important role for a woman is to be a wife and mother. On a scale of 0 to 100, to what extent is this true of _____(her ethnic group) _____(her social

class) as a whole? On a scale of 0 to 100, to what extent do you personally believe that the only best role for a woman is to be a wife and mother? Do your parents? Does your husband (boyfriend)? Do his friends? The major response for the grieving model was that of the first primary role question; the answers to the remaining questions were analyzed as part of the cultural variable analysis.

Attributions

Each subject was asked "Who or what do you blame the most for causing the problems in your relationship?" Subsequently, she was asked "Who or what do you blame the most for allowing the problems to continue?" If the answers to either or both questions was herself, she was asked what about herself she saw as the cause and whether that attribute was one she felt positive or negative about (Miller & Porter, 1983). She also was asked if the self-attribute was one which was currently operating or was only an attribute in the past.

If the woman responded "I don't know," to either or both of these first attribution questions, she was not pressed to specify a cause. This unknown attribution was considered as a separate category on the internal/external parameter.

To determine stability of attributions, each

subject was asked if she saw the problems in the relationship as likely to change or get better. The questions were more direct than those used by Frieze (1979) to determine attributions with battered women, but her indirect questions resulted in uncodable responses from many of the women.

To determine the personal-universal parameter of attributions, two questions were asked. Each subject was asked what percentage of other women had the same problems she had and what percentage of other women could solve her relationship problems given the same situation.

Generation, Implementation and Evaluation of Solutions

The women were asked to generate a list of all the solutions to the problems in the relationship which she had thought of or tried. This was a similar procedure to that used by Claerhout et. al. (1982) to evaluate problem solving skills of battered women. The total number of solutions was considered an indication of number of solutions generated.

The woman then was asked to indicate from her list which solutions she had actually tried, and how helpful she perceived them to have been on a scale of 0 to 100. A mean was then calculated of the total solution evalutions divided by the number of solutions tried.

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This was the perceived efficacy of solutions tried variable.

Other Cultural Variables

The other set of cultural variables measured in this study was tolerance of physical violence. Data on these variables was examined in relationship to the other study variables and analysis used to further explicate the findings.

Tolerance of physical violence was distinguished from approval following the conceptual distinction of Greenblatt (1983; 1984). Only a small minority of her small sample of college students actually approved of the use of physical force by husbands, but much larger percentages thought it was understandable and not considered as seriously wrong in certain situations.

The variable of a culture or subculture's tolerance of violence toward women by male partners in this study was ascertained by the following sequence of statements and questions. "The American culture as a whole seems to think it's understandable and sometimes OK that men men hit their wives or girlfriends in certain situations." "On a scale of 0 to 100, how OK or acceptable does _____(her ethnic group), _____(her social class) people as a group think men hitting their wives or girlfriends in certain

situations is?" "On a scale of 0 to 100, how OK do you personally think it is for men to hit their wives or girlfriends in certain situations?" "How OK were you taught men hitting their wives or girlgriends was as a child" "How OK does your husband (boyfriend) think it is?" "What about his friends?"

Danger Assessment

Both as part of the qualitative data to be analyzed later and as an effort to help subject women who are battered protect themselves against further serious injury or homicide, an assessment of danger was conducted. The Danger Assessment (see Appendix B) was developed from research concerning homicide and battering (Browne, 1983; Campbell, 1981). The questions involve indications of the kind of battering which most frequently have been linked with eventual homicide of one of the partners. It involved information about the battering which was not collected by means of the CTS and could lead to an assessment of battering which better reflects frequency and severity than other measures which have been used in the past. It also was designed as a beginning toward identification of risk factors for homicide which could be used in health assessments of battered women.

The Danger Assessment has been used with a limited

number of battered women in clinical settings in the past who indicated that it was helpful to them in assessing their own danger. However, the assessemnt tool is clearly in the early developmental stage at the present time. Therefore, the data was treated as qualitative data to be analyzed at a later stage. Part of the eventual analysis would be to develop a scoring process which would result in data which could be analyzed with the response variables to determine if more variance is explained with the more sensitive instrument. At this point the qualitative results can be compared with the level of battering indicated by the CTS as an initial validity check and also used to further enrich explanations indicated by this research.

Data Collection Procedures

Pilot Study

Before official data collection began the instruments and interview were piloted with six women, three from a local battered woman's shelter and three from the community. The pilot procedure provided: (a) suggestions for minor revisions of the interview questions; (b) more exact data on time required for completion of the data collection procedures; (c) women's perceptions of the acceptability of the interview format; and (d) confirmation of the codability

of responses to the interview questions on attributions and cultural influences.

Interview Procedure

The actual data collection interviews were conducted at the University of Rochester School of Nursing for the Rochester residents, and Wayne State University College of Nursing for the Detroit residents. Alternate interview sites for women in residence there were the two wife abuse shelters in the localities. Research assistants (graduate or undergraduate student nurses at the two universities) were trained to answer the telephone, explain the study, schedule appointments, and administer the standardized measurement instruments. The investigator conducted all the interviews.

Upon arrival at the interview site, subjects were greeted and the study was explained to them a second time with opportunity for and encouragement of questions. They were then asked to sign a consent form (Appendix A). The standardized measurement instruments and demographic information form was administered to them in a room with other subjects completing the same tasks. The researcher or research assistant was present to answer questions about the instruments. If the subject had problems reading, the instruments were administered orally. Subjects were interviewed in a

nearby private office. The CTS was administered first followed by the semi-structured interview questions. The total time for completion of the interview and self-administered instruments was approximately 90 minutes. However, a two hour appointment time was reserved for each woman in order to allow time for a danger assessment for battered women, a longer than average time of completion of instruments, and/or fuller exploration of the feelings and resources available related to the woman's situation.

Debriefing

At the completion of the interview process, each woman was asked if she would like to talk further about her situation and/or would like a referral to another source of help. Since the researcher is a professional nurse with extensive training and background in therapeutic communication, these skills were used to help the woman explore her feelings if she wished.

If the CTS indicated battering or severe mutual violence, the woman was provided with that interpretation and asked if she wished to complete the Danger Assessment. Recommendations for intervention including the phone number of the local shelter and procedures for obtaining an Order of Protection (Restraining Order) were given to all the women involved

in a violent relationship if they so desired.

Subjects also were offered the opportunity to ask more questions about the study and to have their responses to the standardized measurement instruments interpreted to them if they were willing to stay for scoring or return or call back at a later time. In addition, subjects were asked if they were willing to participate in a follow-up study in one year's time. After completion of the procedures, subjects were paid the stipend of $10.

Procedures to Protect Human Subjects

The subjects for study were adult women answering advertisements or responding to posted notices, thereby not being pressured in any way to participate in the research. Respondents were not contacted by phone unless they so desired, thereby protecting women who might have had their phone calls monitored. Although home visits might have been useful in order to increase the convenience of subjects and observe women in their natural environment, it was decided to conduct the interviews elsewhere so that the woman's risk in disclosing information about violence where it might be overheard was minimized.

If telephone contact revealed severe battering in the relationship, the woman was asked to consider

whether or not she was placing herself in danger by responding to the study. If she felt danger was inherent, she was told of resources in her community that she could use to protect herself (the local shelter, how to obtain an order of protection) and urged to avail herself of these resources. She was told that the researcher was anxious that she not place herself in jeopardy and was not encouraged to participate.

For battered women who had carefully assessed their own danger and wished to participate the benefits were expected to outweigh risks of taking part in the study. study. The health care system has generally been less than fully responsive to battered women, and the majority state that they would like to talk about their problems (Drake, 1982). As previously stated, women who identified themselves as battered were assessed for danger of homicide after the interview and given referral sources and other assistance as needed. The researcher was able to give the women information about battering, so that they were assured that they were not alone and thereby hopefully felt less stigma.

Data collection sheets and the transcriptions of interviews were identified by code number only. The participant's name with code number was kept on a master list in a locked file, available to the researcher only.

For both battered women and other women, the exploration of emotionally sensitive areas was a potential risk. All interviews were conducted by a professional nurse, and therapeutic communication skills were used. Again, emotional benefit was expected to outweigh any risks. The researcher referred women to other health care professionals where evidence of significant emotional disturbance, especially severe depression and/or suicide risk, was noted.

CHAPTER IV

RESULTS

Overview

The results of the research study are presented according to the following schema. First, an overview of the data analysis procedures is presented. The second section is a description of the sample in terms of: (a) outcomes of recruiting procedures and retention, (b) mean level differences between samples from two recruiting sites on demographic variables and the major variables from the two models, and (c) total sample demographics. Subsequently, the results of data analyses, using the statistical package of SPSSX, are presented according to each of the research questions.

Measured Variables

The demographic variables measured in this study are presented in Figure 3 along with the measurement used for each variable and the labels which will be used to refer to each variable in subsequent tables. The cultural variables measured also are presented in Figure 3 (p. 112).

The measured variables from the two theoretical models, grief and learned helplessness, are referred to as the model variables for purposes of presenting the study results. The variables from each of the two

Figure 3

Demographic and Cultural Variables: Measurement, Labels

Variable	Measurement	Table Label
DEMOGRAPHIC		
Total family income	$ per Year	INC
Years of education completed		ED
Woman's age		Age
Number of dependent children at home		CHILD
Relationship Duration	Years	YEARS
CULTURAL		
Wife-mother role value of woman's cultural group	0-100	W-M GRP
Wife-mother role value of woman	0-100	W-M Hers
Wife-mother role value of woman's male partner	0-100	W-M His
Cultural group tolerance of men hitting female partners	0-100	HIT/TOL GRP
Learned as child tolerance of men hitting female partners	0-100	HIT/TOL CHLD
Current tolerance of men hitting female partners	0-100	HIT/TOL Hers
Man's tolerance of men hitting female partners	0-100	HIT/TOL His

models are presented in Figures 4 and 5 (pp. 114, 115) according to the construct in the model each variable represents. Two of the demographic variables, total family income and number of dependent children, and one of the culutral variables, the woman's perception of the value placed by her ethnic group and class (cultural group) on the wife-mother role as the primary role for women become model variables in the grief model. There is also overlap in the two models; both contain the variables of self-esteem, self-care agency, and control, although conceptualized as indicators of different constructs in the models.

Overview of Data Analysis Procedures

Determining Similarities and Differences

In order to determine the results of the first research question, the similarities and differences between battered women and other women women considering ending a marital or other significant intimate relationship with a man, the women were first divided into the two groups according to the Conflict Tactics Scale (CTS) results. Mean level differences on the demographic ratio data, model, and cultural variables were computed and compared using two-tailed T-tests. Chi square analysis was used to determine differences between the two groups on nominal level data. Subgroups

Figure 4

Measurement and Labels of Model Variables: Grief Model

Construct Variable	Measurement	Label on Tables
GRIEF (Outcome)		
Depression	Beck Depression Inventory	BDI
Number/severity stress & grief physical symptoms	SCL-90	Sx
LOSS		
Self-esteem	Tennessee Self-Concept Scale	TSCS
Wife-mother role value of cultural group	0-100	W-M GRP
STRESS		
Frequency/severity of conflict in relationship	Conflict Tactics Scale	CTS
Total Family Income	$ per Year	INC
Number of dependent children		CHLD
POWERLESSNESS		
Self-care agency	Denyes Self-Care Agency Instrument	DSCAI
Control woman has in relationship	0-100%	CNTRL

Figure 5

Learned Helplessness Model: Measurement and Labels

Construct Variable	Measurement	Label on Tables
LEARNED HELPLESSNESS		
Depression	BDI	BDI
Number of solutions thought of or tried		SOLUT
Solution Efficacy Index	Mean efficacy of solutions tried	SOL/EFF
SELF-EVALUATION		
Self-esteem	TSCS	TSCS
Self-care agency	DSCAI	DSCAI
NONCONTINGENCY		
Relationship control	0-100%	CNTRL
ATTRIBUTIONS		
Internality: blame for first causing problems	1-4	1st BL
Internality: blame for problems continuing	1-4	2nd BL
Chance of improvement in relationship situation	0-100%	Unstable
% of other women with same relationship problems	0-100%	UNIVERS
% of other women could solve solve problems	0-100%	Personal

within the battered group also were compared by T-tests on mean level differences to explore differences within this sample.

In addition, the sample was compared using T-tests to normative groups on the overall score and two major subscale scores of the Tennessee Self-Concept Scale (TSCS). Differences between the battered and not battered women on normed categories of depression and self-esteem also were examined by chi square analysis. Finally, Pearson correlations among the model variables, the demographic and major model variables, and the cultural variables were computed for each group and examined for similarities and differences.

Comparing Variance Accounted for and Relative Importance of Variables

The second research question asked, "Are there differences in the two groups in either variance accounted for in outcomes or relative importance of the grief and learned helplessness model variables?" Data from the two groups, battered women and not battered women who were also having serious problems in an intimate relationship, were analyzed separately. Significance ($p < .05$) of zero order correlations (if present for either group) for each model were used to determine the variables to be retained for the

multiple regression analyses.

A series of multiple regressions by sets were performed for each model, entering each set of variables first in turn, until all possible orderings were performed. The final multiple regression ordering by sets was determined by order of importance of the set indicated by the relative magnitude of multiple r square change. The final results of the multiple regression analyses were compared for each model for each group. Standardized partial correlations of each variable in both models were compared for the battered and not battered groups to determine relative importance of the variables in the two models for each group.

Determining Relative Applicability of the Two Models

The third research question was, "Within the battered women group, what is the relative applicability of the grief and learned helplessness models?" Data from the battered group only was used for this portion of the analysis. Five comparisons were used in order to answer this question. Zero order correlations were used for the first two comparisons of the two models: (a) comparative strengths of correlations according to model predictions, and (b) accuracy of predictions from two models on the directions of significant correlations.

The zero order correlations ($p < .05$) also were used to determine which variables to retain for the multiple regression for the battered women only. Again, a series of multiple regressions by sets of retained variables were performed for each model, entering each set first in turn until all possible orderings were used. The final multiple regression ordering by sets was determined by order of importance of the set indicated by the relative magnitude of multiple r square change. The third comparison was an examination of the final results of the multiple regression analyses for each model.

To compare more directly relative usefulness of the two models, multiple regression analysis using the same dependent variable, depression, was performed. The fourth comparison was comparison of the variance explained in depression by the two models. Analyses of variance by categories of depression were also performed on the other dependent variable in each model, physical symptoms (grief model) and problem solving (learned helplessness model). This fifth comparison involved the relative accuracy in predicting the relation of depression to the other outcome variables.

The Sample

Sample Generation Results

The final sample of 193 women represents 68.4% of the approximately 282 respondents to the advertisement. Respondents were told that the study involved women having serious problems in an intimate relationship with a man. They were also told the relationship needed to be of at least one year's duration and ongoing or in the process of dissolution. In addition, it was explained that the problems in the relationship had to be serious enough that the woman was considering ending the relationship. The remainder of the respondents either did not qualify for the study because of: (a) gender of respondent (1.9%), (b) relationship duration of less than one year (3.8%) or (c) gender of partner (0.4%), or did not participate in the study for the following reasons: (a) distance of interview site from home or work, transportation problems or other problems in reaching the interview (7.5%), or (b) failure to keep appointment (18%).

Strategies to minimize failures to keep appointments included scheduling interviews at an alternate site, and reminding women by phone the day before or the morning of the appointment. When women were successfully reminded of the appointment, failures

to keep appointments were reduced. Women who failed to keep an appointment were recontacted, unless they had indicated safety problems with telephone calls. Appointments were rescheduled only once for each woman except in cases where she initiated the rescheduling process. A second failure to keep an appointment was considered a lack of interest in participation once the woman had a chance to think about the study. No data were collected on women who did not keep appointments.

The data collected from one woman was discarded. It was determined after the interview began that she did not meet the criteria for the study (her husband died eighteen months previously). The other unusual data collection procedure was a combination of written and telephone interview done with a woman who was kept virtually a prisoner by her abusive husband in a remote rural area. Complete data were obtained from this subject and the data was retained.

The majority (approximately 70%) of women answering the advertisements had seen the ad in the classified section of one of the major newspapers in the two cities. Another 20% had seen the advertisement in a campus, medical center, suburban advertiser, or alternative newspaper or other publication. The remaining 10% heard the advertisement on the radio, saw

a bulletin board posting or heard about the study from a friend.

After approximately one half of the needed sample had been generated, it was calculated that only one-third of those women interviewed had been battered. In concordance with the alternate sample generating procedure, a notice about the study was posted at two shelters for battered women, one in each city. The process generated responses from an additional 23 battered women. In the interest of the safety of these women, their interviews were conducted at the shelters. Twenty of those women were shelter residents at the time of the study; three had been residents within the previous six months. They had returned to the shelter for a group meeting and had seen the notice.

Sample Description

Differences in Two Sites

The final sample consisted of 193 women. One hundred and fourteen women resided in the greater metropolitan area of a large midwestern city; 79 women lived in the metropolitan area of a midsized middle atlantic city. The proportionate sample sizes were roughly equivalent to the proportion of population between the two cities. Ratio scale demographic data from the two groups were compared statistically using

independent t-tests. The results of these analyses are presented in Table 1.

Table 1

Comparison of Women from Two Study Sites on Demographic Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	I.	114	30.37	7.94	-5.40***	191
	II.	79	37.72	10.93		
ED	I.	114	13.25	2.43	1.83	191
	II.	79	12.63	2.10		
CHLD	I.	114	1.29	1.32	.39	191
	II.	79	1.22	1.35		
INC	I.	114	$16,847	16697	-2.36*	191
	II.	79	$22,662	18368		
YEARS	I.	114	6.29	6.15	-4.36***	191
	II.	79	11.11	9.19		

*p<.05 **p<.01 ***p<.001

Note. Group I: Larger midwestern city;
Group II: Smaller midatlantic city.

There were significant (p <.05) differences on three of the demographic variables, age, total income, and duration of the relationship. The women from the

larger city had lower mean levels on these variables. The total income difference is consistent with the lower mean income of the larger city population as a whole compared to the smaller city. The age difference is not explained by known demographic differences in the two cities, and the difference in duration of the relationship is reflective of the age difference. In addition, there was a significantly greater proportion of sample women who were nonwhite from the larger city by chi square analysis. This finding also reflects the demographic profile of the population of the two cities.

Table 2 (p. 124) contains the results of the t-test analyses on the major model variables. There were no significant differences between the women from the two cities on the model variables.

Total Sample Description

Age. The total sample ranged in age from 18 to 64 with a mean age of 33.39 years. The description of the total sample and battered and not battered women according to age groupings is presented in Table 3 (p. 125). Almost 60% of the total sample and 70% of the battered women were 34 years of age and younger.

Education. The educational background of the women in the sample ranged from 4 to 20 years of education with a mean of 13.00 years. Eighty-four per cent (N =

Table 2

Comparison of Women from Two Study Sites on Model Variables

Variable	Group	N	Mean	S.D.	T Value	df
BDI	I.	114	16.28	9.88	-0.57	191
	II.	79	17.14	10.65		
TSCS	I.	114	317.16	41.17	-1.61	191
	II.	79	12.63	2.10		
DSCAI	I.	114	64.37	13.83	-1.35	191
	II.	79	1.22	1.35		
Sx	I.	114	15.62	9.88	-0.05	191
	II.	79	15.68	9.36		
SOLUT	I.	114	5.24	2.29	0.62	191
	II.	79	5.04	2.10		
SOL/EFF	I.	114	31.55	24.90	0.16	189
	II.	77	30.98	23.28		
CNTRL	I.	114	43.92	25.70	0.82	191
	II.	79	40.72	27.70		
CTS	I.	114	236.78	179.26	0.94	191
	II.	79	210.65	204.45		

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

Note. Group I: Larger midwestern city;

Group II: Smaller mideastern city.

Table 3

Description of Sample by Age Categories

Age Category	Battered		Not Battered		Total	
	N	%	N	%	N	%
18-24	28	28.9	17	17.7	45	23.0
25-34	40	41.2	29	30.2	69	35.8
35-44	21	21.6	30	31.3	51	26.4
45-54	7	7.2	15	15.6	22	11.4
55-64	1	1.0	5	5.2	6	3.0
Totals	97	100.0	96	100.0	193	100.0

163) of the women had at least completed high school or successfully completed a G.E.D. equivalency test as shown in Table 4.

Table 4

Description of Sample by Highest Year of Education Completed Categories

Educational Category	N	Percentage
Elementary (4-8 years)	6	3.1
Some High School (9-11 years)	24	12.4
High School Graduate or Equivalent	64	33.2
Some college or college student	70	36.2
Four year college degree	16	8.0
Graduate study	12	6.2
Total	193	

Cultural background. The majority of the women in the total sample, 53.4% (N = 103), described themselves as white Americans, having no strong identification with another ethnic group (see Table 5, p. 127). When the European, Morman, and Jewish cultural groups were combined with the "white Americans," a total of 126 (65.3%) of the sample were Caucasion. The majority of the 67 (34.7%) women of nonwhite minority groups were Afro-Americans.

Table 5

Description of Sample by Cultural Group

Ethnic Group	Battered		Not Battered		Total	
	N	%	N	%	N	%
Afro-American	38	39.2	19	19.6	57	29.5
American Indian	1	1.0	0	0.0	1	.5
Asian-American (Korea, Taiwan)	0	0.0	2	2.1	2	1.0
European-American (Poland; Italy)	9	9.3	9	9.4	18	9.3
Hispanic-American (Puerto Rico; Mexico; West Indies)	4	4.1	2	2.1	6	3.1
Jewish	0	0.0	3	3.1	3	1.6
Middle Eastern-American (Lebanon)	1	1.0	0	0.0	1	.5
Mormon	1	1.0	1	1.0	2	1.0
White American (no other ethnic identification)	43	44.3	60	62.5	103	53.4
Totals	97	100.00	96	100.0	193	100.0

The white and nonwhite groups were compared using independent t-tests on the demographic and model variables. Significant ($p<.05$) differences were found on the demographic variables of age, number of children, total yearly income, and duration of the relationship as displayed in Table 6.

Table 6

Comparison of Women by Race on Demographic Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	Nonwhite	67	29.81	10.36	-3.79***	191
	White	126	35.30	7.96		
ED	Nonwhite	67	12.67	0.21	-1.46	191
	White	126	13.17	0.26		
CHLD	Nonwhite	67	1.55	1.44	2.17*	191
	White	126	1.12	1.25		
INC	Nonwhite	67	$12,053	10623	-4.38***	191
	White	126	$23,179	19259		
YEARS	Nonwhite	67	6.69	6.13	-2.09*	191
	White	126	9.16	8.56		

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

The nonwhite women had, on the average, a greater number of children ($M = 1.55$) than the white women ($M = 1.12$). This proportionate difference reflects the

difference between these two groups found in the population of this country, but the mean number of children is lower in both of the sample groups than in the groups in the population at large. The nonwhite women had a significantly lower mean total yearly household income, reflecting the earning differentials of these two groups in the nation as a whole. The nonwhite women also were significantly younger and had spent fewer years in the relationship, the latter difference reflecting the former.

Table 7 (p. 130) is a presentation of the results of the comparison of nonwhite and white women in the sample on the mean levels of the model variables. The only significant ($p < .05$) difference between the two groups was in the index of severity and frequency of conflict, with the nonwhite women reporting greater conflict in the relationship.

Income. The total yearly income of the households in which the women resided ranged from zero to $85,000. The mean was $19,316. The frequency distribution by income categories is displayed in Table 8 (p. 131). Almost 40% of the total sample reported a household income below $10,000. When household size was taken into account, 71 women or 38% of the total sample were living below the federally determined poverty level of

Table 7

Comparison of Women by Race on Model Variables

Variable	Group	N	Mean	S.D.	T Value	df
BDI	Nonwhite	67	15.58	9.86	-1.12	191
	White	126	17.31	10.82		
TSCS	Nonwhite	67	319.18	39.90	-0.44	191
	White	126	321.94	41.97		
DSCAI	Nonwhite	67	67.80	14.32	1.38	191
	White	126	64.49	12.57		
Sx	Nonwhite	67	15.40	10.32	-0.36	191
	White	126	15.91	8.94		
SOLUT	Nonwhite	67	4.96	1.92	-0.84	191
	White	126	5.24	2.36		
SOL/EFF	Nonwhite	67	34.97	25.89	1.51	191
	White	126	29.46	23.04		
CNTRL	Nonwhite	67	45.43	26.65	1.14	191
	White	126	40.84	26.47		
CTS	Nonwhite	67	268.46	195.43	2.29*	191
	White	126	203.47	182.99		
W-M GRP	Nonwhite	67	44.34	32.79	-0.34	191
	White	126	45.86	27.40		

*p<.05 **p<.01 ***p<.001

$10,500 total income per year for a family of four. Approximately the same proportion (39.4%) had total household incomes between $10,500 and $30,000 and 29% had total yearly incomes of $30,000 per year or more.

Table 8

Description of Sample by Total Household Income

Income Category	Battered		Not Battered		Total	
	N	%	N	%	N	%
$ 0 - 9,999	43	44.3	30	31.3	73	37.8
$10,000 - 19,999	23	23.7	18	18.8	41	21.2
$20,000 - 29,999	11	11.3	25	26.0	36	18.6
$30,000 - 39,999	11	11.3	9	9.4	20	10.4
$40,000 - 49,999	2	2.1	4	4.2	6	3.2
$50,000 - 59,999	3	3.1	3	3.1	6	3.2
$60,000 - 69,999	3	3.1	3	3.1	6	3.2
$70,000 - 79,999	1	.5	2	2.1	3	1.6
$80,000 - 85,000			2	2.1	2	1.0
Totals	97	100.0	96	100.0	193	100.0

In spite of what was reported as the yearly income of the women, only 28 women or 14.5% of the sample described themselves as poor (see Table 9, p. 132). The largest proportion of the sample (32.1%) said they

considered themselves to be either urban or suburban middle class.

Table 9

Description of Sample by Self-report of Class

Class	Battered		Not Battered		Total	
	N	%	N	%	N	%
Poor	16	16.5	12	12.5	28	14.6
Working Class	20	20.6	11	11.5	31	16.1
Lower MC	29	29.9	24	25.0	53	27.5
Suburban MC	11	11.3	22	22.9	33	17.1
Urban MC	18	18.6	12	12.5	30	15.6
Upper MC	1	1.0	12	12.5	13	6.8
"Counterculture"	1	1.0	3	3.1	4	2.1
None			1	1.0	1	.5
Totals	96	100.0	97	100.0	193	100.0

Note. MC = Middle Class

Occupation. The majority (71%) of the sample were employed or working as a student. The occupation categories of the sample are presented in Table 10 (p. 133). Those women reporting employment in unskilled occupations generally worked as babysitters or "fast" food workers. Only one woman was employed in a blue

collar job, factory worker, in spite of the tradition of the larger urban area as an automobile manufacturing city. The largest occupational category was secretarial or service which employed 65 or 48.5% of those reporting an occupation, reflecting the largest occupational category for women in the nation as a whole.

Table 10

Description of Sample by Woman's Occupation

Occupation	Battered		Not Battered		Total	
	N	%	N	%	N	%
None	34	35.4	22	23.4	56	29.0
Student	3	3.1	6	6.4	9	4.7
Unskilled	12	12.5	11	11.7	23	11.9
Blue Collar	1	1.0	0	0.0	1	.5
Secretary/ Service	31	33.0	33	35.1	64	33.2
White Collar/ Professional	15	15.6	22	23.4	37	19.2
Totals	96	100.0	94	100.0	190	100.0

Note. Three women did not report occupation

Marital status. The majority of the sample (64.8%) were legally either single, separated or divorced at the

time of the interview (see Table 11). However, 81.3% of the women were involved in an ongoing sexually intimate relationship with a man which usually involved cohabitation. The remaining 36 women were separated from their husbands or lovers at the time of the interviews. These separations generally were described by the women as temporary or uncertain in terms of eventual outcome.

Table 11

Description of Sample by Marital Status

Marital Status	Battered		Not Battered		Total	
	N	%	N	%	N	%
Single	27	27.8	30	31.3	57	29.5
Married	32	33.0	36	37.5	68	35.2
Separated	20	20.6	16	16.7	36	18.7
Divorced	17	17.5	14	14.6	31	16.1
Widowed	1	1.0	0	0.0	1	.5
Totals	97	100.0	96	100.0	193	100.0

Of the 31 women (16.1%) who were divorced at the time of the interview, 26 were discussing a new relationship which was problematic, while five were still involved with their ex-husbands and wished to

discuss the relatioships with them during the interviews. Because marital status did not reflect the actual relationship situation in the majority of the sample, duration of the relationship was felt to be a more important indicator of the nature and stability of the relationship than legal marital status.

The relationships with husbands or lovers had lasted from one to 35 years with a mean length of 8.3 years. Approximately half (49.7%) of the relationships (N = 96) had lasted five years or less, while only 9.4% (N = 18) had lasted from 21 to 35 years. The categories of relationship duration are presented in Table 12.

Table 12

Description of Sample by Duration of Relationship

Years	Battered		Not Battered		Total	
	N	%	N	%	N	%
1-5	52	53.6	44	45.8	96	49.7
6-10	22	22.7	21	21.6	43	22.3
11-15	13	13.4	9	9.4	22	11.4
16-20	5	5.6	9	9.4	14	5.7
21-25	3	3.1	5	5.2	8	4.1
26-30	2	2.1	4	4.2	6	3.2
31-35	0	0.0	4	4.2	4	2.1
Totals	97	100.0	96	100.0	193	100.0

The women in this sample had from 0 to 6 children, with a mean of 1.51 children. However, the largest group of women in this sample (N = 73) was the 37.8% who had no children (Table 13).

Table 13

Description of Sample by Number of Dependent Children

Children	N	Percentage
None	73	37.8
1	48	24.9
2	37	19.2
3	23	11.9
4	7	3.6
5	4	2.1
6	1	.5
Total	193	100.0

Similarities and Differences between Battered and Not Battered Women

Determination of Groups

The first research question addressed in this study was, "What are the similarities and differences between battered women and other women considering ending a marital or other significant intimate relationship?" In

order to divide the women into the two groups, battered and not battered, the results of the Conflict Tactics Scale (CTS) were coded as described in the methods chapter. This scheme did not prove entirely adequate, because several unanticipated additional categories of physical violence in an intimate relationship were represented in the sample (e.g. mutual physical violence with sexual abuse of the woman). Murray Straus (1985), who developed the CTS, was consulted for assistance in determining presence or absence of abuse in these other violence categories.

Using previously determined criteria (see Chapter 3), 74 women (38.3% of the total sample) clearly were not physically abused (in a violence free relationship) and 86 women (44.6% of the sample) clearly were beaten. According to a priori determined criteria (Chapter 3), a total of 13 women (6.8%) were in mutually violent relationships (with no sexual abuse) and were therefore added to the not battered group. Of these 13 women, 9 were approximately as violent as their partners, while 4 were more violent toward their husband or partner than he was toward them.

Nine women (4.7%) had been the victim of violence in the relationship where the physical violence took place more than one year prior to the interview, usually

order to divide the women into the two groups, battered and not battered, the results of the Conflict Tactics Scale (CTS) were coded as described in the methods chapter. This scheme did not prove entirely adequate, because several unanticipated additional categories of physical violence in an intimate relationship were represented in the sample (e.g. mutual physical violence with sexual abuse of the woman). Murray Straus (1985), who developed the CTS, was consulted for assistance in determining presence or absence of abuse in these other violence categories.

Using previously determined criteria (see Chapter 3), 74 women (38.3% of the total sample) clearly were not physically abused (in a violence free relationship) and 86 women (44.6% of the sample) clearly were beaten. According to a priori determined criteria (Chapter 3), a total of 13 women (6.8%) were in mutually violent relationships (with no sexual abuse) and were therefore added to the not battered group. Of these 13 women, 9 were approximately as violent as their partners, while 4 were more violent toward their husband or partner than he was toward them.

Nine women (4.7%) had been the victim of violence in the relationship where the physical violence took place more than one year prior to the interview, usually

very early in the relationship. The categories of conflict in the relationship are presented in Table 14.

Table 14

Description of Sample by Race and Violence in Relationship

Category of Abuse	White		Not White		Total	
	N	%	N	%	N	%
No violence	59	46.8	15	22.4	74	38.3
Physical Abuse of Woman	47	37.3	41	61.2	86	44.6
Mutual Violence	6	4.7	3	4.5	9	4.7
Sexual Abuse Only	5	4.0	0	0.0	5	2.6
Violence More than 1 Year Prior Only	6	4.7	3	4.5	9	4.7
Woman More Violent than Man	2	1.6	2	3.0	4	2.1
Mutual Violence with Sexual Abuse	3	2.4	3	4.5	6	3.1
Totals	126	100.0	67	100.0	193	100.0

None of the women who had experienced violence more than one year prior to the interview considered themselves battered, nor did they consider physical violence as a current major issue in the relationship.

When compared to the clearly not beaten group (N = 74) on the major model variables, using a series of independent t-tests, no significant differences were found on the model variables between these two groups (see Table 15, p. 140). These results must be interpreted with caution because of the small number of women in the previously victimized group; however, they are considered supportive of the perception of the women themselves. Therefore, these nine women also were included in the not battered group.

Five women (2.6% of the total sample) were sexually abused by their partners but had not experienced any other form of violence in the relationship. Six additional women (3.1%) were in a mutually violent relationship but were also sexually abused by their partner. In these cases, the sexual abuse was considered to be sufficient for battering, and these women were added to the battered group. The final grouping therefore consisted of 97 battered women and 96 not battered with all of the women having serious problems in an intimate relationship.

Similarities and Differences within the Battered Group

Comparison by Shelter Residency

A series of independent t-tests were performed on the major study variables comparing the battered women

Table 15

Comparison of Women without Violence in Relationship with Women with Violence More than One Year Prior Only

Variable	Group	N	Mean	S.D.	T Value	df
BDI	I.	74	15.73	10.24	0.33	81
	II.	9	14.56	7.20		
TSCS	I.	74	322.80	39.42	-0.50	81
	II.	9	330.00	53.62		
DSCAI	I.	74	65.03	14.30	-0.32	81
	II.	9	66.62	12.95		
Sx	I.	74	14.42	8.31	0.99	81
	II.	9	11.56	7.44		
SOLUT	I.	74	4.74	2.03	-0.50	81
	II.	9	5.1	2.47		
SOL/EFF	I.	74	31.08	24.39	-1.29	81
	II.	9	42.98	27.65		
CNTRL	I.	74	45.31	25.80	-0.27	81
	II.	9	47.78	26.82		
W-M GRP	I.	74	41.32	26.75	-0.70	81
	II.	9	48.33	38.73		

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

Note. Group I. Women in violence free relationship. Group II. Women in relationship where violence occurred more than one year previously only.

who were shelter residents (N = 24) with the battered women who were not (N = 74). As shown in Table 16, there were important difference in the demographic variables and battering indices between the two groups.

Table 16

Comparison of Battered Women by Shelter Residency on Demographic and Battering Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	Nonresident	74	32.34	8.82	2.34*	95
	Resident	23	27.61	7.21		
ED	Nonresident	74	13.28	2.19	3.88***	95
	Resident	23	11.35	1.72		
CHLD	Nonresident	74	1.23	1.31	-1.82	95
	Resident	23	1.83	1.56		
INC	Nonresident	74	$19,700	17532	3.19***	95
	Resident	23	$ 7,685	7234		
YEARS	Nonresident	74	7.72	6.64	2.0*	95
	Resident	23	4.74	4.73		
CTS	Nonresident	74	301.39	189.02	-3.11**	95
	Resident	23	446.91	218.52		
Injury Severity	Nonresident	74	1.93	1.48	-2.78**	95
	Resident	23	2.87	1.14		

*p<.05 **p<.01 ***p<.001

The women in the shelters were significantly ($p = <.05$): (a) younger, (b) had less education and (c) less total family income than the battered women in the community. The two groups did not differ as to the mean number of dependent children for whom the women had responsibility.

The shelter residents also were significantly ($p <.01$): (a) more frequently and severely battered and had received more resultant serious injuries, (b) less depressed, (c) higher on the measure of self-care agency (DSCAI), and (d) higher on the mean number of solutions to the relationship problems (see Table 17, p. 143). There were no significant differences between shelter residents and the other battered women on the self-esteem, physical symptoms, solution efficacy, control in the relationship, wife-mother role value and attribution variables.

Comparison by Sexual Abuse

A series of independent t-tests also was performed to determine similarities and differences between the battered women who were sexually abused ($N = 41$) and those whose abuse did not include forced sexual activities ($N = 56$). As presented in Table 18 (p. 144), these two subgroups of battered women did not differ on the demographic variables but the sexually abused women

Table 17 Shelter Residency Comparison: Model Variables[a]

Variable	Group	N	Mean	S.D.	T Value	df
BDI	Nonresident	74	19.16	10.73	2.53**	95
	Resident	23	13.00	8.26		
TSCS	Nonresident	74	317.58	45.11	0.92	95
	Resident	23	326.96	32.98		
DSCAI	Nonresident	74	64.57	11.68	-2.59**	95
	Resident	23	72.00	13.01		
Sx	Nonresident	74	16.73	9.26	-0.99	95
	Resident	23	19.17	13.27		
SOLUT	Nonresident	74	5.85	2.36	2.97**	95
	Resident	23	4.30	1.43		
SOL/EFF	Nonresident	74	33.76	23.26	0.89	95
	Resident	23	32.55	23.96		
CNTRL	Nonresident	74	39.59	26.08	-0.21	95
	Resident	23	40.96	31.46		
W-M GRP	Nonresident	74	45.07	32.00	-1.21	95
	Resident	23	54.04	27.44		
Unstable	Nonresident	74	29.12	28.55	-.35	95
	Resident	23	26.61	33.96		
UNIVERS	Nonresident	74	55.50	22.78	-1.89	95
	Resident	23	65.78	22.82		
Personal	Nonresident	74	31.49	29.72	0.83	95
	Resident	23	25.78	24.95		
1st Blame	Nonresident	74	2.09	.83	0.70	95
	Resident	23	1.96	.83		
2nd Blame	Nonresident	74	2.03	.69	.99	95
	Resident	23	1.87	.63		

*p<.05 **p<.01 ***p<.001

[a] Battered Women only

Table 18

Comparison of Battered Women by Sexual Abuse on Demographic and Battering Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	No Sex Abuse	56	31.63	8.11	0.54	95
	Sex Abuse	41	30.66	9.44		
ED	No Sex Abuse	56	12.79	2.07	-0.20	95
	Sex Abuse	41	9.44	1.47		
CHLD	No Sex Abuse	56	1.21	1.30	-1.31	95
	Sex Abuse	41	1.58	1.48		
INC	No Sex Abuse	56	$17,745	17151	0.62	95
	Sex Abuse	41	$15,631	15683		
YEARS	No Sex Abuse	56	7.20	6.43	0.34	95
	Sex Abuse	41	6.76	6.29	0.98	
CTS	No Sex Abuse	56	274.05	128.62	-3.70***	95
	Sex Abuse	41	420.37	255.62		
Injury	No Sex Abuse	56	1.80	1.29	-2.87**	95
	Sex Abuse	41	2.63	1.56		

*p<.05 **p<.01 ***p<.001

were significantly (p <.001) more frequently and severely beaten and had significantly (p <.01) more serious injuries as a result. When compared on the model variables (Table 19, p. 146), the only significant (p <.05) difference was that the sexually abused women had a lower mean level of self-esteem.

Demographic Similarities and Differences Between Battered and Not Battered Women

A series of independent t-tests was used to determine whether or not there were significant differences (p <.05) between the battered and not battered groups of women in the sample. In terms of demographic variables, there were no significant differences between the two groups in years of education, or number of dependent children as shown in Table 20 (p. 147). However, the battered women did report significantly less total household income and were significantly younger. In addition, there was a significant difference in the length of relationship, with the battered women reporting a shorter relationship. Furthermore, chi square analysis showed a greater (p = .001) than expected proportion of minority ethnic group women in the battered group than in the not battered group.

Table 19 Comparison by Sexual Abuse: Model Variables[a]

Variable	Group	N	Mean	S.D.	T Value	df
BDI	No Sexual Abuse	56	16.80	9.97	-0.98	95
	Sexual Abuse	41	18.93	11.93		
TSCS	No Sexual Abuse	56	322.17	39.90	2.04*	95
	Sexual Abuse	41	309.66	43.77		
DSCAI	No Sexual Abuse	56	66.22	11.52	-0.11	95
	Sexual Abuse	41	66.49	13.55		
Sx	No Sexual Abuse	56	16.13	9.46	-1.33	95
	Sexual Abuse	41	18.93	11.33		
SOLUT	No Sexual Abuse	56	5.55	2.39	0.35	95
	Sexual Abuse	41	5.39	2.12		
SOL/EFF	No Sexual Abuse	56	35.21	25.32	1.28	95
	Sexual Abuse	41	28.92	21.75		
CNTRL	No Sexual Abuse	56	39.89	25.43	-0.01	95
	Sexual Abuse	41	39.95	29.97		
W-M GRP	No Sexual Abuse	56	48.41	29.51	0.45	95
	Sexual Abuse	41	45.54	33.40		
Unstable	No Sexual Abuse	56	32.27	32.51	1.46	95
	Sexual Abuse	41	23.41	24.99		
UNIVERS	No Sexual Abuse	56	58.32	23.40	0.19	95
	Sexual Abuse	41	57.41	22.95		
Personal	No Sexual Abuse	56	35.97	28.91	1.41	95
	Sexual Abuse	41	30.13	28.64		
1st Blame	No Sexual Abuse	56	1.95	.90	-1.62	95
	Sexual Abuse	41	2.22	.69		
2nd Blame	No Sexual Abuse	56	1.91	.67	-1.36	95
	Sexual Abuse	41	2.10	.66		

*p<.05 **p<.01 ***p<.001

[a] Battered Women only

Table 20

Comparison of Battered and Nonbattered Women on Demographic Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	Nonbattered	96	35.59	10.65	3.13**	191
	Battered	97	31.22	8.67		
ED	Nonbattered	96	13.18	2.34	1.07	190
	Battered	97	12.82	2.24		
CHLD	Nonbattered	96	1.17	1.27	-1.07	191
	Battered	97	1.37	1.39		
INC	Nonbattered	96	$21,806	18330	1.97*	191
	Battered	97	$16,851	16496		
YEARS	Nonbattered	96	9.60	9.02	2.31*	191
	Battered	97	7.01	6.34		

*p<.05 **p<.01 ***p<.001

As a check on the division of battered and not battered women, independent t-tests on the demographic variables also were performed using two groups: (a) the women clearly identified as physically abused, and (b) those not beaten (eliminating those sexually abused, mutually violent and those experiencing violence more than one year previously only). The same demographic similarities and differences emerged except that the years of education for the physically abused group was significantly ($p < .05$) lower than the not beaten subgroup, and the difference in duration of the relationship was nonsignificant. These results are presented in Table 21, p. 149).

Model Variable Similarities and Differences

Self-Esteem and Depression

As is presented in Table 22 (p. 150), there were no significant differences between the battered and not battered women on mean levels of the standardized measures: the self-esteem measure (TSCS) and depression (BDI scores). This pattern of no significant differences persisted when the physically abused and not beaten groups were compared (see Table 23, p. 151).

When compared to the norms on the Tennessee Self-Concept Scale (Fitts, 1965) using a t-test, both the battered and not battered groups had significantly ($p =$

Table 21

Comparison of Physically Abused Women and Women in Violence Free Relationships on Demographic Variables

Variable	Group	N	Mean	S.D.	T Value	df
Age	No Violence	74	35.78	10.39	3.04**	155
	Physical Abuse	83	31.23	8.38		
ED	No Violence	74	13.42	2.23	2.10*	155
	Physical Abuse	83	12.69	2.23		
CHLD	No Violence	74	1.20	1.32	-1.12	155
	Physical Abuse	83	1.45	1.39		
INC	No Violence	74	$22,924	18436	2.18*	155
	Physical Abuse	83	$16,884	16231		
YEARS	No Violence	74	9.22	9.04	1.48	155
	Physical Abuse	83	7.36	6.60		

*p<.05 **p<.01 ***p<.001

Table 22. Battered and Nonbattered Women: Model Variables

Variable	Group	N	Mean	S.D.	T Value	df
BDI	Nonbattered	96	15.71	9.88	-1.36	191
	Battered	97	17.70	10.49		
TSCS	Nonbattered	96	322.17	39.90	.40	191
	Battered	97	319.80	42.58		
DSCAI	Nonbattered	96	64.59	13.73	-.88	191
	Battered	97	66.27	12.69		
Sx	Nonbattered	96	14.15	8.14	-2.36*	191
	Battered	97	17.31	10.33		
SOLUT	Nonbattered	96	4.79	2.12	-2.19*	191
	Battered	97	5.48	2.27		
SOL/EFF	Nonbattered	96	30.20	24.42	-0.67	191
	Battered	97	32.55	23.96		
CNTRL	Nonbattered	96	44.98	25.69	1.33	191
	Battered	97	39.92	27.29		
W-M GRP	Nonbattered	96	43.45	27.43	-0.89	191
	Battered	97	47.20	31.08		
Unstable	Nonbattered	96	35.81	33.00	1.61	191
	Battered	97	28.53	29.75		
UNIVERS	Nonbattered	96	48.06	27.18	-2.72**	191
	Battered	97	57.93	23.09		
Personal	Nonbattered	96	35.97	28.91	1.41	191
	Battered	97	30.13	28.64		
1st Blame	Nonbattered	96	2.13	.74	0.56	191
	Battered	97	2.06	.83		
2nd Blame	Nonbattered	96	1.95	.81	-0.39	191
	Battered	97	1.99	.67		

*p<.05 **p<.01 ***p<.001

Table 23. Physically Abused and Women in Violence Free Relationships Comparison: Model Variables

Variable	Group	N	Mean	S.D.	T Value	df
BDI	No Violence	74	15.73	10.24	-0.94	155
	Physical Abuse	83	17.33	10.86		
TSCS	No Violence	74	322.80	39.42	0.05	155
	Physical Abuse	83	322.48	43.04		
DSCAI	No Violence	74	65.03	14.30	-0.86	155
	Physical Abuse	83	66.90	12.74		
Sx	No Violence	74	14.42	8.31	-1.49	155
	Physical Abuse	83	16.67	10.41		
SOLUT	No Violence	74	4.74	2.03	-2.25*	155
	Physical Abuse	83	5.53	2.32		
SOL/EFF	No Violence	74	31.08	24.39	-0.02	155
	Physical Abuse	83	31.17	24.62		
CNTRL	No Violence	74	45.31	25.80	1.91	155
	Physical Abuse	83	37.19	27.28		
W-M GRP	No Violence	74	41.32	26.75	-2.10*	155
	Physical Abuse	83	50.90	30.13		
Unstable	No Violence	74	37.97	33.98	1.94	155
	Physical Abuse	83	27.99	30.64		
UNIVERS	No Violence	74	49.78	26.46	-2.28*	155
	Physical Abuse	83	58.81	23.16		
Personal	No Violence	74	36.66	29.37	1.35	155
	Physical Abuse	83	30.46	28.21		
1st Blame	No Violence	74	2.15	.79	0.96	155
	Physical Abuse	83	2.02	.83		
2nd Blame	No Violence	74	2.01	.87	0.11	155
	Physical Abuse	83	2.00	.70		

*p<.05 **p<.01 ***p<.001

.000) lower scores on overall self-concept and the subscales of interest, physical self (body image) and identity, than the instrument norm group (N = 626) means (see Table 24). The overall sample mean on self-concept was 321.24, which is barely within normal limits of the instrument and at the 20th percentile.

Table 24

Comparison of Sample Women with Norm Group for Tennessee Self-Concept Scale

Variable	Group	N	Mean	S.D.	T Value
Self-esteem					
(Total)	Sample	193	321.24	40.67	-8.09***
	Norm	626	345.00	30.70	
Physical Self					
Subscale	Sample	193	62.56	9.73	-12.87***
	Norm	626	71.50		
Identity					
Subscale	Sample	193	117.57	14.03	-10.26***
	Norm	626	128.00		

*p<.05 **p<.01 ***p<.001

The sample total self-concept scores ranged from 189 (approximately the 0.1 percentile) to 423 (99th

percentile) with a standard deviation of 40.67. The norm group standard deviation was 30.7 (Fitts, 1965). None of the women were below the norm on the self-criticism scale, a check against artificially inflated self-concept scores.

Eighty-eight (46%) of the women in the sample were below the normal limits on the total TSCS score; the remaining 105 (54%) were within normal limits. Although there were proportionately more battered women than not battered women below the normal limits on the self-esteem measure, chi square analysis showed that the proportional difference was not significant (Table 25).

Table 25

Comparison of Battered and Not Battered Women by Category on Tennesse Self-Concept Score

	Not Battered		Battered		Total	
	N	%	N	%	N	%
Below Normal Limits	39	40.6	49	50.5	88	45.6
Within Normal Limits	57	59.3	48	49.5	105	54.4
Total	96	49.7	97	50.3	193	100.0

Chi Square = 1.90 df = 1

*p<.05 **p<.01 ***p<.001

The scores of the women in the sample on the Beck Depression Inventory (BDI) ranged from 0 to 48 with a standard deviation of 10.21. The mean depression score (16.71) was within the mild to moderately depressed range. The frequency distribution of the categories of depression is presented in Table 25. As can be seen, almost three fourths (72%) of the total sample were depressed at least mildly depressed.

Table 26

Description of Sample by Scores on the Beck Depression Inventory

	Battered		Not Battered		Total	
Depression Category	N	%	N	%	N	%
No Depression	24	24.7	30	31.3	54	28.0
Mild Depression	18	18.6	22	22.9	40	20.7
Mild to Moderate	14	14.4	12	12.5	26	24.9
Moderate to Severe	24	25.0	24	24.7	48	24.9
Severe Depression	17	17.5	8	8.2	25	13.0

Note. Chi Square = 5.79 df = 4; Chi Square for No Depression and Severe Depression = 4.93* df = 1.

*p<.05 **p<.01 ***p<.001

Chi square analysis showed no significant differences between the expected and actual proportions

of battered and not battered women in the five categories of depression. However, when using only the not depressed and severely depressed categories, a second chi square analysis was significant. The battered women's scores were proportionately more likely ($p < .05$) to be in the severely depressed category than the not battered women. The not battered women were significantly more likely to be in the absence of depression category than the battered women.

Other Model Variables

As also shown in Table 22 (p. 150), there were no significant differences between the battered and not battered women in self-care agency (DSCAI scores), the index of solution efficacy, amount of control in the relationship, perceived cultural group value of the wife-mother role, predicted improvement in the relationship problems (situation unstable), percentage of other women who could solve the relationship problems (situation personal), and internality of attributions of blame for first causing the problems in the relationship. However, the battered women had significantly higher scores on the index of number and severity of physical symptoms (modified SCL-90), attempted a greater number of solutions to solve the problems in the relationship, and perceived a higher

percentage of women to have the same relationship problems (situation universal). The same pattern of similarities and differences were present when the physically abused only and not beaten groups were compared (see Table 23, p. 151), except that the difference in physical symptoms no longer reached significance and the difference on the wife-mother role value of the women's cultural group became significant ($p < .05$).

It had been predicted that there would be three distinct patterns of physical symptoms, those associated with grief, those indicative of stress, and those associated with depression. It had also been theorized that there could be a difference in the two groups of women on these patterns of physical symptoms. The physical symptoms from the BDI were added to the symptoms of stress and grieving (modified SCL-90) and examined by factor analysis, using the entire sample, to determine if the three patterns could be detected. Using an eigenvalue plot and varimax rotation, only a one factor solution was discernable. When the physical symptoms from the BDI were eliminated from the analysis, the remaining symptoms were best represented by a two factor solution (Table 27, p. 157). Using a varimax rotation, the factor loadings for both factors ranged

Table 27

Factor Analysis: Physical Symptoms from Modified SCL-90

Symptom	Hypothesized Origin	Varimax Rotation Factor 1	Factor 2
Throat Tight	Grief	.68696	
Stiff Neck	Stress	.64090	
Insomnia	Grief	.61887	
Restlessness	Grief & Stress	.59791	
Headache	Stress	.50970	
Heart beats rapidly	Stress	.49995	.41284
Trembling	Grief	.48872	
Muscle weakness	Stress	.46886	
Stomach ache	Stress	.45736	.41902
Dry mouth	Stress	.45028	
Urinary frequency	Stress	.40071	
Shortness of breath	Grief		.63762
Chest Pains	Grief		.59535
Excessive smoking	Stress		.57949
Heartburn	Stress		.49363
Diarrhea	Stress		.45786
Feeling faint	Grief & Stress		.44000
Overeating	Stress		

Note. Only factor loadings >.4 included.

from .40 to .69, except for overeating. However, the factors did not distinguish the symptoms of grief from stress as was predicted. Furthermore, the alpha coefficient for the entire symptom list was .82, suggesting that the symptoms might better be considered a unidimensional physical response. The results of the factor analysis were similar for the battered and not battered women.

Cultural Similarities and Differences

The most clear and striking differences between the battered and not battered groups occurred in the set of cultural variables (see Table 28, p. 159). The battered women's partners valued the wife-mother role as the "only really important role for women" more (p = .002) than did the not battered partners (according to the women). However, there were no significant differences in valuing of the wife-mother role by the women's cultural groups or the women themselves.

The other group of cultural variables measured by ratio data were those concerning the tolerance for hitting women in the women's self-identified cultural groups. Significantly (p = <.001) more of the battered women perceived their cultural group and their partners to think it was "OK for men to hit" their female partners "in certain situations." The battered women

Table 28

Comparison of Battered and Not Battered Women on Cultural Variables

Variable	Group	N	Mean	S.D.	T Value	df
W-M CHLD	Not Battered	96	52.91	37.41	-0.36	191
	Battered	97	54.85	37.05		
W-M Hers	Not Battered	96	22.68	28.58	-0.77	191
	Battered	97	25.86	28.72		
W-M His	Not Battered	95	44.46	35.42	-3.19**	189
	Battered	96	60.80	35.43		
HIT/TOL GRP	Not Battered	95	23.42	26.71	-4.26***	190
	Battered	97	41.42	29.58		
HIT/TOL CHLD	Not Battered	95	6.53	19.59	-1.76	190
	Battered	97	12.25	25.00		
HIT/TOL Hers	Not Battered	96	0.50	2.53	-1.96*	191
	Battered	97	3.21	13.26		
HIT/TOL His	Not Battered	96	8.19	22.62	-9.39***	191
	Battered	97	51.94	39.73		

*p<.05 **p<.01 ***p<.001

themselves were marginally more likely to be tolerant of hitting than the not battered women ($p = .051$), although their mean tolerance (on a scale of 0 to 100) was 03.2 as compared to 51.94 for their partners. There were no significant differences between the two groups on how much tolerance for hitting female partners was learned in childhood.

Similarities and Differences in Patterns of Correlations Among Variables

Comparison in Correlations: Model Variables

The zero order correlations among the model variables for the entire sample are presented in Table 29 (p. 161). As can be seen, there are moderate to moderately strong correlations among depression, self-esteem, self-care agency and physical symptoms of stress/grief. The other significant correlations are in the weak to moderate range.

The zero order correlations for the battered and not battered women are compared in Table 30 (p. 162). The correlations among depression, self-esteem, self-care agency and physical symptoms were essentially equal in both groups. Conflict in the relationship and control in the relationship had significant correlations with other model variables (depression and physical symptoms) only for the battered group. Attributions of

Table 29

Correlation Matrix for Total Sample: Model Variables

	BDI	TSCS	DSCAI	Sx	CTS	CNTRL	SOLUT	SOL/EFF	UNSTAB	UNIVERS	PERS	1st BL	2nd BL
TSCS	-.67***												
DSCAI	-.54***	.58***											
Sx	.55***	-.41***	-.24***										
CTS	.09	-.08	.07	.28***									
CNTRL	-.15*	.07	.04	-.02	-.14*								
SOLUT	.09	.01	.02	-.02	-.09	-.09							
SOL/EFF	-.07	.11	.15*	-.04	-.01	.09	.08						
Unstable	.03	-.07	.03	.01	-.07	.13*	-.03	.21**					
UNIVERS	-.07	-.02	.07	.04	.13*	.01	-.07	.05	.09				
Personal	.09	-.09	-.16**	.02	-.12*	.03	-.11	.04	.21**	-.07			
1st Blame	.22**	-.19**	-.11	.12*	.02	-.04	-.01	.08	.02	.00	.00		
2nd Blame	.05	-.01	.00	-.06	.00	-.02	-.03	-.14*	.27**	-.07	-.07	.27**	
W-M GRP	.19**	-.10	-.10	.14*	.07	-.11	-.04	-.19**	-.11	.06	.04	.10	-.03

*p<.05 **p<.01 ***p<.001

Note. N = 193

Table 30 Comparison Correlation Matrix: Model Variables

		BDI	TSCS	DSCAI	Sx	CTS	CNTRL	SOLUT	SOL/EFF	UNSTAB	UNIVERS	PERS	1st BL	2nd BL
TSCS	I.	-.62***												
	II.	-.71***												
DSCAI	I.	-.54***	.61***											
	II.	-.55***	.55***											
Sx	I.	.59***	-.41***	-.27**										
	II.	.52***	-.41***	-.25**										
CTS	I.	.09	-.14	-.13	.11									
	II.	.17*	-.06	.13	.28**									
CNTRL	I.	-.10	.10	.15	-.01	-.05								
	II.	-.17*	.05	-.06	-.01	-.14								
SOLUT	I.	-.01	.01	.03	-.05	.07	-.15							
	II.	.15	.01	.03	-.05	-.06	-.02							
SOL/EFF	I.	-.20*	.15	.18*	-.07	-.02	.08	.06						
	II.	.03	.07	.11	-.04	-.06	.10	.09						
Unstable	I.	-.14	.06	.16	-.02	-.09	.10	-.15	.24*					
	II.	.23**	-.22**	-.13	.08	.03	.14	.12	.19*					
UNIVERS	I.	-.03	-.10	-.06	.07	.06	.01	-.05	.14	.14				
	II.	-.17*	.08	.20*	-.06	.02	.05	-.17*	-.08	.09				
Personal	I.	.34***	-.22**	-.35***	.18*	.13	-.07	-.02	.14	.29**	-.07			
	II.	-.12	.03	.05	-.08	-.16	.11	-.17*	.21**	.11	-.04			
1st Blame	I.	.06	.00	-.03	.00	-.18*	.05	.03	-.09	.11	.03	.03		
	II.	.37***	-.35***	-.17*	.23**	.14	-.13	-.03	-.08	-.08	-.22**	-.03		
2nd Blame	I.	.03	-.02	-.02	-.07	-.23**	.05	-.14	-.31**	.13	-.12	-.01	.31**	
	II.	.06	-.01	.02	-.07	.06	-.10	.08	.06	-.07	.01	-.15	.25**	
W-M GRP	I.	.26**	-.11	-.23**	.10	.07	-.07	-.14	.04	-.15	.04	-.15	.02	.00
	II.	.12	-.09	.03	.16*	.23**	-.14	.01	-.33***	.05	.05	.06	.17*	-.06

*p<.05 **p<.01 ***p<.001

Notes. I. Not Battered (N = 96) II. Battered (N = 97)

Underlined correlations noted in text.

blame for originally causing the problems in the relationship also had moderate and significant correlations with the majority of other variables for the battered women only. The prediction of improvement in the relationship problems (situation unstable) and the perceived percentage of other women with the same kinds of relationship problems (situation universal) also had more significant correlations with other variables for the battered group. In contrast, the perceived percentage of other women who could solve the same relationship problems (situation personal) and the attributions of blame for the problems in the relationship continuing had more significant and stronger correlations for the not battered group. The cultural group valuing of the wife-mother role and the index of solution efficacy varied in their patterns of correlations for the battered and not battered groups.

Comparison in Correlations: Demographic and Major Model Variables

The zero order correlation matrices for the entire sample for the demographic and major model variables are presented in Table 31 (p. 164) and those for the battered and not battered groups are presented in Table 32 (p. 165). The basic patterns of correlations among these variables in the total sample remained similar to

Table 31

Correlation Matrix for Entire Sample: Demographic and Model Variables

	ED	INC	CHLD	Age	YEARS
INC	.30***				
CHLD	-.14*	-.07			
Age	.07	.33***	.13*		
YEARS	-.05	.33***	.21**	.70***	
BDI	-.09	.04	.01	-.02	-.05
TSCS	.17**	.09	-.04	.21**	.16**
DSCAI	.08	.05	-.06	.05	-.01
Sx	-.24***	-.07	.01	-.05	-.07
CTS	-.23**	-.15*	.14*	-.24***	-.11
CNTRL	.13*	-.08	-.03	.02	.70***
SOLUT	.25***	.13*	.05	.03	.06
SOL/EFF	.18**	.11	-.06	-.06	-.02
W-M GRP	-.29***	-.07	.05	-.02	.01
Unstable	.01	.01	-.17**	-.19**	-.14*
UNIVERS	-.12*	-.16*	.03	-.04	.05
Personal	-.04	-.05	-.07	.14*	.04
1st Blame	.00	.08	-.17**	-.08	-.08
2nd Blame	.02	.05	.01	.04	.01

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

Note. N = 193

Table 32 Comparison Correlation Matrix: Demographic, and Model Variables

		ED	INC	CHLD	Age	YEARS
INC	I	.27**				
	II	.31**				
CHLD	I	-.08	-.13			
	II	-.19*	.02			
Age	I	-.10	.26**	.12		
	II	.26**	.36**	.19*		
YEARS	I	-.18*	.30**	.19*	.71***	
	II	.11	.31**	.29**	.66***	
BDI	I	-.05	-.07	-.09	-.08	-.04
	II	-.12	.17*	.04	-.12	-.03
TSCS	I	.17*	.20*	.01	.14	.15
	II	.17*	-.02	-.07	.30**	.17*
DSCAI	I	.10	.15	.04	.10	.04
	II	.05	-.06	-.14	.03	-.03
Sx	I	-.15	-.06	-.08	.08	.05
	II	-.29**	-.05	.05	-.11	-.16
CTS	I	-.23**	-.20*	.05	-.02	.07
	II	-.26**	-.06	.16	-.22*	-.06
SOLUT	I	.26**	-.01	.18*	.07	.14
	II	.27**	.33**	-.08	.07	.02
SOL/EFF	I	.14	.15	-.08	-.10	.02
	II	.23**	.09	-.04	.00	-.05
W-M GRP	I	-.18*	-.12	.11	.03	.02
	II	-.38***	-.02	-.01	-.05	.03
Unstable	I	-.04	-.03	-.34***	-.26**	-.24**
	II	-.05	.02	.01	-.17*	-.06
UNIVERS	I	-.09	-.14	-.10	.05	.07
	II	-.13	-.13	.14	-.06	.11
Personal	I	-.13	-.04	-.05	.18*	.04
	II	.05	-.09	-.06	.05	.00
1st Blame	I	.08	.16	-.26**	-.12	-.09
	II	-.07	.00	-.09	-.06	-.08
2nd Blame	I	.00	.10	.00	.00	.00
	II	.06	.00	.02	.12	.04

*p<.05 **p<.01 ***p<.001

Note. I = Not Battered (N = 96); II = Battered (N = 97)

the patterns within the battered and not battered groups with the following exceptions: (a) age and number of children were significantly correlated with education for the battered women only; (b) relationship duration and education were significantly negatively correlated in the not battered sample only; (c) self-esteem was significantly positively related to income for the not battered women only, while it was significantly positively correlated with age and relationship duration in the battered group; (d) depression was significantly positively related to total income for the battered women only; (e) conflict in the relationship was significantly negatively correlated with income for the not battered group, while it was also significantly negatively related to age but only in the battered sample; and (f) the number of solutions generated correlated significantly in a positive direction with income for the battered women and with number of children for the not battered group.

Comparative Correlations on Cultural Variables

Table 33 (p. 167) is a presentation of the correlations among the cultural variables and some of the more salient model and demographic variables for the battered and not battered women. The cultural variables representing tolerance for hitting significantly

Table 33 Comparison Correlation Matrix: Cultural and Related Variables

		Wife Mother Role Value			Tolerance for Hitting			
		GRP	Hers	His	GRP	CHLD	Hers	His
WM/Her	I	.36***						
	II	.24**						
WM/His	I	.37***	.14					
	II	.21*	.14					
HIT/GRP	I	.08	-.10					
	II	.17*	.10	.20*				
HIT/Ch	I	.17	.06	-.05	.31**			
	II	.21*	.11	.18*	.17*			
HIT/Her	I	-.07	-.03	.10	.02	-.06		
	II	.08	.03	-.01	.22*	.24**		
HIT/Man	I	.18*	.00	.20*	.14	.05	.08	
	II	.19*	-.14	.22*	.31**	.11	.19*	
CTS	I	.07	-.01	.19*	.12	-.06	.15	.19*
	II	.23*	-.09	.23*	.18*	-.00	-.07	.31**
ED	I	-.18*	-.15	.01	-.13	.04	.00	.01
	II	-.38***	-.26**	-.28**	-.17*	-.19*	-.09	-.16
Age	I	.03	.24**	.31**	-.07	.11	-.05	-.06
	II	-.05	.03	-.03	-.09	.01	-.18*	-.22*
CNTRL	I	-.07	-.12	.05	.29**	.05	.09	.05
	II	-.14	.11	-.25**	.03	-.18*	-.19*	.00

*p<.05 **p<.01 ***p<.001

Note. I = Not Battered (N = 96); II = Battered (N = 97)

correlated with other model and demographic variables in the battered group only, while the wife-mother role value variables generally were more strongly correlated with these variables for the not battered women. Control in the relationship was negatively correlated ($p < .05$) with the valuing of the wife-mother role by the partner and the woman's tolerance of hitting (learned as a child and current) for the battered women only. In contrast, control in the relationship was positively related ($p < .01$) to the women's perception of tolerance of hitting women by her cultural group for the not battered group.

Summary of Similarities and Differences Among Battered and Not Battered Women

In summary, within this sample of battered and not battered women there were significant differences on several demographic variables and cultural variables, but there were more similarities than differences in mean levels on the model variables. There was a difference in total family income in the two groups which was reflective of the greater proportion of the battered group belonging to minority ethnic groups. The battered women also were younger and therefore had relationships of shorter duration than the not battered women. In terms of cultural differences, the battered

women perceived their partners to value the wife-mother role more than the partners of the not battered. In addition, the battered women were marginally more tolerant of men hitting female partners, as well as perceiving their partners and cultural groups to be significantly more tolerant of this practice than the not battered group.

When considering the model variables, both groups were depressed and had significantly lower self-esteem than normative groups. In addition, the battered women were more likely to be severely depressed than the not battered women. The battered women also were higher on the measure of number and severity of physical symptoms of stress and grief and had thought of or tried more solutions to the relationship problems. However, the two groups were similar in mean differences on the other model variables.

There were also differences in patterns of correlations between variables in the two groups, especially the stronger correlations of conflict and control in the relationship with other model and demographic variables in the battered group. However, the pattern of correlations among the majority of the key model variables (self-esteem, self-care agency and physical symptoms) was the same in both groups.

Comparing Variance Accounted For and Relative Importance of Variables

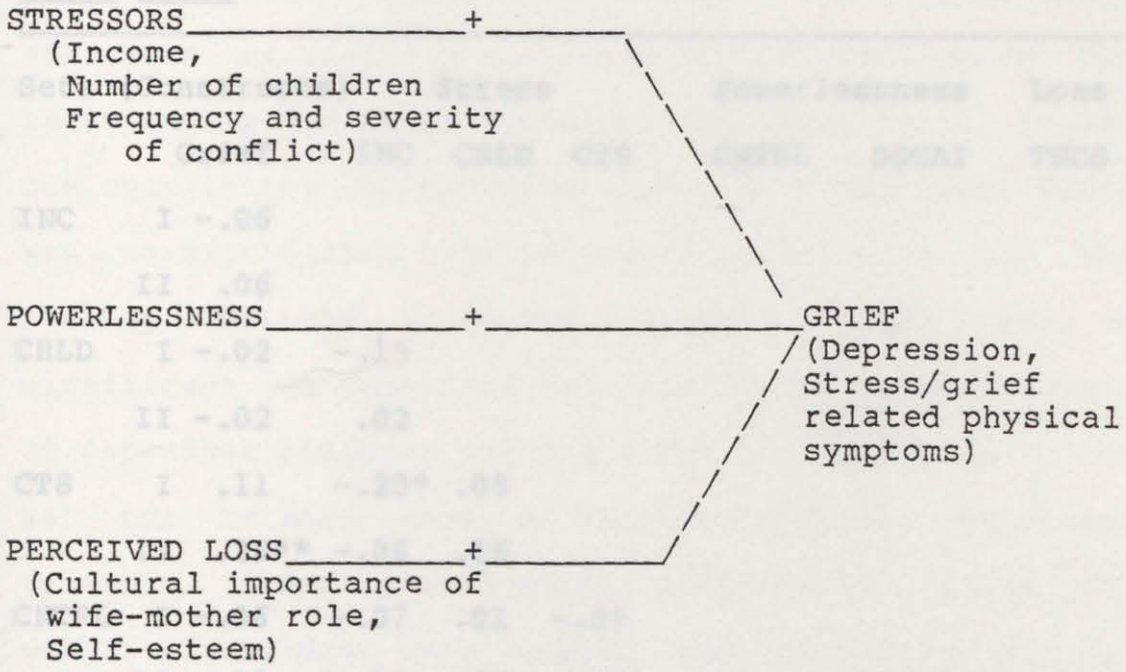
The second research question asked, "Are there differences between the two groups (battered women and other women considering ending a marital or other significant intimate relationship) in either outcomes or the relative importance of the variables in grief and learned helplessness models?" The results of the series of multiple regression analyses for both groups of women will be presented separately for each model.

The Grief Model

The grief model was hypothesized to consist of three sets of independent variables representing stressors, powerlessness and perceived loss (Figure 1, p. 171). The outcome variable, grief, was constructed by first standardizing the scores on depression (BDI) and the index of presence and severity of physical symptoms (modified SCL-90). The mean of these two standardized scores was used to represent the grief construct. Zero order correlations were then computed between the variables in each set and with the outcome variable for each group as shown in Table 34 (p. 172). The model was modified by eliminating variables either not significantly related to other variables in the set or not significantly related to the dependent variable.

Figure 1

The Grieving Model



Note UPPER CASE: Underlying constructs

Lower case: Measured variables

Table 34

Comparison Zero Order Correlation Matrix: Original Grief Model

Sets (Constructs)		Stress			Powerlessness		Loss
	Grief	INC	CHLD	CTS	CNTRL	DSCAI	TSCS
INC	I -.06						
	II .06						
CHLD	I -.02	-.13					
	II -.02	.02					
CTS	I .11	-.20*	.05				
	II .26**	-.06	.16				
CNTRL	I -.06	-.07	.02	-.05			
	II -.10	-.12	-.07	-.14			
DSCAI	I -.46***	.15	.03	-.13	.15		
	II -.46***	-.06	-.14	.13	-.06		
TSCS	I -.58***	.19*	-.03	-.14	.11	.62***	
	II -.64***	.02	-.07	-.06	.05	.55***	
W-M GRP	I .21*	-.12	.14	.07	-.08	-.23**	-.11
	II .16*	-.02	-.01	.23*	-.14	.03	-.10

*p<.05 **p<.01 ***p<.001

Note. Group I = Not battered women (N = 96); Group II = Battered Women (N = 97)

Stressors

A significant negative correlation ($r = -.20, p < .05$) as predicted was found between the hypothesized stressors of severity and frequency of conflict in the relationship (weighted severity) and total family income but only in the not battered group. In addition, there was no significant correlation between income and the outcome variable in either group. There were no significant correlations in either group between number of dependent children and the other two variables in the set nor between number of children and the dependent variable, grief. Therefore, total family income and number of children were dropped from the model.

Powerlessness

Powerlessness was thought to be manifested in perception of low control in the relationship and low self-care agency (score on DSCAI). The two variables were not significantly correlated in either group, nor was control significantly correlated to the grief outcome variable. Therefore, control was eliminated from the model.

Perceived Loss

The construct of perceived loss was expected to be manifested in low self-esteem and perceptions of high importance of the wife-mother role by her individual

cultural group wife-mother role). Wife-mother role was not significantly correlated with self-esteem in either group, (r = -.11, not battered; r = -.10, battered), but the correlations were in the expected direction. In addition, wife-mother role was significantly (p <.05) and moderately positively correlated with the grief dependent variable in both groups (r = .21, not battered and r = .16, battered) and was therefore retained in the model as part of the loss construct.

Multiple Regression Analysis

The series of hierarchical multiple regression analyses by variable sets representing each of the constructs (stressors, powerlessness and loss) was performed. Each set was entered first in turn until all combinations were exhausted. The series of multiple regression analyses was done on each of the two groups in the sample, battered and not battered women. The entry of variable sets used for interpretation of the multiple regression analysis was the ordering which explained the most variance at each subsequent step. For the battered women, this ordering is presented in Table 35 (p. 175). For the not battered women, self-care agency added slightly more than conflict to the variance explained when entered into the multiple regression before conflict. However, the change in

Table 35

Comparison Multiple Regression Results: Modified Grief[a] Model with Grief as Outcome Variable

Step	Variable Entered		Multiple R	Adjusted R^2	Overall F	Change in R^2	F Change
1	PERCEIVED LOSS						
	W-M GRP						
	TSCS	I	.5993	.3389	26.06***	.3592	26.06***
		II	.6457	.4045	33.60***	.4169	33.60***
2	STRESSOR						
	CTS	I	.3598	.3389	17.23***	.0006	.09
		II	.6775	.4416	26.31***	.0422	7.25**
3	POWERLESS-NESS						
	DSCAI	I	.6088	.3430	13.39***	.0109	1.57
		II	.6992	.4889	22.00***	.0299	5.37*

*p<.05 **p<.01 ***p<.001

Note. Group I = Not Battered Women (N = 96); Group II = Battered Women (N = 97)

[a] Grief computed as mean of Depression and Physical Symptoms

variance accounted for was not significant for either conflict or self-care agency in either ordering for the not battered group.

The most powerful predictor for both groups was the loss construct, made up of self-esteem and the wife-mother role. Using the ordering in Table 35, each set added significantly to the total variance explained (adjusted r^2 = .4889) for the battered women. The lack of salience of both conflict in the relationship and self-care agency for the not battered group resulted in a lower, although still significant (p <.001) total variance in grief explained (r^2 = .3430).

The comparison of standardized partial correlations (betas) in the final multiple regression analysis between the two groups is presented in Table 36 (p. 177). Self-esteem acted as the strongest predictor of grief for both groups of women. Conflict in the relationship was next in importance for the battered women, but least important for the not battered women. Self-care agency and wife-mother role value were next in importance for the not battered group. Wife-mother role value accounted for very little of the variance in grief for the battered women, when the contributions of the other variables were taken into account.

The examination of the partial regression

Table 36

Comparison Standardized Partial Regression Coefficients: Grief Model

Variable	Group	Zero Order Correlation	Beta
TSCS	Not Battered	-.58***	-.49***
	Battered	-.64***	-.50***
CTS	Not Battered	.11	.02
	Battered	.26**	.24**
DSCAI	Not Battered	-.46***	-.13
	Battered	-.46***	-.21*
W-M GRP	Not Battered	.21*	.12
	Battered	.16*	.06

*p<.05 **p<.01 ***p<.001

coefficients suggested redundancy among the independent variables in both groups, especially between self-care agency and self-esteem. Referring back to Table 34, it can be seen that the relationship between these two variables was originally very strong (r = .55, battered; r = .62, not battered).

The major difference between the two groups was that the grief model explained more of the variance of the grief response (depression and physical symptoms of stress/grief) for battered women than for not battered

women. The difference in the multiple r^2 was because of the additional variance explained by conflict in the relationship and self-care agency in the battered women.

The Learned Helplessness Model

As displayed in Figure 2 (p. 179), the independent variables in the learned helplessness model also were grouped into three sets, noncontingency (control in the relationship), attributions (blame for the relationship problems and perceptions about the situation), and self-evaluation (self-esteem and self-care agency).

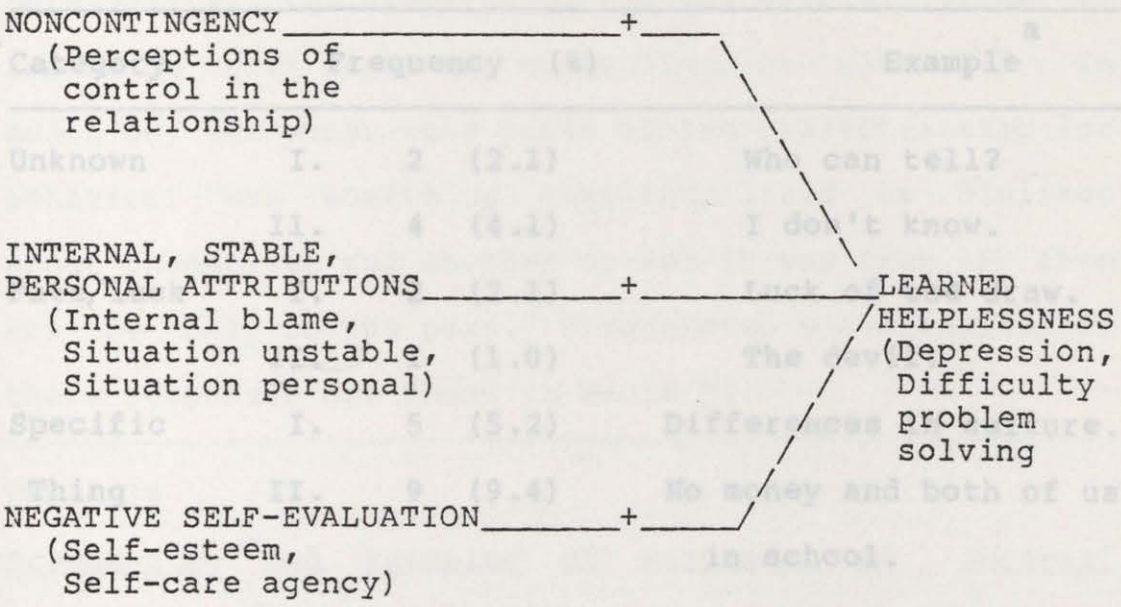
Attributions of Blame Coding

Coding of the attribution of blame for initially causing and the continuation of the relationship problems was based on the answers women gave to a series of questions asked in the interview portion of data collection. The women's answers to the question, "Who or what do you blame the most for first causing the problems in your relationship?" was first coded into seven categories: unknown, fate/luck, specific thing, other person(s), self (internal), partner, and self and partner. Frequencies and examples of these responses from the interviews are presented in Table 37 (p. 180).

Internal attributions were further categorized into behavioral versus characterological by asking the self-blamers what about themselves they blamed. Then those

Figure 2

The Learned Helplessness Model



Note UPPER CASE: Underlying constructs

Lower case: Measured variables

Table 37

Frequencies and Examples of Responses to Query of Blame for First Causing Relationship Problems

Category		Frequency	(%)	Example[a]
Unknown	I.	2	(2.1)	Who can tell?
	II.	4	(4.1)	I don't know.
Fate/luck	I.	2	(2.1)	Luck of the draw.
	II.	1	(1.0)	The devil.
Specific	I.	5	(5.2)	Differences in culture.
Thing	II.	9	(9.4)	No money and both of us in school.
Other	I.	10	(10.3)	His parents.
Person(s)	II.	13	(13.5)	My daughter - he is jealous of her.
Self	I.	19	(19.8)	I let him walk all over me.
	II.	21	(21.9)	I treated him wrong.
Partner	I.	46	(47.4)	He doesn't like to talk
	II.	40	(41.2)	He never grew up.
Both Self & Partner	I.	10	(10.3)	Neither of us trust each other.
	II.	13	(13.5)	We weren't willing to work at it.

Note. Group I = Not Battered; Group II = Battered

[a] Actual quotes from interview

women were asked, "Do you think that the (whatever about themselves they blamed) is part of your basic personality, in other words not changeable, or is it something that can be controlled or altered?" In addition, the women were asked if the characteristic (or behavior) was something that they liked or disliked about themselves and whether or not it was true of them now or only in the past. Frequencies and examples of these responses are found in Table 38.

Table 38

Frequencies and Examples of Responses of Internal Attributions Coded Behavioral or Characterological

Category	Group	Frequency[a]	(%)	Example[b]
Characterological	I	3	(15.8)	I didn't want to be his mother.
	II	6	(28.6)	I'm goal oriented. I put school before the house.
Behavioral	I	16	(84.2)	I had another boyfriend
	II	15	(71.4)	I wasn't honest enough about my feelings.

Note. Group I = Not Battered Women (N = 96); Group II = Battered Women (N = 97)

a N of self-blamers = 40

b Actual quotes from interview

A similar process was undertaken for the question, "Who or what do you blame the most for the problems in the relationship continuing now?" Again, the question was followed by a determination of the characterological versus behavioral parameter and the woman's affect toward that characteristic/behavior.

The final coding scheme was not able to take into account the information on positive or negative affect about and currency of self-attributions because the continued divisions of the internal attributions resulted in extremely small numbers of women in the various categories. However, the final coding scheme took into account much of the current literature on attributions (e.g. Miller & Porter, 1983; Peterson, Schwartz & Seligman, 1981).

The coding categories were ordered according to predictions of learned helplessness. Attributions of self and partner (interactive) were interpreted as the least consistent with learned helplessness and coded as 1. Blaming partner, other person(s), fate/luck, or specific thing (external attributions) was next in order and coded as 2. Women who blamed a behavioral (controllable, changeable) aspect of themselves were labeled internal/behavioral and coded as 3. Those who blamed a characterological aspect of themselves

(uncontrollable, unchanging) were predicted to be the most likely to exhibit learned helplessness and coded as 4 (internal/characterological). This coding scheme was used for both the attributions of blame for initiating the problems in the relationship (original blame attributions) and for continuation of the problems in the relationship (continuation blame attributions).

Six of the women said that they did not know who or what was to blame for the problems in the relationship first starting and 4 women cited the unknown category on the continuation blame attributions. When divided into battered and not battered groups, the frequencies became even smaller. In addition, the mean level on depression for these women was not consistent with predicted patterns of depression and was at the opposite end of the spectrum for battered and not battered women (see Table 39, p. 184). It was decided that the small numbers in these groups made further attempts to categorize or ordinally scale these women problematic. Therefore, the unknown blame category data were not included in the attribution coding.

Learned Helplessness Outcome Variable

The dependent variable, learned helplessness, was planned as a combination of standardized scores on depression, the number of solutions to the problems in

Table 39

Mean Levels of Depression for Each Category of Attribution of Blame for First Causing Relationship Problems

Category	Group	Frequency (%)	Depression[a]
Unknown	Not battered	2 (2.1)	21.2
	Battered	4 (4.1)	7.8
Interactive (Self & Partner)	Not battered	10 (10.4)	14.0
	Battered	13 (13.4)	15.2
External	Not battered	63 (65.6)	15.9
	Battered	58 (59.8)	17.1
Self (Behavioral)	Not battered	16 (16.7)	15.6
	Battered	17 (17.5)	21.3
Self (Characterological)	Not battered	5 (5.2)	17.6
	Battered	5 (5.2)	28.8

Note. Group I = Not Battered Women (N = 96); Group II = Battered Women (N = 97)

[a] Categories of depression on BDI: none (0-9); mild (10-15); mild to moderate (16-19); moderate to severe (20-29); severe (30-63).

the relationship thought of and/or tried (solutions), and the perceived usefulness of the solutions tried (solution effectiveness). The solution effectiveness variable was created by computing a mean using the sum of the perceived effectiveness of each solution and the number of solutions actually tried. The mean of the standardized number of solutions and solution effectiveness was to be subtracted from the standardized depression scores to determine the learned helplessness score.

In spite of the theoretical soundness of this combination of depression and problem solving, neither of the indices of problem solving correlated significantly with depression nor with each other in the battered group. However, education was significantly positively correlated with both measures of problem solving and was perhaps acting as a suppressor variable. Therefore, partial correlations between number of solutions, solution efficacy and depression, controlling for education were computed. Table 40 (p. 186) shows that the measures of problem solving remained essentially uncorrelated with depression and with each other, even when the effects of education were controlled. The only exception was the significance of the correlation of number of solutions with depression

Table 40

Partial Correlations of Problem Solving Variables and Major Learned Helplessness Model Variables Controlling for Education Compared with Zero Order Correlations[a] (Battered Women)

	SOL/EFF	BDI	TSCS	DSCAI
SOLUT	.03	.20*	-.03	-.05
	(.09)	(.16)	(.01)	(-.03)
SOL/EFF		.03	.04	.10
		(.03)	(.07)	(.11)

*$p<.05$ **$p<.01$ ***$p<.001$; N = 97

[a] Zero order correlations in parentheses

(r = .20, p <.05), but the direction (positive) was opposite of that predicted by the learned helplessness model.

Although both the zero order and partial correlation for solution efficacy and depression was significant for the not battered group, this group was primarily designed as a comparison group and not as the sample on which to base the models. Because of these difficulties with the problem solving indices, it was decided to eliminate them from the model. Therefore, depression was used as the sole outcome variable.

Further Model Modification

Zero order correlations for the learned helplessness model using depression as the outcome variable are shown for both the battered and not battered women in Table 41 (p. 188). The only variable which was not significantly correlated with depression in either the battered or not battered group was attribution of blame for the relationship problems continuing. Therefore, this variable was eliminated from the modified model analysis. To verify that the relation of depression to the attribution of blame for first starting the relationship problems (ordinal data), a Spearman Rho correlation was calculated (r = .34, p = .000).

Multiple Regression Analysis

A series of hierarchical multiple regression analyses by variable sets was performed for the battered and not battered groups, entering each set in turn until all possible combinations were used. The ordering which accounted for the greatest amount of variance in depression at each step for the battered women was the following entry order: (a) the self-evaluation set, (b) the noncontingency variable, and (c) the attribution set. The hierarchical multiple regression analysis ordering which best reflected the data for the not

Table 41

Comparison Zero Order Correlations of Learned Helplessness Model Variables with Depression as Outcome Variable

Set Variable		Contingency CNTRL	Self-Eval DSCAI	Attributions TSCS	UNSTAB	UNIVERS	PERS	1st BL
CNTRL	I	-.10						
	II	-.17*						
DSCAI	I	-.54***	.15					
	II	-.55***	-.06					
TSCS	I	-.62***	.10	.61***				
	II	-.71***	-.05	.55***				
Unstable	I	-.14	.10	.16	.06			
	II	.23*	.14	-.13	-.23*			
UNIVERS	I	.03	.01	-.06	-.10	.14		
	II	-.17*	.05	.20*	.08	.09		
Personal	I	.34***	-.07	-.35***	-.22**	.29**		
	II	-.12	.10	.05	.03	.11	.01	
1st Blame	I	.06	.05	-.03	.00	.11	.03	.03
	II	.37***	-.13	-.17*	-.35***	-.08	-.22*	-.03
2nd Blame	I	.03	.05	-.02	-.02	.13	-.12	-.01 .31**
	II	.06	-.10	.02	-.01	.08	.01	-.15 .25**

*p<.05 **p<.01 ***p<.001

Note. Group I = Not Battered; Group II = Battered

battered women was to enter the attribution set second. However, the change in R^2 for either control or attributions was nonsignificant for the not battered women. As displayed in Table 42, the addition of the attribution set of variables did not significantly alter the variance accounted for in either group.

Table 42

Comparison Multiple Regression Results: Modified Learned Helplessness Model; Outcome Variable, Depression

Step Variable		Multiple R	Adjusted R2	Overall F	Change in R2	F Change
1 Self-Evaluation						
TSCS DSCAI	I	.6481	.4075	33.67***	.4200	33.67***
	II	.7363	.5324	55.65***	.5421	55.65***
2 Noncontingency						
CNTRL	I	.6483	.4014	22.23***	.0003	.04
	II	.7532	.5533	40.64***	.0252	5.41*
3 Attributions						
1st Blame Unstable Personal UNIVERS	I	.6863	.4710	11.19***	.0508	2.11
	II	.7778	.5738	19.47***	.0376	2.12

*p<.05 **p<.01 ***p<.001

Note. Group I = Not Battered Women; Group II = Battered

The higher final multiple R^2 (.57 versus .47) for the battered women, as compared to that for the not battered women, reflected the greater influence of the control variable for battered women. The standardized partial regression coefficients (betas) for control further demonstrated this finding as shown in Table 43 (p. 191). The self-care agency portion of the construct self-evaluation also was more important in predicting depression for the battered women than the not battered. In spite of the moderately strong zero order correlation between internality of original blame attributions and depression in the battered women, the beta was not significant. As with self-care agency, it appeared that redundancy of internality of attributions with self-esteem (zero order correlation, $r = -.35$) may have accounted for the lower beta.

The standardized partial regression coefficients of the other attribution parameters show that perceptions of universality of the relationship situation were not salient for either the battered or not battered women when other factors were taken into account. The perception that the situation was personal was an important predictor only for the not battered group. The perception of stability of the situation was a relatively weak predictor for both groups, and operated

Table 43

Comparison Standardized Partial Regression Coefficients (Betas): Learned Helplessness Model with Depression as Outcome Variable

Variable	Group	Zero Order Correlation	Beta
TSCS	Not Battered	-.62***	-.47***
	Battered	-.71***	-.49***
DSCAI	Not Battered	-.54***	-.15*
	Battered	-.55***	-.23**
CNTRL	Not Battered	-.10	-.03
	Battered	-.17*	-.15*
Internality			
1st Blame	Not Battered	.06	.06
	Battered	.37***	.12
Situation			
Unstable	Not Battered	-.14	-.15*
	Battered	.23*	.14*
Situation			
Personal	Not Battered	.34**	.22*
	Battered	-.12	-.09
Situation			
Universal	Not Battered	-.03	-.05
	Battered	-.17*	-.07

*p<.05 **p<.01 ***p<.001

in opposite ways. For the battered women, the more they thought the relationship problems would improve, the more depressed they were. In the not battered group, the stability parameter was related to depression in the direction predicted by the reformulated model of learned helplessness. There was no evidence of suppression effects from the examination of the zero order and partial correlations.

Summary of Findings for the Grief and Learned Helplessness Models in Battered and Not Battered Women

In summary, both the grief and learned helplessness models explained more of the variance in outcomes for the battered women than the not battered women. Self-esteem was the only variable consistently strongly predictive of depression and grief for the not battered group when other factors were taken into account. Self-esteem was also the most important predictor variable for the battered group in both models. Self-care agency and relationship conflict were significant predictors for the battered women in the grief model. In the learned helplessness model, self-care agency and control in the relationship were salient factors for the battered women.

Relative Applicability of Two Models

The third research question was, "Within the battered group, what is the relative applicability of the grief and learned helplessness models?" Data from the battered group only was used for this portion of the analysis. The five comparisons used in order to answer the research question were as follows: (a) two comparisons of magnitude of zero order correlations among variables paired as constructs according to each model's predictions, (b) a comparison of the accuracy of a priori predictions from the two models on the directions of significant zero order correlations, (c) comparison of the final results of the multiple regression analyses for each model, (d) comparison of the final results of the multiple regression analyses for each model using the same dependent variable, depression, and (e) determination of which model more accurately predicted the relationship of depression to the other variables used to construct the indices of grief (physical symptoms) and learned helplessness (problem solving).

Comparative Strengths of Correlations

To partially determine the relative applicability of the two models, the actual relative strength of zero order correlations between key variables in both models

were compared to relative strengths predicted by each model. Four key variable pairs were chosen for this comparison. The learned helplessness model predicts that the correlation between depression and problem solving would be greater than that between depression and physical symptoms (considered irrelevant to learned helplessness theory). The grief model predicts the opposite situation, that depression and physical symptoms would have the higher correlation. The grief model prediction was supported in this sample of battered women. The actual correlations were: (a) depression and the index of problem solving, r = .13 (nonsignificant); (b) depression and physical symptoms, r = .52 (p <.001).

The learned helplessness model also would predict that self-care agency and self-esteem (paired as the construct of self-evaluation) would have a higher correlation than that of self-care agency and control (not paired in the learned helplessness model). The grief model would predict a greater correlation of self-care agency and control (paired in the grief model as the construct of powerlessness). In this aspect of the comparison, the learned helplessness prediction was supported. The self-care agency and self-esteem correlation was .55 (p = .000) while the self-care

agency and control correlation was -.06 (not significant). Thus, the predictions of relative correlation strengths of each model were strongly supported in one of the combinations and not in the other. Clear support for more utility of one model over the other was not found by this model comparison procedure.

Relative Accuracy of Correlation Direction

As a further comparison, the ratios of numbers of accurate predictions of the direction of significant correlations to possible correlations for both models were compared. Only variables retained in the modified models for battered women were used in this comparison. The predicted and obtained correlations for the two models are shown in Tables 44 and 45 (pp. 196, 197). Almost two thirds of the predicted correlations for each model reached significance. Sixty-four per cent of the predicted correlations were supported for the grief model, while 66.7% of the hypothesized directions of the correlations were supported in the learned helplessness model. Again, clear support for one model over the other was not obtained.

Final Multiple Regression Analysis Results

For the final multiple regression analyses for the battered women, the grief model remained as it had been

Table 44

Predicted and Actual Variable Correlation Matrix for Battered Women: Modified Grief Model

Constructs		Grief		Powerlessness	Stress	Loss
		BDI	Sx	DSCAI	CTS	W-M GRP
Sx	I	+				
	II	***				
DSCAI	I	-	-			
	II	***	***			
CTS	I	+	+	-		
	II	*	**	ns		
W-M GRP	I	+	+	-	+	
	II	ns	ns[a]	ns	*	
TSCS	I	-	-	+	-	?
	II	***	***	***	ns	(ns)

*p<.05 **p<.01 ***p<.001; N = 97

Note. I Predicted direction II Obtained correlation in terms of significance if in expected direction. Of 14 predictions, 9 (64.3%) were supported at p <.05

[a] Expected direction; p<.10; 71.4% of predictions supported at p <.05.

Table 45

Predicted and Actual Variable Correlation Matrix for Battered Women: Modified Learned Helplessness Model

Constructs		Self-Evalution		Contingency	Attributions
	BDI	DSCAI	TSCS	CNTRL	1st Blame
DSCAI	I -				
	II ***				
TSCS	I -	+			
	II ***	***			
CNTRL	I -	+	+		
	II *	ns	ns		
1st BL	I +	-	-	-	
	II ***	*	***	ns[a]	
UNIVERS	I -	+	+	+	-
	II *	*	ns	ns	*

*p<.05 **p<.01 ***p<.001

Note. Group I = Predicted direction of significant correlation; Group II = Obtained correlations significance if in predicted direction. Of 15 predictions, 10 (66.7%) were supported at p <.05; N = 97

[a] Expected direction; p<.10; 73.3% of predictions supported at p <.10.

modified for both groups. Zero order correlations (Table 46) were used to further eliminate variables that did not correlate significantly with depression in the sample of battered women as predicted by the learned helplessness model. The situation personal variable was

Table 46

Zero Order Correlations (Battered Women): Learned Helplessness Model with Depression as Outcome Variable

Variable by Set	Correlation with Depression
NONCONTINGENCY	
Control	-.17*
SELF-EVALUATION	
Self-Care Agency	-.55***
Self-Esteem	-.71***
ATTRIBUTIONS	
Unstable	.23*
Original Blame	
Internality	.37***
Continuation Blame	
Internality	.06
Personal	-.12
Universal	-.17*

*p<.05 **p<.01 ***p<.001; N = 97

dropped from the model because of lack of significant correlation with depression. Situation unstable was eliminated because its influence was in the opposite direction from the theoretical prediction.

The final multiple regression ordering by variable sets was again determined by order of importance of the set indicated by the relative multiple r square change. The final multiple regression results (Tables 47 and 48) were an adjusted multiple $\underline{R}^2$ of .49 for the grief model and .56 for the learned helplessness model.

Table 47

Multiple Regression: Modified Grief Model (Battered Women) with Grief[a] as Outcome Variable

Step	Variable Entered	Multiple R	Adjusted R^2	Overall F	Change in R^2	F Change
1	Loss W-M GRP TSCS	.6457	.4045	33.60***	.4169	33.60***
2	Stress CTS	.6775	.4416	26.31***	.0422	7.25**
3	Powerlessness DSCAI	.6992	.4889	22.00***	.0299	5.37*

*p<.05 **p<.01 ***p<.001 Note. N = 97

[a] Grief computed as mean of Depression and Physical Symptoms

Table 48

Multiple Regression (Battered Women): Modified Learned Helplessness Model with Depression as Outcome Variable

Step	Variable Entered	Multiple R	Adjusted R^2	Overall F	Change in R^2	F Change
1	Self-Evaluation					
	TSCS DSCAI	.7363	.5324	55.65***	.5421	55.65***
2	Noncontingency					
	CNTRL	.7532	.5533	40.64***	.0252	5.41*
3	Attribution					
	UNIVERS 1st Blame	.7632	.5595	25.39***	.0152	1.66

*p<.05 **p<.01 ***p<.001

Note. N = 97

Final Multiple Regression Analyses with Depression as Outcome Variable

Because of the lack of comparability in outcome variables in the previous comparison, a more accurate comparison was made. Table 49 (p. 201) presents the results of the grief model multiple regression analyses in the sample of battered women with depression only as the outcome variable. As can be seen, the adjusted

total R^2 of depression for the grief model is .55 while it is .56 for the learned helplessness model.

Table 49

Multiple Regression: Modified Grief Model (Battered Women) with Depression as Outcome Variable

Step	Variable Entered	Multiple R	Adjusted R^2	Overall F	Change in R^2	F Change
1	Loss W-M GRP TSCS	.7142	.4996	48.93***	.5101	48.93***
2	Stress CTS	.7240	.5088	34.14***	.0140	2.74
3	Powerlessness DSCAI	.7585	.5479	23.54***	.0523	6.05**

*p<.05 **p<.01 ***p<.001

Note. N = 97

Relationship of Depression to Other Outcome Variables

The original learned helplessness model predicted that those battered women who were the most depressed also would be least able to solve relationship problems. In contrast, the grief model predicted that the severely depressed women would have the most symptoms of stress and grief. In order to test these predictions, analyses

of variance were performed on problem solving (mean of solutions and solution efficacy) and physical symptoms by categories of depression. The results of these analyses are presented in Tables 50 and 51.

Table 50

Analysis of Variance of Effects of Depression Categories on Physical Symptoms for Battered Women (N = 97)

Source	df	Sum of Squares	Mean Square	F
Category of Depression	4	3265.14	816.28	10.77***
Within Group	92	6573.58	75.80	
Total Variation	96	10238.72	106.65	

*p<.05 **p<.01 ***p<.001

Table 51

Analysis of Variance of Effects of Depression Categories on Index of Problem Solving for Battered Women

Source	df	Sum of Squares	Mean Square	F
Category of Depression	4	4.07	1.02	1.91
Within Group	92	48.92	0.53	
Total Variation	96	52.98	0.55	

*p<.05 **p<.01 ***p<.001

The differences were clear; depression categories had a significant ($p < .001$) effect on physical symptoms, while they did not for problem solving. However, the problem solving index and the two variables forming the index had not correlated as expected with any of the variables in the learned helplessness model as discussed in the previous section.

Summary of Relative Applicability Findings

It was not clear from the five comparisons performed that one model was more applicable than the other in explaining the responses of women to battering. Both models had significant explanatory power and both accurately predicted a large number of the relations among variables.

Summary of Results

This research used a self-selected sample of 193 women who were having problems in an intimate relationship of at least one year's duration with a man. The sample was generated by newspaper advertisement and agency (including two battered women's shelters) postings in two different cities. The groups from the two cities did not differ significantly in mean levels on the model variables, and demographic variable differences could be basically attributed to demographic differences in the cities as a whole.

The sample as a whole was relatively young, well-educated, lower to middle income, and culturally diverse. When the sample was divided into battered and not battered women, the battered women were significantly younger and poorer than the not battered women and were significantly more likely to be a minority in terms of cultural group. It was suggested that the income differences were reflective of the difference in minority representation in each group.

Within the battered group, there were significant differences between battered women residing in shelters and those in the community, and between those who were sexually abused and those who were not. Shelter residents were younger, less well educated and poorer than battered women not from shelters. Shelter residents also were significantly more frequently and severely abused, were less depressed, had more self-care agency, and had thought of and/or tried more solutions to the relationship problems. Sexually abused battered women were similar to not sexually abused abused women on demographic variables but were significantly more frequently and severely battered and had lower self-esteem than those battered women not sexually abused.

The battered and not battered women had more similarities in mean levels on the model variables than

differences, including no significant difference in self-esteem and depression. Both groups of women with relationship problems were depressed and had significantly lower self-esteem than normative groups. In addition, the battered women were significantly more likely to be severely depressed than the not battered women. The battered women also had more frequent and severe physical symptoms of stress and grief and had thought of or tried significantly more solutions to the relationship problems. However, the two groups were similar in mean differences on the other model variables of self-care agency, control, solution efficacy, cultural group wife-mother role valuing, and the various attribution parameters.

There were important cultural differences between the battered and not battered groups. The partners of the battered women valued the wife-mother role more and were more tolerant of men hitting women than the not battered women's partners as reported by the women. The cultural groups of the battered women were also perceived by the women as significantly more tolerant of men hitting women.

Two theoretical models purporting to explain the responses of women to battering, grief and learned helplessness, were modified according to the results of

multiple regression analyses. Both the modified grief and learned helplessness models explained more of the variance in outcomes for the battered than the not battered group. Self-esteem was the strongest predictor of depression and grief for both groups of women when other factors were taken into account. Self-care agency, relationship conflict, and control in the relationship were significant predictors only for the battered women.

Both models had significant explanatory power and both accurately predicted a large number of the correlations among variables in the battered group. However, neither model was clearly more useful than the other in explaining the responses of women to battering.

CHAPTER V

DISCUSSION

The results of this study have important theoretical implications for understanding women's responses to battering which provides the base for nursing care of battered women. In addition, there are important findings in terms of knowledge about battering in general. The discussion of findings will begin with the research questions, first exploring the meaning of the similarities and differences found and then discussing the implications of the results in terms of the two theoretical models. Subsequently, some of the other implications of the study findings in terms of the more general body of knowledge concerning battering will be discussed. Finally a presentation of the strengths and weaknesses of this research will serve as a foundation for suggestions for future research and nursing care of battered women.

Similarities and Differences Between Battered and Not Battered Women

The comparison group for this research was selected to be as similar as possible to the battered women. The women were recruited from the same geographical locations using the same advertisement. They were also having serious problems in a longterm intimate relationship with a man, which was theorized to invoke

many of the same responses as would occur in the battered women. Theoretically, the major basic differences should have been in terms of the responses to the battering portion of the relationship problems.

Demographic Variables

The battered women were younger, poorer, in a relationship of shorter duration, and more likely to belong to a nonwhite minority group than the not battered women. One of the factors in sampling procedure that increased the minority group representation and concomitantly reduced average age, relationship duration, and income, was the recruitment from an inner city shelter in the larger city. All but two of the 15 women recruited from that site were African-Americans. In the interest of including more minority group women in this sample and insuring that the sample represented the racial distribution of the city as a whole, the recruitment procedure was sound. However, it undoubtedly artificially increased the proportion of minority women in the battered group.

In the national random sample of Straus, Gelles and Steinmetz (1980), relative youth (under 30 years old), poverty (under $6,000), and minority group membership were significant predictors of wife abuse. However, two or more children also was predictive of wife abuse as

was the completion of less than high school education by the woman. In the sample used for the research being discussed, neither educational level nor number of dependent children was significantly different in the two groups of women.

Importantly, minority group membership did not account for a significant portion of the variance in severity and frequency of violence in the relationship in the battered women. In an analysis of variance of the severity and frequency of violence in the battering relationships, both sexual abuse and shelter residency had significant main effects ($p < .001$ and $p < .01$ respectively), while there was no significant main effect of nonwhite minority group membership and no interaction effects. Therefore, although minority group membership may have been a factor in predicting the presence or absence of abuse, it did not predict severity of battering when other factors were taken into account.

Model Variables

The pattern of similarity between battered and not battered women on mean levels of the measured model variables is an extremely important finding. This is a very different description of battered women than what is found in most of the literature. On established valid

and reliable measures for self-esteem, depression, self-care agency and physical symptoms of stress and grief, the battered and not battered women were significantly different only on the physical symptoms measure.

Responses to Relationship Problems

Since there were no measures of model variables prior to the relationship problems, time ordering cannot be ascribed. However, the indicators of self-esteem, depression and physical symptoms conceptually can be considered as important responses of women to relationship problems. They have been cited in the literature as responses of women to battering, other forms of violence, separation and divorce, death of spouse, and alcoholic husbands. Such a conceptual viewpoint places the examination of these indicators within the definition of nursing cited in Chapter 1: "Nursing is the diagnosis and treatment of human responses to potential or actual health problems" (American Nurses Association, p. 9).

In this sample, the only difference between the two groups which had an effect on these responses (depression, self-esteem and physical symptoms) was battering. The major demographic differences between the two groups (income, age and minority group status) were not significantly correlated with the response

variables (Tables 7 and 32) except for a correlation between age and self-esteem (r = .21, p <.01).

It is especially noteworthy that the mean levels of both self-esteem and depression were not significantly different in the two groups of women. Thus, this study did not support the premise that low self-esteem and depression are primary responses to battering by itself as has been widely claimed, although seldom measured, in the literature (e.g. Hilberman, 1980; Prescott & Letko, 1977; Rounsaville, 1978; Walker, 1979). However, in this study the entire sample had significantly lower self-esteem as measured by the Tennessee Self-Concept Scale (TSCS) than normative groups and also had a significant level of depression. Thus, this study provides support for depression and low self-esteem being responses to relationship problems, one of which may be battering.

Self-esteem. The most comparable study in terms of self-esteem is the research of Virginia Drake (1985) who also measured self-esteem using the TSCS. Although her study used shelter residents (N = 51) exclusively, she also found a significantly lower overall self-esteem (311.5) than the norm group. The mean level of self-esteem of the battered women in this study was 319.8. It is also noteworthy that the group of battered women who were shelter residents did not differ significantly

from those battered women living in the community on self-esteem. However, those battered women who were sexually abused had significantly lower levels of self-esteem than those who were not.

The TSCS Physical Self subscale had been considered as representative of the concept of body image. The literature suggests that body image would be negatively affected by physical violence and consequent injury. However, the battered and not battered women did not significantly differ on this subscale. It may be that the subscale was not an adequate operationalization of body image; the items on the TSCS comprising the subscale are very different from the more traditional operationalization of body image (Secord and Jourard, 1953). The concept of body image in relation to battering is an area of needed future research.

In addition, the existing literature implied that the more severe the battering, the lower the self-esteem. This study found no significant correlation between severity of abuse (as measured by the Conflict Tactics Scale) and self-esteem (see Table 30). This corroborates the findings of Drake (1985), who measured severity of both psychological and physical abuse and found neither to be significantly correlated with self-esteem.

A final important finding in regards to self-esteem was the lack of correlation with the length of the relationship. Again, it has been suggested that the longer the battering relationship (and therefore the more the battering) the lower the self-esteem (Walker, 1979). In neither this study, nor the Drake (1985) research was there a significant relationship between the length of the battering relationship and self-esteem. This again supports that lowered self-esteem is in response to relationship problems in general rather than specifically to battering.

Depression. Although the mean levels of depression as measured by the BDI were not significantly different in the battered and not battered women, there was a significantly greater proportion of battered women who were in the severely depressed category and a significantly smaller proportion of the battered group who were not depressed at all. In addition, there was a weak positive correlation ($r = .17$; $p < .05$) between severity and frequency of abuse and depression. Within the not battered group no significant correlation was obtained between depression and severity and frequency of conflict. These findings support the contention that presence, frequency and severity of abuse, not nonviolent conflict, affects depression. Also important

is the indication that although depression was as much a response to general relationship problems in the sample women as a response to violence, severe depression was more likely to occur with battering.

It is difficult to compare these results with epidemiological studies of depression in women, since the majority of such research used psychiatric diagnosis or other measurement instruments rather than the Beck Depression Inventory (Boyd & Weissman, 1981). From these epidemiological studies, it has been estimated that from 11% to 24% of all women are depressed (Rothblum, 1983). Beck suggests that a score of 21 can be used as a cut-off point for depression where false positives are an issue (Beck & Beamesderfer, 1974). Using that standard (the moderate to severe and severe depression categories in Table 26), 37.9% of the not battered women and 42.5% of the battered women in this sample were depressed. Thus, it appears likely that larger proportions of both the battered and not battered women in this sample were depressed than other women.

Other research on depression has also found that women who were married tended to be more depressed than single women and divorced women were most at risk for depression (Radloff, 1980). In addition, several studies have corroborated that younger women are more

depressed than older women (Rothblum, 1983). The largest proportions of women in this research were married or separated or divorced (Table 11). Even those who were legally single were in intimate relationships with men. Since the sample was also relatively young, these demographic factors undoubtedly also contributed to the increased proportion of depression.

No other study reported in the literature measured depression in battered women using the BDI. Walker (1984) used the CES-D scale of depression and found her sample of battered women to score significantly higher than other samples of women. Rosewater (1984) found significantly more depression in battered women than normative groups using the MMPI. Shields and Hannecke (1983) demonstrated that the correlation between severity of abuse and depression (measured as presence or absence by self-report) in their sample of battered women was spurious when sexual abuse was entered as a control variable.

In this sample, depression was strongly negatively related to self-esteem and self-care agency and strongly positively related to physical symptoms of stress and grief in both groups of women. In the Walker (1984) research, the correlation of depression with self-esteem was surprisingly a moderate positive correlation (r

= .36), perhaps because her measure of self-esteem did not have established reliability and validity. Walker's (1984) "health scale," an investigator developed measure of ten health problems, was relatively similar to the physical symptoms scale in this research. This health scale had a moderately strong correlation (r = .46) with depression in the Walker study, but somewhat lower than the correlation of .55 in this research.

Important differences were obtained between the battered and not battered groups in this research in the correlations of depression and other variables. The amount of control the woman perceived herself as having in the relationship was weakly (r = .17, p <.05) but significantly negatively related to depression in the battered group only. Given the importance control has been given in the battering literature from a theoretical standpoint (e.g. Gondolf, 1985; Okun, 1983), it is congruent that control would have more salience for battered women than not battered women.

In addition, depression was <u>not</u> significantly related to the strength of the woman's current belief in the wife-mother role being the most important for women for the battered group in this sample. Walker (1984) used the Attitudes Toward Women Scale (AWS), a standardized measure of conceptually similar attitudes.

The correlation of .25 of the AWS with depression in the Walker sample suggested that nontraditional values were associated with depression in battered women.

Physical symptoms. The battered women had a significantly higher mean level of physical symptom occurrence and severity than the not battered women. The severity and frequency of battering was significantly positively correlated with physical symptoms (r = .28 p <.01) for the battered group only. This is congruent with both increased stress from battering and/or increased physical problems from the injuries of battering. Shields and Hanneke (1983) measured physical symptoms on an investigator developed "psychosomatic symptoms" symptoms scale and found a similar correlation (r = .25 p <.05) with severity of violence even when controlling for sexual abuse.

Other Model Variables

The only other significant differences between the battered and not battered women were that the battered women had thought of or tried a greater number of solutions to the relationship problems and saw their situation as more universal than did the not battered women (Table 22). The finding relative to the number of solutions considered or tried was the opposite of that reported in a study of problem solving in battered women

by Claerhout, Elder and Janes (1982). Using a hypothetical battering situation and counting the number of solutions in a small sample, these researchers concluded that the battered women had poorer problem solving skills than a control group of not battered women. Using battered women's real experience rather than a hypothetical situation, the research under discussion is supporting that battered women have better problem solving skills, in terms of generation of solutions, than not battered women. It is a very different finding than one would expect if all battered women are experiencing learned helplessness.

Problem Solving Indicators. The number of solutions variable used in this study seems to be an inadequate index of problem solving behavior by itself. Asked about during the oral interview portion of data collection, the number of solutions told to the interviewer seemed sometimes to be related to how much hurry the woman was in, whether or not she divided large strategies into small steps, and how well educated she was, as much as to actual problem solving. Indeed, the number of solutions was significantly related ($r = .26$ $p < .01$) to education in both groups of women. If number of solutions had been a representative index of problem solving, one would expect it to be correlated with the

measure of self-care agency (DSCAI), which measures decision making ability along with other agency components. However, scores on the DSCAI were not significantly correlated with number of solutions in either group, even when the effects of education were controlled.

It might be postulated that the battered women had to think of or try more solutions because of the severity of the problem of battering. However, the number of solutions was not significantly correlated with the severity and frequency of battering, which does not support such an interpretation. The only significant correlation with number of solutions was in the opposite direction from what was expected and was found in the battered group only. Controlling for education, battered women thought of or tried more solutions as depression increased ($r = .20$ $p < .05$). This is, of course, exactly opposite of the predictions of learned helplessness. The mechanism operating may have been related to women having tried "everything under the sun" (as one of the subjects stated) without success and thereby becoming depressed. Without knowing time ordering of these variables, this interpretation is difficult to support, but it is a possibility worth exploring in future research.

The number of solutions might have been a viable indicator of problem solving when used along with another indicator of problem solving as was originally planned. However, the lack of significant differences in the two groups in either the measure of solution efficacy or the measure of self-care agency tends to suggest that the difference in number of solutions was related to other factors rather than problem solving ability and/or battering alone.

Perceived universality. Greater universality of the relationship situation was perceived by the battered women than the not battered women. This finding is also contrary to the battered women thinking she is alone in her plight which has been described although not measured in the literature (e.g. Walker, 1979; Hilberman & Munson, 1978). However, there has been much popular media attention to battering in the last few years which may explain why the battered women perceived, on average, that 57.9% of all other women in the world had the same kind of relationship problems. In contrast, the not battered women did have a much larger variety of types of relationship problems, ranging from two women in bigamous relationships to a woman who filed for divorce only to have her husband become a cardiac invalid whom she felt too guilty about

to leave. Many of these situations did seem unique.

Control in the relationship. There were no significant differences between battered and not battered women in their perceived control in the relationship. This was particularly noteworthy, because lack of control in the relationship has been thought to be associated with battering by several authors (Bowker, 1983; Dobash & Dobash, 1979; Gondolf, 1985; Okun, 1983; Walker, 1979).

Control in the relationship was significantly but weakly negatively correlated (r = .17) with depression in the battered women only. It was not significantly correlated with any of the other model variables in either group, although, there was a weak nonsignificant correlation (r = .14) in the expected direction (negative) between control and both frequency and severity of battering and wife-mother role value of the cultural group for the battered women only.

It is difficult to determine if the lack of significant correlations between the measured variable of control in the relationship and other model variables, such as severity and frequency of conflict, is because of lack of reliability and validity of this investigator developed measure or lack of salience of this aspect of battering relationships. The results of

the multiple regression analysis supported that there was some predictive value of the control variable for the battered women, but not as much as had been anticipated.

Generalized locus of control was measured in the Walker (1984) research and the Drake (1985) study. Contrary to her expectations, Walker found that her sample of battered women scored significantly higher on the internal locus of control scale and lower on the powerful others and chance scales than normative groups. In contrast, Drake found her sample of battered women to be significantly more externally controlled on the Adult Nowicki-Strickland Internal-External Control Scale than one other sample of "community" subjects. Thus, the two studies had conflicting results.

Control specific to the relationship as measured in the research being discussed is not conceptually equivalent to the locus of control measures used in the other studies. However, Walker (1984) reported a correlation of $r = .18$ between depression and the internal scale of the Levinson Locus of Control measure, a correlation similar to the one reported here. In addition, Drake (1985) found a significant positive correlation ($r = .37$) between severity of abuse and external control. These research findings support the

relevance of a control concept; measurement and replication remain as issues.

Control in the relationship was significantly related to three of the other cultural variables in the directions expected from prior research in the battered group only. These relationships were as follows: (a) valuing of the wife-mother role by partner ($r = -.25$ $p < .01$), (b) tolerance of men hitting female partners woman learned as a child ($r = -.18$ $p < .05$), and (c) woman's current tolerance of men hitting women ($r = -.19$ $p < .05$). Thus, less control was associated with perceived valuing of the wife-mother role by the batterers and tolerance of hitting by the battered women. Therefore, the concept of control in the relationship appears to have most relevance in the battering situation in terms of the cultural variables.

More Alike than Different

The significant differences between the battered and not battered groups on the demographic variables of age, income, and minority group membership were influenced by recruitment procedures. Therefore, it is difficult to say if the demographic differences were associated with battering or recruitment. The only difference in the response variables was the greater number and severity of physical symptoms in the battered

group. The only differences on the other model variables was the increased number of solutions generated and greater perceived universality of the situation for the battered group. The battered and not battered women were essentially alike on the majority of variables measured: level of education, number of dependent children, self-esteem, depression, self-care agency, solution efficacy, control in the relationship, valuing of wife-mother role, internal attributions of blame for both originally causing the relationship problems and the problems continuing, perceptions of future improvement in the relationship situation, and perceptions that the situation was personal.

This is a very different picture from that which is presented in most literature on battered women, a group generally perceived as very different from "normal women." The implication of lack of normalcy may have contributed to feelings of deviancy of battered women (Campbell, 1986) and has resulted in subtle blaming of the victim in much of the research on battering (Wardell, Gillespie & Leffler, 1983). This research indicates that battered women respond in very similar ways to other women who are having serious problems in relationships.

Cultural Variables

Tolerance for Hitting

There were noteworthy differences between the two groups on the cultural variables. As would be expected, the battered women reported significantly more tolerance for men hitting female partners in their cultural groups, in their partners, and in themselves than the not battered group (Table 28). However, it is very important when interpreting these results to note that the battered women had a current mean tolerance level of 3.21 while their male partners had a mean tolerance level of 51.94 on a scale of 0-100.

Much of the literature on battered women and some of the research suggested a greater than "normal" incidence of childhood victimization (abuse, sexual abuse, witnessing mother's abuse) in battered women (Peterson, 1980; Walker, 1984). According to social learning theory, women learn to be victims by witnessing or experiencing violence. In contrast, the battered women in this sample did not report having learned significantly more tolerance for men hitting women in their childhoods than the not battered group, a finding which has been supported elsewhere (Carroll, 1977; Pagelow, 1981; Straus, Steinmetz & Gelles, 1980). Some of the women in this sample who were victimized in

childhood were vehemently opposed to any form of family violence. They maintained that they learned this attitude from their childhood experience, either by reacting against the violence or by listening to a mother who said that her abuse was intolerable. Indeed, there was no significant relationship between tolerance for hitting female partners learned as a child and current tolerance for hitting women in the not battered group. Ulbrich and Huber (1981) also found no significant relationship between parental violence and approval of violence toward women in the females of a large national probability sample. They did find a relationship for men.

However, there was a significant positive correlation (r = .24 p <.01) between the two variables in the battered women in this study. In other words, women who were battered were more likely than not battered women to have stayed with an attitude of tolerating violence learned in childhood rather than reacting against it. What made the difference in this response to the lessons learned in childhood about hitting women would be a useful avenue for future research.

There was also a significant positive correlation between frequency and severity of abuse and the cultural

group tolerance for hitting women (r = .18 p <.05) and the partner's tolerance for hitting women (r = .31 p <.01) in the battered group (Table 33) as would be expected. What is especially important to note is that such a relationship was not present for the woman's tolerance either as a child or at the time of the interview. Thus, the findings suggests that the woman's tolerance for violence had little to do with the severity of her own victimization, but her partner's tolerance had a great deal to do with it.

Also noteworthy is the finding of weak but significant negative correlations between age and both the woman's and man's tolerance of men hitting women in the battered group. The finding that younger women and men were more tolerant of the hitting of wives is frightening but consistent with other research (Straus, Gelles & Steinmetz, 1980).

Minority Group Membership and Tolerance of Hitting

Because of the strong representation of nonwhite minority women in the battered group, a series of analyses of variance were conducted using the entire sample to describe interrelations among race, presence or absence of abuse, and tolerance of men hitting female partners. The man's tolerance and the cultural group tolerance of men hitting women were significantly

associated with both race and abuse. The woman's tolerance of men hitting women was only associated with race not abuse.

These findings suggest that differences in cultural tolerance of men hitting women may be at least partially responsible for the higher risk for abuse in nonwhite minority groups (Straus, Gelles, & Steinmetz, 1980). This premise is not only advanced by white researchers; black scholars also describe violence toward black women (e.g. Giovanni, 1981; Hunter, 1981; Walker, 1982; Wallace, 1978). The cultural tolerance for men hitting women may reflect the generally violent environment within which most poor nonwhite people are forced to exist. Familiarity is part of the basis for tolerance.

Valuing of Wife-Mother Role

There were no significant differences between the battered and not battered women on the valuing of the wife-mother role of the woman's cultural group or of the women themselves. This was surprising given the frequently cited generalization that battered women are traditionalists (Hilberman and Munson, 1978; Pagelow, 1981; Walker, 1979). However, Pagelow (1981) found only weak or nonsignificant correlations between her indices of traditional ideology and continuation of battering after a first incident. In addition, Walker (1984) used

the Attitudes toward Women Scale to measure traditional ideology and found that the battered women in her sample scored significantly higher than normative groups.

The battered women's partners in this study were significantly more likely to value the wife-mother role over other roles for women than the men who were not batterers. Walker (1984) reported a similar finding, but both studies used the woman's perception of her partner's attitudes. However, direct reports of battering men indicate similar findings (Coleman, 1977; Gondolf, 1985). These findings support the suggestion that the values of the batterer and cultural group may be more important antecedents of battering than the personalities and attitudes of the woman themselves.

The same conclusion is supported by other findings. In the battered group only, the tolerance for hitting variables all had a significant positive correlation with the batterer's valuing of the wife-mother role and that of the cultural group but not of the woman's. Furthermore, frequency and severity of battering was also positively correlated with the wife-mother role valuing of the men and cultural group. In addition, battered women's control in the relationship was negatively correlated with the partner's valuing of the wife-mother role.

It is also noteworthy that in the battered group the woman's education was significantly negatively related to all of the cultural variables except the batterer's tolerance for hitting and the tolerance for hitting learned as a child. Also not surprisingly, age was positively correlated with the value of the wife-mother role for both the women and the partners, but only in the not battered group. Conventional wisdom would postulate that younger and more educated people would be less likely to hold traditional values about the wife-mother role, but these relationships did not hold for both groups.

Summary of Cultural Differences

In both mean levels and patterns of correlations there were more differences than similarities between the battered and not battered women on the cultural variables. This may reflect the fact that these variables were designed to explore some of the cultural influences on battering specifically rather than responses to relationship problems in general. There were important findings in regards to the cultural variables which did not always support the majority of the literature on battering.

The Models in the Two Groups

Both the grief and the learned helplessness models were more applicable to the battered women than the not battered women. This is undoubtedly because the models were formulated primarily from theory and research specific to battered women.

The Grief Model

The grief model postulated that stressors, powerlessness and perceived loss would all significantly affect the outcome variable of grief, operationalized as a combination of depression and physical symptoms of stress and grief. Combining depression and physical symptoms worked well as the outcome variable since they were strongly correlated.

Stressors

The construct of stressors was planned as a set of three variables, income, number of children and frequency and severity of conflict. Neither income nor number of children was significantly correlated to the outcome variable in the expected direction in either group. Frequency and severity of conflict was only related to grief in the battered group. This makes sense, because in the battered group frequency and severity of conflict measured for the most part frequency and severity of abuse. Many of the not

battered women reported being as distressed about little communication with their partners, including absence of overt conflict, as they were about fighting with their spouse. This conceptual difficulty suggests an alternative measure of perceived stress or actual stressors such as the Holmes and Rahe scale, used by Straus, Gelles and Steinmetz (1980), would have been preferable to the assessment used in the current study.

As the model was modified, to include only frequency and severity of conflict for the stressor construct, the model changed concommitantly. For battered women, the frequency and severity of abuse was a significant predictor of grief. This could conceptually fit within a grief model for battered women, since the worse the battering the more the sense of loss of the ideal relationship and loss of attachment the woman would experience. However, the model would have been more complete to actually measure stress.

Loss

The variables conceptualized as representing the concept of loss were the woman's self-esteem and the valuing of the wife-mother role by her cultural group. This set explained the largest portion of variance in the grieving outcome variable for both groups. Self-esteem was the most predictive variable of any for both

groups. As all the literature has supported, the extent of diminishment in self-esteem which may accompany any loss or anticipated loss in role, attachment figure, body image, and sense of self as invulnerable is a powerful predictor of grief.

The valuing of the wife-mother role of the woman's cultural group was a significant predictor by itself of grief for the not battered women but not for the battered women. An interaction effect is a possible interpretation. Women may have felt badly about themselves because they perceived themselves as was "failing" at a role which was very important in their cultural group. Since only direct effects were considered in this data analysis, a future secondary data analysis could fruitfully examine a number of possible interaction effects in both models.

Powerlessness

The construct of powerlessness was measured by self-care agency and control in the relationship. Since control in the relationship was not significantly related to grief in either group, it was also excluded from the model when modified. Again it is difficult to conceptualize powerlessness as determined by self-care agency alone. Self-care agency is the ability to perform self-care, an ability which could be constrained

by external circumstances. Since control is theoretically such an important aspect of both the battering situation and other aspects of life, another measurement or a combination of measures to better tap this concept would be advisable in future research.

Self-care agency was a significant predictor of grief for the battered women only. It is difficult to explain why it did not act as a predictor of grief for the not battered women. Agency, or perceived ability to influence outcomes, is an important aspect of control for all human beings as conceptualized and supported by the empirical research presented by Skinner and Connell (1985). The relationship of self-care agency and agency in general warrants further exploration in research.

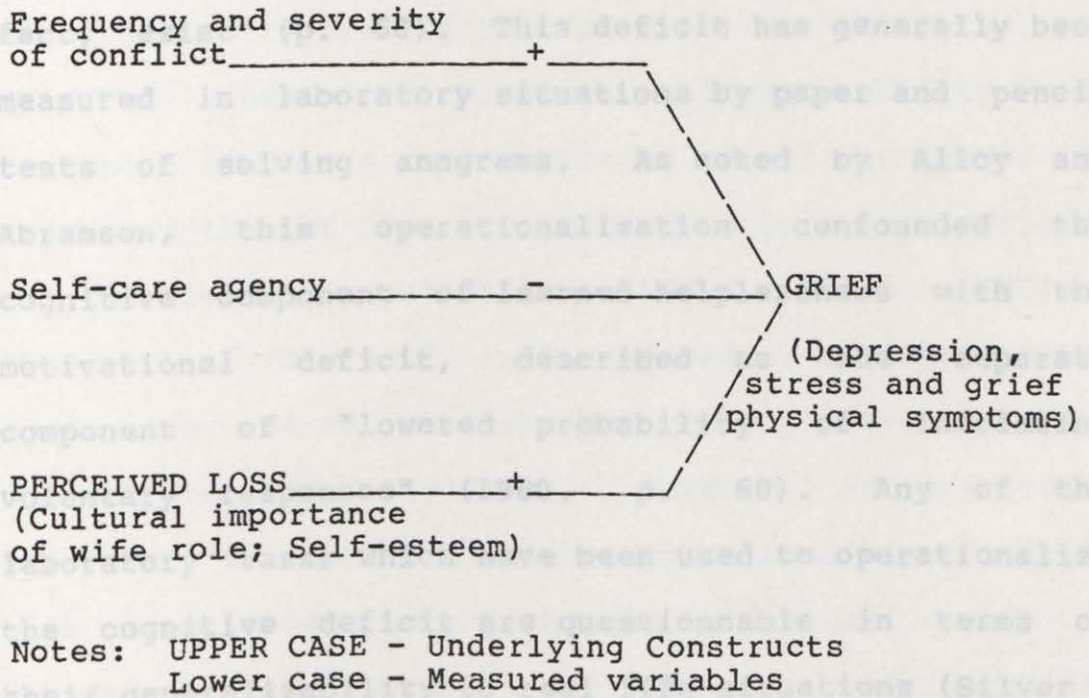
From the examination of the standardized partial correlations, it appeared that self-care agency was redundant with self-esteem to some extent. In fact, one of the components of the Denyes Self-Care Agency Instrument is an ego-strength factor (Denyes, in press). However, apparently the other aspects of self-care agency were salient for the battered women. The DSCAI concentrates on agency in terms of health, and it could be postulated that health was more important to the battered women because their physical health was in jeopardy.

Grief Model as Modified

Thus, the modified grief model as it was examined in the multiple regression was is presented in Figure 6 (p. 251). Even without entering all components theoretically important in grief, it explained a considerable amount of the variance (.4889) in the battered group. Since only self-esteem was a significant predictor in the not battered group, it cannot be said to be an explanatory model for those women.

Figure 6

Modified Grief Model



Learned Helplessness Model

The learned helplessness model was conceptualized as an outcome of learned helplessness affected by noncontingency, attributions about the situation, and self-evaluation. Exploring the learned helplessness model was hampered by an inability to include an important aspect of learned helplessness as an outcome variable.

Learned Helplessness

The cognitive, or associative, deficit of learned helplessness was defined by Alloy and Abramson (1980) as "difficulty in perceiving a relationship between responses and outcomes when a relationship does, in fact, exist" (p. 60). This deficit has generally been measured in laboratory situations by paper and pencil tests of solving anagrams. As noted by Alloy and Abramson, this operationalization confounded the cognitive component of learned helplessness with the motivational deficit, described as the separate component of "lowered probability of initiating voluntary responses" (1980, p. 60). Any of the laboratory tasks which have been used to operationalize the cognitive deficit are questionnable in terms of their generalizability to real life situations (Silver & Wortman, 1980).

In the application of learned helplessness to battered women by Lenore Walker (1985) the cognitive deficit was measured by investigator developed questions about passive versus active behavior in terms of battering incidents. It is questionnable whether this approach actually measured the cognitive component or the motivational component. It was also assumed by Walker that not leaving the battering relationship indicated the cognitive and motivational deficits of learned helplessness. Since the latter assumption was rejected by this researcher (see Chapter 2), a different measurement of the cognitive aspect specific to the relationship and reflective of the situation rather than an unrelated laboratory task problems was attempted.

The index of problem solving ability was conceptualized as a combination of the of the number of solutions thought of or tried and the perceived efficacy of the solutions actually tried. Since solutions thought of as well as tried were included, the confounding of the motivational and cognitive deficits was theoretically avoided. However, as previously presented, the measures neither correlated significantly with each other nor with depression as would be consistent with the conceptualization. The problem may have been that the measures were not sufficiently

reliable or that the cognitive aspect of learned helplessness is not manifested in this way.

The effectiveness of the solutions tried may have been low, not because the woman's problem solving ability was hampered but because circumstances prevented the solutions from being useful. For instance, many women gave an impressive number of solutions that they had tried but felt that their partner had either not cooperated with them or that other people or things (e.g. lack of money) had prevented the solutions from being useful.

Because the index of problem solving was not useful, it was eliminated from the model. Therefore, the model becomes an explanation for depression, not learned helplessness. Depression has been used in other research as the sole outcome variable in studies of learned helplessness, but the validity of this approach is questionnable (Alloy & Abramson, 1980). Therefore the results of the multiple regression analyses using this model will be considered as evidence for an explanatory model solely for depression.

Noncontingency

Noncontingency can be described as a lack of relationship between responses and outcomes. In the majority of the learned helplessness research,

noncontingency has been operationalized as various laboratory procedures (e.g. impossible tests, random noxious noises). Translating this notion to real life situations in research with human subjects has been difficult. The concept was operationalized in this research as control in the relationship, congruent with the learned helplessness model as presented by Alloy and Abramson (1980): "The relationship between reponses and outcomes is best construed as one of controllability."

As previously discussed, there may have been measurement problems with the control in the relationship variable. In addition, there may have been conceptual problems in terms of learned helplessness theory stemming from the wording of the question. The control in the relationship question may have been too broad to ascertain the amount of control specific to the battering situation. A more useful way to ascertain noncontingency in this research might have been to ask the women to what degree they felt the relationship problems (and/or the abusive incidents) were under their control. In addition, as pointed out by Abramson, Alloy and Seligman (1980), noncontingency is not predictive of learned helplessness unless there is an expectation of future noncontingency. It may have been preferable to measure expectation of control of the relationship

problems (and/or battering) also.

Walker (1985) operationalized noncontingency as control in the relationship also. She has also made the assumption that a battering relationship is by its very nature a noncontingent situation, since the women are beaten no matter what they do (Walker, 1979). If this is a correct assumption, it may explain why the learned helplessness model was more explanatory for battered than not battered women.

Control in the relationship was not a significant predictor of depression for the not battered women. Control in the relationship did account for a significant portion of the variance for the battered women, supporting that having more control or more contingency in the relationship is associated with less depression for battered women.

Attributions

The addition of attributions to Seligman's (1975) original model of learned helplessness was an attempt to make the model more explanantory. In this research, the variables making up the attribution construct did not add significantly to the variance in depression accounted for in either the battered or not battered women. However, Abramson, Seligman and Teasdale (1978), conceptualized learned helplessness as having a

component of low self-esteem as well as the affective (depression), motivational and cognitive components. It can be argued that the model of learned helplessness used in this study should have used self-esteem as part of the outcome variable rather than one of the independent variables.

Examination of the standardized partial coefficients suggested that the attribution variables were redundant with other variables in the model. Since the internality dimension of attributions have been theorized to better explain the self-esteem component of learned helplessness in particular, it would be reasonable to expect that the attributions would have contributed significantly to a model with self-esteem as part of the dependent variable. This modification is further supported by the significant correlation of internality of attributions with self-esteem as well as depression in the battered women in this sample.

Internal attributions. The women in this study did not have a difficult time articulating who or what they blamed the most for the problems in the relationship beginning or continuing. For the most part, they had obviously thought about it before and had come to some sort of a conclusion. Only six women did not know who or what was to blame for the initial cause. This

supports reasearch that contends people do make attributions about important events in their lives.

In spite of the contention of Miller and Porter (1983) that attributions about the problems in the relationship continuing were more salient for battered women, the blame for first causing the problems was the only blame attribution which was significantly correlated to other model variables. However, the blame for first causing the problems was salient in the model for the battered women only. This may have been because of the greater need of battered women than other women to assign blame for relationship problems because of the seriousness of battering.

Contrary to the frequently repeated generalization that battered women blame themselves and/or feel guilty about the abuse, only 21.6% of the battered women in this sample blamed themselves alone. This is considerable less than the 50% of the Frieze (1978) sample who blamed themselves for the violence. However, as the model would predict, those who blamed themselves were the most depressed of the battered women. This finding does not support the idea that people who blame themselves will be better able to cope because of the increased control this affords them (Miller and Porter, 1983).

The battered women who blamed a characterological aspect of themselves were the most depressed, supporting the research of Peterson, Schwartz and Seligman (1981). In fact these reserachers maintained that this is the only category of blame attribution compatible with depression. However, in this sample there were only five battered women who made this attribution and there were many other battered women who were depressed. Contrary to the findings of Miller and Porter (1983), it was not difficult to make the distinction between characterological and behavioral self-blame. The wording of the question regarding self-blame in this study was careful to have the woman make the distinction between behavioral and characterological self-blame in terminology which she could understand.

Also surprising was the category of unknown blame. In the not battered women, the ones who did not know who or what to blame were the most depressed of that group, consistent with other research (e.g. DuCette & Keane, 1984). In contrast, the battered women who did not know to whom to ascribe blame were the least depressed of that group. It is not clear how to interpret these results. Since there were so few women in the category, the difference may have been due to chance.

The finding that the women who blamed both

themselves and their partner for the battering were the least depressed is consistent with that of Langer (1983) in her study of post-divorce adaptation. She labeled this category of blame as interactive. By blaming both self and partner, the person maintains some control but also avoids thinking that she is totally culpable.

It is interesting to note that one of the women in this study shared with the investigator that she used to blame just her partner for the battering, but she had been instructed by her therapist to blame herself also. She noted that she felt this attribution restructuring had been very helpful. Many of the suggestions for therapy with battered women are totally contrary to this intervention. Therapists have been advised to help the woman blame her husband so that the responsibility for the abuse is where it should be. Further research is clearly indicated in this area.

Stability. The stability dimension was ascertained by asking the woman what she thought the chances were of her situation improving. The reformulated model of learned helplessness (and common sense) predicted that the more unstable (high chance of improvement) the situation was perceived to be, the less depressed a person would be. Surprisingly, for the battered women in this sample, there was a significant positive

correlation between instability and depression. For the not battered women, there was a negative correlation (r = -.14) as was predicted, but it was not strong enough to be significant.

The reason for this paradoxical finding in the battered women may well be that many of the women had concluded that there was no chance of improvement in the relationship and therefore they were sure that they were going to end the relationship. In some cases the realization that things were not going to get any better had precipitated their seeking refuge in a shelter. Rather than making them feel more depressed, the perceived stability was actually helping them feel better.

Personal-universal. The personal-universal dimension of attributions theoretically denotes whether or not relevant other persons can control outcomes and therefore a person who is not able to control outcomes should be able to do so (Abramson, Garber & Seligman, 1980). This dimension was measured by two different questions in this study. The results of the questions were not correlated with each other and only responses to the question, "What percentage of other women have the same kind of problems in a relationship with a man that you do?" were significantly correlated (negatively)

with depression in the battered group. This question may have been more pertinent for the battered women than those not abused, because if many other women were known to be battered (as recent popular media has been indicating), then other women could not control battering either.

For the not battered group only, the question, "What percentage of other women could solve your problems in the relationship?" was salient. Not only was this indicator of personal helplessness significantly positively correlated (r = .34 p <.001) with depression, but it was significantly negatively correlated (r = -.22 p < .01) with self-esteem. The reformulated model of learned helplessness postulates that personal helplessness can be distinguished from universal helplessness (situations where no one else could control outcomes either) by the low self-esteem deficit present in cases of personal helplessness (Abramson, Garber & Seligman, 1980). Therefore, this question was a useful measure of the personal-universal dimension according to the model for not battered women in this sample. The cause for its lack of relevance for the battered women is not readily explainable.

Self-Evaluation

The set of self-evaluation variables, self-esteem

and self-care agency, accounted for the largest amount of the variance in depression for both groups. Self-care agency again had a higher beta for the battered women in the multiple regression analysis with the same indication of redundancy as was discussed previously.

Modified Model

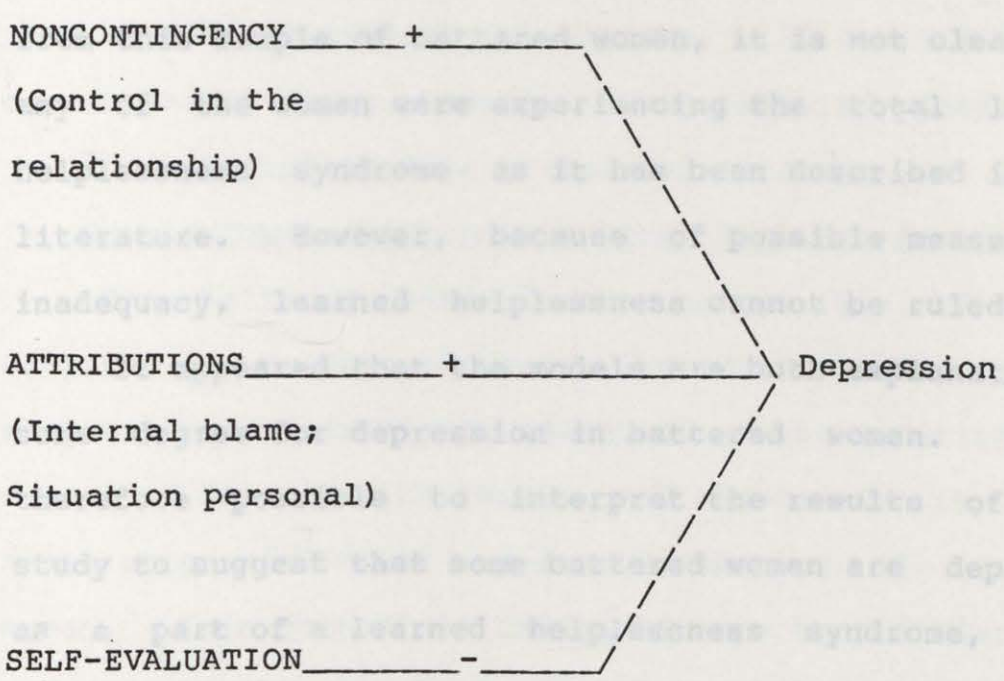
The modified learned helplessness model for depression is presented in Figure 7 (p. 248). Since the attributions set did not explain a significant portion of the variance in either group, it would not be included in the model. However, the results support including this construct in a future model of learned helplessness which would include self-esteem as part of the outcome variable and would have a useful measure of problem solving. As noted previously, the modified model does not have much relevance for women who are not battered as presented, except to support the idea that self-esteem is strongly related to depression in any woman. However, there was indication from one of the personal-universal dimension questions that the suggested model modifications might increase its salience for not battered women also.

Relative Applicability of the Two Models

The criteria for testing the relative applicability of the two models for battered women did not show a

Figure 7

Modified Learned Helplessness Model



Notes: UPPER CASE- Underlying constructs

Lower case- Measured variables

clear difference. The comparison was hampered because of the lack of salience of the problem solving index in the learned helplessness component. Based on the data from this sample of battered women, it is not clear that any of the women were experiencing the total learned helplessness syndrome as it has been described in the literature. However, because of possible measurement inadequacy, learned helplessness cannot be ruled out.

It appeared that the models are both explanatory to some degree for depression in battered women. It is therefore possible to interpret the results of this study to suggest that some battered women are depressed as a part of a learned helplessness syndrome, while others are depressed as part of a grief reaction. In order to explore those possibilities, further research is needed. However, this study has indicated that both are viable and should continue to be considered in nursing care of battered women.

It is also important to note that not all of the battered women in this sample were either depressed or had low self-esteem. In fact half of the battered women were within normal limits on the measure of self-esteem and 44% were not depressed at all or were within the mild category of depression. Again, it would be a fallacy to assume that depression and low self-esteem

are responses to battering in all cases. It therefore would be important to search out the factors which accompany high self-esteem and lack of depression as well as to continue to explore the factors which contribute to these responses among battered women.

Implications of Related Findings

Sample Comparability with Other Research Samples

The battered women in this sample (N = 97) were compared on the demographic variables of age, education, whether or not employed, duration of the relationship, number of dependent children, and ethnic minority group membership with other major study samples of battered women. This comparison indicated important differences related to sampling between the results of this study and the majority of research on battered women. Five relatively large, recent American samples were chosen for comparison, those described by Drake (1985), Okun (1983), Pagelow (1981), Snyder and Fruchtman (1981), and Walker (1984).

The overall mean age of the five studies of battered women (N = 1221) was calculated as 30.3 while the mean age of the battered women in this sample was 31.22. Those studies which consisted of battered women from shelters (Drake, 1985; Okun, 1983; Pagelow; Snyder & Fruchtman, 1981) reported a mean age of 29.4 (N =

818). In contrast, the Walker (1984) sample (N =403) of battered women from the community as well as various agencies, a composition more similar to that of this sample, had an average age of 32.2. The finding of lower age in shelter battered women generally is consistent with the significantly lower age (27.6) of the battered women in shelters in this sample (see Table 16).

The mean level of education in years completed for the battered women in this sample was 12.8 which again was similar to the overall mean level of education (12.4) reported in the studies used for comparison.

Employment rate of women in the various studies averaged 27.5%. In this sample 64.6% of the battered women were employed. Employment rates for women in the nation as a whole in 1980 were 59.6% for black women and 49.3% for white women (McGhee, 1984). Thus, this sample was more comparable to women in the country as a whole than to other samples of battered women.

The average length of the relationship in the other samples of battered women was 6.5 years compared to a mean length of relationship of 7.1 years of the battered women in this study. This research only included women whose relationship had lasted at least one year, which may have slightly lengthened the mean duration of the

relationship for this sample.

Shelter residents in this study had a significantly shorter average duration (4.7 years) of the relationship than the battered women from the community, a shorter average relationship length than that reported by any other study. The duration of the relationship figure was, of course, influenced tremendously by age of the women, also significantly lower in the shelter residents.

The mean number of dependent children in the comparison studies of battered women was 2.18 compared to 1.4 for the battered women in this sample. Shelter residency did not make a significant difference in number of children in this sample, nor did it differentiate the other samples on the number of children variable.

An average of 25% of the comparison samples belonged to an ethnic minority group. In contrast 46.4% of the battered women in this sample reported nonwhite minority group membership. This minority group representation reflected the minority group proportion of the large city used as one of the recruitment sites, but it is still a striking difference from the other samples of battered women.

In summary, the sample of battered women recruited

for this research was close to the same age as the average age of other large samples of battered women and similar in educational level and duration of the relationship. The sample was more likely to be employed, had fewer dependent children and had a higher representation of nonwhite minority group members than other samples of battered women. One of the sources of difference in demographic variables appeared to be shelter residency. In this sample, only 23.7% of the women were shelter residents at the time of the interview, while 4 of the 5 other samples used only shelter residents. Overall, the demographic comparison demonstrates the importance of research on battering including other women as well as shelter residents.

Patterns of Violence

Although not directly related to the purpose of the study, there were some important findings in regards to patterns of relationship violence in this sample. These findings add to the general knowledge about the battering of female partners.

Abuse of Female Partners versus "Conjugal Violence"

Considering the entire sample of 193 women, 38.4% of the women reported no violence in their relationship. Of the 119 (61.2%) violent relationships, 7.5% were characterized by mutual violence (without sexual abuse

of the women) while in 3.4% of the relationships, the woman was more violent than the man. Keeping in mind that violent women may not have responded to the advertisement or may have minimized their own violence, this finding is supportive of studies which have emphasized that the vast majority of "conjugal" violence is actually abuse of females (Berk et. al., 1983; Dobash & Dobash, 1979).

This study used the Conflict Tactics Scale (CTS), also used by Straus, Steinmetz and Gelles (1980) in their national study. One of the most frequently cited findings of that study was that the women in the sample were as likely as the men to have ever used a physically agressive conflict tactic in the relationship. This finding has been used by other authors to contend that husband-abuse is close to as prevalent as wife abuse (e.g. Steinmetz, 1978). However, the Straus et. al. (1980) research took into account neither self-defense nor sexual abuse. In addition, of the 161 couples in their study who used "abusive violence" (conflict tactics having a high potential of injury), 6.8% of the victims were men; the rest were women.

Sexual Abuse

The finding in this study that 42.3% of the battered women in this sample were sexually abused is

important. The women were asked if their partner had ever forced them into sex in which they did not wish to participate. The wording of the question was taken from Diana Russell's (1982) landmark research on rape in marriage. If the woman answered yes, she was asked to describe what she meant. Examples of responses of the women in this sample to that query included: "He ties me up every time I try to say no" or "He used to beat me up and take me to bed anyway, so now I just give in." Other examples of sexual abuse included the batterer having a friend rape the woman and sexual practices which the woman found repulsive (anal sex, vaginal insertion of foreign objects). In all cases the woman was "forced" by actual physical violence or threats of such. These acts would have been considered rape if the partners had not been married or cohabitating. Many women spontaneously made the distinction between being forced and being "pressured" or "wheadled" into sex.

This study only categorized repeated sexual assault as sexual abuse. Eleven (13.9%) of the battered women, in addition to the 41 sexually abused women, had been raped by their husband or partner only once. One woman had been sexually abused early in the relationship (more than nine years previously), but the abuse had totally ended and she no longer felt it was a problem. The

incidence of sexual abuse in the relationship in this research was similar to the incidence reported by four separate studies of marital rape and battering (Finkelhor & Yllo, 1980; Russell, 1982; Shields & Hanneke, 1983; Walker, 1984).

The sexually abused women in this sample were more severely injured ($p < .01$) from the physical abuse than the other battered women and their battering was more frequent and severe ($p < .001$) (Table 18). In addition, the sexually abused women had lower self-esteem ($p < .05$) than the other battered women (Table 19), although there were no other significant differences in the two subgroups of battered women. These findings support the research results reported by Shields and Hanneke (1983) of significantly lower self-esteem and more frequent and severe abuse in sexually abused battered women than in women who are physically abused only.

Shelter Residency

Grouping by shelter residency differed the battered women on the majority of the demographic variables and also made a signifcant difference on several of the other variables. Shelter residents were significantly more frequently and severely battered and had been more severely injured than those who were not in shelters. This finding may reflect an appropriate effort on the

part of severely battered women to seek safety in a shelter. This interpretation is further supported by the finding that the shelter residents had significantly higher mean scores on the measure of self-care agency (DSCAI) and the number of solutions thought of or actually tried than the battered women in the community.

In addition, the battered women in the shelters were significantly less depressed than the battered women in the community in spite of the increased severity of their abuse. Depression as conceptualized by Beck (1976) is a relatively enduring state which theoretically should not be significantly altered by short-term relief from the abuse. Shelter residency was limited to 30 days in both the shelters used for recruitment. However, the Beck Depression Inventory basically measures the women's depressive indicators for the past week and thereby could have been affected by the recent introduction of safety. The knowledge of the availability of shelter may have acted as a support system before actual residency and thus buffered the effects of the abuse on depression. If the lower levels of depression in the shelter residents preceded their admission to the shelter, a lower level of learned helplessness could be postulated. If less depression came after shelter residency, this would reflect relief

from abuse.

The speculation of lower levels of learned helplessness is somewhat supported by the higher average number of solutions thought of or actually tried by the shelter residents. However, there was not a significant negative correlation between depression and the number of solutions of the battered women as one would expect if learned helplessness was operating. In contrast there was a significant weak positive correlation (r = .17; p <.05) between frequency and severity of abuse and depression.

Summary of Related Findings

The results of this research have important implications for general theory and research on battering as well as knowledge generated concerning the responses to battering. This sample was more representative of all battered women than research solely using shelter residents. Significant differences between shelter residents and battered women from the community indicated the importance of using caution in generalizing research on shelter residents to all battered women. In addition, the results supported the overwhelming preponderance of wife abuse in marital violence and the importance of sexual abuse in research on battered women.

Strengths and Limitations of the Study

Sampling Procedures

Subjects for this study were recruited from both the community and agencies via media and bulletin board advertisement. The fact that the battered women were not recruited solely from shelters, increased the generalizability over much of the research on abused women. Because nurses are likely to encounter battered women in many other health care settings as well as shelters, it is important that the knowledge about the responses to battering be based on both women in shelters and those not in shelters.

At the same time, the newspaper recruiting procedure resulted in including women who self-selected and who felt very strongly about their situation and wanted to share their story. It may also have not attracted those who were ashamed about their situation. This may have lowered the percentage of women who blamed themselves for the problems in the relationship and the percentage of women who were more violent than their partners. In addition, women who qualified for the study but were extremely depressed may not have responded because of the apathy which accompanies depression.

Women who were poor were more likely to have

responded to the advertisement because of the $10 fee involved. The amount did not mean much to middle class women; many of them wanted their stipend donated to charity. However, the stipend was a significant amount for poor women and may well have increased their representation in the sample. Yet the stipend is considered by this author to have been an important symbol to the women that their time was valuable as well as an incentive. In addition, several of the poorer women indicated that they planned to use the money to do something significant about their situation. One woman planned to use it to purchase a bus ticket to escape from a batterer. Three other women planned to use it toward the court cost of a restraining order. An increase in the stipend in future research may make participation more attractive to middle class women as well.

The fact that the sample was generated from two cities selected mainly for convenience was a major limitation in terms of external validity. However, the two cities were demographically distinct and had a rich variety of cultural groups which enhanced the exploration of cultural factors.

The recruitment from shelters, especially the inner city shelter, for the additional battered women needed

certainly increased the proportion of nonwhite women in the battered sample. It may have been advisable to continue and/or expand media advertisement to obtain the additional numbers of battered women needed. Again, this "overrepresentation" of minority women was also a strength in terms of the cultural data gleaned from the research. The majority of research on battered women has used predominantly white subjects or (in at least one of the major studies) predominantly nonwhite women. This study was enhanced by the sufficient numbers of nonwhite women to draw some preliminary conclusions about cultural effects on the responses to battering.

In terms of the number of women in the sample, it would have been preferable to recruit a sample of twice (N = 386) that actually recruited in order to meet the power requirements decided upon. The total sample of 193 women was adequate for power of .80 (at p = .05, effect size .20), as was originally determined to be optimal. Because the two groups of women were very different in the variable correlational patterns, separate multiple regressions on the battered and not battered women were performed. With sample sizes of 97 and 96 respectively, the power was actually .50. In other words, there was only a fifty per cent chance of rejecting the null when seeking an effect size of .20.

Thus the chance of Type II error was increased in this study. However, the sample sizes of 97 and 96 respectively was adequate for power of .80 to detect an effect size of .30, a "medium" effect size (Cohen and Cohen, 1982). Given that there has been some prior work in the area, such an effect size was probably reasonable.

There was a problem with women not keeping appointments in this research. However, the procedures used kept these failures to a minimum, given the vagaries of transportation and lifestyle of poor women with young children and the necessity of keeping the appointment a secret for many of the battered women. Not keeping the appointment was also a way for women to withdraw from the study without embarrassment when they decided against participation after reflection. Thus, lack of persistent follow-up of women who failed to keep appointments was a means of protecting the rights of human subjects used by the researcher.

Methodology

The design was cross-sectional which excluded any conclusions about the time-ordering of the responses. Since multiple regression as well as a cross-sectional design was used, no causal implications could be drawn.

However, this study was designed as a preliminary, exploratory study. There is a follow-up study planned which will give more information about the responses to battering over time. In addition, the results can be appropriately used as the basis for theoretical model building which can be tested in future research.

Measurement was an issue in this research. It was a strength of the study that standardized, established measurement instruments were used for several of the most important variables. It may have been preferable to use more established measures for some of the other variables; however, there were time restraints in how long the women could be asked to take part in the interview. As important, there were no appropriate measures found for several of the variables which were specific to the situation being explored. The study would have been strengthened by additional piloting and refinement of the interview questions with more attention to reliability and validity of the questions pertaining to crucial variables.

Knowledge Generated

One of the strengths of this research was the attempt to explore two theoretical models. The data generated will be useful in planning nursing care for battered women and in addition, will add to the more

general interdisciplinary knowledge concerning the two models. The inclusion of the self-care agency concept from Orem (1985) also provided a synthesis of nursing theory and other discipline theory.

The theoretical relevance of the research would have been improved by more adequate operationalization of the constructs of stress (grieving model) and the cognitive deficit of learned helplessness. However, there was theoretical importance in the attempts to appropriately measure concepts which have only been operationalized in laboratory situations or applied in different situations in previous research.

An additional strength of the research was the comparison aspect. A "search for differences" between battered and "normal" women has characterized much of the previous research on battered women (Wardell, Gillespie & Leffler, 1983). In contrast, this research sought to demonstrate similarities as well as differences. By using a comparison group of other women also having problems in a relationship, the differences found could be conceptualized as attributable solely to abuse, rather than to relationship problems in general. However, the significant demographic differences between the battered and not battered groups may have also contributed to the differences found. The use of

standardized instruments also allowed some comparison with normative groups.

The study also was important because the responses to battering (or relationship problems) were conceptualized holistically, consistent with nursing theory. Thus, emotional, physical, cognitive, and behavioral responses, as well as cultural factors, were explored rather than the unidimensional approach taken in much of the prior research on battering. The research can be considered a preliminary step in formulating nursing practice theory, theory which can be used as the basis for the development of nursing interventions.

Implications for Nursing

As the widespread incidence of battering of female partners is recognized more fully in the professional literature and educational programs of nursing, battered women will be increasingly recognized in health care settings. Nursing is in an excellent position to provide holistic care to these women. In order to develop, test and provide effective diagnosis and treatment of the responses to battering, additional theory development is needed to provide a basis for these interventions. This research was intended as an early step in developing such theory. The purpose was

to further explore two theoretical models which have been proposed to explain the responses of women to battering, but which have not yet been fully tested by research. In addition, the research was intended to increase the knowledge base about the responses to battering by comparing two groups in similar situations, where an abusive partner was the major difference. Finally, there was an attempt to explore cultural influences on the responses to battering.

Taking Cultural Influences into Account

Based on this study, appropriate nursing care would take into account the cultural background of battered women encountered. The findings about the cultural tolerance for hitting indicated that the woman may live in a cultural atmosphere which is tolerant of wife abuse. A nursing expectation of support for the woman from her community that the battering situation is intolerable may be in error. In addition, these findings indicate that the woman herself probably is not tolerant of violence toward female partners, even though her partner and cultural group may be. It would also be important to realize that a strong belief in the primary value of the wife-mother role in the woman's partner and her cultural group (not her own valuing of that role) are correlated with tolerance for hitting in

those groups and the severity and frequency of abuse.

Sexual Abuse

The findings of this research support the significant incidence of sexual abuse among battered women and the necessity for nursing assessment for sexual abuse among both physically abused and other women in intimate relationships with men. In this sample, 30 (34.8%) of the physically abused women (N = 86) had been sexually abused (repeated forced sex), and an additional 14 (16.3%) had been raped by the batterer once. Six (40%) of the 15 women in a mutually violent relationship had been sexually abused and 5 of the 79 (6.3%) women in an otherwise violence free relationship were sexually abused. In addition, where sexual abuse is present in battered women, the results of the study suggest that nurses can also expect more frequent and severe abuse and an even greater chance of lowered self-esteem.

Attitudes toward Battered Women

The implications of the findings that the battered women and those who were not battered but also having serious relationship problems were more alike than different is important in terms of the nurse's approach to battered women. Rather than viewing them as a very different population from the norm, nurses would be

better to see them as experiencing responses which are to be expected given serious relationship problems. Although there is support from this research that the nurse would be alert for signs of depression and low self-esteem in both of these groups of women, she would not be justified in assuming these to be present. In addition, physical symptoms which are present may be attributable to the stress and grief of the woman's situation, rather than or in addition to, physical disease processes or physical injury. Nurses should be especially watchful for this kind of physical response from battered women based on the findings of this study.

The results of this study also indicate that battered women are frequently taking action to decrease the abuse even while remaining committed to the relationship. For instance, 22.8% of the battered women had significantly decreased the frequency and severity of the battering in their relationship by taking actions (e.g. calling the police, filing a restraining order, leaving the batterer temporarily whenever the abuse reached an intolerable level). These findings, taken in conjunction with those of Bowker (1983) and Okun (1983) suggest that nurses should not assume that women remaining in or returning to a violent relationship are allowing themselves to be beaten. In contrast, the

actions being taken by the woman to decrease and/or end the battering need to be asked about, praised, supported and expanded.

The Risk of Suicide

The study findings also support previous research that all depressed women and especially those severely depressed should be carefully assessed for battering. There are very few incidence studies of battering among women seeking psychiatric care. However, there are indications that the incidence of battered women among all mental health agency patients approaches 50% and approximately 25% of suicide attempts in women are precipitated by battering (Stark & Flitcraft, 1985). In addition, battered women need to be carefully assessed for suicide potential. In addition to the findings of 17.5% of the battered women in this sample scoring in the severely depressed range on the BDI, 40.5% had seriously threatened or attempted suicide. Previous research has suggested that at least 10% of battered women have attempted suicide (Stark & Flitcraft, 1985).

Nursing Interventions for Depression

In terms of depression and physical symptoms found in battered women, the results of this study do not support an assumption that one of the two models are operating. Thus, the nurse should explore the

individual woman's perceptions of the situation in more depth to determine the more probable theoretical model. It is possible that the women who were severely depressed in this sample were more apt to be affected by learned helplessness, and this possibility could be explored in secondary data analysis. However, even given the results of the study as reported herein, there are important findings which can help to guide the nursing interventions of battered women who are depressed and to help alleviate the potential for depression in other battered women.

Although attributions were not a significant unique contribution to depression in the battered women, attributions of blame were correlated with both self-esteem and depression. Internality of blame was associated with difficulties in both areas, suggesting that the nursing care of battered women who are blaming themselves should include helping the woman to see her partner's responsibility as equal to her own. The study does not support encouraging self-blaming battered women to totally change her attributions to external blame, since interactive (self and partner) blame was the category least often associated with depression and low self-esteem.

Helping the battered women realize that they are

not alone in a battering situation was also supported as a nursing intervention in terms of depression. Group intervention has been suggested as a useful approach to increase the perceptions of universality (Campbell, 1986).

The findings further suggested that battered woman would be less depressed and have higher self-esteem if they decided that there was no hope of the relationship problems getting better. The findings about expectations of instability of the situation do not support other research in the area, so that an active intervention to change attributions in this arena is be a tentative suggestion. However, if a battered woman had reached the point where she no longer felt that there is any chance of improvement in the relationship, this perception could be supported by the nurse according to the findings of this study.

Perceptions of control in the relationship were a significant unique contribution to depression in the learned helplessness multiple regression analysis in this study. Therefore, a congruent nursing intervention would be to help the woman perceive more control and/or to exert more control. Because of the possible physical danger to the woman in some cases if she tried to exert more control, this possibility would have to be

discussed very carefully with battered women. However, the possibility of increased perceptions of control is very real. The battered women interviewed for this research and seen in the author's clinical practice often did not perceive as much control as they appeared to be exerting. For instance, two of the women in this sample had disarmed the batterer's handgun and one had asked the police to impound a gun. These women saw themselves as having very little control in the relationship, but the researcher interpreted these actions as exerting significant control. Encouraging battered women to cognitively reappraise their control is supported as a useful nursing intervention.

Finally, the importance of self-care agency as a predictor for depression in battered women is a finding of this study which suggests interventions to increase self-care agency. Orem (1985) describes self-care agency as:

> a set of human abilities for deliberate action: the ability to attend to specific things (this includes the ability to exclude other things) and to understand their characteristics and the meaning of the characteristics; the ability to apprehend the need to change or regulate the things observed; the ability to acquire knowledge of appropriate courses of action for regulation; the ability to decide what to do; and the ability to act to achieve change or regulation (p. 107).

Thus, nursing interventions are indicated which: (a) help battered women see the patterns of and influences

on the abuse, (b) improve their decision making skills regarding the abuse, and (c) both provide information and give further sources of information about battering and possible solutions for battering. These could be important ways to decrease depression and decrease the vulunerability to depression.

In addition, the measure of self-care agency was again a self-perception instrument. The battered women were for the most part actively problem solving about the abuse they were encountering. By recognizing the significant strengths that battered women have in this area and helping the women themselves to recognize these strengths, nursing also can help to increase the women's perception of self-care agency.

Summary

The current research is seen as an important step toward formulating theory regarding women's responses to battering, including self-system processes, behavioral processes, and interpersonal control. The results also provide direction for nursing approaches to the care of battered women. The study suggests future research to further refine this theory by integrating aspects of the grief and learned helplessness models. The fit of this new model to this cross-sectional data and to future longitudinal data sets could be shown by causal modeling

techniques. The study supports the importance of inclusion of cultural influences, sexual abuse, attributions, and control in future research. Finally, the nursing interventions which have been supported by this research need to be tested in experimental nursing research with battered women. With this type of theory based, applied research, nursing can contribute significantly to diagnosing and alleviating the responses to battering which are deleterious to the health and well-being of so many women.

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. Journal of Abnormal Psychology, 87, 49-74.

Abramson, L. Y., Garber, J., & Seligman, M. E. P. (1980). Learned helplessness in humans: An attributional approach. In Garber, J. & Seligman, M. E. P. (Eds.), Human helplessness: Theory and application. New York: Academic Press.

Adams, D. C., & McCormick, A. J. (1982). Men unlearning violence: A group approach based on the collective mode. In Roy, M. (Ed.), The abusive partner: An analysis of domestic battering. New York: Van Norstrand Reinhold.

Allen, C. M., & Straus, M. A. (1980). Resources, power, and husband-wife violence. In M. A. Straus and G. T. Hotaling (Eds.), Social causes of husband-wife violence. Minneapolis: University of Minnesota Press.

Alloy, L. B., & Abramson, L. Y. (1980). The cognitive component of learned helplessness and depression: A critical analysis. In Garber, J. & Seligman, M. E. P. (Eds.), Human helplessness: Theory and application. New York: Academic Press.

Alloy, L. B., & Abramson, L. Y. (1982). Learned helplessness, depression, and the illusion of control. Journal of Personality and Social Psychology. 42, 1114-1126.

American Nurses' Association. (1980). Nursing: A social policy statement. Kansas City: ANA.

American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM III), 3rd ed. Washington, DC: American Psychiatric Association.

Appleton, W. (1980). The battered woman syndrome. Annals of Emergency Medicine, 9, 84-91.

Arndt, N. Y. (1981). Domestic violence: Psychological aspects of the battered woman. Dissertation Abstracts International. (University Microfilms International No. 8129553).

Bailey, M. B. (1967). Psychophysiological impairment in wives of alcoholics as related to their husbands' drinking and sobriety. In R. Fox (Ed.), Alcoholism: Behavioral research and therapeutic approaches. New York: Springer.

Bandura, A. (1973). Aggression: A social learning analysis. Englewood Cliffs, NJ: Prentice Hall.

Baucom, D. H. (1983). Sex role identity and the decision to regain control among women: A learned helplessness investigation. Journal of Personality and Social Psychology. 44, 334-343.

Baum, A., Fleming, R., & Singer, J. E. (1983). Coping with victimization by technological disaster. Journal of Social Issues, 39(2), 119-140.

Beck, A. T. (1972). Depression: Causes and treatment (rev. ed.). Philadelphia: University of Pennsylvania Press.

Beck, A. T. & Beamesdorfer, A. B. (1974). Assessment of depression: The depression inventory. Modern Problems of Pharmacopsychiatry, 7, 151-169.

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. Archives of General Psychiatry, 4, 561-571.

Berk, R. A., Berk, S. F., Loseke, D. R., & Rauma, D. (1980). Mutual combat and other family violence myths. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), The dark side of families. Beverly Hills: Sage.

Berman, W. H., & Turk, D. C. (1981). Adaptation to divorce: Problems and coping strategies. Journal of Marriage and the Family, 43, 179-189.

Blaney, P. H., Behar, V., & Head, R. (1980). Two measures of depressive cognitions: Their association with depression and with each other. Journal of Abnormal Psychology, 89, 678-682.

Bloom, B. L., White, S. W., & Asher, S. J. (1979). Marital disruption as a stressful life event. In Levinger, G., & Moles, O. C. (Eds.), Divorce and separation. New York: Basic Books.

Bowker, L. H. (1983). Beating wife-beating. Lexington, MA: Lexington Books.

Bowlby, J. (1973). Self-reliance and some conditions that promote it. In R. Gosling (Ed.), Support, innovation, and autonomy. London: Tavistock Publications.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss. New York: Basic Books.

Boyd, J. H., & Weissman, M. M. (1981). Epidemiology of affective disorders. Archives of General Psychiatry, 38, 1039-1046.

Boynton, G. M. (1979). The relationship between identity development and attitudes toward motherhood in young married professional women (Doctoral dissertation, Columbia University, 1979). Dissertations Abstracts International, 40, 440B.

Brown, B. W. (1980). Wife-employment, marital equality, and husband-wife violence. In M. A. Straus, & G. T. Hotaling (Eds.), Social causes of husband-wife violence. Minneapolis: University of Minnesota Press.

Browne, A. (in press). Assault and homicide at home: When battered women kill. In M. J. Saks & L. Saxe (Eds.), Advances in applied social psychology: Vol. 3. Hillsdale, NJ: Lawrence Erlbaum Associates.

Bulcroft, R., & Straus, M. A. Validity of husband, wife, and child reports of intrafamily violence and power. University of New Hampshire, Family Violence Research Program, mimeograph V16.

Bulman, R., & Wortman, C. (1977). Attributions of blame and coping in the "real world": Severe accident victims react to their lot. Journal of Personality and Social Psychology, 35, 351-363.

Burgess, A. W., & Holmstrum, L. L. (1974). Rape trauma syndrome. American Journal of Psyhciatry, 134, 69-72.

Byles, J. (1978). Violence, alcohol problems and other problems in disintegrating families. Journal of Studies on Alcohol, 39, 551-553.

Campbell, J. C. (1985) The beating of wives. Victimology: An International Journal, 10, 174-185.

Campbell, J. C. (1981). Misogyny and homicide of women. Advances in Nursing Science, 3(2), 67-85.

Campbell, J. C. (1986). A support group for battered women. Advances in Nursing Science, 8(2), 13-20.

Campbell, J. C. & Humphreys, J. H. (1984). Nursing care of victims of family violence. Reston, VA: Reston.

Carlson, B. (1977). Battered women and their assailants. Social Work, 22, 455-465.

Carroll, J. C. (1977). The intergenerational transmission of family violence. Aggressive Behavior, 3(3), 289-299.

Carroll, J. C. (1980). Cultural-consisitency theory of family violence in Mexican-American and Jewish-American ethnic groups. In M. A. Straus, & G. T. Hotaling (Eds.), Social causes of husband-wife violence. Minneapolis: University of Minnesota Press.

Choderow, N. (1974). Family structure and feminine personality. In M. Z. Rosaldo & L. Lamphere (Eds.), Woman, culture and society. Stanford: Stanford University Press.

Claerhout, S., Elder, J. & Janes, C. (1982). Problem-solving skills of rural battered women. American Journal of Community Psychology, 10, 605-612.

Coates, D., & Winston, T. (1983). Counteracting the deviance of depression: Peer support groups for victims. Journal of Social Issues, 39(2), 171-196.

Coleman, K. H. (1980). Conjugal violence: What 33 men report. Journal of Marriage and the Family, 6(2), 207-213.

Davidson, T. (1978). Conjugal crime: Understanding and changing the wifebeating problem. New York: Hawthorn Books.

Davies, J. (1984). The role of alcohol in family violence. Unpublished doctoral dissertation. University of Rochester, New York.

Davis, L. V., & Carlson, B. E. (1981). Attitudes of service providers toward domestic violence. Social Work Research and Abstracts, 81, 34-39.

DeBliek, D. J. (1981). Prevalence of domestic violence reported by female psychiatric inpatients. Unpublished field study, Wayne State University College of Nursing.

Denyes, M. J. (1980). Development of an instrument to measure self-care agency in adolescents. Dissertation Abstracts International, 4(5), 1716-B. (University Microfilms No. 8025672).

Denyes, M. J. (in press). Self-care agency in adolescents: A measurement instrument. Research in Nursing and Health.

Derogatis, L. R. (1977). SCL-90 Manual-I. Baltimore: John Hopkins University School of Medicine.

Dobash, R. E., & Dobash, R. (1979). Violence against wives. New York: The Free Press.

Dobash, R. E., & Dobash, R. (1981). Social science and social action: The case of wife beating. Journal of Family Issues, 4, 439-470.

Drake, V. K. (1982). Battered women: A health care problem in disguise. Image, 14, 40-47.

Drake, V. K. (1985). An investigation of the relationships among locus of control, self-concept, duration of the intimate relationship, and severity of physical and nonphysical abuse of battered women. Unpublished doctoral dissertation, Catholic University of America.

DuCette, J., & Keane, A. (1984). "Why me?": An attributional analsysis of a major illness. Research in Nursing and Health, 7, 257-264.

Eberle, P. A. (1982). Alcohol abusers and non-users: A discriminant analysis of differences between two subgroups of batterers. Journal of Health and Social Behavior, 23, 260-271.

Erikson, E. H. (1968). Identity: Youth and crisis. New York: W. W. Norton.

Erikson, E. H. (1959). Identity and the life cycle. Psychological Issues, 1, 1-171.

Fagan, J. A., Stewart, D. K., & Hansen, K. V. (1983). Violent men or violent husbands? Background factors and situational correlates. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), The dark side of families (pp. 49-68). Beverly Hills: Sage.

Faulk, M. (1974). Men who assault their wives. Medicine, Science, and the Law, 14(3), 180-183.

Ferraro, K. J., & Johnson, J. M. (1983). How women experience battering: The process of victimization. Social Problems, 30, 325-339.

Finkelhor, D., & Yllo, K. (1980). Forced sex in marriage: A preliminary research report. Crime and Delinquency, 34, 459-478.

Fitts, W. H. (1972). The self concept and behavior: Overview and supplement. Los Angeles: Western Psychological Services.

Flynn, J. P. (1977). Recent findings related to wife abuse. Social Casework, 58(1), 13-20.

Flynn, J. B., & Whitcomb, J. C. (1981). Unresolved grief in battered women. Journal of Emergency Nursing, 7(6), 250-254.

Frieze, I. R. (1979). Perceptions of battered wives. In I. R. Frieze, D. Bar-Tal, & J. S. Carroll (Eds.), New approaches to social problems (pp. 79-108). San Francisco: Jossey-Bass.

Gayford, J. J. (1975). Battered wives. Medicine, Science and the Law, 15(4), 237-245.

Gayford, J. J. (1979). The aetiology of repeated serious physical assaults by husbands on wives. Medicine, Science and the Law, 19(1), 9-24.

Gelles, R. J. (1972). The violent home. Beverly Hills: Sage.

Gelles, R. J. (1975). Violence and pregnancy: A note on the extent of the problem and needed services. Family Coordinator, 24, 81-86.

Gelles, R. J. (1976). Abused wives: Why do they stay? Journal of Marriage and the Family, 38(4), 659-668.

Gelles, R. J. (1980). Violence in the family: A review of research in the seventies. Journal of Marriage and the Family, 42, 339-347.

Giles-Sims, J. (1983). Wife battering: A systems theory approach. New York: Guilford Press.

Gilligan, C. (1982). In a different voice. Cambridge: Harvard University Press.

Giovanni, N. (1981). Nikki Giovanni. In Tate, C. (Ed.), Black women writers at work. New York: Continuum.

Glick, I. O., Weiss, R. S., & Parkes, C. M. (1974). The first year of bereavement. New York: Wiley.

Goldberg, W., & Carey, A. (1982). Domestic violence victims in the emergency setting. Topics in Emergency Medicine, 3, 65-75.

Goldberg, W. G., & Tomlanovich, M. C. (1984). Domestic violence victims in the emergency department. Journal of the American Medical Association, 251, 3259-3264.

Gondolf, E. (1985). Men who batter. Holmes Beach, FL: Learning Publications.

Goode, W. (1971). Force and violence in the family. Journal of Marriage and the Family, 33, 624-636.

Greenblat, C. S. (1984, November). "Don't hit your wife...unless": Preliminary findings on normative support for the use of physical force by husbands. Paper presented at the Third International Institute on Victimology, Lisbon, Portugal.

Gullattee, A. C. (1981). Spousal abuse. Journal of the National Medical Association, 71, 335-340.

Guttentag, M., & Salasin, S. (1977). Women, men and mental health. In L. A. Cater & A. F. Scott (Eds.), Women and men: Changing roles, relationships and perceptions. New York: Praeger.

Hackney, G. R., & Ribordy, S. C. (1980). An empirical investigation of emotional reactions to divorce. Journal of Clinical Psychology, 36, 105-110.

Hamen, L. C. (1982). Separated and divorced women. Westport, CT: Greenwood Press.

Hancock, E. (1980). The dimensions of meaning and belonging in the process of divorce. American Journal of Orthopsychiatry, 50(1), 18-27.

Held, D. (1980). Introduction to critical theory. Berkeley: University of California Press.

Helton, A. M. (November, 1985). Battering during pregnancy: Prevalence study in a metropolitan area. Paper presented at the First Annual Nursing Conference on Violence against Women, Amherst, MA.

Hilberman, E., & Munson, K. (1978). Sixty battered women. Victimology: An International Journal, 2, 460-470.

Hjorth, C. W., & Harway, M. (1981). The body-image of physically abused and normal adolescents. Journal of Clinical Psychology, 37, 863-866.

Hoagland, A. C. (1983). Bereavement and personal constructs: Old theories and new concepts. Death Education, 7, 175-193.

Hodgson, J. W., & Fischer, J. L. (1981). Pathways of identity development in college women. Sex Roles, 7, 681-689.

Hoff, L. A. (1983, October). Violence against women: A social-cultural network analysis. Paper presented at the 1983 Sigma Theta Tau Biennial Convention Research Conference, Boston, MA.

Hornung, C. A., McCullough, B. C., & Sugimoto, T. (1981). Status relationships in marriage: Risk factors in spouse abuse. Journal of Marriage and the Family, 43(3), 675-692.

Horowitz, M. J. (1976). Stress response syndromes. New York: Aronson.

Hunter, K. (1981). Kristin Hunter. In C. Tate (Ed.), Black women writers at work. New York: Continuum.

Jackson, J. K. (1954). The adjustment of the family to the crisis of alcoholism. Quarterly Journal of Studies on Alcohol, 15, 562-586.

Janoff-Bulman, R., & Frieze, I. H. (1983). A theoretical perspective for understanding reactions to victimization. Journal of Social Issues, 39, 1-17.

Jeffery, P. (1979). Frogs in a well: Indian women in purdah. London: Zed Press.

Kalmuss, D. S., & Straus, M. A. (1982). Wife's marital dependency and wife abuse. Journal of Marriage and the Family, 44(2), 277-286.

Kelly, L. (1984, August). Effects or survival strategies? The long-term consequences of experiences of sexual violence. Paper presented at The Second National Conference for Family Violence Researchers, Durham, New Hampshire.

Kitson, G. C. (1982). Attachment to the spouse in divorce: A scale and its application. Journal of Marriage and the Family, 44, 379-393.

Kitson, G. C., Lopata, H. Z., Homes, W. M., & Meyering, S. M. (1980). Divorcees and widows: Similarities and differences. American Journal of Orthopsychiatry, 50(2), 291-301.

Kitson, G. C., & Sussman, M. B. (1982). Marital complaints, demographic characteristics, and symptoms of mental distress in divorce. Journal of Marriage and the Family, 44, 87-101.

Kohen, J. A. (1981). From wife to family head: Transitions in self identity. Psychiatry, 44, 230-240.

Kubler-Ross, E. (1969). On death and dying. New York: Macmillan.

Labell, L. S. (1979). Wife abuse: A sociological study of battered women and their mates. Victimology: An International Journal, 4, 258-267.

Langer, E. J. (1983). The psychology of control. Beverly Hills: Sage.

Lemert, E. M. (1960). The occurrence and sequence of events in the adjustment of families to alcoholism. Quarterly Studies on Alcohol, 21, 679-697.

Lester, D. (1980). A cross-culture study of wife abuse. Aggressive Behavior, 6, 361-364.

Levinson, D. (1983). Physical punishment of children and wife-beating in cross-cultural perspective. In R. J. Gelles, & C. P. Cornell (Eds.), International perspectives on family violence. Lexington, MA: D. C. Heath.

Levinson, H. (1972). Distinctions within the concept of internal-external locus of control: Development of a new scale. Proceedings from the 80th Annual Convention of the Psychological Association, 261-262.

Lichtenstein, V. R. (1981). The battered woman: Guidelines for effective nursing intervention. Issues in Mental Health Nursing, 3, 237-250.

Lindemann, E. (1979). Beyond grief. New York: Jason Aronson.

McGhee, J. D. (1984). A profile of the black single female-headed household. In J. D. Williams (Ed.), The state of black America 1984. New York: National Urban League.

McGrath, K. C. (1981). A study of self-care agency of adolescents within an ambulatory health care setting. Unpublished master's study, Wayne State University, Detroit.

Mahon, L. (1981). Common characteristics of abused women. Issues in Mental Health Nursing, 3, 137-157.

Makepiece, J. M. (1981). Courtship violence among college students. Family Relations, 30, 97-102.

Marris, P. (1974). Loss and change. London: Routledge and Kegan Paul.

Martin, D. (1976). Battered wives. San Francisco: Glide.

Masumura, W. T. (1979). Wife abuse and other forms of aggression. Victimology: An International Journal, 2, 479-485.

May, M. (1978). Violence in the family: An historical perspective. In J. P. Martin (Ed.), Violence and the family (pp. 135-163). Chichester, England: John Wiley & Sons.

Miller, D. T., & Porter, C. A. (1983). Self-blame in victims of violence. Journal of Social Issues, 39, 139-152.

Mitchell, C. J. (1983). Self-care agency of adolescents with asthma. Unpubished master's thesis, University of Washington, Seattle.

Morgan, E., & Farber, B. A. (1982). Toward a reformulation of the Eriksonian model of female identity development. Adolescence, 17, 199-211.

Neidig, P. H., Friedman, D. H., & Collins, B. S. (1984). Spouse abuse: Mutual combat or wife battering? Beaufort, SC: Behavioral Science Associates.

O'Brien, J. E. (1971). Violence in divorce prone families. Journal of Marriage and the Family, 33(4), 692-698.

O'Farrell, T. J., Harrison, R. H., & Cutter, H. S. (1981). Marital stability among wives of alcoholics: An evaluation of three explanations. British Journal of Addiction, 76, 175-189.

Okun, L. E. (1983). A study of woman abuse: 300 battered women taking shelter, 119 woman-batterers in counseling. Dissertations Abstracts International, 44(6). (University Microfilms International No. 8324256).

Orem, D. E. (1985). Nursing: Concepts of Practice (3rd ed.). New York: McGraw-Hill.

Orlofsky, J. L. (1977). Sex-role orientation, identity formation, and self-esteem in college men and women. Sex Roles, 3, 561-575.

Pagelow, M. D. (1981). Woman-battering. Beverly Hills: Sage.

Pahl, J. (1979). The general practicioner and the problem of battered women. Journal of Medical Ethics, 5, 117-123.

Paolino, T. J., McCrady, B. S., & Kogan, K. B. (1978). Alcoholic marriages: A longitudinal empirical assessment of alternative theories. British Journal of Addiction, 73, 129-138.

Parker, B., & Schumacher, D. N. (1977). The battered wife syndrome and violence in the nuclear family of origin: A controlled pilot study. American Journal of Public Health, 67, 760-761.

Parkes, C. M. (1972). Bereavement: Studies of grief in adult life. New York: International Universities Press.

Parkes, C. M. (1975). Unexpected and untimely bereavement: A statistical study of young Boston widows and widowers. In B. Shoenberg, I. Gerber, A. Wiener, A. H. Kutscher, D. Peretz, & A. C. Carr (Eds.), Beareavement: Its psychosocial aspects. New York: Columbia University Press.

Parkes, C. M., & Brown, R. J. (1972). Health after bereavement. Psychosomatic Medicine, 34, 449-461.

Pearlin, L. I., & Lieberman, M. A. (1981). The stress process. Journal of Health and Social Behavior, 22, 337-356.

Peterson, C., Schwartz, S. M., & Seligman, M. E. P. (1981). Self-blame and depressive symptoms. Journal of Personality and Social Psychology, 41, 253-259.

Peterson, R. (1980). Social class, social learning and wife abuse. Social Service Review, 54(3), 390-406.

Pfouts, J. H. (1978). Violent families: Coping responses of abused wives. Child Welfare, 57(2), 101-110.

Pittman, N. L., & Pittman, T. S. (1979). Effects of amounts of helplessness training and internal-external locus of control on mood and performance. Journal of Personality and Social Psychology, 37, 39-47.

Prescott, S. & Letko, C. (1977). Battered women: A social psychological perspective. In M. Roy (Ed.), Battered Women. New York: Van Nostrand Reinhold.

Radloff, L. S. (1980). Risk factors for depression: What do we learn from them? In M. Guttentag, S. Salasin, & D. Belle (Eds.), The mental health of women. New York: Academic Press.

Rosewater, L. B. (1984, August). The MMPI and battered women. Paper presented at The Second National Conference for Family Violence Researchers, Durham, New Hampshire.

Rosenberg, M. L. & Mercy, J. A. (1985). Homicide and Assaultive Violence. In Violence as a public health problem. Atlanta, GA: U. S. Public Health Service.

Rothblum, E. D. (1983). Sex role stereotypes and depression in women. In V. Franks & E. D. Rothblum (Eds.), The stereotyping of women: Its effects on mental health. New York: Springer.

Rounsaville, B. J. (1978). Theories in marital violence: Evidence from a study of battered women. Victimology: An International Journal, 3(1-2), 11-31.

Rounsaville, B. J., & Weissman, M. (1977). Battered women: A medical problem requiring detection. International Journal of Psychiatry in Medicine, 8(2), 191-202.

Roy, M. (1977). A research project probing a cross-section of battered women. In M. Roy (Ed.), The battered woman (pp. 25-43). New York: Van Norstrand Reinhold.

Rubin, R. B. (1976). Worlds of pain. New York: Basic Books.

Rubin, L. B. (1979). Women of a certain age. New York: Harper and Row.

Russell, D. (1982). Rape in marriage. New York: MacMillan.

Schecter, S. (1982). Women and male violence: The visions and struggles of the battered women's movement. Boston: South End Press.

Schlegel, A. (1972). Male dominance and female autonomy. New Haven: Hraf Press.

Schulman, M. (1981). A survey of spousal violence against women in Kentucky. Washington, D. C.: U. S. Department of Justice: Law Enforcement Administration.

Scott, P. D. (1974). Battered wives. British Journal of Psychiatry, 125, 433-441.

Secord, P. F., & Jourard, S. M. (1953). The appraisal of body cathexis: Body cathexis and the self. Journal of Consulting Psychology, 17, 343-347.

Seligman, M. E. P. (1975). Helplessness: On depression and death. San Francisco: W. H. Freeman.

Seligman, M. E. P., Abramson, L. Y., Semmel, A., & von Baeyer, C. (1979). Depressive attributional style. Journal of Abnormal Psychology, 88, 242-247.

Sheldon, A. R., Cochrane, J., Vachon, M. L., Lyall, W. A., Rogers, J., & Freeman, S. J. (1981). A psychosocial analysis of risk of psychological impairment following bereavement. The Journal of Nervous and Mental Disease, 169(4), 253-255.

Shields, N. M. & Hanneke, C. R. (1983). Battered wives' reactions to marital rape. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), The dark side of families. Beverly Hills: Sage.

Shipley, S. B. & Sylvester, D. C. (1982). Professionals' attitudes toward violence in close relationships. Journal of Emergency Nursing, 8(2), 88-91.

Shostak, M. (1983). Nisa. New York: Vintage Books.

Skinner, E., & Connell, J. P. (1985). Development and the understanding of control. In M. M. Baltes & P. B. Baltes (Eds.), Aging and the psychology of control. Hillsdale, NJ: Erlbaum.

Silverman, P. R. (1981). Helping women cope with grief. Beverly Hills: Sage.

Skinner, J. C. (1983). Self-care agencies and health problem solving skills of mothers of well babies. Unpublished master's thesis, University of Wisconsin, Madison, WI.

Snell, J., Rosenwald, R., & Robey, A. (1964). The wifebeater's wife. Archives of General Psychiatry, 11, 107-112.

Snyder, D. K., & Fruchtman, L. A. (1981). Differential patterns of wife abuse: A data-based typology. Journal of Consulting and Clinical Psychology, 49, 878-885.

Spanier, G. B., & Casto, R. F. (1979). Adjustment to separation and divorce: A qualitative analysis. In G. Levinger, & O. C. Moles (Eds.), Divorce and separation. New York: Basic Books .

Stack, C. B. (1974). All our kin. New York: Harper & Row.

Star, B. (1978). Comparing battered and non-battered women. Victimology: An International Journal, 3(1-2), 32-44.

Star, B. (1980). Patterns in family violence. Social Casework: The Journal of Contemporary Social Work, 61(6), 339-347.

Stark-Adamec, C., & Adamec, R. (1982). Aggression by men against women: Adaptation or aberration? International Journal of Women's Studies, 5, 1-21.

Stark, E., & Flitcraft, A. H. (1985). Spouse Abuse. In Surgeon General's Workshop on Violence and Public Health Source Book. Atlanta, GA: U. S. Public Health Service.

Stark, E., Flitcraft, A. & Frazier, W. Medicine and patriarchal violence: The social construction of a "private" event. International Journal of Health Services, 9(3), 461-493.

Stark, E., Flitcraft, A., Zuckerman, D., Grey, A., Robison, J., & Frazier, W. (1981). Wife abuse in the medical setting (Domestic Violence Monograph Series No. 7). Rockville, MD: National Clearinghouse on Domestic Violence.

Steinmetz, S. K. (1977). The cycle of violence: Assertive, aggressive and abusive family interaction. New York: Praeger.

Steinmetz, S. K. (1980). Women and violence: Victims and perpetrators. American Journal of Psychotherapy, 34(3), 334-349.

Strathern, M. (1972). Women in between. New York: Seminar Press.

Straus, M. A. (1973). A general systems approach to a theory of violence between family members. Social Science Information, 12(3), 105-125.

Straus, M. A. (1974). Leveling, civility, and violence in the family. Journal of Marriage and the Family, 36, 13-30.

Straus, M. A. (1978). Wife beating: How common and why? Victimology: An International Journal, 2, 443-458.

Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. Journal of Marriage and the Family, 41, 75-88.

Straus, M. A., Gelles, R. J., & Steinmetz, S. (1980). Behind closed doors: Violence in American families. New York: Doubleday.

Strube, M. J., & Barbour, L. S. (1983). The decision to leave an abusive relationship: Economic dependence and psychological commitment. Journal of Marriage and the Family, 45, 785-793.

Symonds, M. (1975). Victims of violence: Psychological effects and aftereffects. American Journal of Psychoanalysis, 35, 19-26.

Szinovacz, M. E. (1983). Using couple data as a methodological tool: The case of marital violence. Journal of Marriage and the Family, 45, 633-644.

Thompson, W. (1972). Correlates of the self concept. Los Angeles: Western Psychological Services.

Ulbrich, P., & Huber, J. Observing parental violence: Distribution and effects. Journal of Marriage and the Family, 43, 623-631.

Vachon, M. L., Rogers, J., Lyall, W. A., Lancee, W. J., Sheldon, A. R., & Freeman, S. J. (1982). Predictors and correlates of adaptation to conjugal bereavement. American Journal of Psychiatry, 139, 998-1002.

Walker, A. (1982). The color purple. New York: Washington Square Press.

Walker, L. E. (1979). The battered woman. New York: Harper & Row.

Walker, L. E. (1983). The battered woman syndrome study. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), The dark side of families (pp. 31-48). Beverly Hills: Sage.

Walker, L. E. (1984). The battered woman syndrome. New York: Springer.

Wallace, M. (1978). Black macho and the myth of the superwoman. New York: Dial Press.

Wallerstein, J. S., & Kelley, J. B. (1980). Surviving the breakup: How children and parents cope with divorce. New York: Basic Books.

Wardell, L., Gillespie, D. L., & Leffler, A. (1983). Science and violence against wives. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), The dark side of families (pp. 69-84). Beverly Hills: Sage.

Watts, D. L., & Courtois, C. A. (1981). Trends in the treatment of men who commit violence against women. Personnel and Guidance Journal, 60, 245-249.

Weiner, B. (1972). Theories of motivation: From mechanism to cognition. Chicago: Markham.

Weinfourt, R. (1979). Battered women: The grieving process. Journal of Psychiatric Nursing and Mental Health Services, 17(4), 40-47.

Weiss, R. S. (1975). Marital separation. New York: Basic Books.

Wells, L. E., & Marwell, G. (1976). Self-esteem: Its conceptualization and measurement. Beverly Hills: Sage.

Wylie, R. (1974). The self-concept, volume 1. Lincoln: University of Nebrasks Press.

Zuroff, D. C. (1980). Learned helplessness in humans: An analysis of learning processes and the roles of individual and situational differences. Journal of Personality and Social Psychology, 39, 130-146.

APPENDIX A: CONSENT FORM

CIHS # 20,401

THE UNIVERSITY OF ROCHESTER
MEDICAL CENTER
SCHOOL OF MEDICINE AND DENTISTRY · SCHOOL OF NURSING
STRONG MEMORIAL HOSPITAL
601 ELMWOOD AVENUE
ROCHESTER, NEW YORK 14642
AREA CODE 716

CONSENT FORM

Name of Study: WOMEN'S RESPONSES TO RELATIONSHIP PROBLEMS

Investigator: Jacquelyn C. Campbell, R.N., M.S., Doctoral Candidate
University of Rochester School of Nursing
601 Elmwood Avenue
Rochester, NY 14642
(716) 271-0500 or (313) 665-7607

Faculty Advisor: Carole A. Anderson, R.N., Ph.D., F.A.A.N.
Associate Dean for Graduate Studies

The purpose of this study is to learn more about how women respond to problems they are having in a marriage (or any other significant, intimate relationship with a man). It is important to identify factors which influence how women behave and feel in this kind of situation, so that health professionals can better understand what women are experiencing. Your participation in this study will help nurses to know how to help women deal with their responses to relationship problems.

If you agree to participate in this study, you will be filling out several forms with questions about your relationship and you as a person. You will also be interviewed about you and your relationship. We think it will take you about two hours to answer all the written and interview questions.

You can ask any questions you would like about the study or the people involved at any time. We will answer all your questions. In addition, you can receive information on resources available to help you with your relationship problems if you are interested. You may also learn more about what your answers to the questions you answer mean, but you will have to stay a little while longer while we score the questionnaires. You can leave a message at one of the telephone numbers listed above for the investigator who will return your call to answer questions you have about the study after this session. You can also receive a copy of the research results when they are completed if you are interested.

The answers that you give us to the questions are confidential. Only the investigator and the interviewers will have access to the data collected. Your name will not be used in anything that we discuss or write about the research. You are free to choose not to participate or to withdraw from the study at any time. If you withdraw from the study, any information collected before that time will be destroyed.

Consent Form
WOMEN'S RESPONSES TO RELATIONSHIP PROBLEMS
Investigator: Jacquelyn C. Campbell
Faculty Advisor: Carole A. Anderson

I have had opportunity to have my questions answered about the Women's Responses to Relationship Problems study and I agree to participate. I understand I will be paid $10.00 for my participation in the study.

Participant Signature:_____ Date:_____

Jacquelyn C. Campbell

Jacquelyn C. Campbell, R.N., M.S.
Principal Investigator

CIHS
5/16/85

APPENDIX B: INTERVIEW PROTOCOL

Interview Protocol

ID#_____

I would like to ask you some questions about yourself and your relationship. Please feel free to add information that you think is pertinent and to ask questions as we go along.

I will not be asking you any direct questions about physical violence toward your children. However, you need to know that if during the interview you choose to talk about child abuse in your home, the law states that as a nurse I have to report suspicion of child abuse to Protective Services. Do you have any questions about what this means?

Fine. Now we will begin the interview.

_____1. What is your marital status?

1 Single
2 Married
3 Separated
4 Divorced

_____2. How many years have you been living with your husband (partner)?

_____3. What problems are you having in your relationship?

CTS

_____4. Which of you, you or your partner, has more control over what happens in your life together? In other words, who is "boss"?

0 She is
1 He is

Several of the next questions are asked in terms of a scale of 0 to 100 with 0 the least amount and 100 the most. It might be helpful to think in terms of per cent to figure out how you want to answer the questions or on a scale of 0 to 100 that looks like this:

0...10...20...30...40...50...60...70...80...90...100

_____5. OK, you said that (you/your husband/partner) had the most control in your relationship. On a scale of 0 to 100%, how much control do YOU have?

_____6. People in this country usually consider themselves as part of groups in terms of values, economics, and race or culture. For instance, a person might describe themselves as middle class and black or poor and Peurto Rican or working class and anglo saxon or white. How would you describe yourself in terms of these groups?

_____7. Many cultural groups think that the only really important role for a woman or the only role that really counts, is to be a wife and mother. On a scale of 0 to 100%, what per cent of the _____ (her social/economic group) _____ (her ethnic/cultural group) people as a whole believe that the only really important role for a woman is to be a wife and mother?

_____8. On a scale of 0 to 100, to what extent were you brought up to believe that the only really important role for a woman is to be a wife and mother?

_____9. On a scale of 0 to 100, to what extent do you personally believe now that the only really important role for a woman is to be a wife and mother?

_____10. On a scale of 0 to 100, to what extent does your (husband/partner) believe the only really important role for a woman is to be a wife and mother?

_____11. On a scale of 0 to 100, to what extent does your (husband's/partner's) friends believe the only really important role for a woman is to be a wife and mother?

11. a. When you think about yourself, I imagine one of the ways you would describe yourself would be as a wife and mother. I would like to know how else would you describe yourself. For instance I think of myself as a mother, a nurse, and a doctoral student. How do you think of yourself?

_____ a.

_____ b.

_____ c.

_____ d.

_____ e.

_____ f.

Ok. Anything else besides.....?
Now would you please rank these roles in their order of importance to you?

_____12. The American culture as a whole seems to think that it's understandable and sometimes OK for men to hit their wives or girlfriends in certain situations. On a scale of 0 to 100%, what per cent of the_____ (her social/economic group), _____(her ethnic/cultural group) people as a group think that it's acceptable for men to hit their wives or girlfriends in certain situations?

_____ a. Does it differ for men versus women in the _____ (her social/economic group),_____(her ethnic/cultural group)?

0 No
1 Yes

(if yes):

_____ b. On a scale of 0 to 100%, what per cent of the men think it is acceptable for men to hit their wives or girlfriends in certain situations?

_____ c. On a scale of 0 to 100%, what per cent of the women think it is understandable and sometimes OK for men to hit their wives or girlfriends in certain situations?

ID#_____

_____13. On a scale of 0 to 100, how acceptable were you brought up to believe it is for men to hit their wives or girlfriends in certain situations?

_____14. On a scale of 0 to 100, how acceptable do you now think it is for men to hit their wives or girlfriends in certain situations?

_____15. On a scale of 0 to 100, how acceptable does your husband/partner think it is for men to hit their wives or girlfriends in certain situations?

_____16. On a scale of 0 to 100, how acceptable do your (husband's/partner's) friends think it is for men to hit their wives or girlfriends in certain situations?

_____17. Some cultural groups in the United States have the kinds households where anyone who is a close friend or family member can stay for a good long while if they need to because of problems in relationships. COULD you go stay with a close friend or relative if things with your (husband/partner) got really bad?

0 no
1 yes

_____ (If yes):
a. About how many weeks in a row do you think you could stay?

_____18. WOULD you go stay with a close friend or relative if things got really bad?

0 no
1 yes

_____19. What else about your own personal culture and the values you have been taught influences the relationship you have with your (husband/partner) as it is now?

_____20. Is there anything about the way you were taught to think or that or that your family believes that affected your relationship when it first started even if it doesn't now?

0 no
1 yes

_____20a. If yes: What?

ID#_____

_____21. Who or what do you blame the most for first causing the problems in the relationship?

0 don't know
1 self
2 him
3 other person
4 specific thing_____
5 fate, luck
6 both self and him

(If a person-self or other):

_____21a. What about (yourself/her/him) is to blame?

0 enduring; characterological; uncontrollable

_____

1 transient; behavioral; controllable

_____

(If self)

_____21b. Is (the characteristic or behavior) something you feel good about?

0 not self
1 no
2 yes

_____21c. Is (the characteristic or behavior) true of you now or was it only true in the past?

0 not self
1 past
2 now

ID#_____

_____22. Who or what do you blame the most for the problems in the relationship continuing now?

0 don't know
1 self
2 him
3 other person
4 specific thing_____
5 fate, luck
6 self and him

(If a person-self or other):

_____22a. What about (yourself/her/him) is to blame?

0 enduring; characterological; uncontrollable

_____

1 transient; behavioral; controllable

_____

(If self)

_____22b. Is (the characteristic or behavior) something you feel good about?

0 not self
1 no
2 yes

_____23. On a scale of 0 to 100%, how likely do you think it is that the problems in your relationship will get better?

_____24. On a scale of 0 to 100%, what per cent of the other women in this country have the same kind of problems you do in their main relationship with a man?

_____25. On a scale of 0 to 100%, what per cent of those other women would be able to end the problems in your relationship if they were in exactly the same situation you are?

ID#_____

_____26. Please tell me all the solutions you have thought of or have actually tried to end the problems in your relationship. I would like you to tell me all the things you thought about or tried even if they didn't work.

	Solution	Tried
_____27a.		
_____27b.		
_____27c.		
_____27d.		
_____27e.		
_____27f.		
_____27g.		
_____27h.		
_____27i.		
_____27j.		

This is your list (show subject the list she has generated). Can you think of anything else you have thought of or tried?

_____27. OK, now please show me the ones you actually tried and we'll check those.

Now, on a scale of 0 to 100, how helpful was it when you tried _____ (list each solution actually tried in turn).

_____28. How long (in months) had you been with your husband (partner) when the problems first started?

_____29. What solutions did you try when the problems first started?

ID#_____

_____30. What solutions have you tried within the last year?

_____31. Have you ever talked to a minister, nurse, doctor counselor or anyone else outside your family and friends about the problems in your relationship?

0 No
1 Yes

If yes:

_____31a. Who did you go talk to?

_____31 1 1 Nurse
_____31 2 2 Physician
_____31 3 3 Counselor
_____31 4 4 Lawyer
_____31 5 5 Minister

On a scale of 0 to 100, how helpful were each of the professionals you talked to? (31b-f)

(If meets criteria for battering):

_____31g. Have you ever gone to a shelter for battered women?

0 no
1 yes

_____31h. How helpful was that on a scale of 0 to 100.

_____32. Has your husband (partner) ever forced you into sex that you did not wish to participate in?

0 No
1 Yes

33. Is there anything else you would like to talk to me about that has to do with your relationship with your (husband/partner)?

ID#_____

33. (If meets the criteria for battering): According to the answers you gave when I asked you about the ways you and your (huband/boyfriend) solve conflicts between you, some experts would say you are a battered woman or abused wife. Do you think of yourself as battered or abused?

(If yes):

a. When did you first start thinking of yourself as battered or abused?

b. Did that make you do anything different about the problems in the relationship or feel differently about the relationship? In what way?

We are concerned about the danger to battered women, because some battered women may eventually be killed by their husband or boyfriend or actually kill him. Since you have told us that there is quite a bit of physical violence in your relationship, we would like to have you do one more thing before you go home. We would like to help you fill out this Danger Assessment (show Danger Assessment to woman) so that you have an idea of how much danger you are in according to what has happened to other battered women. Would you be willing to fill this form out with me?

(If no):

Fine. I do want to give you the phone number of the nearest shelter for battered women in case you might ever want to use it. They answer the phone 24 hours a day and can give you more information on battering should you ever need it.

ID#_____

DANGER ASSESSMENT

The following risk factors have been associated with homicides of both batterers and battered women in research which has been conducted after the killings have taken place. We cannot predict what will happen in your case, but we would like you to be aware of the danger of homicide in situations of severe battering so that you can look at your own situation in light of these factors.

_____I. Using a calendar, I would like you to mark the approximate dates during the last year when you were beaten by your husband or partner. I would like you to tell me how long each incident lasted in approximate hours and rate the incident according to the following scale.

1 Slapping, pushing; no injuries and/or no lasting pain
2 Punching, kicking; bruises, cuts and/or continuing pain
3 "Beating up"; bruises, burns, broken bones
4 Threat to use weapon; head injury, internal injury, permanent injury
5 Use of weapon; wound from weapon

_____II. Is there a handgun in the house?

_____III. Has your husband (partner) ever forced you into sex when you did not wish to do so?

_____IV. Does your husband (partner) use drugs? If yes, does he use "uppers" or amphetamines?

_____V. Is your husband (partner) violent outside of the home?

_____VI. Does your husband (partner) threaten to kill you?

_____ a. If yes, do you believe he is capable of killing?

_____VII. Is your husband (partner) drunk every day or almost every day?

_____VIII. Does your husband or partner control most or all of your daily activities? For instance, does he tell you who you can be friends with, how much money you can take with you shopping, or whether or not you can take the car?

_____IX. Have you been beaten by your husband or partner while you were pregnant?

_____X. Is your husband or partner violently and constantly jealous?

_____XI. Have you ever threatened or tried to commit suicide?

APPENDIX C: INSTRUMENTS

BECK INVENTORY

Name_____ Date_____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the **PAST WEEK, INCLUDING TODAY!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one. **Be sure to read all the statements in each group before making your choice.**

1 0 I do not feel sad.
1 I feel sad.
2 I am sad all the time and I can't snap out of it.
3 I am so sad or unhappy that I can't stand it.

2 0 I am not particularly discouraged about the future.
1 I feel discouraged about the future.
2 I feel I have nothing to look forward to.
3 I feel that the future is hopeless and that things cannot improve.

3 0 I do not feel like a failure.
1 I feel I have failed more than the average person.
2 As I look back on my life, all I can see is a lot of failures.
3 I feel I am a complete failure as a person.

4 0 I get as much satisfaction out of things as I used to.
1 I don't enjoy things the way I used to.
2 I don't get real satisfaction out of anything anymore.
3 I am dissatisfied or bored with everything.

5 0 I don't feel particularly guilty.
1 I feel guilty a good part of the time.
2 I feel quite guilty most of the time.
3 I feel guilty all of the time.

6 0 I don't feel I am being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7 0 I don't feel disappointed in myself.
1 I am disappointed in myself.
2 I am disgusted with myself.
3 I hate myself.

8 0 I don't feel I am any worse than anybody else.
1 I am critical of myself for my weaknesses or mistakes.
2 I blame myself all the time for my faults.
3 I blame myself for everything bad that happens.

9 0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself, but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10 0 I don't cry any more than usual.
1 I cry more now than I used to.
2 I cry all the time now.
3 I used to be able to cry, but now I can't cry even though I want to.

11 0 I am no more irritated now than I ever am.
1 I get annoyed or irritated more easily than I used to.
2 I feel irritated all the time now.
3 I don't get irritated at all by the things that used to irritate me.

12 0 I have not lost interest in other people.
1 I am less interested in other people than I used to be.
2 I have lost most of my interest in other people.
3 I have lost all of my interest in other people.

13 0 I make decisions about as well as I ever could.
1 I put off making decisions more than I used to.
2 I have greater difficulty in making decisions than before.
3 I can't make decisions at all anymore.

14 0 I don't feel I look any worse than I used to.
1 I am worried that I am looking old or unattractive.
2 I feel that there are permanent changes in my appearance that make me look unattractive.
3 I believe that I look ugly.

15 0 I can work about as well as before.
1 It takes an extra effort to get started at doing something.
2 I have to push myself very hard to do anything.
3 I can't do any work at all.

16 0 I can sleep as well as usual.
1 I don't sleep as well as I used to.
2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
3 I wake up several hours earlier than I used to and cannot get back to sleep.

17 0 I don't get more tired than usual.
1 I get tired more easily than I used to.
2 I get tired from doing almost anything.
3 I am too tired to do anything.

18 0 My appetite is no worse than usual.
1 My appetite is not as good as it used to be.
2 My appetite is much worse now.
3 I have no appetite at all anymore.

19 0 I haven't lost much weight, if any, lately.
1 I have lost more than 5 pounds.
2 I have lost more than 10 pounds.
3 I have lost more than 15 pounds.
I am purposely trying to lose weight by eating less. Yes_____ No_____

20 0 I am no more worried about my health than usual.
1 I am worried about physical problems such as aches and pains; or upset stomach; or constipation.
2 I am very worried about physical problems and it's hard to think of much else.
3 I am so worried about my physical problems that I cannot think about anything else.

21 0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

The Conflict Tactics Scale

No matter how well a couple gets along there are times when they disagree on major decisions, get annoyed about somethings the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. I'm going to read a list of some things that you and your (husband/partner) might have done when you had a dispute, and would first like you to tell me for each one how ofter you did it in the past.

Hand Respondent Card A

	Q. 78 Respondent- In Past Year								Q. 79 Husband/Partner- In Past Year								Q. 80 Ever Happened		
	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Yes	No	Don't Know
a. Discussed the issue calmly	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
b. Got information to back up (your/his) side of things	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
c. Brought in or tried to bring in someone to help settle things	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
d. Insulted or swore at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
e. Sulked and/or refused to talk about it	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
f. Stomped out of the room or house (or yard)	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
g. Cried	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
h. Did or said something to spite the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
i. Threatened to hit or throw something at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
j. Threw or smashed or hit or kicked something	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
k. Threw something at the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
l. Pushed, grabbed, or shoved the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X

Straus, 1979

Appendix A, Continued

The Conflict Tactics Scale

Hand Respondent Card A

	Q. 78 Respondent- In Past Year								Q. 79 Husband/Partner- In Past Year								Q. 80 Ever Happened		
	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Never	Once	Twice	3-5 Times	6-10 Times	11-20 Times	More than 20 Times	Don't Know	Yes	No	Don't Know
m. Slapped the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
n. Kicked, bit, or hit with a fist	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
o. Hit or tried to hit with something	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
p. Beat up the other one	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
q. Threatened with a knife or gun	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
r. Used a knife or gun	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X
s. Other (PROBE)_____	0	1	2	3	4	5	6	X	0	1	2	3	4	5	6	X	1	2	X

79. And what about your (husband/partner)? Tell me how often he (ITEM) in the past year

For each item circled either "Never" or "Don't Know" for BOTH respondent and partner, ask:

80. Did you or your (husband/partner) ever (ITEM)?

ID#_____

DENYES SELF-CARE AGENCY INSTRUMENT

INSTRUCTIONS

A. Please answer the following questions by writing in the number or words that best answers the question for you.

B. For most questions there are no right or wrong answers. Please give the answer that best fits you.

C. There may be some questions that seem similar; it would be helpful if you would answer them anyway.

D. Please feel free to write comments and explain your answers in the margins and on the backs of pages.

E. Whenever there is a question about your health or health problems, please take it to mean whatever health means to <u>you</u>.

The first few questions ask you to fill in some background information about yourself. Please write the appropriate answer for each question.

_____ 1. What is your age?

_____ 2. What is your birthdate? (month, day and year)

_____ 3. What was the last grade in school (or year in college) that you completed?

_____ 4. How many children living at home do you have?

_____ 5. What is your total family income (before taxes) in dollars?

_____ 6. How many dollars per year do you personally contribute to that total?

7. If you are employed, what do you do?_____

_____

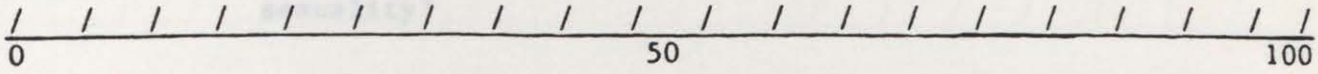
_____ Do you have any health problems? (Note: by health problem, I mean anything <u>you</u> think is a health problem)

If yes, please describe_____

_____

Source # _____
Card # _____
ID # _____

Please answer the questions on the next few pages by writing in a number from 0 to 100 that best answers the question for you. 0 would mean "none" or "not at all" or "nothing" and 100 would mean "everything". Numbers in between would reflect answers between nothing and everything. You might want to think about it as a line with 0 at one end, 100 at the other end, and all the other numbers in between like this.



You can select any number from 0 to 100 that you think best answers the question for you.

_____ 8. On a scale of 0 to 100, how much do you know about your body and how it works?

_____ 9. On a scale of 0 to 100, how much do you know about eating in relation to your own health?

_____ 10. On a scale of 0 to 100, how much do you know about physical exercise in relation to your own health?

_____ 11. On a scale of 0 to 100, how much do you know about sleep and rest in relation to your own health?

_____ 12. On a scale of 0 to 100, how much do you know about smoking in relation to your own health?

_____ 13. On a scale of 0 to 100, how much do you know about stress in relation to your own health?

_____ 14. On a scale of 0 to 100, how much do you know about your own personal strengths?

_____ 14. a. On a scale of 0 to 100, how healthy do you think you are now

Source # _____
Card # _____
ID # _____

For the following questions the wording changes some; please continue to write in any number from 0 to 100 that you think best answers the question for you. 0 would mean "not at all" while 100 would mean "totally".

_____ 15. On a scale of 0 to 100, how aware are you of you own sexuality?

_____ 16. On a scale of 0 to 100, how aware of you of your feelings?

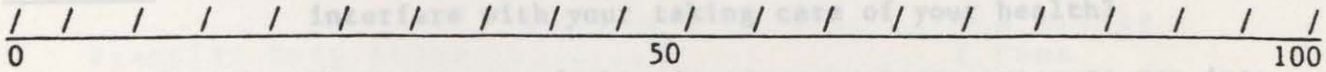
_____ 17. On a scale of 0 to 100, how able are you to describe the different feelingsyou experience?

_____ 18. On a scale of 0 to 100, how able are you to talk about your feelings?

_____ 19. On a scale of 0 to 100, how much experience have you had in making decisions about your health?

Source # _____
Card # _____
ID # _____

For the questions on the next few pages please write in the percentage that best answers the question for you. You are to select numbers from 0% to 100% for your answers to the questions. 0% would mean "never" or none, while 100% would mean "all". The numbers in between would reflect amounts between none and all. You might want to think about it as a line with 0% at one end, with 100% at the other end, and with all the other numbers in between like this:



You can select <u>any</u> number from 0 to 100 that you think best answers the question for you.

_____% 20. What percent of the time do you think you are capable of making good decisions about your own health?

_____% 21. What percent of the time do you think clearly and logically about your own health?

_____% 22. What percent of the time do you think you are in touch with what's going on with your health?

_____% 23. What percent of the time do you think about your health?

_____% 24. What percent of the time does a lack of information interfere with your taking care of your health?

_____% 25. What percent of the time do you feel too fatigued to take care of your own health?

_____% 26. What percent of the time do you have good feelings about yourself?

_____% 27. What percent of the time do you feel confused or unsure about what you are feeling?

_____% 28. What percent of the time do you feel proud about doing things well?

_____% 29. What percent of the time do you feel good about your body?

_____% 30. What percent of the time do you think you have control over your own health?

_____% 31. What percent of the time do you think about what you might be like in the future?

_____% 32. What percent of the time do your friends say or do things to encourage you to take care of your own health?

Source # _____
Card # _____
ID # _____

_____% 33. What percent of the time does your family say or do things to encourage you to take care of your own health?

_____% 34. When you need health information, what percent of the time are you willing to ask for it?

_____% 35. What percent of the time does a lack of physical strength interfere with your taking care of your health?

_____% 36. What percent of the time do your peers pressure you into doing things that are not good for your health?

_____% 37. What percent of the time do you feel good about yourself?

_____% 38. What percent of the time do you feel good about doing well?

_____% 39. What percent of the time do you make good decisions about your own health?

For the last few questions the wording changes again. Please answer these questions by writing in whatever numbers you think best answer the questions for you.

_____ 40. How many things do you value more than your own health? (fill in the number of things you value more than your health)

_____ 41. On the average, how many things do you think your family values more than their own health? (fill in the number of things your family values more than their health)

_____ 42. On the average, how many things do you think your friends value more than their own health? (fill in the number of things your friends value more than their own health)

ID#_____

Below is a list of problems and complaints that people sometimes have. Read each one carefully and select one of the numbered descriptors that best describes HOW MUCH DISCOMFORT THAT PROBLEM HAS CAUSED YOU DURING THE PAST WEEK INCLUDING TODAY. Place that number in the line to the right of the problem. Do not skip any items and print your number clearly. If you change your mind, erase your first number completely. Read the example below before beginning, and feel free to ask questions.

EXAMPLE

HOW MUCH WERE YOU DISTRESSED BY:

Example: Body Aches.....3

Descriptors
0 Not at all
1 A little
2 Some
3 Very much

1. Headaches.....
2. Faintness or dizziness.....
3. Shortness of breath.....
4. Trembling.....
5. Pains in heart or chest.....
6. Heart pounding or racing or beating irregularly.....
7. Stiffness or pain in neck.....
8. Tightness or lump in throat.....
9. Feeling weak in parts of your body.....
10. Feeling so restless you couldn't sit still.....
11. Increased smoking.....
12. Overeating.....
13. Dryness of throat and mouth.....
14. Not being able to get to sleep at night.....
15. Heartburn.....
16. Having to urinate too often.....
17. Diarrhea.....
18. Pains in stomach.....

(Derogatis, 1977; Horowitz, 1976; Parkes & Brown, 1972)

Tennessee Self-Concept Scale

William H. Fitts, Ph.D.

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INSTRUCTIONS

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill in these boxes later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself *to yourself. Do not omit any item.* Read each statement carefully, then select one of the five responses listed below. On your answer sheet, put a *circle* around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an *X* mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked *time started* and record the time. When you are finished, record the time finished in the box on your answer sheet marked *time finished.*

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a *circle* around the response number you have chosen for each statement.

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

You will find these response numbers repeated at the top of each page to help you remember them.

1 2 3 4 5 6 7 8 9
Printed in U.S.A.

2A

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Item No.
1.	I have a healthy body	1
3.	I am an attractive person	3
5.	I consider myself a sloppy person	5
19.	I am a decent sort of person	19
21.	I am an honest person	21
23.	I am a bad person	23
37.	I am a cheerful person	37
39.	I am a calm and easygoing person	39
41.	I am a nobody	41
55.	I have a family that would always help me in any kind of trouble	55
57.	I am a member of a happy family	57
59.	My friends have no confidence in me	59
73.	I am a friendly person	73
75.	I am popular with men	75
77.	I am not interested in what other people do	77
91.	I do not always tell the truth	91
93.	I get angry sometimes	93

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Item No.
2.	I like to look nice and neat all the time	2
4.	I am full of aches and pains	4
6.	I am a sick person	6
20.	I am a religious person	20
22.	I am a moral failure	22
24.	I am a morally weak person	24
38.	I have a lot of self-control	38
40.	I am a hateful person	40
42.	I am losing my mind	42
56.	I am an important person to my friends and family	56
58.	I am not loved by my family	58
60.	I feel that my family doesn't trust me	60
74.	I am popular with women	74
76.	I am mad at the whole world	76
78.	I am hard to be friendly with	78
92.	Once in a while I think of things too bad to talk about	92
94.	Sometimes, when I am not feeling well, I am cross	94

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Iten No.
7.	I am neither too fat nor too thin	7
9.	I like my looks just the way they are	9
11.	I would like to change some parts of my body	11
25.	I am satisfied with my moral behavior	25
27.	I am satisfied with my relationship to God	27
29.	I ought to go to church more	29
43.	I am satisfied to be just what I am	43
45.	I am just as nice as I should be	45
47.	I despise myself	47
61.	I am satisfied with my family relationships	61
63.	I understand my family as well as I should	63
65.	I should trust my family more	65
79.	I am as sociable as I want to be	79
81.	I try to please others, but don't overdo it	81
83.	I am no good at all from a social standpoint	83
95.	I do not like everyone I know	95
97.	Once in a while, I laugh at a dirty joke	97

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Item No.
8.	I am neither too tall nor too short	8
10.	I don't feel as well as I should	10
12.	I should have more sex appeal	12
26.	I am as religious as I want to be	26
28.	I wish I could be more trustworthy	28
30.	I shouldn't tell so many lies	30
44.	I am as smart as I want to be	44
46.	I am not the person I would like to be	46
48.	I wish I didn't give up as easily as I do	48
62.	I treat my parents as well as I should (Use past tense if parents are not living)	62
64.	I am too sensitive to things my family says	64
66.	I should love my family more	66
80.	I am satisfied with the way I treat other people	80
82.	I should be more polite to others	82
84.	I ought to get along better with other people	84
96.	I gossip a little at times	96
98.	At times I feel like swearing	98

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Item No.
13.	I take good care of myself physically	13
15.	I try to be careful about my appearance	15
17.	I often act like I am "all thumbs"	17
31.	I am true to my religion in my everyday life	31
33.	I try to change when I know I'm doing things that are wrong	33
35.	I sometimes do very bad things	35
49.	I can always take care of myself in any situation	49
51.	I take the blame for things without getting mad	51
53.	I do things without thinking about them first	53
67.	I try to play fair with my friends and family	67
69.	I take a real interest in my family	69
71.	I give in to my parents (Use past tense if parents are not living)	71
85.	I try to understand the other fellow's point of view	85
87.	I get along well with other people	87
89.	I do not forgive others easily	89
99.	I would rather win than lose in a game	99

Completely False	Mostly False	Partly False and Partly True	Mostly True	Completely True
1	2	3	4	5

		Item No.
14.	I feel good most of the time	14
16.	I do poorly in sports and games	16
18.	I am a poor sleeper	18
32.	I do what is right most of the time	32
34.	I sometimes use unfair means to get ahead	34
36.	I have trouble doing the things that are right	36
50.	I solve my problems quite easily	50
52.	I change my mind a lot	52
54.	I try to run away from my problems	54
68.	I do my share of work at home	68
70.	I quarrel with my family	70
72.	I do not act like my family thinks I should	72
86.	I see good points in all the people I meet	86
88.	I do not feel at ease with other people	88
90.	I find it hard to talk with strangers	90
100.	Once in a while I put off until tomorrow what I ought to do today	100