The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Male-Perpetrated Domestic Violence: Testing a

**Series of Multifactorial Models, Final Report** 

Author(s): Lynda A. King, Daniel W. King

Document No.: 185696

Date Received: December 6, 2000

Award Number: 98-WT-VX-0031

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S.

Department of Justice.

#### FINAL REPORT

**SEPTEMBER 30, 2000** 

# MALE-PERPETRATED DOMESTIC VIOLENCE: TESTING A SERIES OF MULTIFACTORIAL FAMILY MODELS

# RESEARCH SUPPORTED BY THE NATIONAL INSTITUTE OF JUSTICE GRANT NUMBER 98-WT-VX-OC31

**Investigators and Affiliations** 

CO-PRINCIPAL INVESTIGATORS Lynda A. King<sup>1</sup> & Daniel W. King<sup>2</sup>

CO-INVESTIGATORS, RESEARCH ASSOCIATES, AND RESEARCH ASSISTANTS David W. Foy<sup>3</sup>, Heidi S. Resnick<sup>4</sup>, David S. Riggs<sup>5</sup>, Amy E. Street<sup>6</sup>, Holly K. Orcutt<sup>7</sup>, Vincent W. Savarese<sup>8</sup>, Michael K. Suvak<sup>9</sup>, Jeffrey I. Gold<sup>10</sup>, & Marie B. Caulfield<sup>11</sup>

# CONSULTANTS K. Daniel O'Leary<sup>12</sup>, & Robert S. Pynoos<sup>13</sup>

- <sup>1, 11</sup> Women's Health Sciences Division, National Center for PTSD, VA Boston Healthcare System, & Boston University School of Medicine, Boston, MA
- <sup>2, 5</sup>Behavioral Science Division, National Center for PTSD, VA Boston Healthcare System, & Boston University School of Medicine, Boston, MA

<sup>3</sup>Graduate School of Education and Psychology, Pepperdine University, Encino, CA

<sup>4</sup>Department of Psychiatry and Behavioral Sciences, National Crime Victims Research and Treatment Center, Medical University of South Carolina, Charleston, SC

<sup>6, 7, 8, 9</sup>Women's Health Sciences Division and Behavioral Science Division, National Center for PTSD, VA Boston Healthcare System, Boston, MA

<sup>10</sup>Palo Alto VA Medical Center, Palo Alto, CA

<sup>12</sup>Psychology Department, State University of New York at Stony Brook, Stony Brook, NY

<sup>13</sup>Department of Psychiatry & Biobehavioral Sciences, UCLA/Neuropsychiatric Institute, University of California at Los Angeles Medical School, Los Angeles, CA

National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

#### INTRODUCTION

# Overriding Goal and Rationale for the Project

There is no shortage of statistics to document that violence is a serious problem in our society, and much of this violence occurs in the home environment. According to Straus and Gelles (1992), over 1.8 million women may be battered by their partners in a given year, and Carlson (1984) noted that some 3.3 million children witness interparental violence annually, both figures that are likely underestimates of the true prevalences (Goodman, Koss, Fitzgerald, Russo, & Keita, 1993). In addition, a national study by the U.S. Advisory Board on Child Abuse and Neglect (1993) estimated that more than 1 million children were themselves abused in 1992, with concomitant physical, emotional, and behavioral consequences.

Also, the likelihood of experiencing traumatic events in general and the prevalence of posttraumatic stress disorder (PTSD) and associated conditions are not inconsequential. As examples, Kilpatrick, Saunders, Veronen, Best, and Von (1987) found that 75% of a representative sample of women in a southern city had been crime victims, and Breslau, Davis, Andreski, and Peterson (1991) documented that 39% of young adult members of an HMO in a midwestern metropolitan area had experienced some type of traumatic event. For veterans of the Vietnam War, Kulka et al. (1990a, 1990b) estimated 15% and 8% current rates of combat-related PTSD for men and women, respectively, and about double those figures for lifetime rates. Perhaps even more revealing are the results of Kessler et al.'s (1995) National Comorbidity Survey, which generated an approximate (and conservative) 8% lifetime rate of PTSD for the population as a whole, across all types of traumatic experiences.

PTSD is an anxiety disorder observed in persons who have been exposed to an extreme stressor that evokes feelings of "intense fear, helplessness, or horror" (Diagnostic and Statistical Manual of Mental Disorders [DSM-IV]; American Psychiatric Association, 1994, p. 428). Symptoms include reexperiencing the event through frightening dreams and intrusive recollections, avoidance of circumstances that might trigger a reexperiencing episode, emotional numbing and retreat from intimate relationships, and increased arousal. PTSD achieved recognition largely as a consequence of clinical and research work to address the psychological needs of veterans returning from the Vietnam War. It has subsequently been diagnosed and studied in a variety of populations, as examples, survivors of natural and manmade disasters and serious accidents, victims of assault, rape, or torture, abused children, and those suffering from a catastrophic illness or injury. The condition is highly comorbid with alcohol abuse (Keane & Wolfe, 1990; Stewart, 1996).

In the project reported here, we sought to demonstrate that these two important social and health problems-domestic violence and trauma-related psychological distress-are indeed connected, with the sequelae of trauma (PTSD and comorbid alcohol abuse) serving as major mediators to explain the etiology and propagation of aggressive behaviors in families. While our endeavor examined military veterans with documented levels of a particular trauma experienced in young adulthood, war-zone stressor exposure, they and their families represent merely one trauma-exposed group among many to which the models tested here might be extrapolated.

The goal of the project was to gain a better understanding of risk factors associated with male-perpetrated domestic violence, partner's mental distress, and child behavior problems using data from the National Vietnam Veterans Readjustment Study (Kulka et al., 1990a, 1990b). This rich database contains extensive information on community-residing male veteran-female partner dyads and afforded the opportunity to examine multivariate models of the antecedents, correlates, and consequences of violence against women. The analytic strategy was structural equation modeling.

Emphasis was placed on *four categories of explanatory variables*: (a) the perpetrator's accounts of family of origin characteristics and experiences; (b) the perpetrator's conduct and behavior problems prior to age 15 (childhood antisocial behavior); (c) the perpetrator's exposure to war-zone stressors; and (d) mental distress of the perpetrator, with attention to PTSD symptomatology and alcohol abuse. The project incorporated *four clusters of family of procreation criterion variables*: (e) marital and family functioning; (f) perpetrator-to-partner violence; (g) partner mental distress; and (h) child behavior problems.

The general rationale for the project derived from several perspectives. First, in its focus on a multifactorial explanation, the research program responded to calls for more sophisticated models to predict family relationships and domestic violence (Karney & Bradbury, 1995; Margolin & Burman, 1993; O'Leary & Smith, 1991). It is consistent with Karney and Bradbury's admonition that explanatory constructions should include stressful life events and consider their implications for long-term marital quality. It also harkened to O'Leary and Smith's recommendation to direct attention to how the psychopathology of a partner may impact marital/partnership adjustment. And it recognized Margolin and Burman's observation that a multidetermined interactional view of husband-to-wife violence is necessary.

Second, some contemporary evidence suggests that at least a partial explanation for domestic violence within our society lies with the experiencing of traumatic events or circumstances and their psychological and emotional consequences. As examples, Finkelhor and Dziuba-Leatherman (1994) opined that PTSD "may be a unifying concept..." (p. 181) for understanding the effects of child victimization, and Dutton (1995) similarly noted that "PTSD may be another link or mediating variable between childhood abuse victimization and adult perpetration of intimate abuse" (p. 215). Thus, the research project represented a timely blending of research from the trauma - PTSD domain with that of the marital and family literature.

Third, the number of empirical studies of Vietnam veteran families is surprisingly scant, and virtually all of those that do exist make simple group comparisons (e.g., Carroll, Rueger, Foy, & Donahoe, 1985; Laufer & Gallops, 1985; Roberts, Penk, Gearing, Robinowitz, Dolan, & Patterson, 1982). In a report on families of veterans who participated in the National Vietnam Veterans Readjustment Study, Jordan et al. (1992) noted that the variability in functioning in families of PTSD-positive veterans was substantial, suggesting that other factors might assuage the influence of trauma and related sequelae. In a similar vein, they indicated that more study of the spouse or partner of PTSD veterans is needed. Both of these issues invite additional research to examine a more complex system of relationships linking trauma, PTSD, and family-related outcomes. The project described here responded to this invitation.

Finally, the quality of the family data from the National Vietnam Veterans Readjustment Study argued for a research project of this type. In addition to a vast array of information on the veterans' prewar, war-zone, and postwar experiences and conditions, extensive data were obtained on the partners and children of a substantial number of these veterans. Furthermore, these available data had been relatively untapped, with only initial descriptive analyses by Jordan et al. (1992). These data were intended to advance our knowledge of the impact of trauma and stress symptomatology on family life, and they included accepted measures of family relationships and family violence. Hence, they were well suited for the project. Even more important, the data suggested elevated levels of violence in PTSD veteran families, again attesting to their usefulness for the project. We will discuss the National Vietnam Veteran Readjustment Study family sample in greater depth later in this report.

# Specific Objectives and Associated Hypotheses

The research project was organized into a sequence of four studies, each of which addressed a specific objective and subsumed hypotheses concerning the patterns of relationships among critical variables:

Study 1 (Variables Characterizing Perpetrator's Family of Procreation) sought to determine the pattern of relationships among variables representing marital and family functioning, perpetrator-to-partner violence, partner's mental distress, and child behavior problems. This initial study laid a foundation for the full project by documenting associations among the criterion variables that provide a contemporary portrayal of the perpetrator's family of procreation. For this segment, a working hypothesis was that the perpetrator's perspective on the quality of marital and family functioning and his violent behaviors toward the partner have direct effects on partner's mental distress and child behavior problems and indirect effects on these outcomes via the partner's perspective on the quality of marital and family functioning.

Study 2 (Perpetrator's Early Background and Trauma History) aimed to establish the degree to which the perpetrator's family of origin characteristics and experiences (especially severe punishment and other forms of childhood trauma), childhood antisocial behavior, along with exposure to stressors in the Vietnam war zone and subsequent PTSD symptomatology, relate to perpetrator-to-partner family violence. First, we predicted main effects for the background and trauma variables, emanating from the family of origin, childhood antisocial behavior, and war-zone stressor categories to the violence variable. Also, we predicted that PTSD would serve as at least a partial mediator of these relationships.

Study 3 (Perpetrator's Current Mental Distress) proposed to examine how the current mental distress of the perpetrator is associated with marital and family functioning, violence, and current mental distress of the partner. This phase of the research program highlighted the role of stress disorder symptomatology and alcohol abuse in accounting for family violence. Hypotheses included: (a) a relationship between the perpetrator's mental distress (PTSD and alcohol abuse) and the mental distress of the partner; (b) a direct effect between the emotional numbing aspect of PTSD and marital and family functioning; (c) a direct effect between PTSD's hyperarousal symptom cluster and violence; and (d) a disinhibition hypothesis regarding perpetrator's alcohol abuse, such that its presence further provokes domestic turmoil and aggression in the form of an interaction between hyperarousal and alcohol abuse on perpetrator-to-partner violence.

Study 4 (Developmental and Intergenerational Perspective on Violence) aimed to model a network of relationships explaining the potential transmission of violence across generations, commencing with the perpetrator's accounts of violence within the family of origin and terminating with reports of child behavior problems (particularly externalizing behaviors) within the family of procreation. All eight categories of variables were incorporated, with variables that emerged as salient in the preceding studies given priority consideration. An evaluation of a full model, with designated mediational influences capturing important stages and events in the life of the perpetrator, and with child behavior problems as the outcome, was intended to emphasize the relative influence of leading risk factors and suggest mechanisms by which they operate.

Throughout this report, we refer to the male partner as the perpetrator. We acknowledge that a good portion of the male veteran respondents did not perpetrate violence upon their partners. We have used this term for parsimony of presentation.

# An Early Comment on Generalizability

We noted above the quality of the National Vietnam Veteran Readjustment Study data as an argument in favor of this project. Yet, one might still question how the study of these military veterans and their families contributes to understanding the broader picture of domestic violence in our society. There are aspects of this population that might argue for its suitability in serving as a starting point for testing multifactorial explanations of male-perpetrated domestic violence. Specifically, they are a nationally drawn community-residing sample from households throughout the United States, most having left the military environment one or two decades prior to data collection. So, there is diversity in this sample: geographically, vocationally, racially/ethnically, and socioeconomically. In addition, male veterans constitute a fair proportion of the general population of U.S. men, an estimated 25.8 million or approximately 28% of all adult male citizens (Annual Report of the Secretary of Veterans Affairs, 1993; National Survey of Veterans, 1989). The important point is that the data for this project derived from families that are not unusually "special" or different from the remainder of society; there are many Vietnam veteran families in the U.S. On the other hand, war-time experiences are not trivial and could likely flavor the dynamics of family relations. We duly acknowledge that the sample is comprised of men who vary along a continuum of exposure to a well-documented stressor experience that may have implications for their later battering behavior. But, with the exception of the war-zone stressors, all other variables examined in this project are amenable to inquiry with any family units. Further comments on generalizability are in the concluding sections of this document.

#### CONCEPTUAL FRAMEWORK AND RELEVANT LITERATURE

Figure 1 presents an organizational framework for the project, depicting the eight categories of variables under investigation. The framework is a composite and extension of Karney and Bradbury's (1995) vulnerability-stress-adaptation explanation of marital quality and Gimbel and Booth's (1994) path

**CRITERION EXPLANATORY VARIABLES** VARIABLES Perpetrator's Family of Marital/Family Perpetrator's **Origin Characteristics** Functioning Exposure to & Experiences Marital Adjustment War-zone Stressors Relationship with Mother Family Adaptability **Traditional Combat** Relationship with Father Family Cohesion Perceived Threat **Family Dysfunction** Family Turmoil Perpetrator-to-Partner Severe Punishment Violence Interparental Violence CTS Physical Violence Inventory of Traumatic Events Partner's Mental **Distress** Perpetrator's Current Demoralization Mental Distress General Well-being Social Isolation Perpetrator's Alcohol Abuse Childhood Drinking Frequency **Child Behavior** Antisocial Drinking Quantity **Problems Behavior** DIS Abuse Scale **CBCL** Internalizing CBCL Externalizing DIS Dependence Scale

Figure 1. Conceptual Framework for the Research Project

diagram to explain the impact of premilitary and military variables on marital relations in terms of their influence on stress reactions and violent behavior. In each subsection below (the presentation of logic for Studies 1 through 4), we provide literature to support relationships of interest and then restate key relationships in the context of our hypotheses. The associated figures are intended to capture and highlight important hypothesized relationships.

# Study 1: Variables Characterizing Perpetrator's Family of Procreation

Study 1 was concerned with the four categories of criterion variables in our organizational framework: (a) marital and family functioning; (b) perpetrator-to-partner violence; (c) partner's mental distress; and (d) child behavior problems (see Figure 2). There is ample literature to support associations among these factors. First, general marital and family functioning is related to both perpetrator-to-partner violence and partner psychological well-being (Holtzworth-Munroe, Smutzler, & Sandin, in press). In turn, perpetrator-to-partner violence has been shown to affect the female partner's mental health in a number of studies. PTSD (e.g., Astin, Ogland-Hand, Coleman, & Foy, 1995; Houskamp & Foy, 1991) and depressive symptomatology (e.g., Campbell, 1989; Straus, 1992) are frequent outcomes, but there is also a body of evidence suggesting that battered women have lower levels of self-esteem than nonbattered women (e.g., Aguilar & Nightingale, 1994; Perilla, Bakeman, & Norris, 1994). Although the number of studies is somewhat limited, another consequence of battering appears to be substance abuse (e.g., Bergman & Brismar, 1991; Kilpatrick, Resnick, Saunders, & Best, 1994). With regard to child outcomes, Emery (1982) reviewed the literature on the impact of marital discord on children and concluded that

upheaval in the household is linked to child behavior and adjustment problems. Yet, he noted, the presence of marital violence is a prominent factor. Later, Jouriles, Murphy, and O'Leary (1989) documented a relationship between interspousal aggression and child behavior problems, while controlling for marital adjustment. Given that general marital adjustment is related to family violence (O'Leary & Smith, 1991), the Jouriles et al. findings point to an indirect effect of marital adjustment on child behavior problems, with poor marital adjustment associated with violence and violence then leading to child behavior problems. Rosenbaum and O'Leary (1981) likewise suggested that behavior problems of children of maritally violent couples differ from those of children from nonviolent families, and this relationship between interspousal violence and child behavior problems was subsequently substantiated by Wolfe, Jaffe, Wilson, and Zak (1985).

Taken together, these findings argued for a test of relationships among the variables depicted in Figure 2. In this case, however, we recognized two perspectives on marital and family functioning, one for the perpetrator and one for the partner. The perpetrator's perspective on marital and family functioning and perpetrator-to-partner violence were expected to have a direct association with partner's mental distress and child behavior problems. Also, the effect on these two latter outcomes was expected to be indirect through the partner's perspective on marital and family functioning. Moving left to right in the

Figure 2. Variables for Study 1

Marital/Family Functioning-Perpetrator's Perspective Marital Adjustment

Marital Adjustment Family Adaptability Family Cohesion

Marital/Family Functioning-Partner's Perspective

Marital Adjustment Family Adaptability Family Cohesion

Perpetrator-to-Partner
Violence
CTS Physical Violence

Partner's Mental Distress

Demoralization General Well-being Social Isolation

Child Behavior Problems CBCL Internalizing CBCL Externalizing hypothesized model, an underlying assumption was that characteristics of the perpetrator (his assessments of the quality of marriage and family and his tendency to violence) have serious implications for the well-being of his partner and children.

# Study 2: Perpetrator's Early Background and Trauma History

This second study concentrated on connections between aspects of the perpetrator's background (family of origin characteristics, childhood antisocial behavior, and trauma history), his stress symptomatology, and his violent behavior within the family of procreation. Early work by Rosenbaum and O'Leary (1981) and more recent endeavors by Dutton (Dutton, 1995; Dutton & Hart, 1992) have established a link between a perpetrator's childhood experiences and current abusive behaviors. Dutton reported significant relationships between abuse experiences in the family of origin and variables defined in terms of abusive personality tendencies and contemporary abusive behaviors; and Dutton and Hart noted that almost 55% of a sample of incarcerated family violence offenders had a history of childhood victimization. In both cases, the childhood trauma was defined as either experiencing physical or sexual abuse or witnessing extreme acts of violence among other members of the family of origin, a dual conceptualization was recognized in the current research project.

Furthermore, to provide a more complete picture of the perpetrator's early childhood, our model for Study 2 incorporated relationship with mother, relationship with father, as well as general chaos within the family of origin. Indicators of this latter variable, which include poor mental health, substance abuse, and legal and other problems among family members, are reminiscent of classic risk factors established by the work of Rutter (1979) and Garmezy (1974). Since variables of this type have been shown to be contributory factors accounting for PTSD severity in veterans (King, King, Foy, & Gudanowski, 1996), and since they may also be related to the presence and intergenerational transmission of violent behaviors (Kaufman & Zigler, 1987; Van Ijzendoorn, 1992; Zeanah & Zeanah, 1989), they seemed particularly pertinent to this research project's inquiry into trauma, stress symptomatology, and family violence.

Two other important links in the Study 2 model are those from the perpetrator's childhood antisocial behavior to violence. Since behavior problems, particularly those of an antisocial nature, portend later relationship difficulties and social isolation (Loeber & Dishion, 1983), one might surmise such problems to surface in the marital and family context. Similarly, violent tendencies in early adolescence--which typically characterize antisocial behavior and accompany substance abuse (Murdoch, Pihl, & Ross, 1991)--may emerge in the form of later domestic violence within the family of procreation.

For veterans, there is also the important potential influence of war-zone stressor exposure on family of procreation variables. Peaks in the divorce rate have been observed to follow periods of national conflict (e.g., Pavalko & Elder, 1990), and it is likely that life disruptions in educational and career pursuits or financial set-backs associated with wartime military service could negatively impact subsequent marital relations (Laufer & Gallops, 1985). In addition, Gimbel and Booth (1994) provided a rationale by which behaviors that are inculcated and highly endorsed in the war zone (excessive aggression and combative resolution of circumstances) are wholly inappropriate in postwar intimate relationships. The thesis here is that learned responses may be carried over and used for conflict resolution within the family.

This portion of the proposed research project sought to clarify the relative influence of early childhood trauma, war-zone trauma, and their possible psychological sequelae, on family violence. As shown in Figure 3 and supported by the literature described in the previous four paragraphs, both prewar family of origin characteristics and war-zone stressor exposure were expected to be related to family violence directly and indirectly via PTSD symptomatology. In addition, the model proposed direct effects

from family of origin characteristics to childhood antisocial behavior (e.g., Dembo, Williams, Wothke, Schmeidler, & Brown, 1992) and from both of these to war-zone stressor exposure (D. King et al., 1996).

Figure 3. Variables for Study 2

Perpetrator's **Exposure** Perpetrator's Family of to War-zone Origin Characteristics Stressors & Experiences Traditional Combat Relationship with Mother Perceived Threat Relationship with Father Family Dysfunction Family Turmoil Severe Punishment Perpetrator-to-Partner Interparental Violence Violence Inventory of CTS Physical Violence Traumatic Events Perpetrator's Current Perpetrator's Mental Distress Childhood **PTSD** Antisocial **Behavior** 

Study 3: Perpetrator's Current Mental Distress

There have been a number of case studies and anecdotal accounts of the effects of PTSD and associated behaviors on military veteran families (e.g., Haley, 1984; Rosenheck & Nathan, 1985; Rosenheck & Thomson, 1986). The early studies of Carroll et al. (1985) and Laufer and Gallops (1985) reached similar conclusions: Veterans exposed to higher levels of war-zone stressors and/or with a diagnosis of PTSD fared more poorly on various measures of interpersonal relationship quality and marital adjustment than their noncombat or non-PTSD counterparts. Also, Carroll et al. found PTSD-positive veterans more prone to report hostility toward their partners, in particular, physical aggression. Jordan et al. (1992) compared the families of veterans with PTSD to those without PTSD on a series of marital and family variables. In addition to differences between PTSD-positive veterans and PTSD-negative veterans in their own reports of marital and general family adjustment, responses of partners yielded significant differences. Partners of PTSD-positive veterans reported more marital problems and marital violence than did partners of PTSD-negative veterans.

Many of these same observations have surfaced in the work of Solomon and her colleagues with families of Israeli veterans of the 1982 Lebanon War. In the first of a series of family studies, Solomon, Mikulincer, Freid, and Wosner (1987) found that higher levels of veteran PTSD symptomatology were associated with less expressiveness and cohesiveness and more conflict in families of veterans who had previously suffered a combat stress reaction on the battlefield. In a later examination of a subset of these families, Solomon, Waysman, Avitzur, and Enoch (1991) found a relationship between expressiveness within the marital relationship and wife's mental health. Additionally, Waysman, Mikulincer, Solomon, and Weisenberg (1993) found that veteran breakdown during the war and current PTSD were significantly related

to wife's psychiatric symptomatology. Taken together, these results suggest a network of associations connecting psychological dysfunction of the veteran to dimensions of the family environment and partner's mental health.

The third study in the sequence attempted to clarify relationships among variables describing perpetrator's mental distress, partner's mental distress, marital and family functioning, and perpetrator-to-partner violence (see Figure 4). While many of the above studies examined one to several of these relationships in isolation, this research project studied their simultaneous effects within a common conceptual framework. First, we hypothesized a direct effect of perpetrator's mental distress (PTSD and alcohol abuse) on partner's mental distress. What's more, we were particularly concerned in this third study with how separate PTSD symptom categories and alcohol abuse might be differentially related to family variables, with several explicit predictions. In line with previous research on intimate relationships among Vietnam veterans (Carroll et al., 1985; Laufer & Gallops, 1985), the emotional numbing aspect of PTSD was hypothesized to have a direct negative effect on quality of marital and family functioning (that is, dimensions of marital adjustment, family adaptability, and family cohesion). Also, the hyperarousal

Marital/Family Functioning-Perpetrator's Perspective Marital Adjustment Family Adaptability Family Cohesion PTSD (with special attention to the emotional Marital/Family Functioningnumbing and hyperarousal Partner's Perspective features of PTSD) Marital Adjustment Family Adaptability Alcohol Abuse Family Cohesion **Drinking Frequency Drinking Quantity** Perpetrator-to-Partner DIS Abuse Scale Violence DIS Dependence Scale CTS Physical Violence PTSD-Alcohol Abuse Partner's Mental Interaction **Distress** Demoralization General Well-being Social Isolation

Figure 4. Variables for Study 3

aspect of PTSD was proposed to be particularly salient in this study of violence, such that direct positive relationships were anticipated between this self-reported symptom cluster and perpetrator-to-partner violence. This hypothesis may be somewhat subject to controversy, in light of the work by Gottman, Jacobson, Rushe, Shortt, Babcock, LaTaillade, and Waltz (1995) who reported decrements in physiological arousal (heart rate) during a dyadic conflict-resolution task for batterers considered most dangerous; yet, the vast majority of their batterer-subjects (80%) experienced increases in heart rate. To our knowledge, there has been no prior investigation of the differential impact of disaggregated components of stress disorder symptomatology on family variables.

Finally, alcohol abuse is known to co-occur with PTSD at tragically high rates (e.g., Cottler, Compton, Mager, Spotznagel, & Janca, 1992; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995;

Kilpatrick et al., 1994) and to be a serious behavioral problem for PTSD-positive veterans (e.g., Keane, Gerardi, Lyons, & Wolfe, 1988; Kulka et al., 1990a, 1990b). Given the established association between substance abuse and family violence (e.g., Hotaling & Sugarman, 1986; Leonard & Blane, 1992), we therefore proposed a disinhibition hypothesis represented by an interaction between the hyperarousal aspect of PTSD and alcohol abuse: Those who exhibit more hyperarousal symptomatology along with higher levels of alcohol abuse were expected to be most prone to the expression of violent behaviors. It might be noted that we did not anticipate such an interaction with other distinct features of PTSD (e.g., emotional numbing) in predicting violence.

# Study 4: Developmental and Intergenerational Perspective on Violence

Reviews of the literature on the intergenerational transmission of family violence (Kaufman & Zigler, 1987; Van Ijzendoorn, 1992; Zeanah & Zeanah, 1989) have tended to deemphasize the simple assertion that abused children become abusive parents in favor of a more elaborate conceptualization. Noting that roughly one-third of their sample of abused or neglected individuals engaged in harsh parenting practices--but that two-thirds did not--Kaufman and Zigler asserted that "many mediating factors affect the likelihood of transmission; consequently, unqualified acceptance of the intergenerational hypothesis is simply unwarranted" (p. 190). This theme was reinforced in the work of Cappell and Heiner (1990), who demonstrated evidence for an intricate pattern of relationships between family of origin violence and family of procreation violence. They too argued for mediational processes.

**CRITERION EXPLANATORY VARIABLES VARIABLES** Marital/Family Functioning-Perpetrator's Perspective Perpetrator's Family of Marital Adjustment Perpetrator's **Origin Characteristics** Family Adaptability & Experiences Exposure to Family Cohesion War-zone Stressors Relationship with Mother Traditional Combat Family Dysfunction Marital/Family Functioning-Perceived Threat · Family Turmoil Partner's Perspective Marital Adjustment Severe Punishment Family Adaptability Interparental Violence Family Cohesion Inventory of **Traumatic Events** Perpetrator-to-Partner Violence CTS Physical Violence Perpetrator's Current **Mental Distress** Partner's Mental Distress **PTSD** Demoralization Perpetrator's Alcohol Abuse General Well-being Childhood Drinking Frequency Social Isolation Antisocial **Drinking Quantity** Behavior DIS Abuse Scale Child Behavior Problems DIS Dependence Scale **CBCL** Externalizing

Figure 5. Variables for Study 4

As examples, abusive treatment by one parent may be mitigated by an otherwise stable home environment in the family of origin, the loving support and availability of another adult during childhood, or an emotionally satisfying long-term intimate relationship in later adulthood (Cowan, Cohn, Cowan, & Pearson, 1996; Kaufman & Zigler, 1987; Van Ijzendoorn, 1992; Zeanah & Zeanah, 1989). On the other hand, exposure to subsequent highly stressful life events as an adult might increase the incidence of violence within the family of procreation (Kaufman & Zigler). Of course, family violence, directed from spouse to spouse and/or from parent to child, may carry forward to yet the next generation, wherein the concern becomes child behavior problems, including externalizing aggressive and delinquent behaviors on the part of the child. Dutton (1995), Van Ijzendoorn, and Zeanah and Zeanah all have framed this process within an expanded version of attachment theory, wherein internal working models arising from early parent-child interactions are subject to modifications based on other interactions with the environment. Lyons-Ruth (1996) has specifically pointed to parent's unresolved trauma as possibly responsible for a child's disorganized attachment which, in turn, may predict general child distress, conduct disorder, or aggressive tendencies. She recommended study of parent's PTSD as a contributing factor to child aggression.

The project's final study had the benefit of testing a refined intergenerational transmission hypothesis that incorporated a number of mediators, reflected in the above brief summary of the literature and drawn from the full collection of variable categories. As shown in Figure 5, the guiding model was a composite of all three prior models and faithful to the general theme of the overall research endeavor: that the psychological consequences (PTSD and associated abuse of alcohol) of exposure to highly stressful life events are pivotal mediators of the relationship between aggression and disorder within the family of origin and family of procreation violence, in particular, the externalizing behaviors exhibited by the offspring.

#### **METHODS**

In this section of the report, we present an introduction to the data source, the National Vietnam Veterans Readjustment Study, and the sample of families who were the focus of the project. We then present details on operationalization of all variables and the data analytic approach used in the four studies.

#### **Data Source**

#### Overview of the National Vietnam Veterans Readjustment Study

The Congressionally-mandated National Vietnam Veterans Readjustment Study (Kulka et al., 1990a, 1990b) sought to document the current and long-term psychosocial status of those who served one or more tours of duty in the Vietnam theater of operations sometime between August 5, 1964, and May 7, 1975, compared to their peers who served elsewhere in the military during that era and to a comparable group who never experienced military service. Data were collected in the mid- to late-1980s. A primary goal was to derive reliable and valid estimates of the prevalence of PTSD. There were actually four parts to the full National Vietnam Veterans Readjustment Study: (a) the Preliminary Validation component, aimed at selecting appropriate measures of PTSD for use in the larger national survey; (b) the National Survey of the Vietnam Generation, the main endeavor; (c) the Clinical Interview component, intended to generate supplementary data for use in the computation of prevalence estimates within the national sample; and (d) the Family Interview component, designed to obtain corroborative information about the veteran and family-oriented data from a spouse or partner. The project described in this document relied upon data from the National Survey and Family Interview components.

The National Vietnam Veterans Readjustment Study and the data it produced have much to recommend them. A large multidisciplinary team of researchers and consultants assured a wealth of

expertise from diverse perspectives including psychology, psychiatry, sociology, nursing, epidemiology, and biostatistics. For the National Survey, the sampling approach afforded extraordinarily comprehensive coverage of the full veteran population. The sampling list frame for veterans was derived from three sources: (a) the National Personnel Records Center, (b) the Defense Manpower Data Center, and (c) a list of female veterans developed for the study by the Department of Defense Environmental Support Group. Careful attention was given to representation of female veterans, minority groups among male veterans, and war-injured individuals. Women, African American and Hispanic American men, and veterans with service-connected disabilities were oversampled. Minority women were not oversampled since very few (less than 3%) served in Vietnam. Response rates were quite good: for all Vietnam veterans, 83%, with 86% and 82% for female and male veterans, respectively. In all, the National Survey of the Vietnam Generation included 3,016 persons: 1,632 Vietnam veterans, 716 era veterans, and 668 nonveterans.

The data obtained from each participant in the National Survey were extensive. Face-to-face structured interviews, with some supplementary self-report paper-and-pencil measures, were conducted in the homes of participants throughout the United States, averaging over 5 hours for the Vietnam veterans. To help assure reliability of the interview, all interviewers received a thorough, 10-day training program. The interview protocol was organized into 16 parts, including portions requesting information on childhood experiences and early delinquent behaviors, military service history, legal problems in the family of origin and postwar period, stressful life events, social support systems, marital and family discord and abusive behaviors, and physical and mental health.

For the Family Interview, spouses or cohabitating partners (that is, common-law spouses living as if married) of Vietnam veterans were targeted. The intent was to include families of all veterans who had a high probability of PTSD, a status operationalized as scores at or above 89 on the Mississippi Scale for Combat-Related Posttraumatic Stress Disorder (Keane et al., 1988). Families were also selected if the veteran member scored below 89 on the Mississippi Scale but reported high levels of combat exposure or a high degree of nonspecific distress. In addition, some families were included to specifically represent veterans who did not meet these criteria, thereby enhancing dispersion or score variability in the full family sample while maintaining a focus on high-risk family units.

For the current project, there was a total of 376 male veteran-female partner dyads, 261 of whom had one or more children between the ages of 6 and 16 residing in the home. For these dyads, the partner interview averaged about 1 hour in length. Data were collected on selected background characteristics of the partner and couple, the partner's perspective on the veteran's mental health and functioning, the partner's own psychological and emotional well-being, interaction problems and violence in the family, and behavior and adjustment problems for all 6- to 16-year old children in the household.

With regard to race and ethnicity, the original National Vietnam Veterans Readjustment Study researchers were particularly attuned to achieving sufficient numbers of selected minority male veterans to allow for meaningful comparisons among groups. As a result of their oversampling strategies, approximately 25% of the male Vietnam veteran participants identified themselves as African American, whereas 24% identified themselves as being of Hispanic origin. One can conclude, therefore, that the primary study from which this proposal drew its data was well grounded in its concerns for inclusiveness based on minority status, at least with regard to the two largest minority groups in our society. In turn, the current project benefited. The racial or ethnic identity for male veterans whose partners provided data for the Family Interview was distributed as follows: African American, 24%; Hispanic American, 29%; and white/other, 47%. Not surprisingly, the partners of these veterans had a fairly comparable distribution: African American, 23%; Hispanic American, 22%; and white/other, 55%.

# Descriptive Profile of the Sample: Respondent-Nonrespondent Contrasts and Key Variables

In tables and appendices accompanying the National Vietnam Veterans Readjustment Study final report, Kulka et al. (1990a) provided much information concerning the comparability of the families who participated in the Family Interview component to those families invited to participate but from whom data were not collected for this component. Contrasts on 28 variables were computed for male veteran-female partner families, for female veteran-male partner families, and for the group as a whole. Variables included demographics for veteran, partner, and family unit (as examples, age, education, family income, and number of children) and veteran's military background (as examples, months in Vietnam, war-zone stressor exposure). In addition, contrasts were conducted on important variables that characterize the health and well-being of the veteran and the family, including scores on the Mississippi Scale for Combat-Related PTSD (Keane et al., 1988), scores on a demoralization scale derived from the Psychiatric Epidemiological Research Interview (Dohrenwend, 1982), number of current serious readjustment problems, and indices of both marital and general family adjustment. The large majority of the contrasts were nonsignificant, 23 out of the 28 for the total sample, including all those mentioned here. Differences were found only for rural-urban residence (respondents tended to be more rural), mode of entry into the military (nonrespondents were more likely to have enlisted or been drafted as opposed to entry by military academy, reserve call-up, etc., suggesting something of a socioeconomic selection bias; King & King, 1991), year of first Vietnam service (the trend nondiscernible), wounded in Vietnam (respondents were more likely than nonrespondents to have received noncombat wounds), and lifetime substance abuse (respondents reported higher levels). Moreover, Kulka et al. reported no differences in response rates for the several race and ethnicity groups, nor any differences in scores on the selection criteria for those who agreed to participate and those who did not. Hence, the preponderance of evidence supports the conclusion of no important systematic selection bias for those partners who agreed to participate in the Family Interview.

As noted just above, the sample for the project had the dual strengths of appropriate dispersion or variability on key variables and ample representation of high-risk families. This was an ideal situation both theoretically and statistically since the conceptual models could be evaluated on a sample offering responses that reflected broader ranges on the construct continua and relationships would not likely be masked by arbitrary restrictions in range. To highlight the composition of the sample, we rely upon the initial descriptive profiles developed by Jordan et al. (1992) for the male veteran-female partner units. Almost 33% of the veterans in these families scored above the 89 cut-point for PTSD on the Mississippi Scale, and 51% scored in the medium to high range on the demoralization scale. With regard to marital problems, Jordan et al. reported that 61% of the PTSD-positive veteran families and 44% of the total sample had partner-generated marital problem scores in the medium to high range. Finally, family violence, as reported by the female partner concerning the male veteran's behavior, was elevated for PTSD-positive veterans, with 34% reporting at least one violent incident in the past year (1-2 incidents, 6.8%; 3-5, 10.6%; 6-12, 7.3%; 13 or more, 9.3%). For the full sample, 21% reported one or more incidents in the past year, including the complement of tactics on Straus's (1979) Conflict Tactics Scale, as well as additional items reflecting extreme threat of violent acts. Another important risk factor for domestic violence is substance abuse, and the particular sample investigated demonstrated the following prevalence estimates: for the veteran, a 42% lifetime rate of alcohol abuse or dependence and a 15% current rate; a 9% lifetime rate of drug abuse or dependence and a 3% current rate.

#### Summary: The Sample and Its Strengths

In summary, models to explain relationships among variables within the project relied on the family as the unit of analysis, with data supplied by the veteran-spouse couple. Veteran data from the National Survey component of the National Vietnam Veterans Readjustment Study were merged with partner data (both self-report and report of child behavior) from the Family Interview component of that large national study. Data from the 376 families (300 with children) characterized by a male veteran-female partner combination were used for structural equation modeling procedures; for Studies 1 and 4, in which ratings of child behavior were involved, sample sizes were n = 260 and n = 254, respectively, and

for Studies 2 and 3, in which all couples were eligible, sample sizes were n = 367 and n = 372, respectively. Additionally, as will be detailed in the sections to follow, some construction and refinement of veteran indicators took advantage of the larger group of National Survey veterans who were not a part of the family subsample. This allowed us to capitalize on all available veteran data to achieve optimal measurement within the project.

To reiterate, several features of the available data set made it especially appropriate to the goal of this project: (a) Data came from an influential study that scrupulously attended to the diversity of the sample, the quality of measures and questionnaires, and the collection and management of information. (b) Response rates for the family participants were high, with no appreciable differences between those who participated and those who did not. (c) The characteristics on which the families were targeted for selection yielded a sample well-suited to studying those at high risk for domestic violence, including the requisite dispersion or variability in scores to insure detection of important relationships in models.

# Variables and Their Measurement

To operationalize the variables for the project (see Figure 1), we adopted a strategy governed by classical test theory-based methodologies for rationally-constructed, internally consistent scales (Nunnally, 1978). Items from the National Survey data for veterans and the Family Interview data for partners were carefully screened in light of variable definitions and with attention to content breadth and content coverage. Item-total correlations were computed, and items with the highest values were identified as best candidates to serve as indicators in the ensuing analyses, with continuing regard for the representativeness of item content. The operationalization of some measures (e.g., relationship with mother, relationship with father, the war-zone stressor variables) derived from prior studies with this database (see King, King, Foy, Keane, & Fairbank, 1999) using a similar strategy. Also, the measures of violence and child behavior problems were taken intact from rather well-established instruments. Wherever possible, the data for those veterans who were not a part of the Family Interview subsample were used in the development and refinement of measures of perpetrator variables. Below is a compilation of all variables and descriptions of their measurement.

# Perpetrator's Family of Origin Characteristics and Experiences

Relationship with Mother. A 6-item scale was created to measure the quality of the veteran's relationship with his mother. Items on the scale included inquiries regarding feelings of closeness to the parent, time spent with the parent, ability to confide in the parent, degree to which the parent showed affection, degree to which the parent provided consolation at times of distress (all using a 5-point scale), and an assessment of the overall quality of the relationship (using a 9-point scale). Item responses were converted to standard scores and summed to compute a total score, with higher values indicating poorer relationship quality. The internal consistency estimate for this measure was .91.

**Relationship with Father.** A 6-item scale was also constructed to assess the veteran's relationship with his father. The item wording and format paralleled those for the relationship with mother measure. Again, item responses were centered and standardized, and the total scores derived such that higher scored indicated poorer relationship quality. The scale had an estimated internal consistency coefficient of .92.

<u>Family Dysfunction</u>. Family dysfunction was indexed by four measures of instability, problems, and/or serious conflict within the veteran's family of origin. First, a measure of **family turmoil** consisted of a series of nine inquiries regarding circumstances that might have created a disruptive home environment for the veteran's family of origin. Examples are serious illness, mental disorder and associated hospitalization, handicap or disability, problem drinking or other substance abuse, and arrest and/or incarceration among family members. Items were scored 1 (<u>circumstance did not occur in the</u>

family of origin), 2 (occurred and involved a family member other than a parent), 3 (occurred and involved one parent), or 4 (occurred and involved both parents). The internal consistency of the full scale was .65.

The impact of exposure to trauma in childhood was of special interest to the project, and the three remaining family dysfunction measures captured aspects of such exposure. A measure of severe punishment or abuse as a child consisted of the sum of standard scores on two items. The first asked the veteran whether anyone in the family or household had ever spanked or hit him hard enough to cause marks or bruises, to cause him to stay in bed, or to require a physician's attention. Responses were scored using the same 4-point system as that for the family turmoil items. The other item required the veteran to judge how often such severe punishment occurred. Responses were scored from 0 to 4, where 0 indicated severe punishment had never occurred and 4 indicated it had occurred very often. The internal consistency of this 2-item index was .92. The witnessing of interparental violence in the family of origin was assessed with a single dichotomously scored question: "Did you ever see your parents [parent substitutes] hit one another?" Finally, we scored an inventory of traumatic events, comprised of five categories of highly stressful experiences: fires or explosions, automobile or other vehicular accidents, farm or industrial accidents, natural disasters, and physical assaults or abuse. Each event within a category was scored 0 if the respondent reported never being a victim of such an event, 1 if the respondent was a victim of the event but not injured, and 2 if the respondent was a victim and also was "severely or permanently ill, injured, or mutilated as a result of the event." A total score across all 5 categories was computed for each veteran.

# Perpetrator's Childhood Antisocial Behavior

There was one measure within this category drawn from the **Diagnostic Interview Schedule** (Robins, Helzer, Croughan, & Ratcliff, 1981). Its 17 items were aimed at documenting whether or not the veteran had engaged in certain problem behaviors: vandalism, fighting, truancy, arson, running away from home, and the like. If the behavior was affirmed as occurring prior to the age of 15, the veteran received a score of 1 on that item; if the veteran did not affirm the behavior, or if it first occurred after the age of 15, a score of 0 was assigned. The internal consistency was .74.

#### Perpetrator's Exposure to War-zone Stressors

Regarding stressor exposure in the military, the National Vietnam Veterans Readjustment Study database affords a wealth of information, with over 100 items reflecting war-zone events or circumstances of varying levels of magnitude. King, King, Gudanowski, and Vreven (1995) applied sorting tasks, classical test theory instrument construction strategies, and structural equation modeling to these data to operationalize and validate four alternative representations of war-zone stressors. Two these were used in the present project.

<u>Exposure to Traditional Combat</u>. This more objective measure of war-zone stressors consisted of 36 items intended to judge the extent to which the veteran reported circumstances or events that would be considered observable, stereotypical warfare experiences. For example, items referred to receiving enemy fire, seeing injured or dead Americans, going on special missions or patrols, and firing weapons. The internal consistency of this measure, a sum of standardized item scores, was .94.

<u>Perceived Threat</u>. This more subjective scale contained 9 items that required an individual appraisal as to whether war-zone circumstances or events were harmful to personal safety: as examples, judgments of fear and degree of danger. It too was scored as the sum of standardized item scores, and the internal consistency was .84.

# Perpetrator's Current Mental Distress

PTSD. The assessment of PTSD was accomplished using the Mississippi Scale for Combat-Related PTSD (Keane et al., 1988), a 35-item self-report instrument that employs a 5-point Likert response format. Items assess the reexperiencing, avoidance and numbing, and hyperarousal criteria for PTSD, along with the associated features of substance abuse, depression, and suicidality. The Mississippi Scale has an impressive record for reliable and valid PTSD assessment (see the psychometric studies by Hyer, Davis, Boudewyns, & Woods, 1991; Keane et al.; King, King, Fairbank, Schlenger, & Surface, 1993; Kulka et al., 1990a, 1990b; McFall, Smith, Mackay, & Tarver, 1990; and McFall, Smith, Roszell, Tarver, & Malas, 1990). The internal consistency was .94.

Alcohol Abuse. There were four indicators of alcohol abuse. The frequency and quantity of current alcohol use was assessed using questions from the Diagnostic Interview Schedule (DIS; Robins et al., 1981) that inquired about the veteran's consumption of beer, wine, and liquor separately, a method that has been recommended by recent research (Feunekes, van't Veer, van Staveren, & Kok, 1999; Serdula, Mokdad, Byers, & Siegel, 1999). Questions about drinking frequency were accompanied by an 8-point scale, with the following response options: never in the past 12 months; once or twice in the past 12 months; 3-11 days in the past 12 months; 1-3 times/month; 1-2 days/week; 3-4 days/week; 5-6 days/week; about every day. To obtain a more precise estimate of drinking frequency, responses were transformed using the median value of each response option (e.g., once or twice in the past 12 months = 1.5 days/year divided by 52 weeks/year = .029; 3-4 days/week = 3.5; about every day = 7). Responses for each of the three beverages were then summed to give a total drinking frequency score, reflecting total number of drinking occasions per week. Drinking quantity was obtained in a similar fashion. Veterans were asked to report the number of drinks they typically consumed in a single occasion for beer, wine, and liquor, separately, over the last 12 months. Responses were then averaged over the three beverages, giving a total quantity of alcohol imbibed in an average occasion.

In addition to the drinking frequency and drinking quantity self-reports, we also employed a **DIS** abuse scale and **DIS** dependence scale. To derive these measures, all items within the Alcohol Subsection of the DIS were reviewed in light of their match to the <u>Diagnostic and Statistical Manual of Mental Disorders</u>' (<u>DSM-IV</u>; American Psychiatric Association, 1994) criteria for abuse and dependence. The resulting alcohol abuse scale contained 10 items, each dichotomously scored, that reflected problem drinking behaviors (e.g., job troubles due to alcohol, family objections to drinking, incidents of drunk driving) occurring in the last year. Its internal consistency reliability was .69. The alcohol dependence scale contained 13 items, also dichotomously scored, consistent with DSM-IV's signs of very serious drinking behavior (e.g., binges, early morning drinking, blackouts) occurring in the last year. The internal consistency reliability of this latter measure was .81.

#### Marital and Family Functioning

Three parallel measures of marital and family functioning were used for both perpetrator and partner.

Marital Adjustment. First, both members of the dyad were scored on a series of 15 items intended to assess marital happiness, companionship and compatibility, and general satisfaction with the relationship from several previously established measures embedded in the National Vietnam Veterans Readjustment Study protocols. These sources include Spanier's (1976) Dyadic Adjustment Scale, Dohrenwend's (1982) Marital Dissatisfaction Scale from the Psychiatric Epidemiological Research Interview, and instruments used in national studies of American life conducted by Campbell, Converse, and Rodgers (1976) and Veroff, Douvan, and Kulka (1981). A composite score was computed as the sum

of standardized item scores for both members of the dyad. Estimates of internal consistency reliability were .91 for veterans and .92 for their female partners.

Family Adaptability and Family Cohesion. Family adaptability and family cohesion variables were operationalized in terms of responses to the Family Adaptability and Cohesion Evaluation Scales (FACES II; Olson, Bell, & Portner, 1978; Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983). Briefly, the construct of family adaptability refers to flexibility in family roles, responsibilities, and operating principles, and the construct of family cohesion is defined in terms of closeness and affiliation among family members. To preserve the integrity and distinctiveness of the constructs, we removed the few FACES II items that might confound family violence (for example, "Family members sometimes hit each other") with dimensions of marital and family functioning (for example, "In our family, everyone goes his/her own way"). We constructed continuous measures of family adaptability (11 items) and family cohesion (13 items) from both the perpetrator's data and the spouse's data applicable to couples both with and without children. The internal consistency reliability score was .80; for the partner's family adaptability score, .83. The internal consistency reliability coefficient for perpetrator's family cohesion score, .89.

# Perpetrator-to-Partner Violence

The Conflict Tactics Scale (CTS; Straus, 1979) has been shown to be a reliable and valid self-report measure of marital discord and violence (e.g., Arias & Beach, 1987; Straus, 1979) and has been used in numerous empirical studies (e.g., Byrne & Riggs, 1996; Dutton, 1995; Gondolf & Foster, 1991; Jordan et al., 1992). Its items ask for the frequency (in the last year) of different strategies used to resolve marital dispute. For our measure of violence, we used eight CTS items that inquired about the perpetrator's physical battering of his partner in the past year, as reported by the partner. Sample items are: "threw something at [you]", "pushed, grabbed, or shoved [you]", and "used a knife or gun." Each item reflected a 7-point Likert-type scale of choices ranging from 0 (never) to 6 (more than 20 times), with a total scale score that was a sum of the item scores. Although there is controversy about the different methods for scoring the CTS, this simple sum across items has been found to produce a reliable and valid index of family violence (Straus, 1990). The scale had an internal consistency reliability of .90 in our sample.

#### Partner's Mental Distress

<u>Demoralization</u>. One measure of the partner's mental distress was comprised of a set of 27 items from eight scales on the Psychiatric Epidemiological Research Interview (Dohrenwend, 1982). These items assessed aspects of depression, dread, anxiety, hopelessness, and poor self-esteem. Each item was accompanied by a 5-point Likert-type response scale, and a total summative index was computed. The internal consistency of this measure for the female partners in the sample was .94.

<u>General Well-being</u>. Partners were asked two global questions about their sense of personal well-being. The first required a judgment of overall life satisfaction using a 3-point rating scale. The second was a similar 3-point rating of their degree of overall happiness. The sum of scores on these two items formed our general well-being index, which was reverse scored such that higher values indicated poorer outcomes, that is, less life satisfaction and overall happiness. The internal consistency reliability of this 2-item index was .65.

<u>Social Isolation</u>. A third index of the partner's mental distress was her reported social isolation, operationalized using four items assessing the a lack of close friends, relatives, and confidents. The total score on this index was a sum of standardized item scores, and the internal consistency reliability was .50.

#### **Child Behavior Problems**

The Child Behavior Checklist (Achenbach, 1978, 1991) was completed by the partner describe the behavior of all children between ages 6 and 16 residing in the household. This measure served as the prime indicator of child's mental health. It is a widely used and well normed instrument, appropriate for the ages of children in the project, and assesses a broad spectrum of behavioral/emotional problems and competencies. According to Achenbach (1978, 1991), and consistent with the procedures of the National Vietnam Veterans Readjustment Study Family Interview, the Child Behavior Checklist was designed to be completed by a parent or parent surrogate, deemed most knowledgeable and capable to give observational ratings of a child. The most recent manual for the instrument (Achenbach, 1991) reports high internal consistency and test-retest (1-week interval) reliability estimates for parents' ratings of clinically nonreferred boys' and girls' internalizing, externalizing, and total scores: ranging from .87 to .96, with 16 out of 18 coefficients in the .90s. The accumulated validity evidence indicates that parent ratings on the Child Behavior Checklist are able to successfully differentiate between clinically referred and nonreferred children (Achenbach, 1991); that these ratings converge with psychiatric diagnoses (e.g., Edelbrock & Costello, 1988); and that they predict maladjustment and poor outcomes in later years (e.g., Verhulst, Koot, & Van der Ende, 1994). Both internalizing and externalizing scores, normed for age and gender, were used in the project. McCloskey et al. (1995) concluded that the broader based internalizing and externalizing dimensions of child psychopathology were preferrable to more narrowly defined variables.

Appendix A contains details on descriptive statistics and frequency distributions of the manifest indicators or observed variables for the study (see sections to follow).

# **Analytic Procedures**

Structural equation modeling procedures were used in all parts of the project. This methodology gives the researcher more flexibility and powerful tools to enhance measurement precision and understand complex associations among constructs. The measurement component of structural equation modeling, confirmatory factor analysis, defines latent variables or factors in terms of their observed or manifest indicators. The benefit of latent variables is that they can be treated as if they are perfectly reliable, since measurement error is specified and thereby accounted for in the analysis. Thus, when the latent variables are employed in the structural component testing hypotheses about the relationships among variables, their regression or path coefficients are unbiased (e.g., Bollen, 1989b; Hoyle, 1994; Joreskog & Sorbom, 1993a). Furthermore, the full-information estimation procedures of structural equation modeling yield parameter estimates that are efficient; their standard errors are as small as they can be, thereby providing more stable values and a more accurate representation of the pattern of relationships among the variables.

In Studies 1-3, the general analytic approach was as follows: Initially, a measurement model, incorporating the latent variables of interest and their manifest indicators, was specified and evaluated using the available family data. Following the attainment of adequate fit of the measurement model, the latent variables or constructs within the structural component were optimally-weighted composites of factor scores. A series of hierarchically nested structural models accompanied by chi-square difference tests and other indices of close fit (root mean square error of approximation [Steiger, 1990], expected cross-validation index [Browne and Cudeck, 1989], Akaiki Information Criterion [Akaiki, 1987] and Corrected Akaiki Information Criterion (Bozdogan, 1987) were used to systematically evaluate hypotheses concerning direct and indirect effects, proceeding from the most saturated to the most parsimonious model (Anderson & Gerbing, 1988). Other fit indices, such as the comparative fix index (Bentler, 1990), incremental fit index (Bollen, 1989a), non-normed fit index (Bentler & Bonett, 1980; Tucker & Lewis, 1973) and goodness-of-fit index (Joreskog & Sorbom, 1993a) were likewise consulted. The goal was to select the most parsimonious model that best fit the data.

In Study 4, a variation on this procedure was employed. This last study in the sequence drew from all categories of variables and was, in essence, a large model built by integrating the models tested in Studies 1-3. There were too many manifest indicators or observed variables given the number of perpetrator-partner dyads to accommodate implementation of a measurement model. Hence, we tested a model of relationships among observed variables but included information about their reliability, where available, to best approximate measurement error and minimize bias in parameter estimates. We followed the same process of proceeding from the most saturated to the most parsimonious model, arriving at the model of best fit with the aid of the various fit indices. Details of analyses specific to each study are incorporated within the reporting of results to follow.

The following points are intended to provide further technical details on analyses for Studies 1 through 4, and to note some difficulties and how they were addressed:

- ◆ As pointed out by Cudeck (1989), analyses of matrices of correlations may present several problems, including an incorrect omnibus test statistic, incorrect standard errors of parameter estimates, and incorrect test statistics for parameter estimates. Therefore, across all studies, structural equation modeling was applied to the more appropriate matrices of variances and covariances.
- When both perpetrator and partner were sources of information about a common variable (e.g., family adaptability), the measurement model incorporated correlated residuals to accommodate the interdependence of couple data.
- ♦ It is quite likely that the assumption of the multivariate normality of the data was violated, as is usually the case when variables representing psychopathology are measured within a community sample. To deal with this problem, we used the Satorra- Bentler (Chou, Bentler, & Satorra, 1991) correction for chi-squares and standard errors of the parameter estimates.
- ◆ As noted earlier in this document, model-fitting for all studies proceeded from the more saturated (having fewer constraints on parameters) to the more parsimonious, less saturated, theory-based models (having more constraints on parameters; Anderson & Gerbing, 1988; Bentler & Bonett, 1980; James et al., 1982). Decisions regarding model respecification and simplification were always made in light of meaningful, substantive considerations, as strongly emphasized by Joreskog and Sorbom (1993a), Cudeck and Browne (1983), and Bollen (1989b), among others.
- ♦ The statistical software used in the project was: (a) for data manipulation, general analyses, and first-stage psychometric analyses, SPSS; (b) for data screening in preparation for modeling analyses, PRELIS 2 (Joreskog & Sorbom, 1993b); (c) for specifying and evaluating the models for Studies 1, 3, and 4, LISREL 8 (Joreskog & Sorbom, 1993a); and (d) for specifying and evaluating the models for Study 2, EQS (Bentler, 1989).
- ♦ Because the project relied on the use of an already existing data set, many of the usual logistical problems that can arise when securing subjects, collecting data, and organizing and entering data for computer analysis were obviated. This is not to say, however, that challenges were not encountered in the various data analytic procedures. For example, some problems related to missing data presented themselves and reduced the number of families for a particular analysis to a less than optimal level. We were fortunate to be able to employ PRELIS's (Joreskog & Sorbom, 1993b) missing data imputation process to elevate the numbers of family units to a suitable level for each study. [see the work of McArdle (1994), Graham, Hofer, Donaldson, MacKinnon, and Schafer (1997), and Little and Rubin (1987) for discussion of the advantages of imputation over more traditional listwise and pairwise deletion procedures].

♦ We offer a few cautionary comments regarding the viability of the models that derived from the project. It is very important to recognize the retrospective, cross-sectional nature of the National Vietnam Veterans Readjustment Study data (Widom, 1989). In judging the potential limitations of the data, King et al. (1995) noted difficulties with recall for events in the distant past, problems in encoding of detail for events occurring during times of extreme stress, and especially the tendency for one's current psychological state to color how one reports on prior circumstances. Thus, in any retrospective, cross-sectional design, there is no assurance that the putative direction of a relationship is as modeled. Strictly speaking, the process of structural equation modeling does not confirm a model. Rather, it simply concludes that there is no available evidence to disconfirm the model. As pointed out by Breckler (1990), Cliff (1983), and Loehlin (1992), it is possible to find other substantively different, even contradictory, models that furnish equivalent fit to the data. The best defense against erroneous interpretations is for decisions regarding model specification and acceptance to be primarily informed by theory, a premise that we have upheld in prior work and in the current project.

#### **RESULTS**

# Study 1: Variables Characterizing Perpetrator's Family of Procreation

Study 1 documented associations among variables describing the perpetrator's family of procreation. The five latent variables for this study were marital and family functioning (both from the perspective of the male perpetrator and from the perspective of his female partner), perpetrator-to-partner violence, partner's mental distress, and child behavior problems. Within the measurement model, the manifest indicators for marital and family functioning, for both members of the dyad, were scores on the marital adjustment, family adaptability, and family cohesion scales. Violence was treated as a causal indicator (Bollen & Lennox, 1991; Cohen, Cohen, Teresi, Marchi, & Velez, 1990) with the sum of the 8 Conflict Tactics Scale physical violence items serving as the manifest indicator. Partner's mental distress had three manifest indicators: scores on the demoralization, general well-being (reverse scored), and social isolation indices. Finally, the latent variable of child behavior problems had two manifest indicators: the child's internalizing and externalizing scores from the Child Behavior Checklist. For this confirmatory factor analytic model, S-B  $\chi^2(42, N = 260) = 59.75$ , p < .05. The root mean square error of approximation (RMSEA; Steiger, 1990) was .040, with a 90% confidence interval of .010 to .062; the associated probability of close fit (< .05) was .74. According to Browne and Cudeck (1993), an RMSEA value less than .05 is indicative of good model-data fit. The comparative fit index (CFI; Bentler, 1990) was .90, and the LISREL goodness of fit index (GFI; Joreskog & Sorbom, 1993a) was .90. Convention has dictated that values of such indices of .90 or above reflect reasonable model-data fit. Appendix B1 contains further specifics on this measurement model.

Table 1. Standardized Total, Direct, and Indirect Effects for Study 1

Latent Variable		ct on Pa ntal Dis		Effect on Child Behavior Problems			
	Total	Direct	Indirect	Total	Direct	Indirect	
Marital/Family Functioning-Perpetrator's Perspective	37	-	37	20	•	20	
Perpetrator-to-Partner Violence	.38	.13	.25	.20	-	.20	
Marital/Family Functioning-Partner's Perspective	87	87		46	-	46	
Partner's Mental Distress	-	-	-	.53	.53	•	

Once a satisfactory measurement model was attained, we proceeded to specify and evaluate a structural model of best fit in which the perpetrator's perspective on marital and family functioning and

perpetrator-to-partner violence were treated as exogenous variables and the other three latent variables, partner's perspective on marital and family functioning, partner's mental distress, and child behavior problems, were treated as endogenous variables. Figure 6 displays the final model of best fit, and Table 1 presents the total, direct, and indirect effects for this model. A chronicle of the model-trimming process appears in Appendix B2.

As shown in Figure 6, violence was associated with partner's mental distress, both directly and indirectly through the partner's attitudes and feelings about her marital and family life. The direct path from violence to partner's mental distress was relatively weak, with a value for the partial correlation or effect size being only .10. By far, most of the association of violence with partner's mental distress flowed indirectly through the intermediary variable of partner's perspective on marital and family

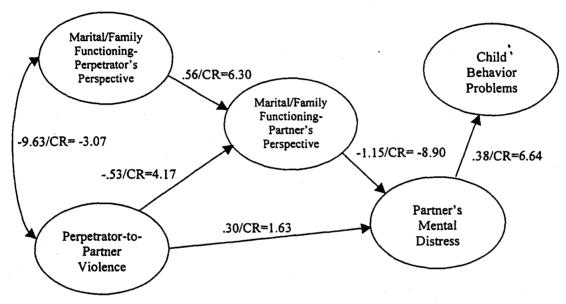


Figure 6. Relationships among Variables in Study 1

S-B  $\chi^2$  (46, N = 260) = 82.69, p < .001; RMSEA = .055 (90% CI = .036-.074); CFI = .90; GFI = .89. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

functioning. The effect size of the latter variable on partner's mental distress was .49. In addition, the perpetrator's perspective on marital and family functioning had a similar indirect effect on partner's mental distress via the partner's perspective on marital and family functioning. In this model, 86% percent of the variance in partner's mental distress was accounted for, a finding largely a consequence of the very strong relationship between partner's perspective on marital and family functioning and her mental distress. The bivariate relationship between these two latent variables was -.93.

Also shown in Figure 6 is that the best representation of the network of relationships of parental variables on child behavior problems is one in which the violence and marital and family functioning variables impact indirectly through the partner's mental distress. There were no other direct associations with child behavior problems. Of course, it is important to note that the source of information for four of these five variables (all except the perpetrator's perspective on marital and family functioning) is the partner (reporting on both her own perspective on marital and family functioning and mental distress, as well as violence directed toward her and the child's behavior problems). The previously noted strong relationship between partner's perspective on marital and family functioning and partner's mental distress is certainly partially a consequence of this common source, and multicollinarity between these two variables would likely preclude any association between the former variable and child behavior problems. In any case, 28% of the variance in child behavior problems is accounted for in the model, specifically

from the direct path from partner's mental distress. There is no unique contribution from perpetrator-to-partner violence to child behavior problems, beyond that already accounted for by partner's mental distress.

# Study 2: Perpetrator's Early Background and Trauma History

Study 2 attempted to link chaotic circumstances, highly stressful experiences, and dysfunctional behaviors in the perpetrator's background to later perpetrator-to-partner violence. There were eight variables in the Study 2 model. The first was a family (of origin) dysfunction latent variable with four manifest indicators: scores on the family turmoil scale, severe punishment index, interparental violence item, and inventory of traumatic events. Also characterizing the family of origin were relationship with father and relationship with mother latent variables, each with scores on two item triplets as manifest indicators. The childhood antisocial behavior latent variable had five indicators, formed by grouping the 17 items for that measure into two clusters of 4 items and three clusters of 3 items. Cataloging war-zone stressors were two latent variables. The first was traditional combat, having a single causal indicator, the total score on the measure of exposure to traditional combat. The second was perceived threat, with manifest indicators derived from grouping the perceived threat scale's 9 items into three triplets. The PTSD latent variable had four manifest indicators taken from prior factor analyses of the Mississippi Scale (King & King, 1994). These indicators were average scores on item clusters designated as reexperiencing and situational avoidance (11 items), withdrawal and numbing (11 items), arousal and lack of control (8 items), and guilt and suicidality (5 items). As before, the perpetrator-to-partner violence variable had a causal indicator, the sum of scores on the 8 Conflict Tactics Scale physical violence items. For this measurement model, S-B  $\chi^2$  (183, N = 367) = 320.46, p < .001. RMSEA was .051, with a 90% confidence interval of .043 to .059; CFI was .95; and GFI was .92. Please see Appendix B3 for further information.

Table 2. Standardized Total, Direct, and Indirect Effects for Study 2

Latent Variable	Effect on Violence					
	Total	Direct	Indirect			
Family Dysfunction	.08	-	.08			
[Poor] Relationship with Father	-	-	•			
[Poor] Relationship with Mother	.13	.13	-			
Childhood Antisocial Behavior	.06	-	.06			
Combat Exposure	.05	41	.46			
Perceived Threat	.50	.09	.41			
PTSD	.17	.17				

In specifying and evaluating a structural model for Study 2, we were particularly interested in the perpetrator's family of origin and other background variables that might directly impact perpetrator-to-partner violence. We began with a saturated initial structural model with all antecedent variables having direct paths to violence and then sequentially deleted those least likely to be implicated, based on observed partial relationships and substantive considerations. The final model of best fit is depicted in Figure 7. In this model, there were four direct paths to perpetrator-to-partner violence: from [poor]

relationship with mother, exposure to traditional combat, perceived threat in the war zone, and PTSD symptomatology. Two other variables in the model, family dysfunction and childhood antisocial behavior, were indirectly associated with violence via the war-zone stressor variables and PTSD. The variable representing a poor relationship with father did not appear uniquely associated with any of the endogenous variables in the model. Table 2 presents the total, direct, and indirect effects of the seven antecedent latent variables on the violence latent variable, and Appendix B4 highlights the model fitting process.

Interestingly, only two of the seven bivariate correlations of antecedent latent variables with the perpetrator-to-partner violence latent variable had critical ratios that exceeded 2.00, the general standard for declaring "significance." These were perceived threat (r = .16, CR = 2.77) and PTSD (r = .24, CR = 3.51). As shown in Figure 7, the partial coefficients or path coefficients for these variables were also noteworthy, their critical ratios likewise exceeding 2.00. Also, the critical ratio for the path from combat exposure to violence exceeded 2.00 (negatively), whereas the critical value for their bivariate correlation did not. And, the direction of the bivariate relationship was positive. Taken together, the change in significance and the change in the direction of the relationship suggests a suppressor effect: Partialing out the deleterious consequences of exposure to combat—pathways leading to perceived threat and PTSD symptomatology—the relationship between combat exposure and violence becomes negative. The effect

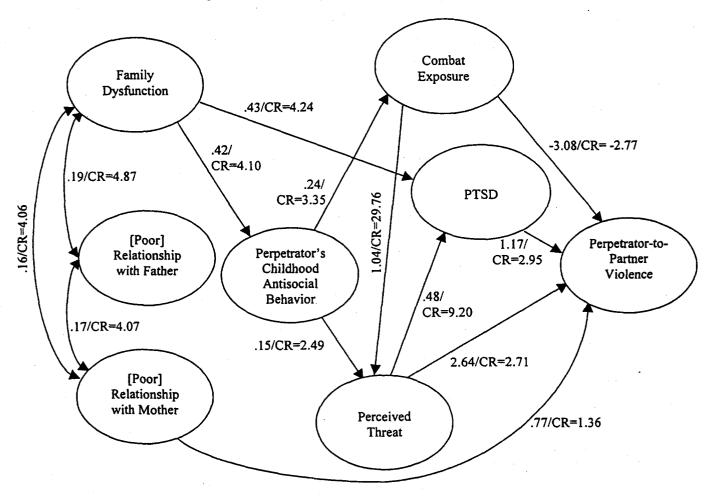


Figure 7. Relationships among Variables in Study 2

S-B $\chi^2$  (198, N = 367) = 335.30, p < .001; RMSEA = .049 (90% CI = .041-.056); CFI = .95; GFI = .92. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

sizes (partial correlations) for the perpetrator's war-related experiences and their sequelae (that is, the effects of combat exposure, perceived threat, and PTSD) on perpetrator-to-partner violence were in the .14 to .15 range. The proportion of variance in violence accounted for by the four variables having direct effects was 10%. In might be recognized again the source of information if different for the outcome (partner's report) than for all the antecedent variables in the model.

# Study 3: Perpetrator's Current Mental Distress

Study 3 sought to clarify the effects of the veteran's PTSD and frequently existing collateral problem of alcohol abuse, and their interaction, on marital and family functioning, perpetrator-to-partner violence, and partner's mental distress. There were two general approaches to the data analyses in Study 3. The first was an evaluation of the main effects of PTSD and alcohol abuse on the family-of-procreation variables, using the full sample and treating PTSD as a singular construct. The second was the evaluation of the interaction between specific features of PTSD and alcohol abuse, achieved by diasggregrating PTSD into symptom cluster components and employing a multisample structural equation analysis for high and low alcohol users.

In the measurement model where PTSD was a singular construct and the purpose was to evaluate main effects, the latent variables of PTSD, perpetrator's perspective on marital and family functioning, partner's perspective on marital and family functioning, perpetrator-to-partner violence, and partner's mental distress had the same manifest indicators as in the prior studies. The newly introduced latent variable of alcohol abuse had four manifest indicators: drinking frequency, drinking quantity, and scores on the DIS abuse scale and DIS dependence scale. For this measurement model, S-B  $\chi^2(117, N = 372) = 240.31$ , p < .001. RMSEA was .053, with a 90% confidence interval of .044 to .063; CFI was .95; and GFI was .92. Appendix B5 provides elaboration on this factor solution.

Table 3. Standardized Total, Direct, and Indirect Effects for Study 3

Effect on Violence				Effect on Partner's Mental Distress			
Total	Direct	Indirect	Total	Direct	Indirect		
.25	.12	.13	.40	.20	.20		
.37	.37	. •	.18	-	.18		
-	• -	-	25	-	25		
-	-	•	.36	.25	.11		
-	-	-	62	62	-		
	.25 .37	Total Direct .25 .12 .37 .37	Total         Direct Indirect           .25         .12         .13           .37         .37         -           -         -         -           -         -         -	Effect on Violence         Me           Total Direct Indirect         Total           .25         .12         .13         .40           .37         .37         -         .18           -         -         -        25           -         -         -         .36	Effect on Violence         Mental Dis           Total         Direct Indirect         Total         Direct           .25         .12         .13         .40         .20           .37         .37         -         .18         -           -         -         -        25         -           -         -         -         .36         .25		

Figure 8 presents the structural model of best fit, Table 3 lists total, direct, and indirect effects on the perpetrator-to-partner violence and partner's mental distress latent variables, and Appendix B6 gives details on model trimming. Note, first, from Figure 8, that the pattern of relationships among the four latent variables that characterize the family of procreation mirror those found in Study 1. Also, both PTSD and alcohol abuse have direct paths to the violence latent variable, and PTSD has an indirect effect as well, through alcohol abuse. In line with the study's first hypothesis, the perpetrator's mental distress as represented by PTSD symptomatology was directly associated with partner's mental distress. On the other hand, no direct path from perpetrator's alcohol abuse to partner's mental distress resulted. Rather, the influence of alcohol abuse on partner's mental distress was indirect through perpetrator-to-partner violence and both marital and family functioning variables. PTSD appears to have a rather pervasive

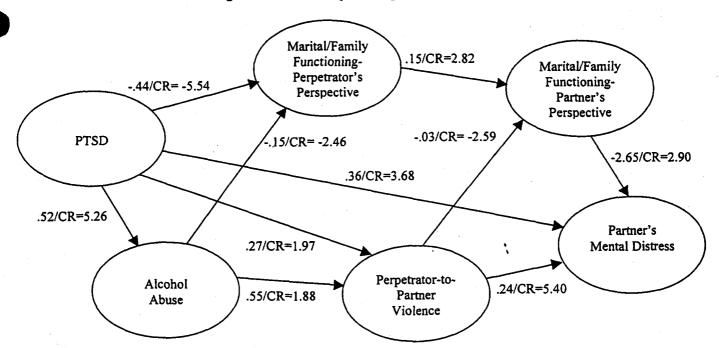


Figure 8. Relationships among Variables in Study 3

 $S-B\chi^2$  (122, N = 372) = 245.18, p < .001; RMSEA = .052 (90% CI = .043-.062); CFI = .95; GFI = .92. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

(negative) effect on the family. In addition to aforementioned paths to alcohol abuse, violence, and partner's mental distress, its association with the perpetrator's perspective on marital and family functioning was strong and negative. In this model, 18% of the variance in violence and 64% of the variance in partner's mental distress were accounted for.

When we disaggregated PTSD, creating separate withdrawal and numbing (the emotional numbing feature of PTSD) and arousal and lack of control (the hyperarousal feature of PTSD) latent variables, a new measurement model was necessarily specified. In this instance, the withdrawal and numbing variable had four manifest indicators, 3 triplets and 1 pair of Mississippi Scale items representing that symptom cluster. Similarly, arousal and lack of control had manifest indicators formed as 2 triplets and 1 pair of items drawn from that symptom cluster. The indicators for the four family of procreation latent variables remained as before. In addition, high and low alcohol use groups were identified, with high use individuals being those who met one or both of the following criteria: (a) the product of their drinking frequency and drinking quantity values equaled or exceeded 15 drinks per week, and (b) at least one of the DIS abuse items or one of the DIS dependence items was affirmed. Using this decision rule, 139 individuals were designated the high alcohol use group and 233 were designated the low alcohol use group. A multisample measurement model, with equality constraints on the loadings across groups to achieve metric invariance (McArdle & Cattell, 1994), yielded the following fit indices: S-B $\chi^2$  (215, N = 372) = 328.92, p < .001. RMSEA was .054, with a 90% confidence interval of .042 to .065; CFI was .94; and GFI was .90. Please see Appendix B7 for further information.

Figure 9 depicts the final structural model for this multigroup analysis, and Appendix B8 provides details. In effect, this model addresses the remaining hypotheses for Study 3. The critical values for the path from withdrawal and numbing to the perpetrator's perspective on marital and family functioning exceeded 2.00 irrespective of level of alcohol, although the relationship was somewhat stronger for the

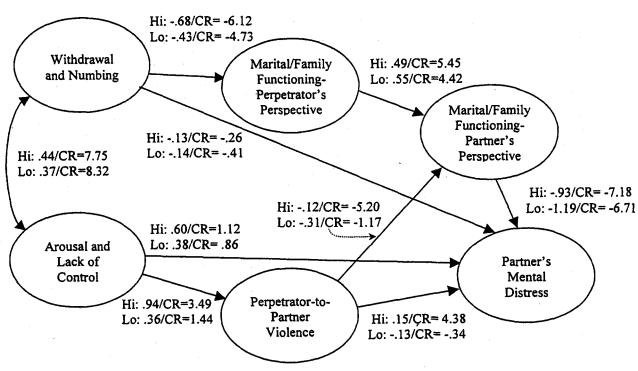


Figure 9. Relationships among Variables in Study 3 (Specific Features of PTSD and Interactions with Alcohol Abuse)

S-B $\chi^2$ (227)=338.04, p < .01; RMSEA=.051 (90% CI = .040-.063); CFI=.93; GFI=.90. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

high use group than for the low use group. In contrast, the path from arousal and lack of control to perpetrator-to-partner violence had critical values indicating a much stronger effect for the high use group than for the low use group. For the former, the effect size was .29, whereas for the latter, the effect size was .09. Thus, there is a relationship between hyperarousal and violence, but it is stronger for those who use alcohol at higher rates.

# Study 4: Developmental and Intergenerational Perspective on Violence

The intent of the fourth and final study in the project was integrative: to build a larger model incorporating all important variables from the prior three studies and to provide a more comprehensive explanation for violence and its impact. In particular, Study 4 focused on the extent to which factors in the perpetrator's background may be linked to his offspring's behavior problems. As noted in the Method section of this report, the number of manifest indicators or observed variables relative to the number of families having children was too great to allow for specification of a measurement model prior to evaluating a structural model. We used information about the reliabilities of measures to specify proxy values for measurement error and thus lessen potential bias in parameter estimates. Note also that the relationship with father

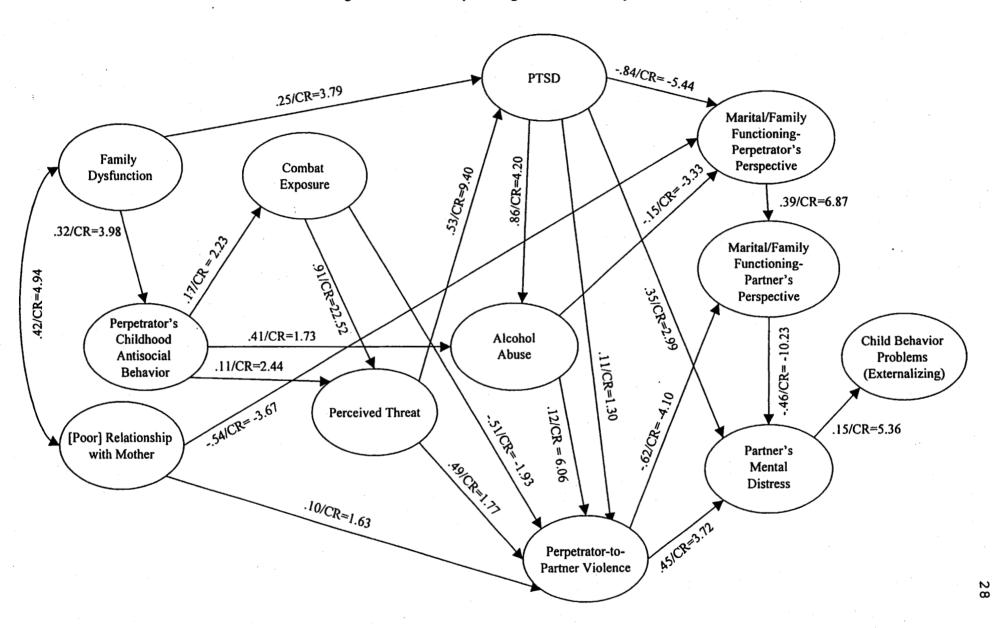
Table 4. Standardized Total, Direct, and Indirect Effects for Study 4

Latent Variable	Effect on Violence				ct on Par ntal Dist		Effect on Child Behavioral Problems			
•	Total	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	
Family Dysfunction	.09	-	.09	.10	-	.10	.03	-	.03	
[Poor] Relationship with Mother	.10	.10	-	.08	-	.08	.03	•	.03	
Childhood Antisocial Behavior	.12	-	.12	.07	•	.07	.03	-	.03	
Combat Exposure	.05	51	.56	.13	.06	.07	.04	. •	.04	
Perceived Threat	.61	.50	.11	.32	-	.32	.11	•	.11	
PTSD	.21	.11	.10	.29	.15	.14	.10	-	.10	
Alcohol Abuse	.38	.38	-	.16	٠ -	.16	.05	j	.05	
Marital/Family Functioning- Perpetrator's Perspective	. <b>-</b>	-	<b>-</b> .	20	<del>-</del> .	20	07	•	07	
Perpetrator-to-Partner Violence	-	-	• •	.33	.20	.13	.11	-	.11	
Marital/Family Functioning- Partner's Perspective	<b>-</b>	-	-	52	52	•	17	-	17	
Partner's Mental Distress	-	-	<b>-</b> ,	-	-	-	.34	.34	-	

variable was not included in the model since it was not influential in Study 2. And, consistent with aim of Study 4, the externalizing subscale, including delinquency and aggressive behaviors, of the Conflict Tactics Scale was used as the measure of child behavior problems.

Figure 10 portrays the most parsimonious representation of the network of associations among variables in this study; Table 4 gives total, direct, and indirect effects for the violence, partner's mental distress, and child behavior problems variables; and Appendix B9 contains information about model trimming. Many of the paths shown in Figure 10 are recapitulations of those in the prior three studies (as they should be). The only path not evaluated in prior models that is sustained in this model is the rather interesting association between the relationship with mother variable and the perpetrator's perspective on marital and family functioning. The sign of this association suggests that a warmer relationship with mother in the family of origin portends a more positive appraisal of the marriage and family of procreation. Furthermore, since child behavior problems (externalizing) was the focal outcome, it is instructive to note that the only direct path to this variable was from the partner's mental distress. Hence, in this model (as in Study 1), all influences on the child's behavior problems were channeled through the partner's psychological status. Again, war-zone exposure and subsequent PTSD and alcohol problems appear to play important transgenerational mediating roles.

Figure 10. Relationships among Variables in Study 4



 $S-B\chi^2$  (43, N = 254) = 56.89, p = .08; RMSEA = .036 (90% CI = .000-.059); CFI = .98; GFI = .96. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

This document is a research report submitted to the U.S. Department of Justice. This report has not been published by the Department. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

# SUMMARY, DISCUSSION, AND IMPLICATIONS

The project reported here sought to test a series of multivariate family models centered around an understanding of factors contributing to male-perpetrated domestic violence. specifically violence toward the female partner, and its consequent effects upon the partner's mental health and the behavior of offspring. The sample was comprised of 376 couples (261 of whom had children in the home) who had been a part of a larger investigation of the health and adjustment of veterans of the Vietnam War. Our first study sought to document associations among critical variables within the perpetrator's family of procreation, including indicators of marital/family functioning, perpetrator-to-partner battering, partner's mental distress, and child behavior problems. The second study examined relationships among perpetrator's family of origin background, childhood antisocial behavior, war-zone events and circumstances, and stress symptomatology as they pertain to incidents of violence against the partner. The third study emphasized mechanisms by which perpetrator's PTSD symptom severity and alcohol abuse are implicated in marital/family functioning, violence, and partner's mental distress. The fourth and final study attempted to synthesize the models from the prior three studies and suggest a process by which early stressful experiences of the perpetrator, in conjunction with additional exposure to potentially traumatic events in early adulthood, are translated into the propensity to commit domestic violence and, most important, to the child's tendency to exhibit aggressive, delinquent, and other externalizing behavior problems.

A primary thesis that guided the structure of the various models tested in the project's four studies was the assertion that male-perpetrated domestic violence in our society may be partially grounded in the trauma exposure and its psychological consequences. In particular, we adopted a trauma-focused perspective with a concentration on PTSD and gave special attention to the emotional numbing and hyperarousal clusters of symptoms that define this condition, as well as alcohol abuse, which is highly comorbid with PTSD. Accordingly, much of the underlying emphasis in the project was that the perpetrator's prior exposure to highly stressful events creates PTSD symptomatology, which, in turn, drives the negative outcomes in the family of procreation.

This research was in keeping with Osofsky's (1995) appeal for violence research into mediating factors that will enlighten legal authorities, social service agencies, and public health policy-makers. It was consistent with the need to better understand violence perpetration, interpersonal victimization, and the effect of major traumatic events in our society. We endeavored to gain an integrated multifactorial perspective on a collection of risk factors for family violence that would better inform prevention and intervention programs within the criminal justice, social services, and mental health systems. Unlike clinical studies using samples limited in size and diversity, the database for this project contained a reasonably large, racially and ethnically diverse, national sample of veteran-headed families with an extensive collection of perpetrator psychopathological, attitudinal, and other psychosocial variables that could be associated with abusive and violent behaviors in the family. Although this project cannot provide definitive answers, we trust that it may have heuristic value for refining the research agenda and guiding future inquiries into the etiology of domestic violence. We also duly recognize the cross-sectional nature of the data: Associations are not causal or necessarily predictive but, rather, suggestive for further research.

Overall, the results of this research project appear to offer support for the guiding traumafocused perspective, that exposure to highly stressful life events in a man's childhood or early adulthood and the psychological consequences may explain later partner battering and concomitant partner mental distress and child behavior problems. As a general statement, there appears to be a "chaining" of variables depicting pathways by which a man's adverse childhood experiences are linked to difficulties in his subsequent marital and family life. In our studies, the perpetrator's own family background characteristics and experiences contributed to early acting out behaviors; these were then influential in terms of his subsequent exposure to high levels of combat. Of course, there is the link between trauma exposure (combat and threat) and PTSD and alcohol abuse. The joint effects of these two latter variables on violence and partner mental distress (the Study 3 findings) are especially tragic, and the chain extends to negative child behavior in general (Study 1) and aggressive, delinquent, and other externalizing behaviors in particular (Study 4).

The pattern of associations among the perpetrator's family of origin dysfunction, childhood antisocial behavior, combat exposure, and perceived threat are particularly noteworthy vis-à-vis a "revictimization" interpretation. This network of relationships suggests that early distress and troublesome experiences in the family of origin may lead to the propensity for risky, destructive, and perhaps illegal activities, which then places the individual in jeopardy for exposure to additional serious life stressors in late adolescence and early adulthood. In our context, these later stressors are war-zone related, combat and the accompanying fear of bodily harm or death, and they have been discussed previously as a selection bias (see the review by King & King, 1991), drawing the more vulnerable members of society into harm's way. Moreover, King et al. (1996) noted that male Vietnam soldiers who reported earlier childhood behavior problems were more likely to have encountered exposure to combat than those who did not have a history of such antisocial behavior, a likely reflection of the selection bias within the military placing those with more limited skills and abilities into the combat arms. These findings are not inconsistent with other contexts, for example, in the rape literature (e.g., Kilpatrick, Resnick, Saunders, & Best, 1998) wherein the individual's early exposure seems to portend increased risk for later victimization.

If we can extrapolate to persons in distressed childhood environments within chaotic communities, in general, then the results may point to a need for enhanced anti-risk-taking training for youth, especially those with documented exposure to traumatic events. Such training might emphasize "personal safety" education to include the avoidance of potentially dangerous environments, compensatory behaviors to quell sensation-seeking, and alternatives to violent responses to threatening stimuli. The goal, of course, would be to break the cycle of vulnerability.

The associations among early adulthood trauma (combat exposure and perceived threat), PTSD symptomatology, and perpetrator-to-partner violence are also quite interesting (see Figures 7 and 10). First, there are the expected positive relationships between PTSD and violence and between perceived threat and violence: Those with more symptomatology or who manifested more fear in the war zone tended to be more violent toward their partners. Yet, the direct path between combat exposure and perpetrator-to-partner violence carries a negative sign, such that those exposed to high levels of combat perpetrated less violence upon their partners. This finding may appear counterintuitive. Indeed, a consideration of the negligible bivariate association between combat and violence, would suggest a suppressor effect (Cohen & Cohen, 1983). Upon further reflection, however, it may impart a message of hope. That is, controlling for, or taking into account, or removing the psychopathological consequences of combat (threat

and PTSD), there may be a tendency at least for some who experience traumatic events to be less inclined to perpetrate violence on their partners.

Which leads to the role of PTSD as a critical gatekeeper variable through which various factors in the perpetrator's background make their felt impact on the family. Indeed, PTSD symptomatology appeared to have a pervasive influence on other variables. In addition to paths to alcohol abuse, perpetrator-to-partner violence, and partner's mental distress, its association with the perpetrator's perspective on marital/family functioning was strong and negative: the greater the level of symptoms, the less positively the perpetrator viewed his family situation. The important point is that PTSD appeared to function the way we predicted, as a pivotal intermediary variable leading to violent behaviors and then to partner and child distress (see Figures 8 and 10).

Even more intriguing are the findings involving PTSD when it was disaggregated into its component symptom categories and the focus became the emotional numbing and hyperarousal features of the condition (see Figure 9). Here, we gain some insight into the mechanisms by which PTSD may operate to influence different aspects of the marriage and family. In line with our hypotheses, emotional numbing (our withdrawal and numbing variable) was particularly salient in its association with the perpetrator's perspective on marital/family functioning, suggesting that this aspect of stress symptomatology inhibits positive interactions, interpersonal satisfaction, and feelings of warmth and intimacy with partner and children. The chain of associations continues through the partner's perspective on marital/family functioning to partner's mental distress (and subsequently to child behavior problems; see Figures 6 and 10).

Also, as hypothesized, hyperarousal (our arousal and lack of control variable) was the feature of PTSD, when the condition was disaggregated, that appeared most critical to reports of violence in the family. But this conclusion is qualified on the basis of a significant interaction effect between hyperarousal and alcohol abuse (see Figure 9). Thus, as proposed, alcohol abuse seems to be a key exacerbation factor, and the effect of hyperarousal is stronger in the presence of higher levels of alcohol consumption. PTSD symptomatology, in and of itself, is harmful and places the partner at risk, but when coupled with alcohol, male-perpetrated partner battering is more likely to result. A practical implication is that interventions in domestic violence cases should recognize that the perpetrator's symptoms of PTSD and comorbid substance abuse might be appropriate targets for treatment.

Two final observations deserve mention. First, in the models depicted in Figures 6 and 10, the partner's (mother's) mental distress is strongly associated with the child's behavior problems. In fact, this is the sole path that links all of the other variables to the offspring's behavior. This finding points to the importance of the mother's well-being, or lack thereof, in accounting for the well-being, or lack, thereof, of her child, not only for battered women but for all women. Additionally, the perpetrator's relationship with his own mother (see Figures 7 and 10) emerges as having possible influence on two important variables in his family of procreation: a relatively weak relationship with perpetrator-to-partner violence and a somewhat stronger relationship with the perpetrator's perspective on his own marital/family functioning. Therefore, it appears that the mother plays a substantial role in safeguarding the mental health of her child in the midst of highly stressful life events and negative family experiences, and perhaps the effect carries forward into the next generation. This interpretation reinforces advocacy for shelters and other programs that provide supportive services to women and their children.

As with much of the research on stress and trauma, the cross-sectional design of the NVVRS and the retrospective self-report nature of its data necessarily mandate careful interpretation of our findings. The principal concern is ambiguity about the direction of relationships among variables, which may derive from a number of sources: poor recall, particularly for some experiences in an emotionally charged or highly stressful environment (for example, a war zone; Burke, Heuer, & Reisberg, 1992; Christianson, 1992); an associated tendency to reconstruct events and assign meaning based on one's current psychological state (Metts, Sprecher, & Cupach, 1991; Nisbett & Wilson, 1977); and possible recognition-seeking or need to present oneself in a socially desirable manner (King & King, 1991).

Furthermore, we duly recognize that the structural equation modeling approach does not confirm a model. As emphasized by Breckler (1990), among others, it simply asserts that there are no available data to disconfirm the model. In fact, a model that produces a specific value for a chi-square statistic could be only one model among many that would produce the same value using the same data. The best defense is for putative relationships in any model to be informed by theory and substantive issues, a strategy that guided decisions in the present study. For example, in the present project, we postulated a direction of association from partner's mental distress to child behavior problems. A model with associations pointing in the opposite direction may be equally viable. We selected the former direction because the emphasis of the project was on the intergenerational transmission of violence. Hence, the behavior of the child in the family of procreation would logically be the most distal factor. We also acknowledge that all factors potentially associated with outcomes were not incorporated into this project.

Very cautiously, we offer the notion that the generalizability of our findings may not be limited to war veterans and their families. We believe that the resulting paradigm could be applicable to families within economically depressed neighborhoods in our nation's larger cities, where, for example, men may be exposed to intensely stressful events in adolescence or young adulthood, which consequently has implications for ongoing community and domestic violence. Also, other occupational groups exposed to alternating periods of routine boredom and high stress, like law enforcement officers, may mirror this sample to some degree. Interestingly, these implications may be doubly meaningful, since a good portion of police, security, emergency, and other public safety occupational groups are themselves military veterans. Findings might very well inform targeted employee assistance programs. In any case, replication in other populations of important relationships uncovered here are called for.

We close with a recommendation for a strong alliance between the criminal justice community and the mental health services community. In particular, we urge a recognition of the importance of trauma exposure and subsequent PTSD symptomatology and alcohol abuse in accounting for the perpetration of violence against women. Clearly, the results suggest that current batterer treatment programs can be designed to address the findings of this study: namely, that PTSD and alcohol abuse account for a significant amount of the explained variance. In this regard, those expert in PTSD and comorbid substance abuse may be able to offer training and consultation services that are explicitly targeted at the recognition of classical signs and symptoms among perpetrators and appropriate avenues for effective intervention and treatment.

#### REFERENCES

Achenbach, T. M. (1978). The child behavior profile: I. Boys aged 6-11. Journal of Consulting and Clinical Psychology, 46, 478-488.

Achenbach, T. M. (1991). Manual for the Child Behavior Checklist/4-18 and 1991 profile. Burlington, VT: University of Vermont, Department of Psychiatry.

Aguilar, R. J., & Nightingale, N. N. (1994). The impact of specific battering experiences on the self-esteem of abused women. <u>Journal of Family Violence</u>, 9, 35-45.

American Psychiatric Association. (1994). <u>Diagnostic and statistical manual of mental disorders (4<sup>th</sup> ed.)</u>. Washington, DC: Author.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. <u>Psychological Bulletin</u>, 103, 411-423.

Astin, M. C., Ogland-Hand, S. M., Coleman, E. M., & Foy, D. W. (1995). Posttraumatic stress disorder and childhood abuse in battered women: Comparisons with maritally distressed women. <u>Journal of Consulting and Clinical Psychology</u>, 63, 308-312.

Bentler, P. M. (1989). <u>EQS structural equations program manual</u>. Los Angeles: BMDP Statistical Software.

Bentler, P. M. (1990). Comparative fit indexes in structural models. <u>Psychological</u> Bulletin, 107, 238-246.

Bentler, P. M. & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. <u>Psychological Bulletin</u>, 88, 588-606.

Bergman, B., & Brismar, B. (1991). A five-year follow-up study of 117 battered women. American Journal of Public Health, 81, 1486-1489.

Bollen, K. A. (1989a). A new incremental fit index for general structural equation models. <u>Sociological Methods and Research</u>, 17, 303-316.

Bollen, K. A. (1989b). Structural equations with latent variables. New York: Wiley.

Bollen, K. A., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. <u>Psychological Bulletin</u>, 110, 305-314.

Bollen, K. A., & Stine, R. A. (1993). Bootstrapping and goodness-of-fit measures in structural equation models. In K. A. Bollen and J. S. Long (Eds.), <u>Testing Structural equation models</u>. Newbury Park, CA: Sage.

Bozdogan, H. (1987). Model selection and Akaike's information criteria (AIC). Psychometrika, 52, 345-370.

Breckler, S. J. (1990). Applications of covariance structure modeling in psychology: Cause for concern? <u>Psychological Bulletin</u>, 107, 260-273.

Breslau, N., Davis, G.C., Andreski, P., & Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. <u>Archives of General Psychiatry</u>, 48, 216-222.

Browne, M. W., & Cudeck, R. (1989). Single sample cross-validation indices for covariance structures. <u>Multivariate Behavioral Research</u>, 24, 445-455.

Burke, A., Heuer, F., & Reisberg, D. (1992). Remembering emotional events. <u>Memory and Cognition</u>, 20, 277-290.

Campbell, A., Converse, P. E., & Rodgers, W. L. (1976) The quality of American life. Beverly Hills, CA: Sage.

Campbell, J. C. (1989). A test of two explanatory models of women's responses to battering. <u>Nursing Research</u>, 38, 18-24.

Cappell, C., & Heiner, R. B. (1990). The intergenerational transmission of family aggression. <u>Journal of Family Violence</u>, 5, 135-152.

Carlson, B. E. (1984). Children's observations of interparental violence. In A.R. Roberts (Ed.), <u>Battered women and their families</u>. (pp. 147-167), New York: Springer.

Carroll, E. M., Rueger, D. B., Foy, D. W., & Donahoe, C. P. (1985). Vietnam combat veterans with posttraumatic stress disorder: Analysis of marital and cohabitating adjustment. <u>Journal of Abnormal Psychology</u>, 94, 329-337.

Chou, C. P., Bentler, P. M., & Satorra, A. (1991). Scaled test statistics and robust standard errors for non-normal data in covariance structure analysis: A Monte Carlo study. British Journal of Mathematical and Statistical Psychology, 44, 347-357.

Cliff, N. (1983). Some cautions concerning the application of causal modeling methods. Multivariate Behavioral Research, 18, 115-126.

Cohen, P., Cohen, J., Teresi, J., Marchi, M. L., & Velez, C. N. (1990). Problems in the measurement of latent variables in structural equations causal models. <u>Applied Psychological Measurement</u>, 14, 183-196.

Cook, T. D., & Campbell, D. T. (1979). <u>Quasi-experimentation: Design and analysis issues for field settings</u>. Chicago: Rand McNally.

Cottler, L. B., Compton, W. M., Mager, D., Spitznagel, E. L., & Janca, A. (1992). Posttraumatic stress disorder among substance users from the general population. <u>American Journal of Psychiatry</u>, 149, 664-670.

Cowan, P. A., Cohn, D. A., Cowan, C. P., & Pearson, J. L. (1996). Parents' attachment histories and children's externalizing and internalizing behaviors: Exploring family systems models of linkage. <u>Journal of Consulting and Clinical Psychology</u>, 64, 53-63.

Christianson, S. A. (1992). Emotional stress and eyewitness memory: A critical review. Psychological Bulletin, 112, 284-309.

Cudeck, R. (1989). Analysis of correlation matrices using covariance structure models. Psychological Bulletin, 105, 317-327.

Cudeck, R., & Brown, M. W. (1983). Cross-validation of covariance structures. Multivariate Behavioral Research, 18, 115-126.

Dembo, R., Williams, L., Wothke, W., Schmeidler, J., & Brown, C. H. (1992). The role of family factors, physical abuse, and sexual victimization experiences in high-risk youths' alcohol and other drug use and delinquency: A longitudinal model. <u>Violence and Victims</u>, 7, 245-266.

Dohrenwend, B. P. (1982). <u>Psychiatric Epidemiology Research Interview (PERI)</u>. New York: Columbia University, Social Psychiatry, Research Unit.

Dutton, D. G. (1995). Intimate abusiveness. <u>Clinical Psychology: Science and Practice</u>, <u>2</u>, 207-224.

Dutton, D. G., & Hart, S. D. (1992). Risk markers for family violence in a federally incarcerated population. <u>International Journal of Law and Psychiatry</u>, 15, 101-112.

Edelbrock, C., & Costello, A. J. (1988). Convergence between statistically derived behavior problem syndromes and child psychiatric diagnoses. <u>Journal of Abnormal Child Psychology</u>, 16, 219-231.

Emery, R. E. (1982). Interparental conflict and the children of discord and divorce. Psychological Bulletin, 92, 310-330.

Feunekes, G.I.J., van't Veer, P., van Staveren, W.A., & Kok, F.J. (1999). Alcohol intake assessment: The sober facts. <u>American Journal of Epidemiology</u>, 150, 105-112.

Finkelhor, D., & Dziuba-Leatherman, J. (1994). Victimization of children. <u>American</u> Psychologist, 49, 173-183.

Garmezy, N. (1974). Children at risk: The search for the antecedents of schizophrenia: II. Ongoing research programs, issues, and intervention. Schizophrenia Bulletin, 9, 55-125.

Gimbel, C., & Booth, A. (1994). Why does military combat experience adversely affect marital relations? <u>Journal of Marriage and the Family</u>, 56, 691-703.

Goodman, L. A., Koss, M. P., Fitzgerald, L. F., Russo, N. F., & Keita, G. P. (1993). Male violence against women: Current research and future directions. <u>American Psychologist</u>, 48, 1054-1058.

Gottman, J. M., Jacobson, N. S., Rushe, R. H., Shortt, J. W., Babcock, J., LaTaillade, J. J., & Waltz, J. (1995). The relationship between heart rate reactivity, emotionally aggressive behavior, and general violence in batterers. <u>Journal of Family Psychology</u>, 9, 227-248.

Graham, J. W., Hofer, S. M., Donaldson, S. I., MacKinnon, D. P., & J. L. Schafer (1997). Analysis with missing data in prevention research. In K. J. Bryant, M. Windle, & S. G. West (Eds.), The science of prevention: Methodological advances from alcohol and substance abuse research, pp. 325-366. Washington, DC: American Psychological Association.

Haley, S. (1984). The Vietnam veteran and his preschool child: Child rearing as a delayed stress in combat veterans. <u>Journal of Contemporary Psychotherapy</u>, 14, 114-121.

Holtzworth-Monroe, A., Smutzler, N., & Sandin, B. (in press). A brief review of the research on husband violence. Part II: The psychological effects of husband violence on battered women and their children. Aggression and Violent Behavior.

Hotaling, G. T., & Sugarman, D. B. (1986). An analysis of risk markers in husband to wife violence: The current state of knowledge. Violence and Victims, 1, 101-124.

Houskamp, B. M., & Foy, D. W. (1991). The assessment of posttraumatic stress disorder in battered women. <u>Journal of Interpersonal Violence</u>, 6, 367-375.

Hoyle, R. H. (1994). Introduction to the special section: Structural equation modeling in clinical research. <u>Journal of Consulting and Clinical Psychology</u>, 62, 427-428.

Hu, L., Bentler, P. M., & Kano, Y. (1992). Can test statistics in covariance structure analysis be trusted? Psychological Bulletin, 112, 351-362.

Hyer, L., Boudewyns, P. A., & Woods, M. G. (1991). A short form of the Mississippi Scale for Combat-Related PTSD, <u>Journal of Clinical Psychology</u>, 47, 510-518.

James, L. R., Mulaik, S. A., & Brett, J. M. (1982). Causal analysis: Assumptions, models, and data. Beverly Hills: Sage.

Jordan, K. B., Marmar, C. R., Fairbank, J. A., Schlenger, W. E., Kulka, R. A., Hough, R. L., & Weiss, D. S. (1992). Problems in families of male Vietnam veterans with posttraumatic stress disorder. Journal of Consulting and Clinical Psychology, 60, 916-926.

Joreskog, K. G., & Sorbom, D. (1993a). <u>LISREL 8 User's Reference Guide</u>. Chicago: Scientific Software.

Joreskog, K. G., & Sorbom, D. (1993b). <u>PRELIS 2 User's Reference Guide</u>. Chicago: Scientific Software.

Jouriles, E. N., Murphy, C. M., & O'Leary, K. D. (1989). Interspousal aggression, marital discord, and child problems. <u>Journal of Consulting and Clinical Psychology</u>, 57, 453-455.

Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. <u>Psychological Bulletin</u>, 118, 3-34.

- Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents? <u>American Journal of Orthopsychiatry</u>, 57, 186-192.
- Keane, T. M., Caddell, J. M., & Taylor, K. L. (1988). Mississippi Scale for Combat-Related Posttraumatic Stress Disorder: Three studies in reliability and validity. <u>Journal of Consulting and Clinical Psychology</u>, 56, 85-90.
- Keane, T. M., Gerardi, R. J., Lyons, J. A., & Wolfe, J. (1988). The interrelationship of substance abuse and posttraumatic stress disorder: Epidemiological and clinical considerations. In M. Galanter (Ed.) Recent developments in alcoholism (pp. 27-48). New York: Plenum Press.
- Keane, T.M., & Wolfe, J. (1990). Comorbidity in post-traumatic stress disorder: An analysis of community and clinical studies. <u>Journal of Applied Social Psychology</u>, 20, 1776-1788.
  - Kenny, D. A. (1979). Correlation and causality. New York: Wiley.
- Kenny, D. A., & Judd, C. M. (1984). Estimating the nonlinear and interactive effects of latent variables. Psychological Bulletin, 96, 201-210.
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the National Comorbidity Survey. <u>Archives of General Psychiatry</u>, 52, 1048-1060.
- Kilpatrick, D. G., Resnick, H. S., Saunders, B. E., & Best, C. L. (1994). Victimization, posttraumatic stress disorder, and substance use/abuse among women. Paper presented at Drug Addiction Research and Health of Women Conference, National Institute of Drug Abuse, Washington, DC.
- Kilpatrick, D. G., Resnick, H. S., Saunders, B. E., & Best, C. L. (1998). Rape, other violence against women, and posttraumatic stress disorder. In B. P. Dohrenwend (Ed.), Adversity, stress, and psychopathology (pp. 161-176). New York: Oxford.
- Kilpatrick, D. G., Saunders, B. E., Veronen, L. J., Best, C. L., & Von, J. M. (1987). Criminal victimization: Lifetime prevalence reporting to police, and psychological impact. Crime and Delinquency, 33, 479-489.
- King, D. W., & King, L. A. (1991). Validity issues in research on Vietnam veteran adjustment. <u>Psychological Bulletin</u>, 109, 107-124.
- King, D. W., King, L. A., Fairbank, J. A., Schlenger, W. E., & Surface, C. R. (1993). Enhancing the precision of the Mississippi Scale for Combat-Related Posttraumatic Stress Disorder: An application of item response theory. <u>Psychological Assessment</u>, 4, 457-471.
- King, D. W., King, L. A., Foy, D. W., & Gudanowski, D. M. (1996). Prewar factors in combat-related posttraumatic stress disorder: Structural equation modeling with a national sample of female and male Vietnam veterans. <u>Journal of Consulting and Clinical Psychology</u>, 64, 520-531.
- King, D. W., King, L. A., Foy, D. W., Keane, T. M., & Fairbank, J. A. (1999). Posttraumatic stress disorder in a national sample of female and male Vietnam veterans: Risk factors, war-zone stressors, and resilience/recovery variables. <u>Journal of Abnormal Psychology</u>, 108, 164-170.
- King, D. W., King, L. A., Gudanowski, D. M., & Vreven, D. L. (1995). Alternative representations of war zone stressors: Relationships to posttraumatic stress disorder in male and female Vietnam veterans. <u>Journal of Abnormal Psychology</u>, 104, 184-196.
- King, L. A., & King, D. W. (1994). Latent structure of the Mississippi Scale for Combat-Related Post-Traumatic Stress Disorder: Exploratory and higher order confirmatory factor analyses. <u>Assessment</u>, 1, 275-291.

Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, K. B., Marmar, C. R., & Weiss, D. S. (1990a). <u>The National Vietnam Veterans Readjustment Study: Tables of findings and technical appendices</u>. New York: Brunner/Mazel.

Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, K. B., Marmar, C. R., & Weiss, D. S. (1990b). <u>Trauma and the Vietnam War generation: Report of findings from the National Vietnam Veterans Readjustment Study</u>. New York: Brunner/Mazel.

Laufer, R. S., & Gallops, M. S. (1985). Life-course effects of Vietnam combat and abusive violence: Marital patterns. <u>Journal of Marriage and the Family</u>, 839-853.

Leonard, K. E., & Blane, H. T. (1992). Alcohol and marital aggression in a national sample of young men. <u>Journal of Interpersonal Violence</u>, 7, 19-30.

Loeber, R., & Dishion, T. (1983). Early predictors of male delinquency: A review. Psychological Bulletin, 94, 68-99.

Loehlin, J. C. (1992). <u>Latent variable models: An introduction to factor, path, and structural analysis</u> (2<sup>nd</sup> ed.). New Jersey: Lawrence Erlbaum.

Lyons-Ruth, K. (1996). Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. <u>Journal of Consulting and Clinical Psychology</u>, 64, 64-73.

Margolin, G., & Burman, B. (1993). Wife abuse versus marital violence: Different terminologies, explanations, and solutions. Special Issue: Marital conflict. Clinical Psychology Review, 13, 59-73.

Marsh, H. W., & Bailey, M. (1991). Confirmatory factor analyses of multitrait-multimethod data: A comparison of alternative models. <u>Applied Psychological Measurement</u>, 15, 47-70.

McArdle, J. J., & Cattell, R. B. (1994). Structural equation models of factorial invariance in parallel proportional profiles and oblique confactor problems. <u>Multivariate Behavioral</u> Research, 29, 63-113.

McCloskey, L. A., Figueredo, A. J., & Koss, M. P. (1995). The effects of systemic family violence on children's mental health. <u>Child Development</u>, 66, 1239-1261.

McFall, M. E., Smith, D. E., Mackay, P. W., & Tarver, D. J. (1990). Reliability and validity of Mississippi Scale for Combat-Related Posttraumatic Stress Disorder. <u>Psychological Assessment</u>, 2, 114-121.

McFall, M. E., Smith, D. E., Roszell, D. K., Tarver, D. J., & Malas, K. L. (1990). Convergent validity of measures of PTSD in Vietnam combat veterans. <u>American Journal of Psychiatry</u>, 147, 645-648.

Metts, S., Sprecher, S., & Cupach, W. R. (1991). Retrospective self reports. In B. M. Montgomery & S. Duck (Eds.), <u>Studying interpersonal interaction</u>. Guilford communication series. New York: Guilford Press.

Murdoch, D., Pihl, R. O., & Ross, D. (1991). Alcohol and crimes of violence: Present issues. The International Journal of the Addictions, 29, 1065-1081.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. Psychological Review, 84, 231-259.

Nunnally, J. (1978). Psychometric Theory. New York: McGraw-Hill.

O'Leary, K. D., & Smith, D. A. (1991). Marital interactions. <u>Annual Review of</u> Psychology, 42, 191-212.

Olson, D. H., Bell, R., & Portner, J. (1978). <u>Family Adaptability and Cohesion</u>
<u>Evaluation Scales</u>. Unpublished manuscript, University of Minnesota, Family Social Science Department, Minneapolis.

Olson, D. H., McCubbin, H. L., Barnes, H. L., Larsen, A. S., Muxen, M. J., & Wilson, M. A. (1983). Families: What makes them work. Newbury Park, CA: Sage.

Osofsky, J. D. (1995). The effects of exposure to violence on young children. <u>American</u> Psychologist, 50, 782-789.

Pavalko, E. K., & Elder, G. H. (1990). World War Two and divorce: A life-course perspective. American Journal of Sociology, 95, 1213-1234.

Perilla, J. L., Bakeman, R., & Norris, F. H. (1994). Culture and domestic violence: The ecology of abused Latinas. <u>Violence and Victims</u>, 9, 325-339.

Pokorney, A. D., Miller, B. A., & Kaplan, H. (1972). The brief MAST: A shortened version of the Michigan Alcoholism Screening Test. <u>American Journal of Psychiatry</u>, 129, 342-345.

Raykov, T., & Widaman, K. F. (1995). Issues in applied structural equation modeling research. Structural Equation Modeling: A Multidisciplinary Journal, 2, 289-318.

Roberts, W. R., Penk, W. E., Gearing, M. L., Robinowitz, R., Dolan, M. P., & Patterson, E. T. (1982). Interpersonal problems of Vietnam combat veterans with symptoms of posttraumatic stress disorder. <u>Journal of Abnormal Psychology</u>, 91, 444-450.

Robins, L. N., Helzer, J. E., Croughan, J. L., & Ratcliff, K. S. (1981). National Institute of Mental Health Diagnostic Interview Schedule: Its history, characteristics, and validity. <u>Archives of General Psychiatry</u>, 38, 381-389.

Rosenbaum, A., & O'Leary, K. D. (1981). Marital violence: Characteristics of abusive couples. <u>Journal of Consulting and Clinical Psychology</u>, 49, 63-71.

Rosenheck, R., & Nathan, P. (1985). Secondary traumatization in children of Vietnam veterans. <u>Hospital and Community Psychiatry</u>, 36, 538-539.

Rosenheck, R., & Thomson, J. (1986). "Detoxification" of Vietnam war trauma: A combined family-individual approach. Family Process, 25, 559-569.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. In M.W. Kent and J.E. Rolf (eds.), <u>Primary Prevention of Psychopathology</u>, Vol. 3: <u>Social Competence in Children</u> (pp. 49-74). University Press of New England.

Serdula, M. K., Mokdad, A. H., Byers, T., & Siegel, P. Z. (1999). Assessing alcohol consumption: Beverage-specific versus grouped-beverage questions. <u>Journal of Studies on</u> Alcohol, 6, 99-102.

Solomon, Z., Mikulincer, M., Freid, B., & Wosner, Y. (1987). Family characteristics and posttraumatic stress disorder: A follow-up of Israeli combat stress reaction casualties. <u>Family Process</u>, 26, 383-394.

Solomon, Z., Waysman, M., Avitzur, E., & Enoch, D. (1991). Psychiatric symptomatology among wives of soldiers following combat stress reaction: The role of the social network and marital relations. <u>Anxiety Research</u>, 4, 213-223.

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage and the Family, 38, 15-28.

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. <u>Multivariate Behavioral Research</u>, 25, 173-180.

Stewart, S.H. (1996). Alcohol abuse in individuals exposed to trauma: A critical review. Psychological Bulletin, 120, 83-112.

Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflicts Tactics (CT) Scales. <u>Journal of Marriage and the Family</u>, 41, 75-88.

Straus, M. A. (1992). The conflict tactics scales and its critics: An evaluation and new data on validity and reliability. In M. A. Strauss and R. J. Gelles (eds.) Physical Violence in American Families: Risk Factors and Adaptations to violence in 8,145 Families. (pp. 49-73) New Brunswick: Transaction.

Straus, M. A. (1992). Ordinary violence, child abuse, and wife beating: What do they have in common. In M.A. Straus and R.J. Gelles (Eds.) <u>Physical violence in American families</u> (pp. 403-424). New Brunswick: Transaction.

Straus, M. A., & Gelles, R. J. (1992). How violent are American families? Estimates from the National Family Violence Resurvey and other studies. In M.A. Straus and R.J. Gelles (Eds.) Physical violence in American families (pp. 95-112). New Brunswick: Transaction.

U.S. Advisory Board on Child Abuse and Neglect. (1993). The continuing child protection emergency: A challenge to the nation. Washington, DC: U.S. Government Printing Office.

Van Ijzendoorn, M. H. (1992). Intergenerational transmission of parenting: A review of studies in nonclinical populations. Developmental Review, 12, 76-99.

Verhulst, F. C., Koot, H. M., & Van der Ende, J. (1994). Differential predictive value of parents' and teachers' reports of children's problem behaviors: A longitudinal study. <u>Journal of Abnormal Child Psychology</u>, 22, 531-546.

Veroff, J., Douvan, E., & Kulka, R. A. (1991). The inner American: A self portrait from 1957 to 1976. New York: Basic Books.

Waysman, M., Mikulincer, M., Solomon, Z., & Weisenberg, M. (1993). Secondary traumatization among wives of posttraumatic combat veterans: A family typology. <u>Journal of Family Psychology</u>, 7, 104-118.

Widom, C. S. (1989). Does violence beget violence? A critical examination of the literature. <u>Psychological Bulletin</u>, 106, 3-28.

Wolfe, D. A., Jaffe, P., Wilson, S. K., & Zak, L. (1985). Children of battered women: The relation of child behavior to family violence and maternal stress. <u>Journal of Consulting and Clinical Psychology</u>, 53, 657-665.

Zeanah, C. H., & Zeanah, P. D. (1989). Intergenerational transmission of maltreatment: Insights from attachment theory and research. <u>Psychiatry</u>, 52, 177-196.

# Appendix A: Descriptive Statistics and Frequencies for Variables in the Study

	VARIABLE	ACRONYM	NO. ITEMS	ALPHA	
		abuse2	1	NA	
		famall	9	NA	
Perpetrator's Family of Origin Characteristics & Experiences	Family Dysfunction	parhit	1	NA	
		pretraum	5	NA	
	Del disselling in Federal	relpfalr	6 `	.89	
	Relationship with Father	relpfa2r	(2 parcels)	.09	
	Dalai askin sish Maskan	relpmolr	6	.89	
	Relationship with Mother	relpmo2r	(2 parcels)	.09	
		probbh1b		:	
Perpetrator's Childhood Antisocial Behavior		probbh2b		· -	
	Childhood Antisocial Behavior	probbh3b	17 (5 parcels)	.69	
		probbh4b	(*		
		probbh5b			
Perpetrator's Exposure to War	Combat Exposure	combat2	36	.95	
		threatla			
Zone Stressors	Perceived Threat	threat2a	9 (3 parcels)	.82	
		threat3a	( <b>P</b> )		
	Alcohol Abuse	vet_ab	10	.69	
	Alcohol Dependence	vet_dep	13	.81	
	Drinking Frequency	ethfre2	3	NA	
Perpetrator's	Drinking Quantity	ethamt8	3	NA	
Current Mental Distress	PTSD Hyperarousal	msalc2	8	.81	
	PTSD Reexperiencing	msrsa2	11	.89	
	PTSD Self-Persecution	mssp2	5	.58	
	PTSD Withdrawal/Numbing	mswn2	11	.87	
Partner's Mental Distress	Partner's Demoralization	demr_par	27	.94	
	Partner's General Well-Being	pgw	2	.66	
20 -10 -11 400	Partner's Social Isolation	partsi	4	.48	

Perpetrator-to-	Physical Violence	viotot8	8	.90
Partner Violence	Psychological Abuse	psy_ab	6	.84
	Child Behavior Problems (Externalizing)	extraw	33	.89
	Child Behavior Problems (Internalizing)	intraw	31	.87
Marital/Family	Partner's Family Adaptability	pfadj	11	.83
Marital/Family Functioning	Partner's Family Cohesion	pfcoh	13	.89
	Perpetrator's Family Adaptability	vfadj	11	.78
	Perpetrator's Family Cohesion	vfcoh	13	.86
	Partner's Marital Adjustment	vmadj	15	.94
	Perpetrator's Marital Adjustment	paradj	15	.92
Marital/Family Functioning (CHILD SAMPLE)	Partner's Family Adaptability (child sample)	pfadj_c	14	.82
	Partner's Family Cohesion (child sample)	pfcoh_c	16	.89
	Perpetrator's Family Adaptability (child sample)	vfadj_c	14	.79
	Perpetrator's Family Cohesion (child sample)	vfcoh_c	16	.88

### CHILD ABUSE (abuse2\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ABUSE2	371	49	2.81	-1.43E-03	.9701
Valid N (listwise)	371				

### **Frequencies**

#### **Statistics**

ABUSE2

N · Valid	371
Missing	5

#### **ABUSE2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	49	292	77.7	78.7	78.7
	.48	2	.5	.5	79.2
	1.06	9	2.4	2.4	81.7
	1.25	1	.3	.3	81.9
	1.45	7	1.9	1.9	83.8
	1.64	5	1.3	1.3	85.2
ļ	1.65	2	.5	.5	85.7
	1.84	23	6.1	6.2	91.9
	2.04	2	.5	.5	92.5
	2.23	23	6.1	6.2	98.7
	2.42	4	1.1	1.1	99.7
	2.81	1	.3	.3	100.0
	Total	371	98.7	100.0	
Missing	System	5	1.3		·
Total		376	100.0		·

### FAMILY TURMOIL (famall\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
FAMALL	373	1.00	2.78	1.1781	.2688
Valid N (listwise)	373				

### Frequencies

#### **Statistics**

**FAMALL** 

N	Valid	373
	Missing	3.

#### **FAMALL**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	208	55.3	55.8	55.8
'	1.11	22	5.9	5.9	61.7
	1.13	1 1	.3	.3	61.9
	1.22	12	3.2	3.2	65.1
	1.22	36	9.6	9.7	74.8
	1.25	2	.5	.5	75.3
	1.33	16	4.3	4.3	79.6
	1.38	1	.3	.3	79.9
	1.44	12	3.2	3.2	83.1
	<b>*</b> 1.44	20	5.3	5.4	88.5
	1.50	1	.3	.3	88.7
	1.56	1	.3	.3	89.0
	1.56	8	2.1	2.1	91.2
	1.57	1	.3	.3	91.4
	1.63	1	.3	.3	91.7
	1.67	13	3.5	3.5	95.2
,	1.75	1	.3	.3	95.4
	1.78	2	.5	.5	96.0
	1.78	4	1.1	1.1	97.1
	1.89	1	.3	.3	97.3
	1.89	3	.8	.8	98.1
	2.00	4	1.1	1.1	. 99.2
	2.11	1	.3	.3	99.5
	2.56	1	.3	.3	99.7
	2.78	1	.3	.3	100.0
	Total	373	99.2	100.0	
Missing	System	3	.8		
Total		376	100.0		<u> </u>

### PRESENCE OF INTERPARENTAL VIOLENCE (parhit\_v)

### **Descriptives**

### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PARHIT	376	1	2	1.23	.42
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

#### **PARHIT**

N · Valid	376
Missing	0

#### **PARHIT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	291	77.4	77.4	77.4
	2	85	22.6	22.6	100.0
	Total	376	100.0	100.0	

### PRIOR TRAUMA HISTORY (pretraum\_v)

### Descriptives

### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PRETRAUM	376	0	5	.38	.77
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

#### **PRETRAUM**

N	Valid	376
	Missing	0

#### **PRETRAUM**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	285	75.8	75.8	75.8
	1	50	13.3	13.3	89.1
	2	33	8.8	8.8	97.9
	3	6	1.6	1.6	99.5
	4	1	.3	.3	99.7
	5	1	.3	.3	100.0
	Total	376	100.0	100.0	

### RELATIONSHIP WITH FATHER (relpfa1r, 2r\_v)

### Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RELPFA1R	344	-1.44	1.90	1.548E-15	.8461
RELPFA2R	344	-1.20	1.88	3.206E-04	.8927
Valid N (listwise)	344				

### **Frequencies**

#### **Statistics**

		RELPFA1R	RELPFA2R
N	Valid	344	344
	Missing	32	32

### Frequency Table

#### RELPFA1R

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.44	17			4.9
valid			4.5	4.9	
)	-1.29	2	.5	.6	5.5
1	-1.17	8	2.1	2.3	7.8
1	-1.16	3	.8	.9	8.7
	-1.15	2	.5	.6	9.3
	-1.03	1	.3	.3	9.6
	-1.01	9	2.4	2.6	12.2
	90	4	1.1	1.2	13.4
	89	8	2.1	2.3	15.7
	88	2	.5	.6	16.3
	88	4	1.1	. 1.2	17.4
	87	7	1.9	2.0	19.5
	76	2	.5	.6	20.1
ŀ	75	9	2.4	2.6	22.7
	73	1	3	.3	23.0
	64	3	.8	.9	23.8
	62	4	1.1	1.2	25.0
	62	2	.5	.6	25.6
	61	3	.8	.9	26.5
	60	10	2.7	2.9	29.4
,	60	3	.8	.9	30.2
j	59	1	.3	.3	30.5
	59	1	.3	.3	30.8
	58	1	.3	.3	31.1
	48	7	1.9	2.0	33.1
	47	3	.8	.9	34.0
	44	1	.3	.3	34.3
	36	2	.5	.6	34.9

**RELPFA1R** 

		_		Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid34	4	1.1	1.2	36.0
34	9	2.4	2.6	38.7
33	4	1.1	1.2	39.8
32	7	1.9	2.0	41.9
32	2	.5	.6	42.4
31	1	.3	.3	42.7
31	2	.5	.6	43.3
30	1	.3	.3	43.6
21	1	.3	.3	43.9
20	6	1.6	1.7	45.6
- 19	1	.3	.3	45.9
19	2	.5	.6	46.5
18	1	.3	.3	46.8
08	4	1.1	1.2	48.0
07 ',	5	1.3	1.5	. 49.4
06	1	.3	.3	49.7
06	8	2.1	2.3	52.0
05	2	.5	.6	52.6
04	3	.8	.9	53.5
04	1	.3	.3	53.8
03	3	.8	.9	54.7
.07	. 2	.5	.6	55.2
.08	1	.3	.3	55.5
.09	4	1.1	1.2	56.7
.09	1	.3	.3	57.0
.03	1	.3	.3	57.3
.20	1	.3	.3	57.6
.20	2	.5	.6	58.1
.21	8	2.1	2.3	60.5
.22	2	.5	.6	61.0
.22	6	1.6	1.7	62.8
.23	12	3.2	3.5	66.3
· ·	ł	l .		66.6
.25	1	.3	.3	66.9
.25	1	.3	.3	
.34	1	.3	.3	67.2 67.4
.35	1	.3	.3	
.35	4	1.1	1.2	68.6
.37	1	.3	.3	68.9
.38	2	.5	.6	69.5
.39	1	.3	.3	69.8
.49	7	1.9	2.0	71.8
.50	7	1.9	2.0	73.8
.51	6	1.6	1.7	75.6
.52	2	.5	.6	76.2
.63	1	.3	.3	76.5
.63	1	.3	.3	76.7
.64	1	.3	.3	77.0
.66	1	.3	.3	77.3
.75	1	.3	.3	77.6
.76	6	1.6	1.7	79.4
.77	1	.3_	.3	79.7

#### **RELPFA1R**

r					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	.77	3	.8	.9	80.5
1	.77	1	.3	.3	80.8
	.78	9	2.4	2.6	83.4
	.79	1	.3	.3	83.7
	.80	1	.3	.3	84.0
}	.92	4	1.1	1.2	85.2
	.93	1	.3	.3	85.5
	1.04	2	.5	.6	86.0
	1.07	6	1.6	1.7	87.8
ł	1.08	1	.3	.3	88.1
	1.19	1	.3	.3	.88.4
	1.21	1	.3	.3	88.7
	1.32	,1	.3	.3	89.0
,	1.33	4	1.1	1.2	90.1
	1.34	1	.3	.3	90.4
	1.35	7	1.9	2.0	92.4
	1.36	5	1.3	1.5	93.9
	1.37	1	.3	.3	94.2
	1.47	1	.3	.3	94.5
	1.48	1	.3	.3	94.8
	1.49	1	.3	.3	95.1
** <b>*</b> **	1.61	3	.8	.9	95.9
	1.64	2	.5	.6	96.5
	1.76	5	1.3	1.5	98.0
,	1.90	7	1.9	2.0	100.0
1	Total	344	91.5	100.0	
Missing	System	32	8.5		
Total		376	100.0		

### RELPFA2R

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.20	40	10.6	11.6	11.6
	96	23	6.1	6.7	18.3
	96	9	2.4	2.6	20.9
	93	3	.8	.9	21.8
	71	9	2.4	2.6	24.4
	71	10	2.7	2.9	27.3
	68	16	4.3	4.7	32.0
	68	3	.8	.9	32.8
	46	3	.8	.9	33.7
	46	2	.5	.6	34.3
	- 43	9	2.4	2.6	36.9
	43	20	5.3	5.8	42.7
	41	1	.3	.3	43.0
	38	1	.3	.3	43.3
	22	3	.8	.9	44.2
	22	2	.5	.6	44.8
	19	3	.8	.9	45.6
	19	19	5.1	5.5	51.2

·		Descent	Valid Percent	Cumulative Percent
10	Frequency	Percent	1.2	52.3
Valid19	4	1.1	.3	52.6
19	1	.3		53.2
16	2	.5	.6	53.5
10	1	.3	.3	
.03	1	.3	.3	53.8
.03	1	.3	.3	54.1
.06	2	.5	.6	54.7
.06	6	1.6	1.7	56.4
.06	2	.5	.6	57.0
.09	1	.3	.3	57.3
.09	8	2.1	2.3	59.6
.09	1	.3	.3	59.9
.09	1	.3	.3	60.2
.28	1	.3	.3	60.5
.29	. 1	.3	.3	. 60.8
.31	1	.3	.3	61.0
.31	8	2.1	2.3	63.4
.31	3	.8	.9	64.2
.34	3	.8	.9	65.1
.34	9	2.4	2.6	67.7
.36	1	.3	.3	68.0
.53	1	.3	.3	68.3
.55	2	.5	.6	68.9
.56	5	1.3	1.5	70.3
.58	1	.3	.3	70.6
.58	14	3.7	4.1	74.7
.58	1	.3	.3	75.0
.61	1	.3	.3	75.3
.61	2	.5	.6	75.9
	2	.5	.6	76.5
.61	1	1	•	76.7
.64	. 1	.3	.3	77.6
.77	3	.8	.9	1
.80	2	.5	.6	78.2
.83	2	.5	.6	78.8
.83	6	1.6	1.7	80.5
.83	1	.3	.3	80.8
.86	5	1.3	1.5	82.3
.86	1	.3	.3	82.6
.86	1	.3	.3	82.8
1.05	1	.3	.3	83.1
1.08	4	1.1	1.2	84.3
1.08	2	.5	6	84.9
1.11	3	.8	.9	85.8
1.11	9	2.4	2.6	88.4
1.11	1	.3	.3	88.7
1.33	3	.8	.9	89.5
1.35	9	2.4	2.6	92.2
1.35	2	.5	.6	92.7
1.38	1	.3	.3	93.0
1.60	6	1.6	1.7	94.8
1.63	1	.3	.3	95.1

### **RELPFA2R**

			Frequency	Percent	Valid Percent	Cumulative Percent
	Valid	1.88	17	4.5	4.9	100.0
		Total	344	91.5	100.0	
1	Missing	System	32	8.5		
ı	Total		376	100.0		

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
RELPMO1R	369	-1.11	2.77	-1.67E-15	.8369
RELPMO2R	367	78	3.14	-1.30E-03	.8961
Valid N (listwise)	367				

### **Frequencies**

#### **Statistics**

<u> </u>		RELPMO1R	RELPMO2R
N	Valid	369	367
	Missing	7	9

### **Frequency Table**

#### **RELPMO1R**

					Cumulative
l		Frequency	Percent	Valid Percent	Percent
Valid	-1.11	43	11.4	11.7	11.7
	94	2	.5	.5	12.2
	82	35	9.3	9.5	21.7
'	77	3	.8	.8	22.5
	77	1	.3	.3	22.8
	65	8	2.1	2.2	24.9
	52	20	5.3	5.4	30.4
	48	9	2.4	2.4	32.8
	47	5	1.3	1.4	34.1
	43	2	.5	.5	34.7
	35	8	2.1	2.2	36.9
	31	14	3.7	3.8	40.7
1	26	1	.3	.3	40.9
1	23	7	1.9	1.9	42.8
	19	10	2.7	2.7	45.5
1	18	8	2.1	2.2	47.7
1	14	8	2.1	2.2	49.9
1	13	1	.3	.3	50.1
1	10	1	.3	.3	50.4
1	06	4	1.1	. 1.1	51.5
ł	02	16	4.3	4.3	55.8
1	.03	1	.3	.3	56.1
Į	.06	3	.8	.8	56.9
1	.10	6	1.6	1.6	58.5
	.11	5	1.3	1.4	59.9
	.15	3	.8	.8	60.7
	.15	25	6.6	6.8	67.5
J	.16	2	.5	.5	68.0
	.19	1	.3	.3	68.3

### RELPMO1R

	_		V-U-I Damant	Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid .20	3	.8	.8	69.1
.21	1	.3	.3	69.4
.27	4	1.1	1.1	70.5
.32	4	1.1	1.1	71.5
.33	4	1.1	1.1	72.6
.40	3	.8	.8	73.4
.44	1	.3	.3	73.7
.45	12	3.2	3.3	77.0
.45	1	.3	.3	77.2
.49	1	.3	.3	77.5
.49	8	2.1	2.2	79.7
.50	4	1.1	1.1	80.8
.50	1	.3	.3	81.0
.54	1	.3	.3	81.3
.57	. 1	.3	3	81.6
.61	2	.5	.5	82.1
.62	2	.5	.5	82.7
.66	1	.3	.3	82.9
.74	1	.3	.3	83.2
.78	6	1.6	1.6	84.8
.79	4	1.1	1.1	85.9
.79	1	.3	.3	86.2
.83	3	.8	.8	87.0
.84	2	.5	.5	87.5
.88	1	.3	.3	87.8
.95	2	.5	.5	88.3
1.07	2	.5	.5	88.9
1.08	4	1.1	1.1	90.0
1.12	2	.5	.5	90.5
1.12	4	1.1	1.1	91.6
1.13	1	.3	.3	91.9
1.25	l 1	.3	.3	92.1
1.34	l 1	.3	.3	92.4
1.39	1	.3	.3	92.7
1.42	1	.3	.3	93.0
1.46	2	.5	.5	93.5
1.47	1	.3	.3	93.8
1.63	2	.5	.5	94.3
1.76	2	.5	.5	94.9
1.80	2	.5	.5	95.4
1.80	2	.5	.5	95.9
1.81	1	.3	.3	96.2
1.97	1	.3	.3	96.5
2.09	3	.8	.8	97.3
2.15	3	.8 8.	.8	98.1
2.26	1	.3	.3	98.4
2.44	1	.3	.3	98.6
2.60	1	.3	.3	98.9
2.77	4	1.1	1.1	100.0

### **RELPMO1R**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Total	369	98.1	100.0	
Missing	System	7	1.9		*
Total		376	100.0		

#### **RELPMO2R**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	78	114	30.3	31.1	31.1
Valid	48	52	13.8	14.2	45.2
•	44 44	7	1.9	1.9	47.1
	<del>44</del> 43	14	3.7	3.8	51.0
	43 19	6	1.6	1.6	52.6
	1 <del>9</del> 14	16	4.3	4.4	56.9
	1 <del>4</del> 14	15	4.0	4.1	61.0
	1 <del>4</del> 09	15	.3	3	61.3
	0 <del>9</del> .11	1	.3	.3	61.6
	.16		1.1	1.1	62.7
	.16	5	1.3	1.1	64.0
	.16	3	.8	.8	64.9
	.20 .20	33	8.8	9.0	73.8
	.20 .25			.5	74.4
		2	.5 .3	.3	74.7
	.45	1	I .		75.7
	.45	4	1.1	1.1	76.0
	.50	1	.3	.3	79.6
	.50	13	3.5	3.5	80.7
	.54	4	1.1	1.1	80.7
	.55	1	.3	.3	
	.75	1	.3	.3	81.2
	.75	.1	.3	.3	81.5
	.79	1	.3	.3	81.7
	.79	3	.8	.8	82.6
	.84	. 5	1.3	1.4	83.9
	.84	7	1.9	1.9	85.8
	.84	1	.3	.3	86.1
	.89	2	.5	.5	86.6
	.89	1	.3	.3	86.9
	1.09	1	.3	.3	87.2
	1.09	1	.3	.3	87.5
	1.14	2	.5	.5	88.0
	1.14	3	8	.8	88.8
	1.14	1	.3	.3	89.1
	1.18	2	.5	.5	89.6
	1.18	6	1.6	1.6	91.3
	1.19	1	.3	.3	91.6
	1.48	1	.3	.3	91.8
	1.48	2	.5	.5	92.4
	1.52	1	.3	.3	92.6

### **RELPMO2R**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.53	2	.5	.5	93.2
	1.77	1 1	.3	.3	93.5
	1.82	1	.3	.3	93.7
	1.82	5	1.3	1.4	95.1
1	2.11	1	.3	.3	95.4
	2.12	1	.3	.3	95.6
	2.16	1 1	.3	.3	95.9
	2.16	3	.8	.8	96.7
	2.46	2	.5	.5	97.3
1	2.50	2	.5	.5	97.8
·	2.51	1	.3	.3	98.1
1	2.80	1	.3	.3	98.4
	3.14	6	1.6	1.6	100.0
	Total	367	97.6	100.0	
Missing	System	9	2.4		
Total		376	100.0		

## PERPETRATOR'S CHILDHOOD ANTISOCIAL BEHAVIOR (probbh1b,2b,3b,4b,5b\_v)

### **Descriptives**

# PERPETRATOR'S CHILDHOOD BEHAVIOR PROBLEMS (probbh1b,2b,3b,4b,5b\_v)

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PROBBH1B	376	48	2.11	3.635E-04	.6564
PROBBH2B	376	74	2.17	-7.07E-04	.5585
PROBBH3B	376	37	2.77	-3.94E-04	.6953
PROBBH4B	376	35	4.21	1.261E-03	.5694
PROBBH5B	376	53	1.90	6.310E-04	.6668
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

Г		PROBBH1B	PROBBH2B	PROBBH3B	PROBBH4B	PROBBH5B
N	Valid	376	376	376	376	376
	Missing	0	0	0	0	0_

### Frequency Table

#### PROBBH1B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	48	201	53.5	53.5	53.5
	47	1	.3	.3	53.7
	42	1	.3	.3	54.0
	34	1	.3	.3	54.3
	31	1	.3	.3	54.5
	29	1	.3	.3	54.8
	.10	62	16.5	16.5	71.3
ŀ	.32	38	10.1	10.1	81.4
	.34	1	.3	.3	81.6
	.69	8	2.1	2.1	83.8
	.72	10	2.7	2.7	86.4
Ī	.89	1	.3	.3	86.7
ł	.91	22	5.9	5.9	92.6
1	1.31	5	1.3	1.3	93.9
	1.50	6	1.6	1.6	95.5
	1.52	.7	1.9	1.9	97.3
	1.83	. 1	.3	.3	97.6
	1.90	1	.3	.3	97.9
1	2.11	8	. 2.1	2.1	100.0
	Total	376	100.0	100.0	<u>.</u>

#### PROBBH2B

	1_	_		Cumulative
	Frequency	Percent	Valid Percent	Percent
Valid74	1	.3	.3	.3
73	1	.3	.3	.5
73	56	14.9	14.9	15.4
70	1	.3	.3	15.7
31	125	33.2	33.2	48.9
29	1	.3	.3	49.2
29	1	.3	.3	49.5
29	1	.3	.3	49.7
26	3	.8	.8	50.5
20	1	.3	.3	50.8
16	12	3.2	3.2	54.0
09	8	2.1	2.1	56.1
.10	20	5.3	5.3	61.4
.12	11	2.9	2.9	64.4
.14	2	.5	.5	64.9
.23	1	.3	.3	65.2
.26	33	8.8	8.8	73.9
.32	19	5.1	5.1	79.0
.37	1	.3	.3	79.3
.37	1	.3	.3	79.5
.38	1	.3	.3	79.8
.48	9	2.4	2.4	82.2
.55	12	3.2	3.2	85.4
.63	1	.3	.3	85.6
.67	4	1.1	1.1	86.7
.68	1	.3	.3	87.0
.69	2	.5	.5	87.5
.73	9	2.4	2.4	89.9
.89	12	3.2	3.2	93.1
.91	1	.3	.3	93.4
.96	3	.8	.8	94.1
1.12	7	1.9	1.9	96.0
1.17	1	.3	.3	96.3
1.30	8	2.1	2.1	98.4
1.34	1	.3	.3	98.7
1.53	2	.5	.5	99.2
1.60	1	.3	.3	99.5
1.76	1	.3	.3	99.7
2.17	1	.3	.3	100.0
Total	376	100.0	100.0	

#### PROBBH3B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	37	1	.3	.3	.3
	36	274	72.9	72.9	73.1
	34	1	.3	.3	73.4
	33	1	.3	.3	73.7
	33	1	.3	.3	73.9
	15	1	.3	.3	74.2
	06	1	.3	.3	74.5
ļ	.60	27	7.2	7.2	81.6
	.68	19	y <b>5.1</b>	5.1	86.7
l	.77	22	5.9	5.9	92.6
ļ	1.64	. 14	3.7	3.7	96.3
	1.73	4	1.1	1.1	97.3
	1.81	3	.8	.8	98.1
	2.77	7	1.9	1.9	100.0
	Total •	376	100.0	100.0	

### PROBBH4B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35	1	.3	.3	.3
Valid	33	195	51.9	51.9	52.1
	30	1 1	.3	.3	52.4
	.00 21	1	.3	.3	52.7
	21	1	.3	.3	52.9
	18	1	.3	.3	53.2
ł	09	63	16.8	16.8	69.9
	08	1	.3	.3	70.2
	.15	48	12.8	12.8	83.0
	.16	1	.3	.3	83.2
	.40	10	2.7	2.7	85.9
	.44	1	.3	.3	86.2
	.64	7	1.9	1.9	88.0
	.69	12	3.2	3.2	91.2
	.77	4	1.1	1.1	92.3
	.93	5	1.3	1.3	93.6
	.94	1	.3	.3	93.9
	.97	1 1	.3	.3	94.1
	1.02	2	.5	.5	94.7
	1.17	4	1.1	1.1	95.7
	1.26	4	1.1	1.1	96.8
	1.26	i	.3	.3	97.1
	1.50	3	.8	.8	97.9
	1.75	1	.3	.3	98.1
	2.08	1	.3	.3	98.4
	2.28	2	.5	.5	98.9
	2.57	2	.5	.5	99.5
	2.82	1 1	.3	.3	99.7
	4.21	1 1	.3	.3	100.0
	Total	376	100.0	100.0	

### PROBBH5B

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	53	197	52.4	52.4	52.4
	51	. 1	.3	.3	52.7
1	51	1	.3	.3	52.9
	44	1	.3	.3	53.2
	40	1	.3	.3	53.5
	.23	41	10.9	10.9	64.4
	.25	45	12.0	12.0	76.3
	.36	28	7.4	7.4	83.8
	1.01	25	, 6.6	6.6	90.4
1	1.03	1	.3	.3	90.7
	1.12	17	4.5	4.5	95.2
1	1.14	5	1.3	1.3	96.5
	1.90	13	3.5	3.5	100.0
'	Total	376	100.0	100.0	

### TRADITIONAL COMBAT (combat2\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
COMBAT2	371	-1.06	1.64	4.324E-03	.6137
Valid N (listwise)	371				

### **Frequencies**

#### **Statistics**

#### COMBAT2

N ·	Valid	371
	Missing	5

#### **COMBAT2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.06	1	.3	.3	.3
Valid	-1.03	1	.3	.3	.5
	-1.03	1	.3	.3	.8
	-1.00	1	.3	.3	1.1
	-1.00	1	.3	.3	1.3
	-1.00		.3	.3	1.6
	-1.00 99		.3	.3	1.9
	98		.3	.3	2.2
	98		.3	.3	2.4
	96 96		.3	.3	2.7
	96 96	1	.3	.3	3.0
	96		.3	.3	3.2
	94	1	.3	.3	3.5
	92	3	.3 .8	.8	4.3
	<del>9</del> 2 91	1	.8	.8	4.6
	91 91	1		.3	4.9
	91 91		.3	.s .3	5.1
	91 90	1	.3	.s .3	5.4
		1	.3		5.4 5.7
	90	1	.3	.3	5. <i>7</i> 5.9
	90 89	1 1	.3	.3	5.9 6.2
			.3	.3	
	89	1 1	.3	.3	6.5
	88	1	.3	.3	6.7
	88	1	.3	.3	7.0.
	86	1	.3	.3	7.3
	86	1	.3	.3	7.5
	86	1	.3	.3	7.8
	85	1	.3	.3	8.1
	85 5	1	.3	.3	8.4
	85	1	.3	.3	8.6
L	85	<u> </u>	.3	.3	8.9

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid83	1	.3	.3	9.2
82	1	.3	.3	9.4
81	1	.3	.3	9.7
81		.3	.3	10.0
	1			10.0
80	1	.3	.3	
80	1	.3	.3	10.5
79	1	.3	.3	10.8
76	1	.3	.3	11.1
76	1,	.3	.3	11.3
75	1	.3	.3	11.6
75	1	.3	.3	11.9
74	1	.3	.3	12.1
74	1	.3	.3	12.4
73	1 1	.3	.3	12.7
73		.3	.3	12.9
73		.3	.3	13.2
			.3	13.
73	1	.3		B .
72	1	.3	.3	13.1
72	1	.3	.3	14.0
72	1	.3	.3	14.3
71	1	.3	.3	14.0
71	1	.3	.3	14.8
71	1	.3	.3	15.
70	1	.3	.3	15.4
70	1	.3	.3	15.0
70	1	.3	.3	15.
68	1	.3	.3	16.
68		.3	.3	16.
68		.3	.3	16.
68	1		B .	4
	1	.3	.3	17.
66	1	3	.3	17.
66	1	.3	.3	17.
66	1	.3	.3	17.
65	1	.3	.3	18.
63	1	.3	.3	18.
62	1	.3	.3	18.
61	1	.3	.3	18.
61	1	.3	.3	19.
60	1	.3	.3	19.
59	1	.3	.3	19.
59	1 1	.3	.3	19.
59	1	.3	.3	20.
58	1	.3	.3	20.
		.3	.3	
58	1	.3	.3	20.
58	1	.3	.3	21.
57	1	.3	.3	21.
57	1	.3	.3	21.
57	1	.3	.3	21.
57	1	.3	.3	22.
57	1	.3	.3	22.
57	1 1	.3	.3	22.

### PROPERTY OF

National Criminal Justice Reference Service (NCJRS) Box 6000

Rockville, MD 20849-6000

Page 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	57	1	.3	.3	22.9
	57	1	.3	.3	23.2
	56	1	.3	.3	23.5
1	55	1	.3	.3	23.7
	54	1	.3	.3	24.0
	53	1	.3	.3	24.3
	53	1	.3	.3	24.5
	52	1	.3	.3	24.8
	50	1	.3	.3	25.1
	50	1	.3	.3	25.3
	49	1	.3	.3	25.6
	49	1	.3	.3	25.9
	48	1 1	.3	.3	26.1
·	48	1	.3	.3	26.4
1	46	1	.3	.3	26.7
1.	46	1	.3	.3	27.0
1	45	1	.3	.3	27.2
ŀ	45	1	.3	.3	27.5
	44	1	.3	.3	27.8
1	44	1	.3	.3	28.0
	44		.3	.3	28.3
Ì	44	l ;	.3	.3	28.6
İ	44		.3	.3	28.8
	43		.3	.3	29.1
1	42	1	.3	.3	29.4
	42	1	.3	.3	29.6
	39		.3	.3	29.9
	39	'1	.3	.3	30.2
1	38		.3	.3	30.5
	38 38		.3	.3	30.7
	38 38	1	.s .3	.3	31.0
	37		.3	.3	31.3
İ	36	1 1	.3	.3	31.5
]	36 36	1	.3	.3	31.8
	35	1			32.1
	35 35		.3 .3	.3	32.3
1	35 35		.3	.3	32.5
	35 35	1	.3	.3	32.9
İ	35 2 <i>4</i>	1	.3	.3	
	34 33	1	.3 .3 .3 .3 .3 .3 .3 .3	.3	33.2 33.4
	33 33	1	.3	.3 .3 .3	
	33 32	1	.3	.3	33.7
	32	1	.3	.3	34.0
	32	1	.3	.3	34.2
	32 -32	1	.3	.3	34.5
	32 - 31	1	.3	.3	34.8
	31 30	1	.3	.3	35.0
	30 30	1	.3	.3	35.3
	30 30	1.	.3	.3	35.6
	30	1	.3	.3	35.8
	29 20	1	.3	.3	36.1
L	29	1	.3	.3	36.4

		Percent	Valid Percent	Cumulative Percent
Valid28	Frequency 1		.3	36.7
	1	.3		36.9
28	1	.3	.3	37.2
28	1	.3	.3	
27	1	.3	.3	37.5
26	1	.3	.3	37.7
26	1	.3	.3	38.0
25	1	.3	.3	38.3
25	1	.3	.3	38.5
25	1,	.3	.3	38.8
24	1	.3	.3	39.1
24	1	.3	.3	39.4
24	1	.3	.3	39.6
23	1	.3	.3	39.9
23	1	.3	.3	40.2
22	- 1	.3	.3	40.4
22	1 1	\.3	.3	40.
22	1	.3	.3	41.0
19		.3	.3	41.3
19	1	.3	.3	41.
17	1	.3	.3	41.8
1 <i>6</i>		.3	.3	42.
	1	i e		42.
16	1	.3	.3	
15	1	.3	.3	42.
15	1	.3	.3	42.
15	1	.3	.3	43.
15	1	.3	.3	43.4
14	1	.3	.3	43.
13	1.	.3	.3	43.
13	1	.3	.3	44.
12	1	.3	.3	44.
11	1	.3	.3	44.
11	. 1	.3	.3	45.
11	1	.3	.3	45.
11	1	.3	.3	45.
10	1	.3	.3	45.
10	. 1	.3	.3	46.
09	1	.3	.3	46.
09	1	.3	.3	46.
09	1	.3	.3	46.
08	1	.3	.3	47.
08	1	.3	3	47.
08	1	.3	.3 .3 .3	47.
08	1	.3	3	48.
08		.3	.3	48.
07	1	.3	.3	48.
		.3	.3	
06	.1	3	.3	48.
05	1	.3	.3	49.
05	1	.3	.3	49.
05	1	.3	.3	49.
03	1	.3	.3	49.
03	1_	.3	.3	50.

		[	Darasat	Valid Baroopt	Cumulative Percent
V . 11 1		Frequency	Percent	Valid Percent	50.4
Valid	02	1	.3	.3	
	02	1	.3	.3	50.7
	01	1	.3	.3	50.9
	01	1	.3	.3	51.2
	01	1	.3	.3	51.5
	.00	1	.3	.3	51.8
	.01	1	.3	.3	52.0
	.01	1	.3	.3	52.3
	.01	1,	.3	.3	52.6
	.01	1	.3	.3	52.8
					53.1
	.01	1 1	.3	.3	
	.03	1	.3	.3	53.4
	.03	1	.3	.3	53.6
	.03	1	.3	.3	53.9
	.03	1	.3	.3	54.2
	.04	1	.3	.3	· 54.4
	.04	1	.3	.3	54.7
	.04	1	.3	.3	55.0
	.05	1	.3	.3	55.3
	.05	1	.3	.3	55.
	.05	1	.3	.3	55.8
					56.
	.06	1	.3	.3	
	.06	1	.3	.3	56.3
	.07	1	.3	.3	56.6
	.07	1	.3	.3	56.9
	.08	1	.3	.3	57.
	.08	] 1	.3	.3	57.4
	.09	1	3	.3	57.
	.09	1	.3	.3	58.
	.10	1 1	.3	.3	58.:
	.10	1	.3	.3	58.
	.11	1	.3	.3	58.8
	.11	1			59.
		1	.3	.3	I .
	.12	1	.3	.3	59.
	.12	1	.3	.3	59.
	.12	1	.3	.3	59.
	.12	1	.3	.3	60.
	.13	. 1	.3	.3	60.4
	.14	1	.3	.3	60.6
	.14	1	.3	.3	60.
	.15	1	.3	.3	61.3
	.16	1	.3	3	61.
	.18	1	.3	.3 .3 .3	61.
	.18	1	.3	.3	62.0
	.18	1		.3	62.
	10	1	.3 .3	.3	
	.19	1	.3	.3	62.
	.19	1	.3	.3	62.
	.20 .22	1	.3	.3	63.
	.22	1	.3	.3	63.
	.22	1	.3	.3	63.0
	.22	1	.3	.3	63.5

			_		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	.22	1	.3	.3	64.2
	.24	1	.3	.3	64.4
	.25	1	.3	.3	64.7
	.26	1 1	.3	.3	65.0
	.26	1	.3	.3	65.2
	.27	1	.3	.3	65.5
	.28	1	.3	.3	65.8
		1			66.0
	.29	1	.3	.3	
	.29	1.	.3	.3	66.3
	.29	1	.3	.3	66.6
	.30	1	.3	.3	66.8
	.30	1	.3	.3	67.1
	.32	1	.3	.3	67.4
-	.33	1	.3	.3	67.7
	.33	1	.3	.3,	67.9
	.33	1	.3	3`	68.2
	.33	1	.3	.3	68.5
	.34	1	.3	.3	68.7
	.34	1	.3	.3	69.0
		1		I .	
	.36	1	.3	.3	69.3
	.38	1	.3	.3	69.
	.40	1	.3	.3	69.8
	.40	1	.3	.3	70.
	.40	1	.3	.3	70.4
	.40	1.	.3	.3	70.6
	.41	1	.3	.3	70.9
	.41	1	.3	.3	71.2
	.42	1	3	.3	71.4
	.42	1 1	.3	.3	71.7
	.42	1 1	.3	.3	72.0
	.43	1 1	.3	.3	72.2
	.43	1	.3	.3	72.
	.44				l .
		1	.3	.3	72.0
	.44	1	.3	.3	73.0
	.45	1	.3	.3	73.
	.45	1	.3	.3	73.6
	.45	1	.3	.3	73.9
	.45	1	.3	.3	74.
	.46	1	.3	.3	74.4
	.47	1	.3	.3	74.3
	.48	1	.3	.3	74.9
	.49	1	.3	1 3	75.2
	.51	1	.3	.3	75.
	.51	1	.3 .3 .3 .3 .3	3	75. 75.
	.52		.5	.3 .3	76.0 76.0
	.52 .53			.3	70.0
			.3	.3	76.:
	.54	1	.3	.3	76.
	.54	1	.3 .3	.3	76.8 
	.54	1	.3	.3	77.1
	.54	1	.3	.3	77.4
	.54	1	.3	.3	77.6

	Fraguanay	Percent	Valid Percent	Cumulative Percent
Valid .55	Frequency 1	.3	.3	77.9
.55			.s .3	78.2
.55		.3	.s .3	78.4
		.3		78.7 78.7
.56	1	.3	.3	
.56	1	.3	.3	79.0
.56	1	.3	.3	79.2
.57	1	.3	.3	79.5
.58	1	.3	.3	79.8
.59	1 ,	.3	.3	80.1
.59	1'	.3	.3	80.3
.59	1	.3	.3	80.6
.60	1	.3	.3	80.9
.60	1	.3	.3	81.1
.61	1	.3	.3	81.4
.61	1	.3	.3	81.7
.61	1	.3	.3	· 81.9
.61	1	.3	.3	82.2
.62	1	.3	.3	82.5
.62	1	.3	.3	82.7
.63	1	.3	.3	83.0
.65	1	.3	.3	83.3
.65	1	.3	.3	83.6
.66	1	.3	.3	83.8
.66	1	.3	.3	84.1
.67	1	.3	.3	84.4
.69	1	.3	.3	84.6
.69	1	.3	.3	84.9
.70	1	.3	.3	85.2
.70	1	.3	.3	85.4
.70	1	.3	.3	85.7
.71	1	.3	.3	86.0
.71	1	.3	.3	86.3
.72	1	.3	.3	86.5
.73		.3	.3	86.8
.74	1		1	87.1
.75	1	.3	.3 .3	87.3
.76	1	.3	.3	
.76		.3	.3	87.6
.76	1	.3	.3	87.9
	1	.3	.3	88.1
.77	1	.3	.3	88.4
.79	1	.3	.3	88.7
.79	1	.3	.3	88.9
.79	1	.3	.3	89.2
.80	1	.3	.3	89.5
.82	1	.3	.3	89.8
.83	1	.3	.3	90.0
.84	1	.3	.3	90.3
.84	1	.3	.3	90.6
.85	1	.3	.3	90.8
.85	1	.3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3	.3	91.1
.87	11_	3	.3	91.4

			· · · · · · · · · · · · · · · · · · ·		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	.88	1	.3	.3	91.6
	.93	1	.3	.3	91.9
	.93	1	.3	.3	92.2
	.93	1	.3	.3	92.5
į	.93	1	.3	.3	92.7
]	.95	1	.3	.3	93.0
İ	.96	1	.3	.3	93.3
	.98	1	.3	.3	93.5
i	1.03	1	.3	.3	93.8
}	1.04	1	.3	.3	94.1
	1.04	1	.3	.3	94.3
	1.05	1	.3	.3	94.6
i	1.05	1	.3	.3	94.9
	1.05	1	.3	.3	95.1
	1.06	1	.3	.3	95.4
	1.06	1	.3	.3	95.7
	1.08	1	.3	.3	96.0
	1.11	1	.3	.3	96.2
	1.11	1	.3	.3	96.5
	1.12	1	.3	.3	96.8
ŀ	1.14	1	.3	.3	97.0
	1.18	1	.3	.3	97.3
*.	1.22	1	.3	.3	97.6
	1.22	1	.3	.3	97.8
	1.28	1	.3	.3	98.1
	1.29	1	.3	.3	98.4
	1.39	1	.3	.3	98.7
	1.41	1	.3	.3	98.9
	1.46	1	.3	.3	99.2
	1.46	1	.3	.3	99.5
	1.47	1	.3	.3	99.7
	1.64	1	.3	.3	100.0
	Total	371	98.7	100.0	
Missing	System	5	1.3		
Total		376	100.0		

### Perceived Threat -- threat 1a, threat 21, threat3a

### **Descriptives**

### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
THREAT1A	371	-1.67	1.42	2.321E-03	.6838
THREAT2A	371	-1.81	1.83	1.643E-03	.7024
THREAT3A	371	-1.43	1.79	-1.71E-03	.8263
Valid N (listwise)	371				

### **Frequencies**

#### **Statistics**

	THREAT1A	THREAT2A	THREAT3A
N Valid	371	371	371
Missing	5	5	5

### **Frequency Table**

#### THREAT1A

			Facette	Percent	Valid Percent	Cumulative Percent
	Valid -	1.67	Frequency			1.6
			6	1.6	1.6	1
)		1.41	1	.3	.3	1.9
		1.40	6	1.6	1.6	3.5
		1.15	3	.8	.8	4.3
		1.13	15	4.0	4.0	8.4
		1.12	3	8.	.8	9.2
	<del>-</del>	.90	1	.3	.3	9.4
		.87	6	1.6	1.6	11.1
1	-	.86	14	3.7	3.8	14.8
	-	.85	3	.8	.8	15.6
ı		.73	1	.3	.3	15.9
		.68	1	.3	.3	16.2
		.62	1	.3	.3	16.4
		.62	1	.3	.3	16.7
1	-,	.61	5	1.3	1.3	18.1
-		.60	17	4.5	4.6	22.6
١	-,	.58	13	3.5	3.5	26.1
١	-,	.57	1	.3	.3	26.4
ı	-,	.45	1	.3	.3	26.7
١	<b>-</b> ,	.39	1 •	.3	.3	27.0
J	<b>-</b> .	.36	1	.3	.3	27.2
I		.35	9	2.4	2.4	29.6
ı		.35	1	.3	.3	29.9
ļ		.34	8	2.1	2.2	32.1
ı		.32	14	3.7	3.8	35.8
		.31	3	8	.8	36.7
l	<u>-</u> .	19	4	1.1	1.1	37.7

ı		_	Danasah	Valid Dansont	Cumulative
		Frequency	Percent	Valid Percent	Percent
N	Valid16	1	.3	.3	38.0
4	12	1	.3	.3	38.3
	11	7	1.9	1.9	40.2
	09	1	.3	.3	40.4
ļ	07	8	2.1	2.2	42.6
	07	1	.3	.3	42.9
	06	9	2.4	2.4	45.3
1	05	10	2.7	2.7	48.0
	.07	1 ,	.3	.3	48.2
	.09	4	1.1	1.1	49.3
	.10	2	.5	.5	49.9
	.11	• 1	.3	.3	50.1
	.12	4	1.1	1.1	51.2
	.12	1	.3	.3	51.5
	.14	. 5	1.3	1.3	52.8
	.15	. 2	.5	.5	53.4
1	.16	3	.8	.8	54.2
	18	2	.5	.5	54.7
	.20	10	2.7	2.7	57.4
	.22	15	4.0	4.0	61.5
	.33	3	.8	8.	62.3
	.35	1	.3	.3	62.5
	.36	3	.8	.8	63.3
	.36	2	.5	.5	63.9
	.37	3	.8	.8	64.7
N	.39	6	1.6	1.6	66.3
7	.40	3	.8	.8	67.1
	.41	4	1.1	1.1	68.2
	.43	1	.3	.3	68.5
	.44	9	2.4	2.4	70.9
	.45	6	1.6	1.6	72.5
	.48	22	5.9	5.9	78.4
1	.60	1	.3	.3	78.7
	.62	6	1.6	1.6	80.3
	.64	3	.8	8.	81.1
1	.64	1	.3	.3	81.4
	.65	2	.5	.5	81.9
	.66	2	.5	.5	82.5
	.67	4	1.1	1.1	83.6
	.69	2	.5	.5	84.1
	.71	. 15	4.0	4.0	88.1
	.88	4	1.1	1.1	89.2
į	.90	1	.3	.3	89.5
	.91	2	.5	.5	90.0
	.92	8	2.1	2.2	92.2
ı	.93	1	.3	.3	92.5
	.95	11	2.9	3.0	95.4
	1.15	1	.3	.3	95.7
	1.16	2	.5	.5	96.2
	1.19	11	2.9	3.0	99.2
) l	1.42	3	.8	.8	100.0

### THREAT1A

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Total	371	98.7	100.0	
Missing	System	5	1.3		
Total		376	100.0		

#### THREAT2A

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	-1.81	3	.8	.8	.8
i	-1.53	4	1.1	1.1	. 1.9
	-1.50	3	.8	.8	2.7
	-1.22	11	2.9	3.0	5.7
-	-1.19	2	.5	.5	6.2
l	97	1	.3	.3	6.5
Ì.	94	9	2.4	2.4	. 8.9
ļ	91	19	5.1	5.1	14.0
	88	1	.3	.3	14.3
•	66	2	.5	.5	14.8
	63	17	4.5	4.6	19.4
Ì	60	5	1.3	1.3	20.8
	57	3	.8	.8	21.6
1	38	5	1.3	1.3	22.9
1	35	36	9.6	9.7	32.6
	32	14	3.7	3.8	36.4
1	29	9	2.4	2.4	38.8
	07	17	4.5	4.6	43.4
	04	32	8.5	8.6	52.0
	01	14	3.7	3.8	55.8
1	.21	1	.3	.3	56.1
ŀ	.24	35	9.3	9.4	65.5
	.27	20	5.3	5.4	70.9
	.29	1	.3	.3	. 71.2
	.31	1	.3	.3	71.4
	.34	1	.3	.3	71.7
1	.55	76	20.2	20.5	92.2
	.68	1	.3	.3	92.5
ŀ	.71	1	.3	.3	92.7
1	.88	1	.3	.3	93.0
i .	.95	1	.3	.3	93.3
ļ	.99	1	.3	.3	93.5
İ	1.20	1	.3	.3	93.8
1	1.23	1	.3	.3	94.1
	1.27	1	.3	.3	94.3
	1.51	1	.3	.3	94.6
1	1.52	7	1.9	1.9	96.5
	1.55	3	.8	.8	97.3
	1.83	10	2.7	2.7	100.0
<b> </b>	Total	371	98.7	100.0	
Missing	System	5	1.3		
Total		376	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.43	15	4.0	4.0	4.0
	-1.26	- 1	.3	.3	4.3
	-1.17	5	1.3	1.3	5.7
	-1.05	39	10.4	10.5	16.2
	91	1 1	.3	.3	16.4
	91	1 1	.3	.3	16.7
	90	1	.3	.3	17.0
	79	33	8.8	8.9	25.9
	- 79	2	.5	.5	26.4
	67	4	1.1	1.1	27.
	53	12	3.2	3.2	30.7
	53	7	1.9	1.9	32.6
	53	3	s .8	.8	33.4
•	42	19	5.1	5.1	38.
	41	1	3	.3	38.6
	<del>4</del> 1 27	1		.3	39.
		1	.3		i e
	27	2	.5	.5	39.0
	27	6	1.6	1.6	41.
	27	2	.5	.5	41.
	16	30	8.0	8.1	49.
	15	2	.5	.5	50.
	04	2	.5	.5	50.
	01	3	.8	.8	51.
	01	2	5	.5	52.
	.10	7	1.9	1.9	54.
	.11	20	5.3	5.4	59.
	.11	4	1.1	1.1	60.
	.22	3	.8	.8	61.
	.26	1	.3	.3	61.
	.36	3	.8	.8	62.
	.36	2	.5	.5	63.
	.37	10	2.7	2.7	65.
	.37	3	.8	.8	66.
	.48	6	1.6	1.6	68.
	.48	2	.5	.5	68.
	49	1 1	.3	.3	69.
	.51	2	.5	.5	69.
	.62	1	.3	.3	69.
	.63	6	1.6	1.6	71.
	.63	10	2.7	2.7	74.
	.63	1	.3	3	74.
	.03 .74	10	.3 2.7	2.7	77.
	.74 .74			I .	. 79.
	.7 <del>4</del> .75	10	2.7	2.7	
	.75 .77	5	1.3	1.3	81.
		2	.5	.5	81.
	.89	2	.5	.5	82.
	.89	6	1.6	1.6	83.
	.89	1	.3	.3	84.
	1.00	8	2.1	2.2	86.
	1.00	8	2.1	2.2	88.
	1.01	4	1.1	1.1	89.

#### **THREAT3A**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.15	3	.8	.8	90.3
)[	1.15	4	1.1	1.1	91.4
	1.26	9	2.4	2.4	93.8
	1.27	5	1.3	1.3	95.1
	1.27	1	.3	.3	95.4
1	1.53	8	2.1	2.2	97.6
1	1.53	3	.8	.8	98.4
1	1.79	6	1.6	1.6	100.0
1	Total	371	98.7	100.0	
Missing	System	5	1.3		
Total		376	100.0		

### Veteran's alcohol abuse (vet\_ab\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
veteran's abuse (10 items)	375	.00	6.00	.6305	1.1818
Valid N (listwise)	375				

### **Frequencies**

#### **Statistics**

	N		
	Valid	Missing	
veteran's abuse (10 items)	375	1	

#### veteran's abuse

(10 items)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	258	68.6	68.8	68.8
	1.00	53	14.1	14.1	82.9
1	1.11	2	.5	.5	83.5
	2.00	31	8.2	8.3	91.7
	2.22	1	.3	.3	92.0
ļ	3.00	14	3.7	3.7	95.7
	4.00	8	2.1	· 2.1	97.9
	5.00	5	1.3	1.3	99.2
	6.00	3	.8	.8	100.0
	Total	375	99.7	100.0	
Missing	System Missing	1	.3		
	Total	1	.3		
Total	·	376	100.0		

# Veteran's alcohol dependence (vet\_dep\_v)

### **Descriptives**

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
veteran's dependence 13 items	375	.00	11.00	.4322	1.3261
Valid N (listwise)	375				

### **Frequencies**

#### **Statistics**

•	N		
	Valid	Missing	
veteran's dependence 13 items	375	1	

#### veteran's dependence 13 items

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	319	84.8	85.1	85.1
	1.00	16	4.3	4.3	89.3
	1.08	2	.5	.5	89.9
	2.00	12	3.2	3.2	93.1
	2.17	1	.3	.3	93.3
	3.00	8	2.1	2.1	95.5
	3.25	2	.5	.5	96.0
. ·	4.00	5	1.3	1.3	97.3
	5.00	2	.5	.5	97.9
	6.00	5	1.3	1.3	99.2
	7.58	1	.3	.3	99.5
	8.67	1	.3	.3	99.7
	11.00	1	.3	.3	100.0
	Total	375	99.7	100.0	
Missing	System Missing	1	.3		
	Total	1	.3		
Total		376	100.0		

# DRINKING FREQUENCY (ethfre2\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ETHFRE2	370	.00	21.00	2.5047	3.3586
Valid N (listwise)	370				

### **Frequencies**

#### **Statistics**

ETHFRE2

N	Valid	370
	Missing	6

#### ETHFRE2

		_		\/-!!-I O	Cumulative
<del></del>		Frequency	Percent	Valid Percent	Percent
Valid	.00	66	17.6	17.8	17.8
	.03	16	4.3	4.3	22.2
	.06	. 7	1.9	1.9	24.1
	.09	1	.3	.3	24.3
l	.13	11	2.9	3.0	27.3
1	.16	13	3.5	3.5	30.8
	.19	6	1.6	1.6	32.4
	.26	6	1.6	1.6	34.1
	.29	. 7	1.9	1.9	35.9
	.39	1	.3	.3	36.2
	47	11	2.9	3.0	39.2
1	.50	5	1.3	1.4	40.5
	.53	9	2.4	2.4	43.0
	.60	9	2.4	2.4	45.4
	.63	4	1.1	1.1	46.5
İ	.73	8	2.1	2.2	48.6
	.94	. 6	1.6	1.6	50.3
	.97	5	1.3	1.4	51.6
	1.07	3	.8	.8	52.4
	1.41	3	.8	.8	53.2
	1.50	9	2.4	2.4	55.7
İ	1.53	6	1.6	1.6	57.3
	1.56	7	1.9	1.9	59.2
1	1.56	1	.3	.3	59.5
	1.63	12	3.2	3.2	62.7
	1.66	3	.8	.8	63.5
	1.76	2	.5	.5	64.1
	1.97	5	1.3	1.4	65.4
	2.00	5	1.3	1.4	66.8
	2.00	1	.3	.3	67.0
	2.10	1	.3	.3	67.3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2	.10	1	.3	.3	67.6
	.00	1	.3	.3	67.8
	.03	2	.5 .5	.5	68.4
	.13	4	1.1	1.1	69.5
	.47	1	.3	.3	69.7
4	.50	11	2.9	3.0	72.7
i i	.53	1	.3	.3	73.0
	.56	4	1.1	1.1	74.1
1	.63	2,	.5	.5	74.6
	.66	2	.5	.5	75.1
	.76	1	.3	.3	75.4
	.97	3	.8	.8	76.2
1	.00	2	.5	.5	76.8
1 .	.00	1	.3	.3	77.0
	.44		.3	.3	77.3
1	.50	1	.3	.3	. 77.6
4	5.00	6	.s 1.6	1.6	79.2
	5.13	1	.3	.3	79.5
	5.47	4	1.1	1.1	80.5
	5.50	3	.8	.8	81.4
	6.63	2	.5	.5	81.9
	i.66	2	.5	.5	82.4
	.76	2	.5	.5	83.0
5	.97	2	.5	.5	83.5
B.	5.00	4	1.1	1.1	84.6
	5.10	1	.3	.3	84.9
. 1	5.44	1	.3	.3	85.1
' <b>1</b>	5.50		.3	.3	85.4
	.00	5	1.3	1.4	86.8
B .	.03 '.03	6	1.6	1.6	88.4
	.06 '.06	2	.5	.5	88.9
	'.13	6	1.6	1.6	90.5
	'.16	2	.5	.5	91.1
	.16 '.26	1	.3`	.3	91.4
	.47	3	.8	.8	92.2
	.50	2	.5	.5	92.7
	.60 '.60	2	.5	.5	93.2
	3.50	6	1.6	1.6	94.9
	3.53	1	.3	.3	95.1
	3.63	1	.3	.3	95.4
	3.97	i	.3	.3	95.7
	3.97	2	.5	.5	96.2
	).47	1	.3	.3	96.5
E .	0.53	1	.3	.3	96.8
	0.97	2	.5	.5	.97.3
	2.00	4	1.1	1.1	98.4
	4.00	2	.5	.5	98.9
	4.03	1	.3	.3	99.2
	4.47	1	.3	.3	99.5
	8.00	i i	.3	.3	99.7
	1.00	1	.3_	.3	100.0

#### ETHFRE2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Total	370	98.4	100.0	
Missing	System	6	1.6		]
Total	•	376	100.0		

### DRINKING QUANTITY (ethamt8\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
ETHAMT8	369	.00	21.33	1.9711	2.1612
Valid N (listwise)	369		_	•	

### **Frequencies**

#### **Statistics**

#### ETHAMT8

N	Valid	369
	Missing	7

#### ETHAMT8

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	.00	66	17.6	17.9	17.9
	.33	8	2.1	2.2	20.1
	.67	30	8.0	8.1	28.2
	1.00	23	6.1	6.2	34.4
	1.33	41	10.9	11.1	45.5
)	1.67	50	13.3	13.6	59.1
į	2.00	37	9.8	10.0	69.1
	2.33	19	5.1	5.1	74.3
	2.67	17	4.5	4.6	78.9
	3.00	19	5.1	5.1	84.0
	3.33	7	1.9	1.9	85.9
	3.67	9	2.4	2.4	88.3
	4.00	9	2.4	2.4	90.8
	4.33	9	2.4	2.4	93.2
	4.67	3	.8	.8	94.0
	5.00	5	1.3	1.4	95.4
	5.33	3	.8	.8	96.2
<b>†</b>	6.33	2	.5	.5	96.7
	6.67	′ 3	.8	.8	97.6
	7.00	1	.3	.3	97.8
Ì	7.33	1	.3	.3	98.1
	8.67	1	.3	.3	98.4
	10.00	1	.3	.3	98.6
	11.00	1	.3	.3	98.9
	11.67	1	.3	.3	99.2
	12.00	1	.3	.3	99.5
	15.00	1	.3	3	99.7
	21.33	1	.3	.3	100.0
	Total	369	98.1	100.0	
Missing	System	7	1.9		* *
Total		376	100.0		

# Veteran's Mississippi Scale arousal and lack of control (msalc2\_v)

### **Descriptives**

#### **Descriptive Statistics**

	· ·	N	Minimum	Maximum	Mean	Std. Deviation
msalc2	8 items	376	1.00	4.75	2.1384	.7374
Valid N (li	stwise)	376				

### **Frequencies**

#### **Statistics**

		N		
	*	Valid	Missing	
msalc2	, 8 items	376	0	

#### msalc2

8 items

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1.00	9	2.4	2.4	2.4
	1.13	17	4.5	4.5	6.9
	1.25	15	4.0	4.0	10.9
1	1.33	1	.3	.3	11.2
	1.38	25	6.6	6.6	17.8
	1.50	24	6.4	6.4	24.2
	1.63	33	8.8	8.8	33.0
	1.71	1	.3	.3	33.2
:	1.75	26	6.9	6.9	40.2
	1.88	25	6.6	6.6	46.8
	2.00	24	6.4	6.4	53.2
	2.13	21	5.6	5.6	58.8
	2.25	15	4.0	4.0	62.8
	2.38	16	4.3	4.3	67.0
	2.50	20	5.3	5.3	72.3
	2.63	15	4.0	4.0	76.3
	2.75	14	3.7	3.7	80.1
	2.88	18	4.8	4.8	84.8
	3.00	10	2.7	2.7	87.5
1	3.13	15	4.0	4.0	91.5
	3.25	7	1.9	1.9	93.4
İ	3.38	6	1.6	1.6	94.9
İ	3.50	5	1.3	1.3	96.3
	3.63	2	.5	.5	96.8
	3.75	3	.8	8	97.6
	3.88	3	.8	.8	98.4
	4.13	2	.5	.5	98.9
	4.38	2	.5	.5	99.5
!	4.50	1	.3	.3	99.7
	4.75	1	.3	.3	100.0
	Total	376	100.0	100.0	
Total		376	100.0		

# Veteran's Mississippi Scale reexperiencing & situational avoidance (msrsa2\_v)

# Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
msrsa2 11 items	376	1.00	5.00	2.2589	.7654
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

		N		
l ·		Valid	Missing	
msrsa2	11 items	376	0	

msrsa2 11 items

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1.	.00	3	.8	.8	.8
	.09	5	1.3	1.3	2.1
	.18	11	2.9	2.9	5.1
	.27	6	1.6	1.6	· 6.6
	.36	16	4.3	4.3	10.9
1.	.45	19	5.1	5.1	16.0
1.	.55	15	4.0	4.0	19.9
1.	.64	16	4.3	4.3	24.2
1	.73	26	6.9	6.9	31.1
1	.82	16	4.3	4.3	35.4
1	.89	1	.3	.3	.35.6
1	.91	. 29	7.7	7.7	43.4
2	.00	25	6.6	6.6	50.0
2	.09	8	2.1	2.1	52.1
2	.18	10	2.7	2.7	54.8
2	.27	16	4.3	4.3	59.0
2	.36	15	4.0	4.0	63.0
2	.45	8	2.1	2.1	65.2
2	.55	13	3.5	3.5	68.6
2	.64	17	4.5	4.5	73.1
2	.73	14	3.7	3.7	76.9
2	.82	8	2.1	2.1	79.0
	.91	7	1.9	1.9	80.9
3	.00	7	1.9	1.9	82.7
3	.09	. 11	2.9	2.9	85.6
3	.18	9	2.4	2.4	88.0
3	.27	4	1.1	1.1	89.1
. 3	.36	6	1.6	1.6	90.7
3	.45	3	.8	.8	91.5
3	.55	6	1.6	1.6	93.1
3	.64	6	1.6	1.6	94.7
3	.73	3	.8	.8	95.5
3	.82	3	.8	.8	96.3
3	.90	1	.3	.3	96.5
3	.91	4	1.1	1.1	97.6
	.00	4	1.1	1.1	98.7
	.18	1	.3	.3	98.9
	.27	2	.5	.5	99.5
	.91	. 1	.3	.3	99.7
	.00	1	.3	.3	100.0
	otal	376	100.0	100.0	
Total		376	100.0		

# Veteran's Mississippi Scale self-persecution (mssp2\_v)

### Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
mssp2 5 items	376	1.00	4.80	1.7537	.6372
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

	N		
	Valid	Missing	
mssp2 5 items	376	0	

#### mssp2 5 items

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	64	17.0	17.0	17.0
1	1.20	36	9.6	9.6	26.6
	1.40	47	12.5	12.5	39.1
1	1.60	42	11.2	11.2	50.3
<b>'</b> ]	1.80	60	16.0	16.0	66.2
	2.00	36	9.6	9.6	75.8
	2.20	31	8.2	8.2	84.0
	2.40	16	4.3	4.3	88.3
	2.60	19	5.1	5.1	93.4
	2.80	5	1.3	1.3	94.7
	3.00	8	2.1	2.1	96.8
	3.20	2	.5	.5	97.3
	3.40	2	.5	.5	97.9
	3.60	3	.8	.8	98.7
	3.80	1	.3	.3	98.9
	4.00	1	.3	.3	99.2
1	4.20	1	.3	.3	99.5
i	4.40	1	.3	.3	99.7
	4.80	1	.3	.3	100.0
1	Total	376	100.0	100.0	
Total		376	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
	.00	2	.5	.5	.5
	.09	5	1.3	1.3	1.9
	.18	6	1.6	1.6	3.5
	.27	10	2.7	2.7	6.1
	.33	1	.3	.3	6.4
	.36	10	2.7	2.7	9.0
	.45	10	2.7	2.7	11.7
	.55	22	5.9	5.9	17.6
	.64	14	3.7	3.7	21.3
	.73	. 19	5.1	5.1	26.3
	.82	12	3.2	3.2	29.5
	.91	11	2.9	2.9	32.4
. 2	.00	18	4.8	4.8	37.2
	.09	6	1.6	1.6	38.8
` 2	.18	16	4.3	4.3	43.1
2	2.27	16	4.3	4.3	47.3
2	.36	15	4.0	4.0	51.3
2	.45	14	3.7	3.7	55.1
2	.55	15	4.0	4.0	59.0
2	.64	15	4.0	4.0	63.0
2	.73	8	2.1	2.1	65.2
2	.82	22	5.9	5.9	71.0
2	.91	10	2.7	2.7	73.7
3	.00	14	3.7	3.7	77.4
3	.09	9	2.4	2.4	79.8
3	3.18	10	2.7	2.7	82.4
	3.27	11	2.9	2.9	85.4
	3.36	7	1.9	1.9	87.2
•	.45	8	2.1	2.1	89.4
	.55	8	2.1	2.1	91.5
	3.64	6	1.6	1.6	93.1
T .	.73	6	1.6	1.6	94.7
	.82	4	1.1	1.1	95.7
	.00	3	.8	.8	96.5
	.09	3	.8	.8	97.3
	.18	3	.8	.8	98.1
	.27	3	.8	.8	98.9
	.36	2	.5	.5	99.5
	.55	1	.3	.3	99.7
	.91	1	.3	.3	100.0
	otal	376	100.0	100.0	100.0
Total	Jiai	376 376	100.0	100.0	

# Veteran's Mississippi Scale withdrawal & numbing (mswn2\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
mswn2 11 items	376	1.00	4.91	2.4310	.7992
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

_		N		
_		Valid	Missing	
mswn2	11 items	376	0	

### PARTNER'S DEMORALIZATION (demr\_par\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Total demoralization score (partner)	376	27.00	120.00	56.8498	16.9296
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

Total demoralization score (partner)

N	Valid	•	376
ı	Missing	i`	0

#### Total demoralization score (partner)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	27.00	1	.3	.3	.3
valid	28.00	'1	.3	.3	.5
	29.00	1	.3	.3	.8
	30.00	'1	.3	.3	1.1
	31.00	2	.5 .5	.5	1.6
	32.00	2	.5	.5	2.1
	33.00	5	1.3	1.3	3.5
	34.00	4	1.1	1.1	4.5
	35.00	4	1.1	1.1	5.6
	35.31	1 1	.3	.3	5.9
	36.00	6	1.6	1.6	7.4
	37.00	2	.5	.5	8.0
	38.00	11	.s 2.9	2.9	10.9
	39.00	8	2.1	2.1	13.0
	40.00	6	1.6	1.6	14.6
	41.00	8	2.1	2.1	16.8
	42.00	5	1.3	1.3	18.1
	43.00	10	2.7	2.7	20.7
	44.00	11	2.9	2.9	23.7
	45.00	14	3.7	3.7	27.4
	46.00	7	1.9	1.9	29.3
	47.00	12	3.2	3.2	32.4
	47.77	1	.3	.3	32.7
	48.00	8	.s 2.1	2.1	34.8
	49.00	13	3.5	3.5	38.3
	50.00	10	2.7	2.7	41.0
	51.00	8	2.1	2.7	43.1
	52.00	12	3.2	3.2	46.3
	53.00	15	4.0	4.0	50.3
	54.00	10	2.7	2.7	52.9

Total demoralization score (partner)

		Frequency	Percent	Valid Percent	Cumulative Percent
I	Valid 55.00	7	1.9	1.9	54.8
١	56.00	6	1.6	1.6	56.4
	55.00 57.00	9	2.4	2.4	58.8
	57.00 57.24	1	.3	.3	59.0
	57.24 58.00	11	2.9	2.9	62.0
	59.00	10	2. <del>3</del> 2.7	2.7	64.6
ļ		9	2.7	2.4	67.0
1	60.00			2.7	69.7
Į	61.00	10	2.7	1.1	70.7
Ì	62.00	4	7 1.1		71.8
	63.00	4	1.1	1.1	71.8
	64.00	5	1.3	1.3	
	65.00	4	1.1	1.1	74.2
	66.00	5	1.3	1.3	75.5
	66.46	1	.3	.3	75.8
ļ	67.00	5	1.3	1.3	- 77.1
	68.00	5	1.3	1.3	78.5
	69.00	1	.3	.3	78.7
	69.58	1	.3	.3	79.0
	70.00	7	1.9	1.9	80.9
	70.62	1	.3	.3	81.1
	71.00	8	2.1	2.1	83.2
	72.00	5	1.3	1.3	84.6
	73.00	3	.8	.8	85.4
	74.00	4	1.1	1.1	86.4
	75.00	5	1.3	1.3	87.8
)	76.00	3	.8	.8	88.6
	77.00	3	.8	.8	89.4
	78.00	1	.3	.3	89.6
	78.92	1	.3	.3	89.9
	79.00	3	8.	.8	90.7
	80.00	1	.3	.3	91.0
	83.00	5	1.3	1.3	92.3
	84.00	3	.8	.8	93.1
	85.00	· 2	.5	.5	93.6
	86.00	1	.3	.3	93.9
	87.00	2	.5	.5	94.4
	88.00	1	.3	.3	94.7
	89.00	1	.3	.3	94.9
	90.00	1	.3	.3	95.2
	91.00	1	.3	.3	95.5
	93.00	1	.3	.3	95.7
	94.00	1	.3	.3	96.0
	95.00	1	.3	.3	96.3
	97.62	1	.3	.3	96.5
	100.00	2	.5	.5	97.1
	101.00	2	.5	.5	97.6
	103.00	2	.5	.5	98.1
	106.00	2	.5	.5	98.7
	108.00	1	.3	.3	98.9
	112.00	1	.3	.3	99.2
)	114.00	1	3	.3	99.5

#### Total demoralization score (partner)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	116.00	1	.3	.3	99.7
Ì	120.00	1	.3	.3	100.0
	Total	376	100.0	100.0	

### PARTNER'S GENERAL WELL-BEING (pgw\_v)

### Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PGW	373	2.00	6.00	4.4102	.9758
Valid N (listwise)	373				

### **Frequencies**

#### **Statistics**

**PGW** 

N	Valid	373
ŀ	Missing	3

#### **PGW**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	17	4.5	4.6	4.6
	3.00	24	6.4	6.4	11.0
	4.00	178	47.3	47.7	58.7
	5.00	97	25.8	26.0	84.7
1	6.00	57	15.2	15.3	100.0
	Total	373	99.2	100.0	
Missing	System	3	.8		
Total	-	376	100.0		

### PARTNER'S SOCIAL ISOLATION (partsi\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PARTSI	374	-10.56	8.29	7.317E-03	2.5590
Valid N (listwise)	374				

### **Frequencies**

**Statistics** 

**PARTSI** 

N ·	Valid	374
	Missing	2

#### **PARTSI**

			5	Valid Barrer	Cumulative
	V-11-1 40 50	Frequency	Percent	Valid Percent	Percent
	Valid -10.56	1	.3	.3	.3
	-8.99	2	.5	.5	.8
	-8.01	1	.3	.3	1.1
	-7.75	2	.5	.5	1.6
	-7.41	2	.5	.5	2.1
)	<del>-</del> 7.11	1	.3	.3	2.4
	-6.44	1	.3	.3	2.7
1	-5.54	1 .	.3	.3	2.9
	-5.46	1	.3	.3	3.2
1	<b>-</b> 5.16	2	.5	.5	3.7
	-4.52	1	.3	.3	4.0
ı	<i>-</i> 4.35	1	.3	.3	4.3
	-4.18	1	.3	.3	4.5
ı	-4.08	1	.3	.3	4.8
	-3.85	1	.3	.3	5.1
	-3.60	. 1	.3	.3	5.3
ļ	-3.50	1	.3	.3	5.6
1	-3.40	1	.3	.3	5.9
	-3.25	1	.3	.3	6.1
	-3.21	9	2.4	2.4	8.6
ı	-3.16	1	.3	.3	8.8
ı	-2.96	1	.3	.3	9.1
	-2.91	2	.5	· .5	9.6
1	-2.87	1	.3	.3	9.9
1	-2.82	1	.3	.3	10.2
١	-2.62	1	.3	.3	10.4
1	-2.58	1	.3	.3	10.7
	-2.57	. 1	.3	.3	11.0
١	-2.43	1	.3	.3	11.2
ı	-2.40	2	.5	.5	11.8
Į	-2.23	1	.3	.3	12.0

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-2.19	4	1.1	1.1	13.1
	-2.17	1	.3	.3	13.4
	-2.14	1	.3	.3	13.6
	-2.04	1	.3	.3	13.9
	-1.99	1	.3	.3	14.2
	-1.93	2	.5	.5	14.7
	-1.92	1	.3	.3	15.0
	-1.81	1	.3	.3	15.2
	-1.79	1	.3	.3	15.5
	-1.68	1	.3	.3	15.8
	-1.67	1	.3	.3	16.0
	-1.60	i	.3	.3	16.3
	-1.60	3	.8	.8	17.1
•	-1.54	2	.5	.5	17.6
	-1.47	1	.3	.3	17.9
	-1.47 -1.42	1	.3	.3 .3	18.2
	-1.42 -1.41	1			19.3
		4	1.1	1.1	
	-1.35	2	.5	.5	19.8
	-1.34	1	.3	.3	20.1
	-1.30	1	.3	.3	20.3
	-1.29	1	.3	.3	20.6
	-1.22	1	.3	.3	20.9
	-1.21	4	1.1	1.1	21.9
	-1.15	3	.8	.8	22.
	-1.04	1	.3	.3	23.0
	-1.02	1	.3	.3	23.3
	96	7	1.9	1.9	25.1
	90	1	.3	.3	25.4
	84	1	.3	.3	25.
	82	2	.5	.5	26.2
	78	1	.3	.3	26.
	76	5	1.3	1.3	27.
	71	1 1	.3	.3	28.
	70	5	1.3	1.3	29.
	68	1	.3	.3	29.
	65	1	.3	.3	29.
	64	3	.8	.8	30.
	57	7	1.9	1.9	32.
	52	3	.8	.8	33.
	45	3	.8	.8	34.
	44	1	.3	.3	34.
	43		.3	.3	34.
	38	2	.5	.5	35.
	36 37	4			36.
		1	1.1	1.1	
	32	9	2.4	2.4	38.
	31	1	.3	.3	39.
	- 26	1	.3	.3	39.
	25	3	.8	.8	40.
	24	1	.3	.3	40.
	19	4	1.1	1.1	.41.
	18	1	.3	.3	41.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid13		1.1	1.1	42.8
12		.5	.5	43.3
06		1.9	1.9	45.2
.00	2	.5	.5	45.7
.01	1	.3	.3	46.0
.02	1	.3	.3	46.3
.07	10	2.7	2.7	48.9
.08	2	.5	.5	49.5
.13	2,	.5	.5	50.0
.13	9	2.4	2.4	52.4
	8	2.4	2.4	54.5
.20			1	54.8
.21	. 1	.3	.3	
.26	1	.3	.3	55.1
.27	20	5.3	5.3	60.4
.33	` 5	1.3	1.3	61.8
.33	6	1.6	1.6	63.4
.39	6	1.6	1.6	65.0
.45	2	.5	.5	65.5
.46	5	1.3	1.3	66.8
.51	1	.3	.3	67.1
.52	13	3.5	3.5	70.6
.58	1	.3	.3	70.9
.59	12	3.2	3.2	74.1
.65	5	1.3	1.3	75.4
.66	3	.8	.8	76.2
.72	7	1.9	1.9	78.
.78	1	.3	.3	78.3
.78	1	.3	.3	78.6
.78	1	.3	.3	78.9
.84	7	1.9	1.9	80.
.90	1	.3	.3	81.0
.91	3	.8	.8	81.6
.92	1	.3	.3	82.
.97	3	.8	.8	82.9
1.0			.8	83.
1.1		.8	.3	84.
1.7		.3		84.
		.3	.3	84.
1.9		.3	.3	
1.99		.3	.3	84.
2.1	•	.3	.3	85.0
2.3		.3	.3	85.3
2.6	•	.3	.3	.85.0
2.6		.5	.5	86.
2.6		.5	.5	86.0
2.7		.3	.3	86.9
2.7		.3	.3	87.:
2.7		.3	.3	87.
2.7		.3	.3	87.
2.8		.3	.3	88.
2.9		.3	.3	88.
2.9	5 1	.3	.3	88.

			Danaant	Valid Dags -	Cumulative
\/alid	2.06	Frequency	Percent	Valid Percent	Percent
Valid	2.96	1	.3	.3	88.8
	3.03	3	.8	.8	89.6
	3.09	1	.3	.3	89.8
	3.22	2	.5	.5	90.4
	3.35	4	1.1	1.1	91.4
	3.48	4	1.1	1.1	92.5
	3.55	3	.8	.8	93.3
	3.61	1	.3	.3	93.6
	3.68	1	.3	.3	93.9
	3.80	2	.5	.5	94.4
	3.91	1	,. <b>3</b>	.3	94.7
	3.93	1	.3	.3	94.9
	4.00	1	.3	.3	95.2
,	4.49	1	.3	.3	95.5
	4.68	2	.5	.5	96.0
	4.88	1	.3	.3	96.3
	5.00	2	.5	.5	96.8
	5.13	1	.3	.3	97.1
	5.26	1	.3	.3	97.3
	5.33	1	3	.3	97.6
	6.94	1	.3	.3	97.9
	7.14	1	.3	.3	98.1
	7.77	1	.3	.3	98.4
	7.79	1	.3	.3	98.7
	7.84	2	.5	.5	99.2
Į	8.02	1	.3	.3	99.5
	8.16	1	.3	.3	99.7
	8.29	1 1	.3	.3	100.0
	Total	374	99.5	100.0	
Missing	System	2	.5		
Total	•	376	100.0		

# PERPETRATOR-TO-PARTNER PHYSICAL VIOLENCE (viotot8\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VIOTOT8	373	.00	47.00	1.3991	4.6437
Valid N (listwise)	373				

### **Frequencies**

#### **Statistics**

VIOTOT8

	N	Valid	373
١		Missing	3

#### **VIOTOT8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	293	77.9	78.6	78.6
Valle	1.00	293	5.3	5.4	
	2.00	9			83.9
İ	3.00	-	2.4	2.4	86.3
		10	2.7	2.7	89.0
	4.00	7	1.9	1.9	90.9
İ	5.00	4	1.1	1.1	92.0
	6.00	5	1.3	1.3	93.3
·	6.86	1	.3	.3	93.6
	7.00	1	.3	.3	93.8
	8.00	4	1.1	1.1	94.9
ļ	9.00	1	.3	.3	95.2
	10.00	4	1.1	1.1	96.2
	11.00	] 3	.8	.8	97.1
	12.00	2	.5	.5	97.6
	13.00	2	.5	.5	98.1
	14.00	1 1	.3	.3	98.4
	18.00	1	.3	.3	98.7
	23.00	1 1	.3	.3	98.9
	27.00	1	.3	.3	99.2
	31.00	1 1	.3	.3	99.5
	38.00		.3	.3	99.7
	47.00		.3	.3	100.0
	Total	373	99.2	100.0	100.0
Missing	System	3	.8	100.0	
Total		376	100.0		

# PERPETRATOR-TO-PARTNER PSYCHOLOGICAL ABUSE (psy\_ab\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PSY_AB	372	.00	36.00	8.7500	8.2271
Valid N (listwise)	372				

### **Frequencies**

#### Statistics

PSY\_AB

N ·	Valid	372
L	Missing	4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	57	15.2	15.3	15.3
	1.00	14	3.7	3.8	19.1
	1.20	3	.8	.8	19.9
	2.00	20	5.3	5.4	25.3
	2.40	1	.3	.3	25.5
	3.00	22	5.9	5.9	31.5
	3.60	1	.3	.3	31.7
	4.00	25	6.6	6.7	38.4
	5.00	23	6.1	6.2	44.6
	6.00	26	6.9	7.0	51.6
	7.00	18	4.8	4.8	56.5
	8.00	14	3.7	3.8	60.2
_	9.00	14	3.7	3.8	64.0
-	10.00	17	4.5	4.6	68.5
	11.00 🐪	9	2.4	2.4	. 71.0
·	12.00	7	1.9	1.9	72.8
	13.00	8	2.1	2.2	75.0
	13.20	2	.5	.5	75.5
	14.00	6	1.6	1.6	77.2
	15.00	16	4.3	4.3	81.5
	16.00	5	1.3	1.3	82.8
	17.00	6	1.6	1.6	84.4
	18.00	8	2.1	2.2	86.6
	19.00	2	.5	.5	87.1
	20.00	5	1.3	1.3	88.4
	21.00	2	.5	.5	89.0
	22.00	7	1.9	1.9	90.9
	23.00	4	1.1	1.1	91.9
	24.00	8	2.1	2.2	94.1
	25.00	4	1.1	1.1	95.2
	26.00	5	1.3	1.3	96.5
	27.00	2	.5	.5	97.0
	28.00	1	.3	.3	97.3
	29.00	1	.3	.3	97.6
	30.00	1	.3	.3	97.8
•	31.00	1	.3	.3	98.1
	32.00	1	.3	.3	98.4
	33.00	2	.5	.5	98.9
	34.00	2	.5	.5	99.5
	35.00	1	.3	.3	99.7
	36.00		.3	.3	100.0
	Total	372	98.9	100.0	. 55.0
Missing	System	4	1.1	100.0	
Total	-,	376	100.0		

### CBCL EXTERNALIZING (extraw\_v)

### **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
EXTRAW	261	.00	35.00	8.9079	7.3384
Valid N (listwise)	261				

### **Frequencies**

#### **Statistics**

#### **EXTRAW**

N	Valid	261
Ī	Missing	115

#### **EXTRAW**

Valid         .00         18         4.8         6.9           1.00         16         4.3         6.1         1           2.00         18         4.8         6.9         1           2.13         1         .3         .4         2           3.00         16         4.3         6.1         2           3.09         1         .3         .4         2           4.00         19         5.1         7.3         3           5.00         14         3.7         5.4         3           5.16         1         .3         .4         3           6.00         13         3.5         5.0         4           7.00         23         6.1         8.8         5           8.00         7         1.9         2.7         5           9.00         18         4.8         6.9         6           10.00         7         1.9         2.7         5           11.00         11         2.9         4.2         7           12.00         8         2.1         3.1         7           13.41         1         .3         .4	<u> </u>			D	Valid Bareant	Cumulative Percent
1.00		00				6.9
2.00       18       4.8       6.9       1         2.13       1       .3       .4       2         3.00       16       4.3       6.1       2         3.09       1       .3       .4       2         4.00       19       5.1       7.3       3         5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       8         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.41       1       .3       .4       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47	Valid				l I	
2.13       1       .3       .4       2         3.00       16       4.3       6.1       2         3.09       1       .3       .4       2         4.00       19       5.1       7.3       3         5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         11.00       11       2.9       4.2       7         13.41       1       .3       .4       7         13.41       1       .3       .4       7         14.44       1       .3       .4       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47	-		i e		1 1	13.0
3.00       16       4.3       6.1       2         3.09       1       .3       .4       2         4.00       19       5.1       7.3       3         5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       7         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.41       1       .3       .4       7         14.44       1       .3       .4       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       7         16.00       6       1.6       2.3       8         19.00						19.9
3.09       1       .3       .4       2         4.00       19       5.1       7.3       3         5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00			i '		1	20.3
4.00       19       5.1       7.3       3         5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.40       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>26.4</td>						26.4
5.00       14       3.7       5.4       3         5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.40       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.66 <td></td> <td></td> <td></td> <td></td> <td></td> <td>26.8</td>						26.8
5.16       1       .3       .4       3         6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.40       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.66       2       .5       .8       9         22.00						34.1
6.00       13       3.5       5.0       4         7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.40       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.06       2       .5       .8       9         22.00       3       .8       1.1       9         25.00 <td></td> <td></td> <td>I</td> <td>ł</td> <td>1</td> <td>39.5</td>			I	ł	1	39.5
7.00       23       6.1       8.8       5         8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00 <td></td> <td></td> <td></td> <td>l .</td> <td>1 1</td> <td>39.8</td>				l .	1 1	39.8
8.00       7       1.9       2.7       5         9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00				l e		44.8
9.00       18       4.8       6.9       6         10.00       7       1.9       2.7       6         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         26.00       3       .8       1.1       9         26.00					1	53.6
10.00       7       1.9       2.7       66         11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         26.00       3       .8       1.1       9         27.00			7	1.9		56.3
11.00       11       2.9       4.2       7         12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9         26.00		9.00	18	4.8	1	63.2
12.00       8       2.1       3.1       7         13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		10.00	7	1.9	2.7	65.9
13.00       4       1.1       1.5       7         13.41       1       .3       .4       7         14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		11.00	11	2.9	4.2	· 70.1
13.41       1       .3       .4       .7         14.00       7       1.9       2.7       .7         14.44       1       .3       .4       .7         15.00       13       3.5       5.0       .8         15.47       1       .3       .4       .8         16.00       6       1.6       2.3       .8         17.00       4       1.1       1.5       .8         18.00       6       1.6       2.3       .8         19.00       2       .5       .8       .9         20.00       5       1.3       1.9       .9         21.00       1       .3       .4       .9         22.00       3       .8       1.1       .9         25.00       2       .5       .8       .9         26.00       3       .8       1.1       .9         27.00       1       .3       .4       .9		12.00	8	2.1	3.1	73.2
14.00       7       1.9       2.7       7         14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		13.00	4	1.1	1.5	74.7
14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		13.41	1	.3	4	75.1
14.44       1       .3       .4       7         15.00       13       3.5       5.0       8         15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		14.00	7	1.9	2.7	77.8
15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		14.44	1	.3	1	78.2
15.47       1       .3       .4       8         16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		15.00	13	3.5	5.0	83.1
16.00       6       1.6       2.3       8         17.00       4       1.1       1.5       8         18.00       6       1.6       2.3       8         19.00       2       .5       .8       9         20.00       5       1.3       1.9       9         21.00       1       .3       .4       9         21.66       2       .5       .8       9         22.00       3       .8       1.1       9         25.00       2       .5       .8       9         26.00       3       .8       1.1       9         27.00       1       .3       .4       9		15.47		.3	.4	83.5
17.00     4     1.1     1.5     8       18.00     6     1.6     2.3     8       19.00     2     .5     .8     9       20.00     5     1.3     1.9     9       21.00     1     .3     .4     9       21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9		16.00	6	Ł .	2.3	85.8
18.00     6     1.6     2.3     8       19.00     2     .5     .8     9       20.00     5     1.3     1.9     9       21.00     1     .3     .4     9       21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9			II .	1	1.5	87.4
19.00     2     .5     .8     9       20.00     5     1.3     1.9     9       21.00     1     .3     .4     9       21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9			li .		2.3	89.7
20.00     5     1.3     1.9     9       21.00     1     .3     .4     9       21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9			1	1		90.4
21.00     1     .3     .4     9       21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9				b .		92.3
21.66     2     .5     .8     9       22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9				ı		92.7
22.00     3     .8     1.1     9       25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9	•		1	l .	1	93.5
25.00     2     .5     .8     9       26.00     3     .8     1.1     9       27.00     1     .3     .4     9						94.6
26.00     3     .8     1.1     9       27.00     1     .3     .4     9						95.4
27.00 1 .3 .4 9			1			96.6
	·		1	1		96.9
1 20,00 1 71 1,11 1,01			1		1	98.5
31.00 2 .5 .8 9				1		99.2
			B .			99.6
<b>.</b>						100.0
I I I I I I I I I I I I I I I I I I I			1		l .	100.0
	Missing			j .	100.0	
Missing         System         115         30.6           Total         376         100.0	-	System				

### CBCL INTERNALIZING (intraw\_v)

### Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
INTRAW	261	.00	34.00	7.5279	6.5182
Valid N (listwise)	261				

### **Frequencies**

#### **Statistics**

#### INTRAW

N	Valid	261
	Missing	115

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	22	5.9	8.4	8.4
Valid	1.00	22	5.9	8.4	16.9
	2.00	27	7.2	10.3	27.2
	2.14	1	.3	.4	27.6
	3.00	13	.5 3.5	5.0	32.6
	3.10	2	.5	.8	33.3
	4.00	22	.5 5.9	8.4	41.8
	4.00	1	.3	.4	42.1
	5.00	14,	3.7	5.4	47.5
				5.4	53.3
· .	6.00	15	4.0	i	
	6.64	1	.3	.4	53.6
1	7.00	16	4.3	6.1	59.8
	8.00	12	3.2	4.6	64.4
	9.00	13	3.5	5.0	69.3
	` 10.00	8	2.1	3.1	72.4
	10.33	1	3	.4	72.8
	11.00	7	1.9	2.7	75.5
	11.37	1	.3	.4	75.9
1	12.00	7	1.9	2.7	78.5
	12.40	1	.3	.4	78.9
	13.00	3	8.	1.1	80.1
	14.00	13	3.5	5.0	85.1
	15.00	6	1.6	2.3	87.4
	16.00	4	1.1	1.5	88.9
	17.00	6	1.6	2.3	91.2
	17.57	1	.3	.4	91.6
	18.00	1	.3	.4	92.0
	19.00	3	.8	1.1	93.1
	20.00	8	2.1	3.1	96.2
	21.00	1	.3	.4	96.6
	22.00	2	.5	.8	97.3
ŀ	23.00	1	.3	.4	97.7
	24.00	1	.3	.4	98.1
	26.00	2	.5	.8	98.9
	27.00	1	.3	.4	99.2
	28.00	1	.3	.4	99.6
	34.00	l i	.3	.4	100.0
	Total	261	69.4	100.0	
Missing	System	115	30.6		
Total	0,0.0	376	100.0		

# PARTNER'S FAMILY ADAPTABILITY (pfadj\_v (couples))

### Pescriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PFADJ	336	14.00	55.00	40.1586	7.7053
Valid N (listwise)	336				

### **Frequencies**

#### **Statistics**

**PFADJ** 

N	Valid	336
	Missing	40

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14.00	1	.3	.3	.3
	16.50	1 1	.3	.3	.6
	17.00	1	.3	.3	.9
	19.00	l i	.3	.3	1.2
	22.00	2	.5	.6	1.8
	23.00	2	.5	.6	2.4
	24.00	2	.5	.6	3.0
	25.00	3	.8	.9	3.9
	26.00	6	1.6	1.8	5.7
	27.00	5	1.3	1.5	7.1
	28.00	3	.8	.9	8.0
	29.00	6	1.6	.s 1.8	9.8
			1		11.3
	30.00	5	1.3	1.5	l)
	31.00	8	2.1	2.4	13.7
	32.00	` 9	2.4	2.7	16.4
	33.00	4	1.1	1.2	17.6
	34.00	9	2.4	2.7	20.2
	35.00	16	4.3	4.8	25.0
	35.20	2	.5	.6	25.6
	36.00	18	4.8	5.4	31.0
	37.00	5	1.3	1.5	32.4
	38.00	14	3.7	4.2	36.6
	39.00	18	4.8	5.4	42.0
	39.60	1	.3	.3	42.:
	40.00	18	4.8	5.4	47.6
	40.70	1	.3	.3	47.9
	41.00	28	7.4	8.3	56.
	42.00	21	5.6	6.3	62.
	43.00	14	3.7	4.2	66.
	44.00	16	4.3	4.8	71.4
	45.00	7	1.9	2.1	73.
	46.00	14	3.7	4.2	77.
	47.00	11	2.9	3.3	81.0
	48.00	13	3.5	3.9	84.
	49.00	10	2.7	3.0	87.
	50.00	11	2.9	3.3	91.
	50.60	2	.5	.6	91.
	51.00	12	3.2	3.6	95.
					96.
	52.00	5 3	1.3	1.5	I '
	53.00		.8	.9	97.
	53.90	1	.3	.3	97.
	54.00	4	1.1	1.2	99.
	55.00	3	.8	.9	100.
	Total	336	89.4	100.0	
Missing	System	40	10.6		
Total		376	100.0	<u> </u>	L

# PARTNER'S FAMILY COHESION (pfcoh\_v (couples))

# Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PFCOH	337	26.00	65.00	51.5890	9.2153
Valid N (listwise)	337				

### **Frequencies**

#### **Statistics**

**PFCOH** 

N	Valid	337
	Missing	 39

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26.00	1	.3	.3	.3
1.	27.00	1	.3	.3	.6
	28.00	1	.3	.3	.9
	29.00	2	.5	.6	1.5
	30.00	1	.3	.3	1.8
	31.00	2	.5	.6	2.4
	31.42	1	.3	.3	2.7
	32.00	'1	.3	.3	3.0
	32.50	1,	.3	.3	3.3
	33.00	2	.5	.6	3.9
	34.00	3	.8	.9	4.7
	35.00	4	1.1	1.2	5.9
	36.00	4	1.1	1.2	7.1
	36.83	1	.3	.3	7.1
	37.00	1 6	.3 1.6	1.8	9.2
	37.92	1		.3	9.5
		1	.3		
	38.00	5	1.3	1.5	11.0
	39.00	8	2.1	2.4	13.4
	40.00	5	1.3	1.5	14.8
	40.08	1	.3	.3	15.1
	41.00	5	1.3	1.5	16.6
	42.00	4	1.1	1.2	17.8
	43.00	4	1.1	1.2	19.0
	44.00	6	1.6	1.8	20.8
	44.42	1	.3	.3	21.1
	45.00	10	2.7	3.0	24.0
•	46.00	9	2.4	2.7	26.7
	47.00	12	3.2	3.6	30.3
	48.00	18	4.8	5.3	35.6
•	49.00	11	2.9	3.3	38.9
	50.00	11	2.9	3.3	42.1
	50.92	. 1	.3	.3	42.4
	50.92	1	.3	.3	42.7
	51.00	16	4.3	4.7	47.5
	52.00	9	2.4	2.7	50. <sup>-</sup>
	53.00	11	2.9	3.3	53.4
	54.00	12	3.2	3.6	57.6
	55.00	8	2.1	2.4	59.:
	56.00	11	2.9	3.3	62.6
	57.00	. 14	3.7	4.2	66.8
	58.00	12	3.2	3.6	70.3
	58.50	1	.3	.3	70.6
	59.00	23	6.1	6.8	77.4
	60.00	13	3.5	3.9	81.3
	61.00	16	4.3	4.7	86.
	62.00	8	2.1	2.4	88.4
	63.00	14	3.7	4.2	92.6
	64.00	8	2.1	2.4	95.0
	65.00	17	4.5	5.0	100.0
	Total	337	89.6	100.0	100.0
Missing	System	39	10.4	100.0	
Total	J, 3, 3, 11	39 376	100.4		

# PERPETRATOR'S FAMILY ADAPTABILITY (vfadj\_v (couples))

### Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VFADJ	375	13.00	55.00	41.1995	6.9013
Valid N (listwise)	375				

### Frequencies

#### **Statistics**

**VFADJ** 

N	Valid	375
	Missing	1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 13.00	1	.3	.3	.3
17.00	1	.3	.3	.5
18.00	1	.3	.3	.8
21.00	1	.3	.3	1.1
23.00	3	.8	.8	1.9
23.10	1	.3	.3	2.1
24.00	1	.3	.3	2.4
26.00	2	.5	.5	2.9
27.00	3	.8	.8	3.7
28.00	3	.8	.8	4.5
29.00	6	1.6	1.6	6.1
30.00	6	1.6	1.6	7.7
31.00	5	1.3	1.3	9.1
32.00	8	2.1	2.1	11.2
33.00	: 8		2.1	13.3
		2.1		
34.00	12	3.2	3.2	16.5
35.00	11	2.9	2.9	19.5
35.20	1 1	.3	.3	19.7
36.00	7	1.9	1.9	21.6
36.67	1	.3	.3	21.9
37.00	14	3.7	3.7	25.6
37.40	1	.3	.3	25.9
38.00	15	4.0	4.0	29.9
39.00	19	5.1	5.1	34.9
40.00	16	4.3	4.3	39.2
41.00	29	7.7	7.7	46.9
41.80	2	.5	.5	47.5
42.00	19	5.1	5.1	52.5
43.00	23	6.1	6.1	58.7
44.00	34	9.0	9.1	67.7
45.00	16	4.3	4.3	72.0
46.00	20	5.3	5.3	77.3
46.20	1 1	.3	.3	77.6
47.00	13	3.5	3.5	81.1
48.00	16	4.3	4.3	85.3
48.40	1	.3	.3	85.6
49.00	17	4.5	4.5	90.1
49.50	1 1	.3	.3	90.4
50.00				93.9
50.60	13	3.5	3.5	
	2	.5	.5	94.4
51.00	9	2.4	2.4	96.8
52.00	6	1.6	1.6	98.4
52.56	1	.3	.3	98.7
53.00	2	.5	.5	99.2
54.00	2	.5	.5	99.7
55.00	1	.3	.3	100.0
Total	375	99.7	100.0	
Missing System		.3	·	
Total	376	100.0		

### PERPETRATOR'S FAMILY COHESION (vfcoh\_v (couples))

# Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VFCOH	375	18.00	65.00	52.0500	8.4716
Valid N (listwise)	375				

### **Frequencies**

**Statistics** 

**VFCOH** 

N	Valid	375
	Missing	11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18.00	1	.3	.3	.3
	22.00	1	.3	.3	.5
	24.00	1	.3	.3	.8
	27.00	1	.3	.3	1.1
	28.00	4	1.1	1.1	2.1
	31.00	2	.5	.5	2.7
	33.00	2	.5	.5	3.2
	34.00	1	.3	.3	3.5
	35.00	4	1.1	1.1	4.5
	35.75	1	.3	.3	4.8
	36.00	2	.5	.5	5.3
	37.00	3	.8	.8	6.1
	38.00	4	1.1	1.1	7.2
•	39.00	4	1.1	1.1	8.3
1	40.00	9	2.4	2.4	. 10.7
		4	2.4 2.1		10.7
	41.00	8		2.1	
	42.00	6	1.6	1.6	14.4
	43.00	6	1.6	1.6	16.0
	44.00	8	2.1	2.1	18.1
	44.42	1	.3	.3	18.4
	45.00	4	1.1	1.1	19.5
	46.00	15	4.0	4.0	23.5
	47.00	9	2.4	2.4	25.9
	48.00	10	2.7	2.7	28.5
	48.45	1	.3	.3	28.8
	49.00	10	2.7	2.7	31.5
٠	49.83	2	.5	.5	32.0
	50.00	12	3.2	3.2	35.2
	51.00	15	4.0	4.0	39.2
	52.00	21.	5.6	5.6	44.8
	53.00	12	3.2	3.2	48.0
	53.08	1	.3	.3	48.3
	54.00	20	5.3	5.3	53.6
	55.00	22	5.9	5.9	59.5
	55.25	1	.3	.3	59.7
	56.00	20	5.3	5.3	65.1
	56.33	2	.5	.5	65.6
	57.00	21	5.6	5.6	71.2
	58.00	15	4.0	4.0	75.2
	59.00	20	5.3	5.3	80.5
	60.00	19	5.1	5.1	85.6
	61.00	18	4.8	4.8	90.4
	61.45	1	.3	.3	90.7
	62.00	9	2.4	2.4	93.1
	63.00	13	3.5	3.5	96.5
	64.00	11	2.9	2.9	99.5
	65.00	2	.5	.5	100.0
	Total	375	99.7	100.0	
Missing	System	1	.3	. 33.0	*
Total	= , = , =	376	100.0	:	,

# PERPETRATOR'S MARITAL ADJUSTMENT (vmaradj\_v)

### **Descriptives**

#### **Descriptive Statistics**

	Ν	Minimum	Maximum	Mean	Std. Deviation
VMARADJ	376	-40.00	18.58	.1493	10.3887
Valid N (listwise)	376				

### **Frequencies**

#### **Statistics**

**VMARADJ** 

N	Valid	376
	Missing	0

#### **VMARADJ**

<u>-</u>		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-40.00	1	.3	.3	.3
	-38.32	1	.3	.3	.5
	-38.02	1	.3	.3	.8
	-36.51	1 1	.3	.3	1.1
	-32.23	1	.3	.3	1.3
	-28.88	1	.3	.3	1.6
	-27.54	1	.3	.3	1.9
	-25.57	1	.3	.3	2.1
	-25.43	1 1	.3	.3	2,4
	-24.63	1	.3	.3	2.7
	-24.62	1 1	.3	.3	2.9
	-24.60	1	.3	.3	3.2
	-24.57	1	.3	.3	3.5
	-24.56	1	.3	.3	3.7
	-24.12	1	.3	.3	4.0
	-22.71	1	.3	.3	4.3
	-22.67	1	.3	.3	4.5
	-22.50	1	.3	.3	4.8
	-22.31	1	.3	.3	5.1
	-20.80	1	.3	.3	5.3
	-20.59	1	.3	.3	5.6
	-20.31	1	.3	.3	5.9
	-18.70	1	.3	.3	6.1
	-18.56	1	.3	.3	6.4
	-18.42	1	.3	.3	6.6
	-18.36	1	.3	.3	6.9
	-18.23	1	.3	.3	7.2
	-17.63	1	.3	.3	7.4
	-17.28	1	.3	.3	7.7
	-16.75	1	.3	.3	8.0
	-16.60	1	3	3	8.2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-16.56	1	.3	.3	8.5
	-16.51	1	.3	.3	8.8
	-16.33	] 1	.3	.3	9.0
	-16.29	1	.3	.3	9.3
	-15.53	1	.3	.3	9.6
	-15.48	1	.3	.3	9.8
	-15.45	1	.3	.3	10.1
	-14.40	1	.3	.3	10.4
	-14.36	1	.3	.3	10.6
	-13.65	l i	.3	.3	10.9
	-13.23	1	.3	.3	11.2
	-13.22	1	.3	.3	11.4
	-13.22	1	.3	.3	11.7
•	-13.20	1	.3	.3	12.0
		10		.3	12.0
	-12.77	1	.31		
	-12.53	1	.3	.3	12.5
	-12.08	1	.3	.3	12.8
	-11.77	1	.3	.3	13.0
	-11.68	1	.3	.3	13.3
	-11.66	1	.3	.3	13.6
	-11.59	1	.3	.3	13.8
	-11.09	1	.3	.3	14.1
	-10.73	1	.3	.3	14.4
	-10.24	1	.3	.3	14.6
	-10.19	1	.3	.3	14.9
	-10.15	1	.3	.3	15.2
	-9.96	1	.3	.3	15.4
	-9.89	1	.3	.3	15.7
	-9.89	1	.3	.3	16.0
	-9.72	1	.3	.3	16.2
	-9.35	1	.3	.3	16.
	-9.19	1	.3	.3	16.
	-9.18	1	.3	.3	17.0
	-8.91	1	.3	.3	17.
	-8.35	1	.3	.3	17.0
	-8.30	1	.3	.3	17.
	-7.99	1	.3		18.
	-7.9 <del>9</del> -7.92		.3	.3	
		1	.3 .3 .3	.3	18.4
	-7.88 7.88	1	.3	.3	18.
	-7.28 7.22	1	.3	.3	18.
	-7.23	1	.3	.3	19.
	-7.19	1	.3	.3	19.4
	-7.14	1	.3	.3	19.1
	-7.12	1	.3	.3	19.9
	-6.69	1	.3	.3	20.:
	-6.64	1	.3	.3	20.9
	-6.40	1	.3	.3	20.
	-6.33	1	.3	.3	21.0
	-6.24	1	.3	.3	21.
	-6.21	1	.3	.3	21.
	-6.20	11_	.3	.3	21.8

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid -6.02	1	.3	.3	22.1
-5.99	1	.3	.3	22.3
-5.95	1	.3	.3	22.6
	1			
-5.88	1	.3	.3	22.9
-5.70	1	.3	.3	23.1
-5.68	1	.3	.3	23.4
-5.34	1	.3	.3	23.7
-5.26	1	.3	.3	23.9
-5.26	. 1	3	.3	24.2
-5.12	1	.3	.3	24.5
<b>-</b> 5.00	1	.3	.3	24.7
-4.79	1	.3	.3	25.0
-4.59	1	.3	.3	25.3
-4.36	1	.3	.3	25.5
-4.24		.3	.3	25.8
	1.			26.1
-4.22	1	.3	.3	
-4.11	1	.3	.3	26.3
-4.06	1	.3	.3	26.6
-3.47	1	.3	.3	26.9
-3.44	1	.3	.3	27.1
-3.34		.3	.3	27.4
-3.33	1	.3	.3	27.7
-3.25	1	.3	.3	27.9
-3.23	1	.3	.3	28.2
-3.19	1 1	.3	.3	28.5
-3.11	1	.3	.3	28.7
-3.04	1 1	.3	.3	29.0
-2.90	1 1	.3	.3	29.3
	1			29.5
-2.86	1	.3	.3	
-2.71	1	.3	.3	29.8
-2.66	1 1	.3	.3	30.1
-2.65	1	.3	.3	30.3
<b>-</b> 2.62	1	.3	.3	30.6
<b>-</b> 2.60	] 1	.3	3	30.9
-2.52	1	.3	.3	31.1
-2.28	1	.3 .3	.3	31.4
-2.22	1	.3	.3	31.6
-2.22	1 1	.3	.3	31.9
-2.21	1 1	.3	.3	32.2
-2.19	1	.3	.3	32.4
-2.06	1 1	.3	.3	32.7
-2.03	1 1	.3	.3	33.0
-1.97	1 1	.3 .3	.3	33.2
-1.72	1	.3 .3·		33.5
	1 1		.3	
-1.70	1	.3	.3	33.8
-1.60	1	.3	.3	34.0
-1.54	1 1	.3	.3 .3 .3 .3	34.3
-1.34	1	.3	.3	34.6
-1.32	1 1	.3	.3	34.8
-1.23	1	.3	3	35.1
-1.21	1	.3	.3	35.4

· · · · · · · · · · · · · · · · · · ·		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.20	1	.3	.3	35.6
valid	-1.20		.3	.3	35.9
	-1.04		.3	.3	36.2
	-1.03 97		.3	.3	36.4
	<del>9</del> 7 97			.3	36.7
	97 85	1	.3		37.0
		1	.3	.3	37.0 37.2
	65	1	.3	.3	1
	55 5.4	1	.3	.3	37.5
	54 53	1	.3	.3	37.8
	53	1	.3	.3	38.0
	52	1	.3	.3	38.3
	47	1	.3	.3	38.6
•	38	1	.3	.3	38.8
	38	1	.3	.3	39.1
	30	1	.3	.3	. 39.4
	14	1	.3	.3	39.6
	07	1	.3	.3	39.9
	.01	1	.3	.3	40.2
	.17	1	.3	.3	40.4
	.23	1	.3	.3	40.7
	.25	1	.3	.3	41.0
	.40	1	.3	.3	41.2
	.52	1	.3	.3	41.5
	.54	1	.3	.3	41.8
	.56	1	.3	.3	42.0
	.57	1	.3	.3	42.3
	.75	1	.3	.3	42.6
	.79	1	.3	.3	42.8
	.80	1	.3	.3	43.1
	.82	1	.3	.3	43.4
	.87	1	3	.3	43.6
	.95	1	.3	.3	43.9
	1.05	1	.3	3	44.1
	1.05	1	.3	.3	44.4
	1.11	1	.3	.3	44.7
	1.11	1	.3	.3	44.9
	1.15	1	.3	.3	45.2
	1.51	1	.3	.3	45.5
	1.53	1	.3	.3	45.7
	1.58	1	.3	.3	46.0
	1.62	1	.3	.3	46.3
	1.63	1	.3	.3	46.5
	1.66	1	.3	.3	46.8
	1.68	1	.3	.3	47.1
	1.68	1	.3	.3	47.3
	1.79	1	.3	.3	47.6
	2.04	1	.3	.3	47.9
	2.06	i	.3	.3	48.1
	2.12	i i	.3	.3	48.4
	2.12	1	.3	.3	48.7
	2.20	1	.3	.3	48.9

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2.40	1	.3	.3	49.2
2.48	1	.3	.3	49.5
2.59	1 1	.3	.3	49.7
2.61				
4	1	.3	.3	50.0
2.65	1	.3	.3	50.3
2.70	1	.3	.3	50.5
2.79	1	.3	.3	50.8
2.80	1	.3	.3	51.1
2.86	1	.3	.3	51.3
2.87	1	.3	.3	51.6
2.89	1	.3	.3	51.9
2.93	1	.3	.3	52.1
3.17	1	.3	.3	52.4
3.18	1	.3	.3	52.7
3.21	l i	.3	.3	. 52.9
3.28		.3	.3	53.2
3.49	1 1	.3	.3	53.5
3.52	1			
	1	.3	.3	53.7
3.53	1	.3	.3	54.0
3.54	1	.3	.3	54.3
3.57	1	.3	.3	54.5
3.62	1	.3	.3	54.8
3.68	. 1	.3	.3	55.1
3.71	1	.3	.3	55.3
3.73	1	.3	.3	55.6
3.76	1	.3	.3	55.9
3.77	1	.3	.3	56.1
3.81	1	.3	.3	56.4
3.83	1	.3	.3	56.6
3.87	1	.3	.3	56.9
3.99	1	.3	.3	57.2
4.03	1 1	.3	.3	57.4
4.04	1	.3	.3	57.7
4.08				
1	1	.3	.3	58.0
4.08	1	.3	.3	58.2
4.12	1	.3	.3	58.5
4.15	.1	.3	.3	58.8
4.22	1	.3	.3 .3 .3 .3	59.0
4.33	1	.3	.3	59.3
4.58	1	.3	.3	59.6
4.61	1	.3	.3	59.8
4.62	1	.3	.3	60.1
4.83	1	.3	.3	60.4
4.85	1	.3	.3	60.6
4.86	1	.3	.3	60.9
4.87	1	.3	.3	61.2
4.87	1	.3	.3	61.4
4.87	1	.3	.3	61.7
4.87		.3	.3	62.0
4.87		.5		
	1 1	.3	.3	62.2
4.92	1	.3	.3	62.5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4.94	1	.3	.3	62.8
	4.98	2	.5	.5	63.3
	5.01	1	.3	.3	63.6
	5.03	1	.3	.3	63.8
	5.23	1	.3	.3	64.1
	5.30	1	.3	.3	64.4
	5.30 5.30	1	.3	.3	64.6
	5.44				64.9
		1	.3	.3	
	5.46	1	/ .3	.3	65.2
	5.50	1	.3	.3	65.4
	5.64	1	.3	.3	65.7
	5.68	1	.3	.3	66.0
	5.72	1	.3	.3	66.2
	5.77	1	.3	.3	66.5
	5.78	1	, .3	.3	. 66.8
	5.99	1	.3	.3	67.0
	6.00	1	.3	.3	67.3
	6.02	1	.3	.3	67.6
	6.04	1	.3	.3	67.8
	6.23	1	.3	.3	68.1
	6.35				68.4
		1	.3	.3	
	6.35	1	.3	.3	68.6
	6.48	1	.3	.3	68.9
	6.48	1	.3	.3	69.1
	6.55	1	.3	.3	69.4
	6.56	1	.3	.3	69.7
	6.67	1	.3	.3	69.9
	6.69	1	.3	,3	70.2
	6.74	1	.3	.3	70.5
	6.74	1	.3	.3	70.7
	6.75	1	.3	.3	71.0
	6.77	1	.3	.3	71.3
	6.90	. 1	.3	.3	71.5
	6.93	1	.3	.3	71.8
	6.96	1	.3	.3	72.1
	7.01	1	.3	.3	72.3
	7.02	1	.3	.3	72.6
	7.04	1	.3	.3	72.9
	7.06	1			72.5
	7.00 7.13	i 1	.3	.3	
		1	.3	.3	73.4
	7.17	1	.3	.3	73.7
	7.22	1 1	.3	.3	73.9
	7.38	1	.3	.3	74.2
	7.44	1	.3	.3	74.5
	7.50	1	.3	.3	74.7
•	7.50	1	.3	.3	75.0
•	7.54	1	.3	.3	75.3
	7.55	1	.3	.3	75.5
	7.61	1	.3	.3	75.8
	7.67	1	.3	.3	76.1
	7.70	1	.3	.3	76.3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.71	1	.3	.3	76.6
7 2	7.75	1	.3	.3	76.9
	7.79		.3	.3	77.1
	7.80	1 1	.3	.3	77.4
	7.83	1 1	.3	.3	77.7
	7.03 7.91		.3	.3	77.9
	8.00	1 1	.3	.3	77.3
	8.02	1		1	
		1 1	.3	.3	78.5
*	8.05	1	.3	.3	78.7
	8.13	1 1	.3	.3	79.0
	8.15	1 1	.3	.3	79.3
	8.18	1	.3	.3	79.5
-	8.19	1	.3	.3	79.8
	8.36	1	.3	.3	80.1
	8.48	1	.3	.3	. 80.3
	8.53	1 1	.3	.3	80.6
	8.88	1	.3	.3	80.8
	8.95	2	.5	.5	81.4
	8.97	1	.3	.3	81.6
	9.00	1	.3	.3	81.9
	9.00	1	.3	.3	82.2
	9.05	1	.3	.3	82.4
	9.05	1	.3	.3	82.1
	9.08	1 1	.3	.3	83.0
	9.08	1 1	.3	.3	83.2
	9.10	1	.3	.3	83.
	9.15	1 1	.3	.3	83.8
	9.29	1	.3	.3	84.0
	9.30	1	.3	.3	84.3
	9.42		.3	.3	84.6
	9.45		.3	.3	84.
	9.61	1 ' (			i e
		1	.3	.3	85. <sup>-</sup>
	9.63	1	.3	.3	85.4
	9.84	1	.3	.3	85.6
	9.86	1 1	.3	.3	85.9
	9.88	1	.3	.3	86.3
	9.91	1	.3	.3	86.4
	9.91	1	.3	.3	86.7
	9.96	1	.3	.3	87.0
	9.99	1	.3	.3	87.2
	10.00	1	.3	.3	87.
	10.20	1	.3	.3	87.8
	10.20	1	.3	.3	88.0
	10.62	1	.3	.3	88.3
	10.72	1	.3	.3	88.6
	10.83	1	.3	.3	88.8
	10.87	1 1	.3	.3	89.1
	10.88	1	.3	.3	89.4
	10.99	2	.5	.5	89.9
	11.01	1	.3	.3	90.2
	11.12	1	.3	3	90.4

	<u> </u>	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11.14	1	.3	.3	90.7
	11.14	lil	.3	.3	91.0
	11.24		.3	.3	91.2
	11.30	1	.3	.3	91.5
	11.50	1 1	.3	.3	91.8
	11.65	1	.3	.3	92.0
	11.85	l 1	.3	.3	92.3
	11.88	1	.3	.3	92.6
	11.90	1 1	.3	.3	92.8
	11.91	1	.3	.3	93.1
	11.94	1 1	.3	.3	93.4
	11.98	1	.3	.3	93.6
	11.98	1 1	.3	.3	93.9
-	12.21	1	.3	.3	94.1
	12.61	1	.3	3	94.4
	12.77	3	.8	.8	95.2
	12.85	1	.3	.3	95.5
	12.98	1 1	.3	.3	95.7
	12.98	1	.3	.3	96.0
	13.03	1	.3	.3	96.3
	13.15	1	.3	.3	96.5
	13.19	1	.3	.3	96.8
	13.28	1 1	.3	.3	97.1
	13.51	1 1	.3	.3	97.3
	13.83	1	.3	.3	97.6
	13.89	1	.3	.3	97.9
	14.74	1 1	.3	.3	98.1
	14.89	1	.3	.3	98.4
	15.06	2	.5	.5	98.9
	15.86	1	.3	.3	99.2
	15.93	1	.3	.3	99.5
	18.03	1	.3	.3	99.7
	18.58	1 1	.3	.3	100.0
	Total	376	100.0	100.0	

# PARTNER'S MARITAL ADJUSTMENT (paradj\_v)

# **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PARADJ	373	-31.28	16.17	-1.60E-03	11.2148
Valid N (listwise)	373				

# **Frequencies**

#### **Statistics**

#### **PARADJ**

7	Valid	373
	Missing	3

#### **PARADJ**

		_			Cumulative
<u> </u>		Frequency	Percent	Valid Percent	Percent
Valid	-31.28	1	.3	.3	.3
	-30.80	1	.3	.3	.5
	-30.07	1	.3	.3	.8
·	-29.43	1	3	.3	1.1
	-29.02	1	.3	.3	1.3
	-28.84	1	.3	.3	1.6
	-28.62	1	.3	.3	1.9
	-28.42	1	.3	.3	2.1
	-28.31	1	.3	.3	2.4
	-28.03	1	.3	.3	2.7
	-28.02	1	.3	.3	2.9
	-27.80	1	.3	.3	3.2
	-27.74	1	.3	.3	3.5
	-26.87	1	.3	3	3.8
	-26.74	1	.3	.3	4.0
	-26.39	] 1	.3	.3	4.3
-	-26.39	1	.3	.3	4.6
	-26.22	1	.3	.3	4.8
	-25.65	1	.3	.3	5.1
	-24.56	1	.3	.3	5.4
	-24.16	1	.3	.3	5.6
	-22.97	- 1	.3	.3	5.9
•	-22.90	1	.3	.3	6.2
	-22.50	1	.3	.3	6.4
	-22.36	.1	.3	.3	6.7
	-20.52	1	.3	.3	7.0
	-20.45	1	.3	.3	7.2
	-20.22	1	.3	.3	7.5
	-19.60	1	.3	.3	7.8
	-19.46	1	.3	.3	8.0
	-19.15	1 1	.3	.3	8.3

			Frequency	Percent	Valid Percent	Cumulative Percent
1	Valid	-19.13	1	.3	.3	8.6
ı		-18.99	1	.3	.3	8.8
١		-18.91	1	.3	.3	9.1
١		-18.85	1	.3	.3	9.4
١		-18.70	1 1	.3	.3	9.7
١		-18.55	1	.3	.3	9.9
١		-18.42	1	.3	.3	10.2
١		-17.63	1 1	.3	.3	10.5
ı		-17.45	1,	.3	.3	10.7
١		-17.24	1 1	.3	.3	11.0
Ì		-16.84	1	.3	.3	11.3
1		-16.12	1 1	.3	.3	11.5
ı		-14.55	1	.3	.3	11.8
١	•	-14.35	1	.3	.3	12.1
		-14.17	1	.3	.3	12.3
		-13.72	1	.3	.3	12.6
		-13.61		.3	.3	12.9
I		-13.42	1	.3	.3	13.1
ı		-13.29	1 1	.3	.3	13.4
l		-12.85	1 1	.3	.3	13.7
١		-12.85	1	.3	.3	13.9
١		-12.34	1	.3	.3	14.2
1		-12.31	1	.3	.3	14.5
1		-12.16	1	.3	.3	14.7
١		-12.07		.3	.3	15.0
1		-12.02		.3	.3	15.3
1		-11.72		.3	.3	15.5
Ì		-11.57	1 1	.3	.3	15.8
I		-11.34	1	.3	.3	16.1
Į		-11.04		.3	.3	16.4
I		-10.93		.3	.3	16.6
١		-10.44	1	.3	.3	16.9
ı		-10.40	1	.3	.3	17.2
١		-10.17		.3	.3	17.4
ı		-9.59	1	.3	.3	17.7
١		-9.25	1	.3	.3	18.0
l		-9.24	1	3	.3	18.2
١		-8.81	1	.5 3	.3	18.5
ı		-8.74	1	.5	.3	18.8
l		-8.66	1	.5	.3	19.0
		-8.61	1	.3 .3 .3 .3	.s .3	19.3
I		-8.55	1	.3 .3	.s .3	19.6
l		-8.39	1	.3	.3	19.8
		-8.39	1	.3	.s .3	20.1
		-8.32	1	.3	.3	20.1
1		-8.25	1	.3	.3	20.4
1		-7.80	1	.3	.ي	20.9
1		-7.68	1	.s .3	.3	20.9
		-7.51	1	.3	.3 .3	21.4
۱		-7.31	1	.3	.3	21.7
١		-7.20	1	.3	.3	22.0

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-7.15	1	.3	.3	22.3
	-7.10	1 1	.3	.3	22.5
	-6.78	1	.3	.3	22.8
	-6.75	1	.3	.3	23.1
	-6.70	1	.3	.3	23.3
	-6.67	1	.3	.3	23.0
	-6.52	1	.3	.3	23.
	-6.18	1	.3	.3	24.
	-6.07	1	.3	.3	24.
	-5.92	1	.3	.3	24.
	-5.88	1	.3	.3	24.
	-5.40	1	.3	.3	25.
	-5.25	l i	.3	.3	25.
•	-5.18	1	.3	.3	25.
	-5.10 -5.11	1	.3	.3	26.
	-5.11 -5.04	1	.3	.3	26. 26.
	-4.96	1	.3	.3	26. 26.
	-4.93		.3	.3	26.
	-4. <del>3</del> 3 -4.89	1		1	20. 27.
	-4.09 -4.72	1 1	.3	.3	27. 27.
		1	.3	.3	27. 27.
	-4.63 4.63	1 1	.3	.3	
	-4.62	] 1	.3	.3	27.
	-4.18	1	.3	.3	28.
	-4.16	1	.3	.3	28.
	-4.16	1 1	.3	.3	28.
	-4.03	1	.3	.3	29.
	-4.01	1	.3	.3	29.
	-3.84	1	.3	.3	29.
	-3.70	. 1	.3	.3	29.
	-3.67	. 1	.3	.3	30.
	-3.55	1	.3	.3	30.
	-3.39	1	.3	.3	30.
	-3.36	1	.3	.3	30.
	-3.35	1	.3	.3	31.
	-3.15	1	.3	.3	31.
	-3.14	1	.3	.3	31.
	-3.02	1	.3	.3	31.
	-2.82	1	.3	.3	32.
	-2.78	1	.3	.3	32.
	-2.66	1	.3 .3	.3	32.
	-2.47	1	.3	.3	33.
	-2.26	1	.3	.3	33.
	-2.23	1	.3	.3	33.
	-2.19	• 1	.3	.3	33.
	-2.17	1	.3	.3	34.
	-2.10	. 1	.3	.3	34.
	-2.05	1	.3	.3	34.
	-2.02	1	.3	.3	34.
	-1.83	1	.3	.3	35.
	-1.71	1	.3	.3	35.
	-1.69	1 1	.3_	.3	35.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	-1.66	1	.3	.3	35.9
	-1.59	1	.3	.3	36.2
	-1.38	1	.3	.3	36.5
	-1.25	1	.3	.3	36.7
	-1.19	1	.3	.3	37.0
	-1.11	1	.3	.3	37.3
,	91	1	.3	.3	37.5
	88	1	.3	.3	37.8
	81	1,	.3	.3	38.1
	68	1	.3	.3	38.3
	57	1	.3	.3	38.6
	46	1	.3	.3	38.9
	45	1	.3	.3	39.
_	31	1 1	.3	.3	39.4
	27	1	•.3	.3	39.7
	20	1	.3	.3	39.9
	20 18	1	.3	.3	40.
		1	l'		40.
	03	1	.3	.3	
	.00	1	.3	.3	40.8
	.14	1	.3	.3	41.0
	.18	1	.3	.3	41.
	.22	1	.3	.3	41.0
	.60	1	.3	.3	41.
	.63	1	.3	.3	42.
•	.74	1	.3	√.3	42.4
	.75	1	.3	.3	42.0
	.76	1	.3	.3	42.9
	.78	1	.3	.3	43.
	.97	1	.3	.3	43.4
	.97	1	.3	.3	43.
	.99	1	.3	.3	44.
	1.08	1 1	.3	.3	44.
	1.18	1	.3	.3	44.
	1.32	1	.3	.3	44.
	1.32	1	.3	.3	45.
	1.33	1	3	.3	45.
	1.36	1	.3	.3	45.0
	1.38	1	.3	.3	45.
	1.41	1	3	.3	46.
	1.42	1	.3	.3	46.4
	1.45		.3	.3	46.0
	1.55	1	.3	.3	46.
	1.61		.3	.3	47.
	1.63		.3	.3	47.
	1.64	1	.3	.3	47.
	1.79	1	.3	.3	48.
	1.79	L		.3	48.
	1.60 1.91	1	.3	.3	
		1	.3	.3	48.
	2.02 2.04	1 1	.3 .3	.3	48.0 49.
	/ (I4.	. 11	7	1 7 1	10'

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2.12	1	.3	.3	49.6
2.13	1	.3	.3	49.9
2.43	1	.3	.3	50.1
2.44	1	.3	.3	50.4
2.48	1	.3	.3	50.7
2.49	1	.3	.3	50.9
2.55	1	.3	.3	51.2
2.73	1	.3	.3	51.5
2.78		.3	.3	51.7
2.79	1	.3	.3	52.0
2.85	1 1	.3	.3	52.3
2.88		.3	.3	52.5 52.5
	1 1		i i	52.8 52.8
2.91	1	.3	.3	52.0
3.07	1	.3	.3	F
3.22	1	.3	.3	53.4
3.32		.3	.3	53.6
3.33	1	.3	.3	53.9
3.41	-1	.3	.3	54.2
3.44	1	.3	.3	54.4
3.45	1	.3	.3	54.7
3.48	1	.3	.3	55.0
3.50	1	.3	.3	55.2
3.51	1	.3	.3	55.5
3.51	1	.3	.3	55.8
3.53	1	.3	.3	56.0
3.54	1	.3	.3	56.3
3.57	1	.3	.3	56.6
3.61	1	.3	.3	56.8
3.63		.3	.3	57.
3.68	1	.3	.3	57.4
3.74	1	.3	.3	57.6
3.86	1	.3	.3	57.
3.89		.3	.3	58.2
3.93	1 1	.3	.3	58.4
		1		1
3.96	1	.3	.3	58.
3.97	1	.3	.3	59.0
4.10	1	.3	.3	59.3
4.29	1	.3	.3	59.
4.34	1	.3	.3	59.
4.38	1	.3	.3	60.
4.41	1	.3	.3	60.
4.51	1	.3	.3	60.6
4.69	1	.3	.3	60.9
4.72	1	3	.3	61.1
4.87	1	.3	.3	61.4
4.94	1	.3	.3	61.7
4.98	1	.3	.3	61.9
4.99	1	.3	.3	62.2
5.16	1	.3	.3	62.5
5.18	1	.3	.3	62.7
5.24	1	.3	.3	63.0

					Cumulative
<b>.</b>		Frequency	Percent	Valid Percent	Percent
Valid	5.35	1	.3	.3	63.3
	5.40	1	.3	.3	63.5
ţ	5.43	1	.3	.3	63.8
	5.49	1	.3	.3	64.1
	5.58	1	.3	.3	64.3
	5.62	ļ ; ;	.3	.3	64.6
1	5.82	1	.3	.3	64.9
	5.86	1	.3	.3	65.1
	5.88	1	.3	.3	65.4
1	5.94	1	.3	.3	65.7
	5.94		.3	.3	66.0
į.	6.01	1	.3	.3	66.2
	6.03	.1	.3	.3	66.5
	6.09	1		.s .3	66.8
		1 1	.3		
	6.45	1	.3	.3	67.0
	6.61	1	.3	.3	67.3
į.	6.85	1	.3	.3	67.6
	6.98	1	.3	.3	67.8
1	7.01	1	.3	.3	68.1
ļ	7.07	1	.3	.3	68.4
	7.12	1	.3	.3	68.6
	7.15	1	.3	.3	68.9
	7.17	1	.3	.3	69.2
	7.19	1	.3	.3	69.4
	7.24	1	.3	.3	69.7
<b>.</b> .	7.26	1	.3	.3	70.0
	7.28	1	.3	.3	70.2
I	7.47	1	.3	.3	70.5
1	7.51	1	.3	.3	70.8
	7.89	1	.3	.3	71.0
	7.94	1	.3	.3	71.3
1	7.97	. 1	.3	.3	71.6
	7.97	1	.3	.3	71.8
	8.04	1	.3	.3	72.1
	8.20	1	.3	.3	72.4
İ	8.22	1	.3	.3	72.7
1	8.40	. 1	.3	.3	72.9
·	8.40	1	.3	} .3	73.2
	8.41	1	.3	.3	73.5
	8.45	1	.3	.3	73.7
}	8.52	1	.3	.3	74.0
	8.62	1	.3	.3	74.3
	8.70	1	3	.3	74.5
	8.71	1	.3	.3	74.8
"	8.78	1	3	.3 .3 .3	75.1
	8.99	1	.3	.3	75.3
	9.01	1	.3	.3	75.6
	9.10	1	.3	.3	75.9
	9.13	1	.3	.3	76.1
	9.19	1	.3	.3	76.4
	9.22	1		.3	76.7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9.26	2	.5	.5	77.2
	9.29	1	.3	3	77.5
	9.32	1 1	.3	.3	77.7
	9.36	1 1	.3	.3	78.0
	9.51	1 1	.3	.3	78.3
	9.55	1	.3	.3	78.6
	9.64	1	.3	.3	78.8
	9.70	1	3	.3	79.1
	9.81	1	.3	.3	79.4
	9.95	1	.3	.3	79.6
	9.99	1	.3	.3	79.9
	9.99	1 1	.3	.3	80.2
	10.00	i i i	.3	.3	80.4
	10.00		.3	.3	80.7
	10.01	1			81.0
		1 1	.3	.3	
	10.09	1	.3	.3	81.3
	10.20	1	.3	.3	81.
	10.25	1	.3	.3	81.
	10.28	1	.3	.3	82.0
	10.32	] 1]	.3	.3	82.3
	10.36	1	.3	.3	82.0
	10.41	] .1	.3	.3	82.8
	10.42	1	.3	.3	83.1
	10.42	1	.3	.3	83.4
	10.52	1	.3	.3	83.
	10.62	1	.3	.3	83.9
	11.04	1 1	.3	.3	84.
	11.16	1 1	.3	.3	84.
	11.17	1	.3	.3	84.
	11.17	1 1	.3	.3	85.
	11.19	1	.3	.3	85.
	11.32	1	.3	.3	85.
	11.34	1	.3	.3	85.
	11.35	1 1	.3	.3	86.
	11.61		.3	.3	86.
	11.83	1 1		.3	86.
	11.86	1	.3		86.
	11.90		.3	.3	
		1	.3	.3	87.
	11.94	1	.3	.3	87.4
•	11.95	1	.3	.3	87.
	12.02	1	.3	.3	87.9
	12.03	1	.3	.3	88.2
	12.04	1	.3	.3	88.
	12.04	1.	.3	.3	88.7
	12.10	1	.3	.3	89.0
	12.10	1	.3	.3	89.3
	12.13	1	.3	.3	89.
	12.13	. 1	.3	.3	89.8
	12.13	1	.3	.3	90.
	12.20	1	.3	.3	90.:
	12.29	1	.3	.3	90.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12.38	1	.3	.3	90.9
	12.42	1	.3	.3	91.2
	12.69	1	.3	.3	91.4
	12.72	1	.3	.3	91.7
	12.78	1	.3	.3	92.0
	12.86	1	.3	.3	92.2
	12.90	1	.3	.3	92.5
	12.97	2	.5	.5	93.0
	13.06	1	.3	.3	93.3
	13.08	2	.5	.5	93.8
	13.20	1	.3	.3	94.1
	13.24	1	.3	.3	94.4
	13.79	1	.3	.3	94.6
· -	13.80	1	.3	.3	94.9
	13.82	2.	.5	.5	95.4
	13.82	1 1	.3	.3	95.7
	13.97	1	.3	.3	96.0
	14.00	1	.3	.3	96.2
	14.05	1	.3	.3	96.5
	14.15	2	.5	.5	97.1
	14.37	1	.3	.3	97.3
	14.80		.3	.3	97.6
	14.81	1	.3	.3	97.9
	14.92	2	.5	.5	98.4
	15.05	1	.3	.3	98.7
	15.09	1	.3	.3	98.9
	15.32	1	.3	.3	99.2
	15.41	1	.3	.3	99.5
	15.90	1	.3 .3	.3	99.7
	16.17	1	.3	.s .3	100.0
	Total	373	.3 99.2	.3 100.0	100.0
Missing	System	3/3	.8	100.0	
_	System	376			
Total		<u> </u>	100.0	l	<u> </u>

# PARTNER'S FAMILY ADAPTABILITY (CHILD SAMPLE) (pfadj\_c\_v)

# **Descriptives**

#### **Descriptive Statistics**

	Ν	Minimum	Maximum	Mean	Std. Deviation
PFADJ_C	261	18.00	65.00	48.4127	8.4159
Valid N (listwise)	261			•	

# **Frequencies**

**Statistics** 

PFADJ\_C

N	Valid	261
	Missing	115

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18.00	1	.3	.4	.4
	22.00	1	.3	.4	.8
	24.00	1	.3	.4	1.1
	25.00	1	.3	.4	1.5
	27.00	3	.8	1.1	2.7
	30.00	2	.5	.8	3.4
	32.00	2	.5	.8	4.2
	33.00	2	.5	.8	5.0
	35.00	5	1.3	1.9	6.9
	36.00	2	.5	.8	7.7
	37.00	4	1.1	1.5	9.2
	38.00	9	2.4	3.4	12.6
	39.00	9	2.4	3.4	16.1
•	40.00	5	1.3	1.9	18.0
	41.00	1	.3	4	18.4
	42.00	3	.8	1.1	19.5
	43.00	11	2.9	4.2	23.8
	43.17	1	.3	.4	24.1
	44.00	14	.3 3.7	5.4	29.5 29.5
	44.15	1	.3	.4	29.9
	44.15 45.00	1		.4 5.0	
	45.00 45.23	13	3.5	1	34.9
		1 1	.3	.4	35.2
	46.00	5	1.3	1.9	37.2
	47.00	14	3.7	5.4	42.
	48.00	7	1.9	2.7	45.2
	48.46	1	.3	.4	45.6
	49.00	13	3.5	5.0	50.6
	49.54	1	.3	.4	51.0
	50.00	8	2.1	3.1	54.0
	50.62	1	.3	.4	54.4
	51.00	16	4.3	6.1	60.
	52.00	16	4.3	6.1	66.7
	53.00	15	4.0	5.7	72.4
	54.00	12	3.2	4.6	77.0
	55.00	9	2.4	3.4	80.
	56.00	8	2.1	3.1	83.
	57.00	8	2.1	3.1	86.6
	58.00	7	1.9	2.7	89.3
	59.00	8	2.1	3.1	92.3
	60.00	9	2.4	3.4	95.8
	61.00	2	.5	.8	96.6
	63.00	3	.8	1.1	97.7
	63.54	1	.3	.4	98.1
	64.00	3	.8	. 1.1	99.2
	65.00	2	.5	.8	100.0
	Total	261	69.4	100.0	
Missing	System	115	30.6		
Total	•	376	100.0	·	

# PARTNER'S FAMILY COHESION (CHILD SAMPLE) (pfcoh\_c\_v)

# Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
PFCOH_C	261	32.00	80.00	61.8738	10.8055
Valid N (listwise)	261				

# **Frequencies**

#### **Statistics**

#### PFCOH\_C

N	Valid	261
	Missing	115

#### PFCOH\_C

				Valido	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	32.00	1	.3	.4	.4
	35.20	1	3	.4	.8
	36.00	3	.8	1.1	1.9
	39.00	3	.8	1.1	3.1
	40.00	1	.3	.4	3.4
	40.53	1	.3	.4	3.8
	41.00	2	.5	.8	4.6
	42.00	2	.5	.8	5.4
	43.00	4	1.1	1.5	6.9
	44.00	2	.5	.8	7.7
	45.00	3	.8	1.1	8.8
	45.87	1	.3	.4	9.2
	46.00	4	1.1	1.5	10.7
	47.00	3	.8	1.1	11.9
	48.00	6	1.6	2.3	14.2
	49.00	6	1.6	2.3	16.5
	50.00	4	1.1	1.5	18.0
	51.00	4	1.1	1.5	19.5
	52.00	3	.8	1.1	20.7
	53.00	2	.5	.8	21.5
	53.33	1 1	.3	.4	21.8
•	54.00	8	2.1	3.1	24.9
	55.00	3	.8	1.1	26.1
	56.00	4	1,1	1.5	27.6
	57.00	6	1.6	2.3	29.9
	58.00	12	3.2	4.6	34.5
	59.00	10	2.7	3.8	38.3
	60.00	3	.8	1.1	39.5
	60.80	1	.3	.4	39.8
	61.00	12	3.2	4.6	44.4

	<del> </del>	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	62.00	8	2.1	3.1	47.5
	63.00	14	3.7	5.4	52.9
	64.00	5	1.3	1.9	54.8
	65.00	7	1.9	2.7	57.5
	66.00	9	2.4	3.4	60.9
	67.00	11	2.9	4.2	65.1
	68.00	7	1.9	2.7	67.8
	69.00	11	2.9	4.2	72.0
	69.33	1	.3	.4	72.4
	70.00	10	2.7	3.8	76.2
	71.00	8	2.1	3.1	79.3
ļ ·	72.00	7	1.9	2.7	82.0
ľ	73.00	11	2.9	4.2	86.2
,	74.00	9	2.4	3.4	89.7
	75.00	. 6	1.6	2.3	92.0
	76.00	` 4	1.1	1.5	93.5
	77.00	3	.8	1.1	94.6
	78.00	3	.8	1.1	95.8
	79.00	7	1.9	2.7	98.5
	80.00	4	1.1	1.5	100.0
	Total	261	69.4	100.0	
Missing	System	115	30.6		
Total		376	100.0		

# PERPETRATOR'S FAMILY ADAPTABILITY (CHILD SAMPLE) (vfadj\_c\_v)

# Descriptives

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VFADJ_C	314	18.00	67.00	50.0439	7.9484
Valid N (listwise)	314				

# **Frequencies**

#### **Statistics**

VFADJ\_C

N	Valid	314
	Missing	62

#### VFADJ\_C

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18.00	1	.3	.3	.3
v aliu	21.00	1	.3	.s <sub> </sub> .3	.s ! .6
	23.69	1	.3	.3	1.0
	28.00		.3	.3	1.3
	29.00	1	.3	.3	1.6
	30.00	3	.8	1.0	2.5
	31.00	1	.3	.3	2.5
	32.00	1	.s .3	1	3.2
	34.00	1	.3	.3	3.4
	35.00	1	.3	.3 .3	3.8
	36.00	6	.3 1.6	.s 1.9	5.7 5.7
	37.00	3	.8	1	5. 6.1
	38.00	3		1.0	
	39.00	7	.8	1.0	7.0
	40.00	5	1.9	2.2	9.9
	41.00	1	1.3	1.6	11.
		11	2.9	3.5	15.0
	42.00	6	1.6	1.9	16.9
	43.00	6	1.6	1.9	18.8
	43.17	1	.3	.3	19.
	44.00	8	2.1	2.5	21.
	45.00	6	1.6	1.9	23.6
	46.00	10	2.7	3.2	26.8
	47.00	12	3.2	3.8	30.6
	48.00	17	4.5	5.4	36.0
	48.46	1	.3	.3	36.3
٠	49.00	16	4.3	5.1	41.4
	49.54	4	1.1	1.3	42.7
	50.00	16	4.3	5.1	47.8
	51.00	18	4.8	5.7	53.5
	51.69	3	.8	1.0	54.5

1					l	Cumulative
			Frequency	Percent	Valid Percent	Percent
. 1	Valid	52.00	19	5.1	6.1	60.5
'		53.00	14	3.7	4.5	65.0
Į		53.85	1	.3	.3	65.3
ı	•	54.00	15	4.0	4.8	70.1
I		55.00	16	4.3	5.1	75.2
I		56.00	18	4.8	5.7	80.9
Į		57.00	8	2.1	2.5	83.4
١		57.08	1	.3	.3	83.8
1		58.00	12	3.2	3.8	87.6
ł		58.15	1	.3	.3	87.9
1		59.00	8 .	2.1	2.5	90.4
1		60.00	6	1.6	1.9	92.4
l		60.31	1	.3	.3	92.7
ı	•	61.00	4	1.1	1.3	93.9
١		61.38	1	3	.3	94.3
1		62.00	. 6	`1.6	1.9	96.2
ı		62.46	1	.3	.3	96.5
1		63.00	5	1.3	1.6	98.1
١		64.00	1	.3	.3	98.4
1		65.00	3	.8	1.0	99.4
1		66.00	1	.3	.3	99.7
1		67.00	1	.3	.3	100.0
1		Total	314	83.5	100.0	
1	Missing	System	62	16.5		
l	Total		376	100.0		

# PERPETRATOR'S FAMILY COHESION (CHILD SAMPLE) (vfcoh\_c\_v)

## **Descriptives**

#### **Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
VFCOH_C	314	28.00	80.00	63.3487	9.8418
Valid N (listwise)	314				

# **Frequencies**

#### **Statistics**

VFCOH\_C

N	Valid	314
	Missing	62

#### VFCOH\_C

		· · · · · · · · · · · · · · · · · · ·	Frequency	Percent	Valid Percent	Cumulative
	Valid	28.00	1 1 requeries	.3		Percent
		34.00	2	.5 .5	.3	.3
ĺ		35.00	1	.3	.6	1.0
ļ	·	36.00	1	.s .3	.3	1.3
١		37.00			.3	1.6
1		38.00	2	.3	.3	1.9
ł		41.00	1	.5	.6	2.5
		42.00	1	.3	.3	2.9
ı		42.67	1	.3	.3	3.2
ļ		43.00	1	.3	.3	3.5
l		44.00	2	.5	.6	4.1
ı		45.00 45.00	1	.3	.3	4.5
ı		46.00	1	.3	.3	4.8
1		47.00°	3	.8	1.0	5.7
ı		48.00	7	1.9	2.2	8.0
ı			3	.8	1.0	8.9
ı		49.00	. 4	1.1	1.3	10.2
ı		50.00	5	1.3	1.6	11.8
۱		51.00	3	.8	1.0	12.7
ı		52.00	6	1.6	1.9	14.6
l		53.00	5	1.3	1.6	16.2
ļ		54.00	9	2.4	2.9	19.1
I		55.00	2	5	.6	19.7
l		56.00	9	2.4	2.9	22.6
ļ		57.00	6	1.6	1.9	24.5
I		57.60	1	.3	.3	24.8
l		58.00	7	1.9	2.2	27.1
١		58.29	1	.3	.3	27.4
l		59.00	10	2.7	3.2	30.6
		59.73	1	.3	.3	30.9
L		60.00	10	2.7	3.2	34.1

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	61.00	9	2.4	2.9	36.9
	62.00	12	3.2	3.8	40.8
1	62.93	2	.5	.6	41.4
	63.00	9	2.4	2.9	44.3
1	64.00	9	2.4	2.9	47.1
1	65.00	9	2.4	2.9	50.0
1	66.00	14	3.7	4.5	54.5
	66.13	2	.5	.6	55.1
	67.00	17	4.5	5.4	60.5
	67.20	1 1	.3	.3	60.8
1	68.00	17	4.5	5.4	66.2
	69.00	13	3.5	4.1	70.4
	69.33	1	.3	.3	70.7
	70.00	8	2.1	2.5	73.2
	70.40	1	.3	.3	73.6
	71.00	10	2.7	3.2	76.8
	72.00	17	4.5	5.4	82.2
1	73.00	13	3.5	4.1	86.3
	73.14	1	.3	.3	86.6
1	74.00	12	3.2	3.8	90.4
	75.00	7	1.9	2.2	92.7
,	76.00	10	2.7	3.2	95.9
	77.00	2	.5	.6	96.5
	78.00	5	1.3	1.6	98.1
	79.00	5	1.3	1.6	99.7
	80.00	1	.3	.3	100.0
	Total	314	83.5	100.0	
Missing	System	62	16.5		
Total	- 4	376	100.0		

Measurement Components and Model Trimming For Studies 1-4

# Measurement Component: Study 1

# Factor Structure, Unstandardized Coefficients, Standard errors, and Critical Ratios

	M&FVET	M&FWIFE	VIOLENCE	WIFEMH	CHILDBEH
VETMADJ	1.00				
VETFAAD	0.86 (0.08) 11.05		<b>-</b> -	<b>-</b> -	<b>-</b> -
VETFACO	1.16 (0.09) 13.13	<b></b>	<del></del>		<del>-</del> -
WIFEMADJ		1.00		<del></del> -	
WIFEFAAD	<b>.</b> .	0.61 (0.06) 10.52		<del></del> . <del></del>	
WIFEFACO	<b>-</b>	0.88 (0.07) 13.01	<b>-</b>	<b>-</b> -	
VIOL8	• • • • • • • • • • • • • • • • • • •		1.00		
WIFEDEMO	<u>-</u> -	·	<del>-</del> -	1.00	:
WIFESI	. <b></b>	<b>-</b> -		0.07 (0.01) 5.41	
WIFEGWBR				0.05 (0.01) 9.03	<b></b>
CHILDINT					1.00
CHILDEXT	<b></b> .	<b></b>	·	0.78	(0.12) 6.40

# **Factor Intercorrelations**

	M&FVET	M&FWIFE	VIOLENCE	WIFEMH	CHILDBEH
M&FVET	1.00				
M&FWIFE	0.50	1.00			
VIOLENCE	-0.25	-0.39	1.00		
WIFEMH	-0.46	-0.92	0.47	1.00	
CHILDBEH	-0.24	-0.49	0.25	0.53	1.00

# Model Trimming: Study 1

Model	χ²	đf	Δχ²	Δdf	RMSEA	AIC	GFI	CFI
Final Accepted Model	82.69	46			.055	146.69	.89	.90

#### Measurement Component: Study 2

# Factor Structure, Unstandardized Coefficients, Standard errors, and Critical Ratios

```
V1=id; V2=pretraum; V3=parhit; V4=combat2; V5=atrocty2;
10 V6=threatla; V7=threat2a; V8=threat3a; V9=malev1; V10=malev2;
   V11=malev3; V12=malev4; V13=malev5; V14=malev6; V15=relfalr;
   V16=relfa2r; V17=relmo1r; V18=relmo2r; V19=famenv1b; V20=famenv2b;
   V21=famenv3b; V22=abuse2; V23=probbh1b; V24=probbh2b; V25=probbh3b;
   V26=probbh4b; V27=probbh5b; V28=vetfcoh; V29=vetfadj; V30=paradj;
   V31=vmaradj; V32=prtfcoh; V33=prtfadj; V34=viotot8; v35 = famall;
16 V36=msalc2; V37=msrsa2; V38=mssp2; V39=mswn2;
17 F1 = traumahx; f2 = pardv; f3 = combat; f4 = threat; f5 = relpfa;
      f6 = relpmo; f7 = famfx; f8 = cabuse; f9 = conduct; f10 = vetfam;
       19 fl1 = partfam; fl2 = violen; fl3 = newfam; fl4 = ptsd;
 MEASUREMENT EQUATIONS WITH STANDARD ERRORS AND TEST STATISTICS
  (ROBUST STATISTICS IN PARENTHESES)
 PRETRAUM=V2
                   .201*F13
                              + 1.000 E2
                   .101
                  1.979
                   .109)
                  1.848)
 PARHIT
       =V3
                   .351*F13
                              + 1.000 E3
                   .068
                  5.190
                   .071)
                  4.957)
COMBAT2 =V4
                   .236*F9
                              + 1.000 E4
                   .077
                  3.064
                   .071)
                  3.346)
THREAT1A=V6
                   .804*F4
                              + 1.000 E6
                   .039
                 20.774
                   .039)
                20.850)
THREAT2A=V7
                   .721*F4
                              + 1.000 E7
                   .038
                 18.937
                   .041)
```

(17.371)

8

/LABELS

```
+ 1.000 E8
THREAT3A=V8 =
                 1.000 F4
RELFA1R =V15 =
                  .953*F5
                            + 1.000 E15
                  .089
                10.674
              ( .099)
                9.612)
              (
                1.000 F5
                             + 1.000 E16
RELFA2R =V16 =
RELMO1R =V17 =
                 1.000 F6
                             + 1.000 E17
RELMO2R =V18 =
                1.004*F6
                             + 1.000 E18
                  .097
                10.298
                  .109)
                 9.201)
ABUSE2 =V22 =
                 1.000 F13
                            + 1.000 E22
                 .765*F9
PROBBH1B=V23 =
                             + 1.000 E23
                  .089
                 8.609
                  .107)
                 7.149)
                  .654*F9
PROBBH2B=V24 =
                             + 1.000 E24
                  .077
                 8.507
                  .086)
                 7.614)
PROBBH3B=V25 =
                             + 1.000 E25
                  .850*F9
                  .093
                 9.147
                  .120)
                 7.084)
PROBBH4B=V26 =
                  .635*F9
                             + 1.000 E26
                  .071
```

```
8.993
                  .094)
                  6.776)
PROBBH5B=V27 =
                  1.000 F9
                              + 1.000 E27
VIOTOT8 = V34 = -3.081*V4
                              + 2.640*F4
                                                             .768*F6
                                            + 1.171*F14
                                              .450
                 1.137
                               1.033
                                                              .315
                 -2.709
                               2.556
                                              2.601
                                                            2.439
               (1.111)
                                .974)
                                               .397)
                                                             .563)
                             (2.710)
               (-2.774)
                                              2.947)
                                                            1.364)
               + 1.000 E34
                  .262*F13
FAMALL =V35 =
                              + 1.000 E35
                   .046
                  5.657
                   .052)
                 5.037)
MSALC2 =V36 =
                   .896*F14
                              + 1.000 E36
                   .041
                21.870
                 .042)
               (21.233)
MSRSA2 = V37 =
                 1.000 F14
                             + 1.000 E37
MSSP2
                  .701*F14
                             + 1.000 E38
                  .038
                18.233
                  .041)
              (17.014)
MSWN2
        =V39 =
                  .986*F14
                             + 1.000 E39
                  .044
                22.299
                  .046)
              (21.606)
```

# **Factor Intercorrelations**

		v				F	
	-VIOTOT8				-RELPFA		.010*I
V4	-COMBAT2				-THREAT		I
<b>5</b> 4	TITO DA M		I				I
F4					-RELPMO		.035*I
V4	-COMBAT2				-THREAT		I
25	-RELPFA		I		-CONDUCT		I
V4							.249*I
V -3	COMBAIZ		I		-THREAT		I
F6	-RELPMO				-NEWFAM		I 207#7
V4					-THREAT		.207*I
			Ī		THREAT	•	I
F9	-CONDUCT		.181*I		- PTSD		.558*I
V4	-COMBAT2	,			-THREAT		I
			Ī				Ī
F13	-NEWFAM		.168*I	F6	-RELPMO		.264*I
V4	-COMBAT2		I	F5	-RELPFA		I
			I				ī
	- PTSD		.490*I	F9	-CONDUCT		.244*I
V4	-COMBAT2		, Í	F5	-RELPFA		I
			:				I
	-THREAT		.162*ப்	F13	-NEWFAM		.450*I
V34	-VIOTOT8		Ť	F5	-RELPFA		I
			Ľ				I
	-RELPFA				- PTSD		.171*I
V34	-VIOTOT8			F5	-RELPFA		I
В.	DET DVO		I				I
	-RELPMO -VIOTOT8				-CONDUCT		.169*I
V 3 4	- 101018			F6	-RELPMO		ı <u>I</u>
FQ	-CONDUCT		1 071+T	E1.2	MEGERAL		I
	-VIOTOT8				-NEWFAM		.374*I
424	V101010		I	10	-RELPMO		I
F13	-NEWFAM		_	E14	- PTSD		I .174*I
	-VIOTOT8				-RELPMO		.1/4~1 I
			7	10	CREMPMO		Ì
F14	- PTSD		.236	F13	-NEWFAM		.365*I
V34	-VIOTOT8				-CONDUCT		.303 I
		.•	ī				Ī
			· ī	F14	- PTSD		.357*I
					-CONDUCT		I
			ı				Ī
			I	F14	- PTSD		.359*I
	•		I	F13	-NEWFAM		I
		/	I				I
	•	•					

# Model Trimming: Study 2

Model	χ²	df	$\Delta \chi^2$	Δdf	RMSEA	AIC	GFI	CFI
Measurement Model	320.46	183			.051	-9.47	.92	.95
Most saturated structural Model	330.26	188	9.80	. 5	.051	-9.13	.92	.95
Deleting 2 paths  RELPFA → PTSD  RELPFA → VIOLEN	331.99	190	1.73	2	.051	-11.91	.92	.95
Deleting 4 paths  RELPMO → PTSD  RELPMO → CONDUCT  NEWFAM → VIOLEN  NEWFAM → THREAT	332.65	194	.66	4	.050	-18.92	.92	.95
Deleting 2 paths  CONDUCT → VIOLEN  COMBAT → PTSD	334.59	196	1.94	2	.049	-21.73	.92	.95
Final Accepted Model; Deleting 2 paths RELPFA → CONDUCT NEWFAM → COMBAT	335.30	198	.71	2	.049	-24.82	.92	.95

# Measurement Component: Study 3, Analysis 1

# Factor Structure, Unstandardized Coefficients, Standard Errors (in parentheses), and Critical Ratios

T.Z	MB	מח	-1

	PTSD	ALCOHOL	HUSBADJ	VIOLENCE	WIFEADJ	WIFEMH
REEX	1.00					
WITH	1.02 (0.05) 21.61	·,	<b></b>	 \ \ <sub>1</sub>		· <b>-</b> -
AROUS	0.94 (0.04) 22.07					. · · · · · ·
GUILT	0.71 (0.04) 17.37					
ALCAB		1.00			·	, <b>-</b> -
ALCDEP		1.13 (0.14) 7.87	<b></b>	'		
ETHFRE	<b></b>	0.51 (0.09) 5.57	. <b>-</b> -			<b>-</b> -
ETHAMT		1.35 (0.25) 5.33		<b></b>		<u>-</u> -
VETADJ			1.00		: 	
VETFACO	<b>-</b> , -		3.32 (0.19) 17.43		<b>-</b> -	
VETFAAD	<b></b>	<b></b> ,	2.52 (0.20) 12.75	<del>-</del> . <del>-</del>		
VIOL			·	1.00		
WIFEADJ	. <b></b>	*		. <del></del>	1.00	-0.61 (0.08) -7.71
WIFEFACO	<b></b>				9.97 (3.08) 3.23	
WIFEFAAD	<b></b>	<b></b>	<del></del>		7.18 (2.17) 3.30	
DEMOR				·		1.00

WIFEGWBR	 	 <b></b>	 0.61 (0.05) 11.74
sı	 		 0.72 (0.11)

#### **Factor Intercorrelations**

#### Correlation Matrix of ETA

	PTSD	ALCOHOL	HUSBADJ	VIOLENCE	WIFEADJ	WIFEMH
PTSD	1.00					
ALCOHOL	0.35	1.00				
HUSBADJ	-0.46	-0.33	1.00			
VIOLENCE	0.25	0.41	-0.18	1.00		
WIFEADJ	-0.23	-0.21	0.43	-0.25	. 1.00	
WIFEMH	0.40	0.30	-0.40	0.45	-0.72	1.00

# Model Trimming: Study 3, Analysis 1

Model	χ²	df	$\Delta \chi^2$	Δdf	RMSEA	AIC	GFI	CFI
Measurement Model	240.31	117		<b></b> -	.053	348.31	.92	.95
Most saturated structural Model	241.20	118	.89	1	.053	342.00	.92	.95
Deleting 3 paths  PTSD → WIFEMH  HUSBADJ → VIOLENCE  ALCOHOL → WIFEADJ	242.31	121	1.11	3	.052	342.21	.92	.95
Final Accepted Model; Deleting 1 path ALCOHOL → WIFEADJ	245.18	122	2.87	1	.052	343.18	.92	.95

# Measurement Component: Study 3, Analysis 2

# Factor Structure, Unstandardized Coefficients, Standard Errors, and Critical Ratios (Note: Factor loadings were constrained to be equivalent across groups)

	WITH	AROUSE	HUSBADJ	VIOLENCE	WIFEADJ	WIFEMH
W&N1	1.00					
W&N2	1.08 (0.08) 13.91		<b></b>	·		
W&N3	1.09 (0.07) 15.03	<b>.</b> .	<b>-</b> -,		<b>-</b> -	·
W&N4	1.20 (0.07) 16.93		, <del>, -</del>	**************************************	<b>-</b>	
AR1	·	1.00	<del>-</del> -			
AR2		1.02 (0.08) 13.35	<b>-</b> -		<b>-</b> -	
AR3		0.97 (0.08) 12.77			<b>-</b> -	<b></b>
VETADJ			1.00		. <b></b> ·	
VETFACO			3.47 (0.22) 15.92		<del>-</del> -	
VETFAAD	<b></b>		2.59 (0.22) 11.75			<b>~ ~</b>
AIOT				1.00	<b>-</b> -	
WIFEADJ		<b>-</b> -			1.00	
WIFEFACO	<b></b>	<b></b>			2.77 (0.18) 15.27	
WIFEFAAD	. <del>-</del> -	·		<b>-</b> -	2.10 (0.16) 12.99	
DEMOR			<b>-</b> .		· ·	1.00

WIFEGWBR		 	 	0.59
				(0.05)
		•		10.70
SI	<b>-</b> -	 	 ·	0.80
				(0.12)
				6.65

# Factor Intercorrelations: High Alcohol Group

	WITH	AROUSE	HUSBADJ	VIOLENCE	WIFEADJ	WIFEMH
		~				
WITH	1.00				•	
AROUSE	0.91	1.00				
HUSBADJ	-0.54	-0.49	1.00		•	
VIOLENCE	0.27	0.30	-0.15	1.00		
WIFEADJ	-0.30	-0.29	. 0.47	-0.32	1.00	
WIFEMH	0.48	0.51	-0.46	0.53	-0.81	1.00

# Factor Intercorrelations: Low Alcohol Group

	WITH	AROUSE	HUSBADJ	VIOLENCE	WIFEADJ	WIFEMH
WITH	1.00					
AROUSE	0.89	1.00				
HUSBADJ	-0.45	-0.40	1.00			
VIOLENCE	0.21	0.23	-0.09	1.00		
WIFEADJ	-0.25	-0.24	0.43	-0.37	1.00	
WIFEMH	0.32	0.34	-0.45	0.28	-0.96	1.00

Appendix B8

# Model Trimming: Study 3, Analysis 2

Model	χ²	df	$\Delta \chi^2$	Δdf	RMSEA	AIC	GFI	CFI
Measurement Model; Equality constraints on factor loadings	382.92	215			.054	510.92	.90	.95
Most saturated structural Model; Equality constraints on factor loadings; Regression coefficients free for both groups	336.10	223	7.18	8	.052	502.10	.90	.93
Final Accepted Model; Deleting 2 paths WITH → VIOLENCE AROUSE → HUSBADJ	338.04	227	1.94	4	.051	496.04	.90	.93
Equating  AROUSE → VIOLENCE  For high and low  alcohol groups	342.91	228	4.87	1	.052	498.91	.90	.93
Equating WITH → HUSBAND For high and low alcohol groups	342.27	228	4.23	1	.052	498.27	.90	.93

# Model Trimming: Study 4

Model	χ²	df	$\Delta \chi^2$	Δdf	RMSEA	AIC	GFI	CFI
Most saturated structural Model	53.95	36	-		.043	137.03	.97	.98
Final Accepted Model Deleting 7 paths RELNMO → VETMF FAMBACK → EXTERN ALCOHOL → EXTERN CABANTI → EXTERN COMBAT → EXTERN THREAT → EXTERN PTSD → EXTERN	57.56	43	3.61	7	.036	126.89	.96	.98