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2500-WORD SUMMARY

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**MALE-PERPETRATED DOMESTIC VIOLENCE: TESTING A
SERIES OF MULTIFACTORIAL FAMILY MODELS****RESEARCH SUPPORTED BY THE NATIONAL INSTITUTE OF JUSTICE
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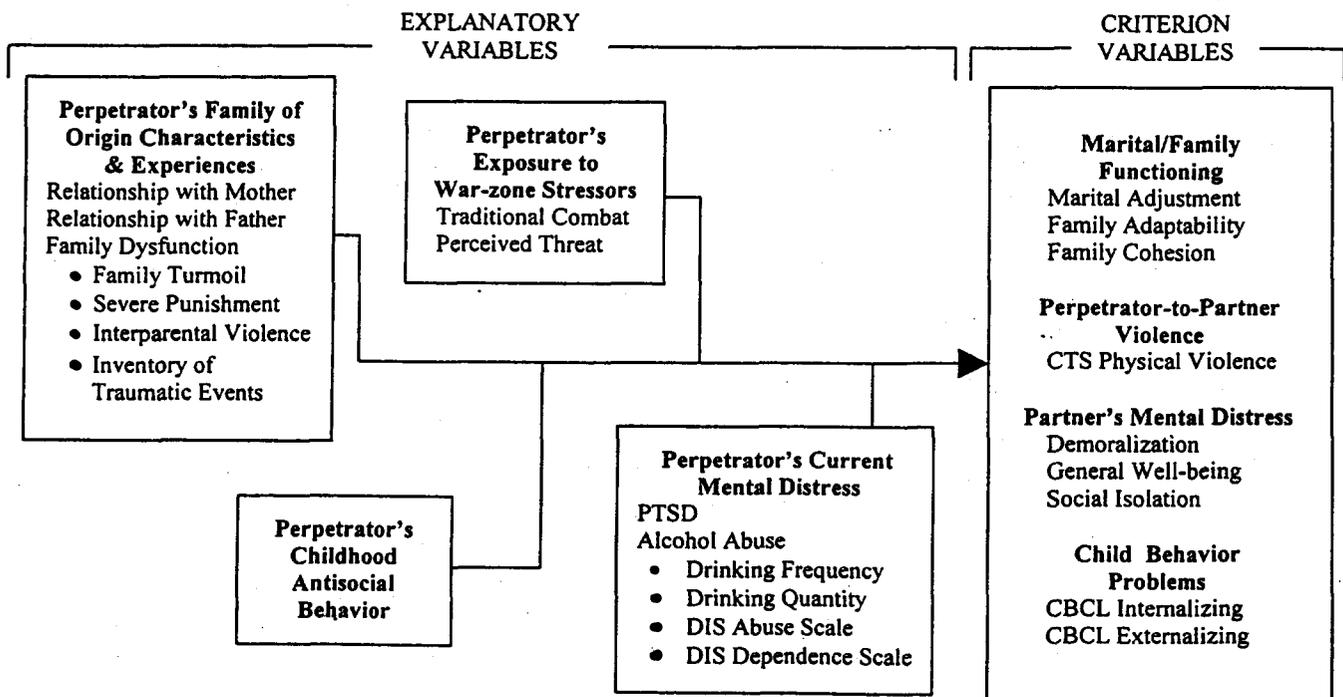
FINAL REPORT *Archival*Approved By: *J. Thomas*Date: *11/27/00*

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. Also, the likelihood of experiencing a traumatic event in general and the prevalence of post-event psychological disturbance are not trivial. One condition that may result is posttraumatic stress disorder (PTSD), 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 frequently co-exists or is comorbid with alcohol abuse.

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 trauma and its sequelae (PTSD and alcohol abuse) serving as major mediators to explain the etiology and propagation of aggressive behaviors in families. 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 a national sample of 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.

Figure 1 presents the conceptual framework for the project. 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.

Figure 1. Conceptual Framework for the Research Project



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.

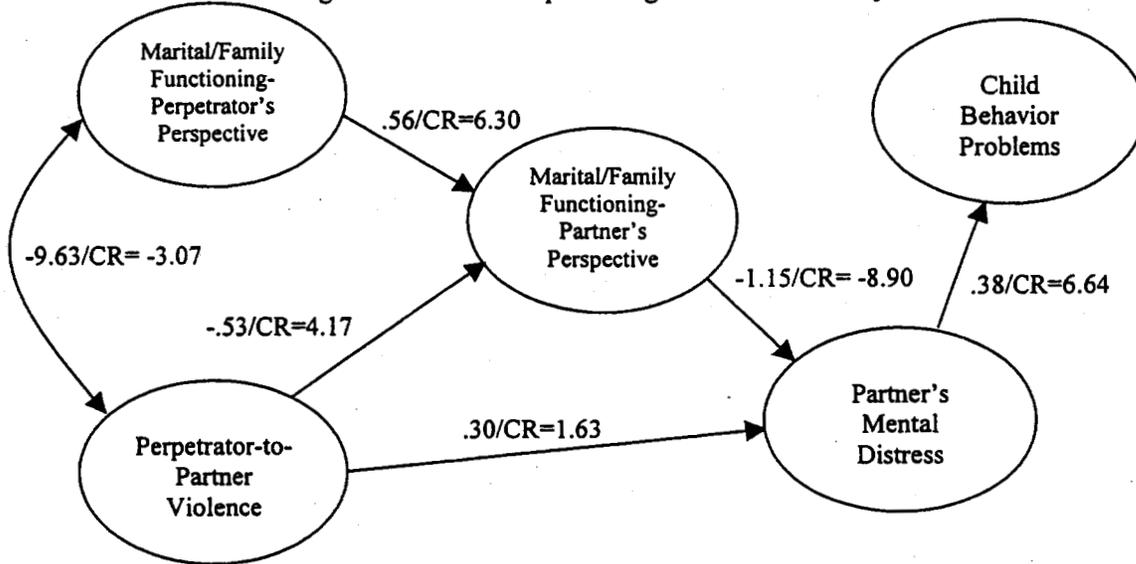
Study 3 (Perpetrator's Current Mental Distress) proposed to examine how the current mental distress of the perpetrator is associated with marital and family functioning, violence, and current mental distress of the partner. This phase of the research program highlighted the role of stress disorder symptomatology 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 (specifically 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.

Models to explain relationships among variables within the project relied on the family as the unit of analysis, with data supplied by 376 male veteran-female partner couples (261 with children in the home) who participated in the National Vietnam Veterans Readjustment Study. 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.

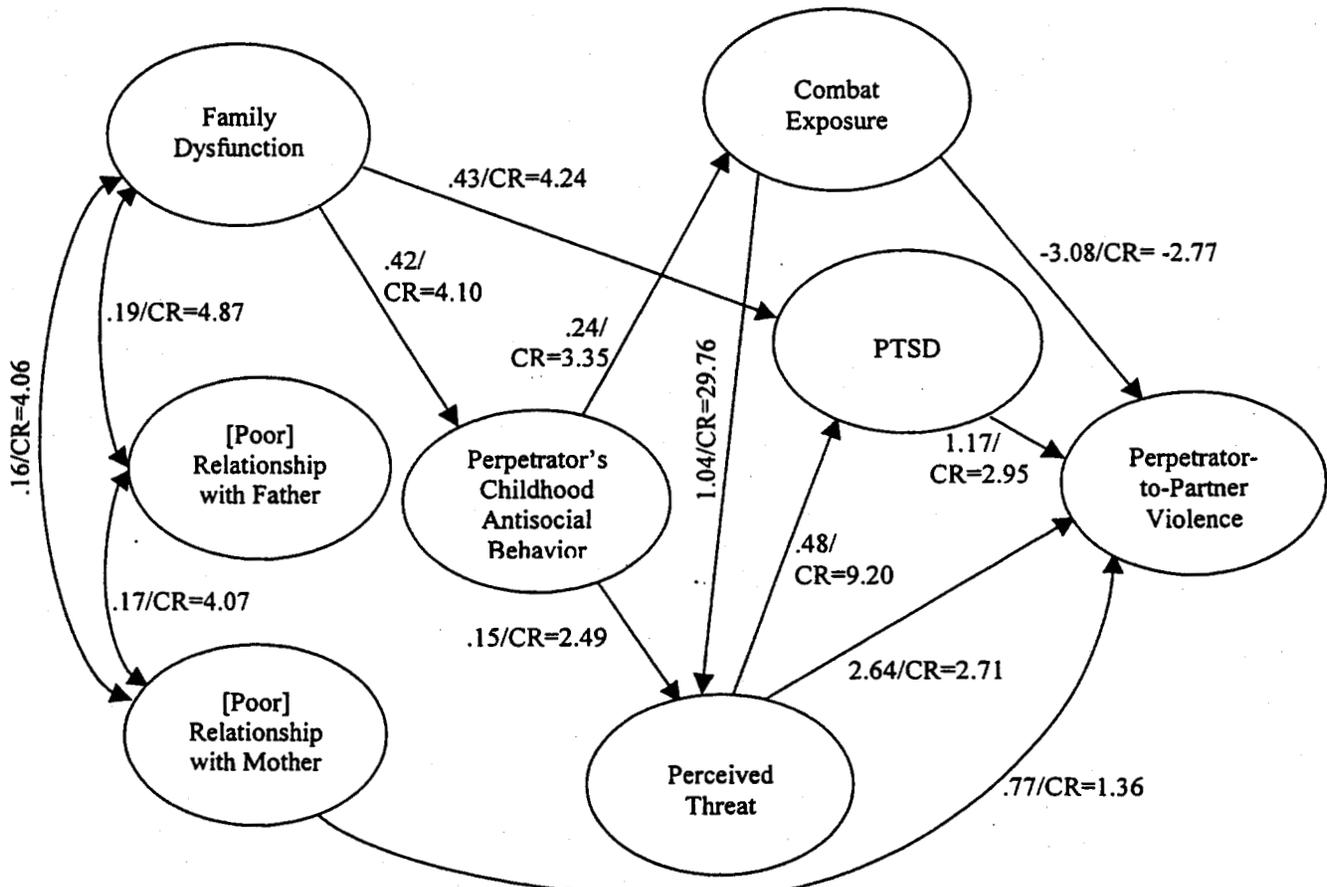
The array of variables (see Figure 1) was operationalized, and structural equation modeling methodologies were employed. Figures 2-6 present the results as represented by models of best fit for each of the studies.

Figure 2. Relationships among Variables in Study 1



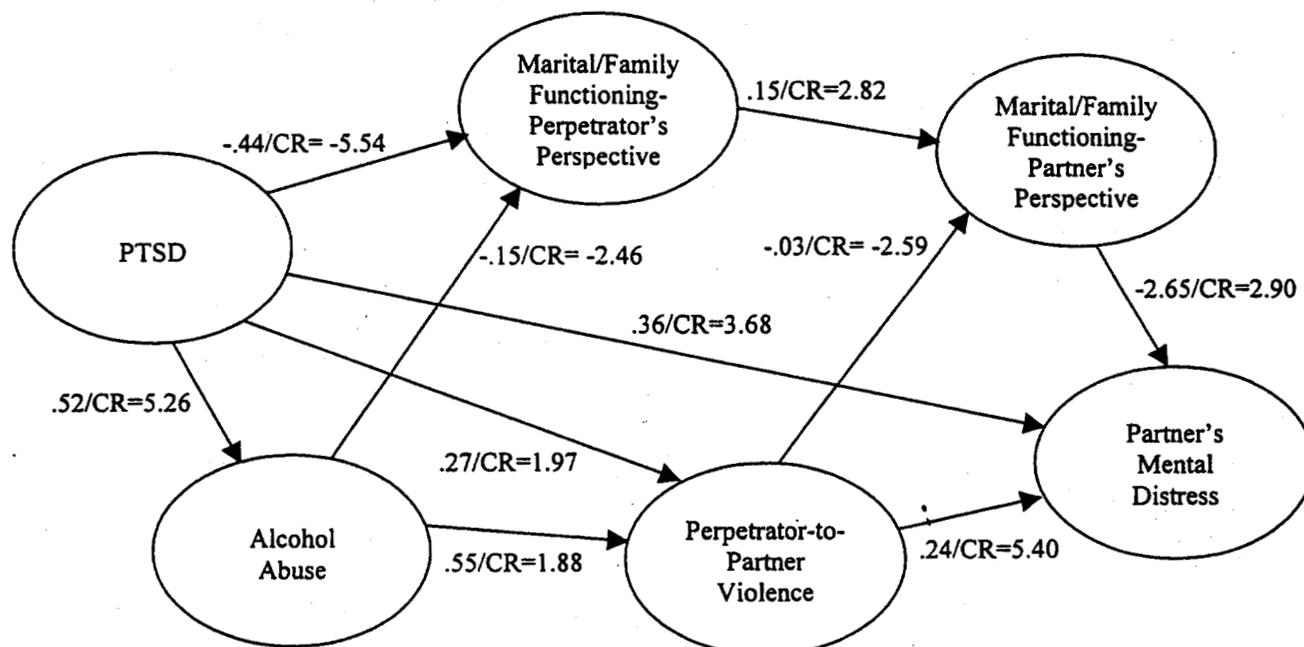
S-B χ^2 (46, N = 260) = 82.69, $p < .001$; RMSEA = .055 (90% CI = .036-.074); CFI = .90; GFI = .89. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

Figure 3. Relationships among Variables in Study 2

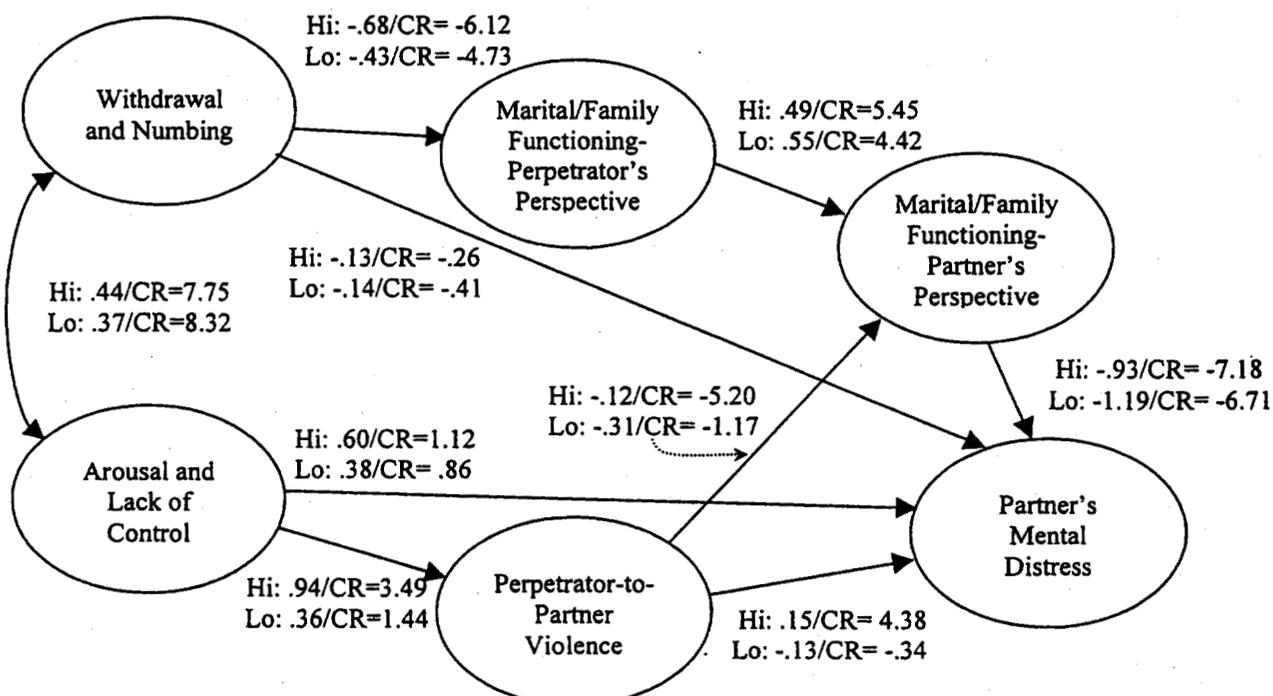


S-B χ^2 (198, N = 367) = 335.30, $p < .001$; RMSEA = .049 (90% CI = .041-.056); CFI = .95; GFI = .92. Structural coefficients are unstandardized. CR = critical ratio, or parameter estimate divided by its standard error.

Figure 4. Relationships among Variables in Study 3



S-B χ^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.

Figure 5. Relationships among Variables in Study 3
(Specific Features of PTSD and Interactions with Alcohol Abuse)

S-B χ^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.

Insert Figure 6 here.

Overall, the results of this research project appear to offer support for the guiding trauma-focused 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; King et al., 1996), drawing the more vulnerable members of society into harm's way. But, they 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 3 and 6). 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 4 and 6).

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 5). 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 2 and 6).

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 5). 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 2 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. Additionally, the perpetrator's relationship with his own mother (see Figures 3 and 6) 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 battered women and their children.

The generalizability of our findings should 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. 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.

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. 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.

Research Proposal Review Checklist

VA Boston Healthcare System and Brockton VA Medical Center

Title of Proposal _____

PI _____

Contact Info _____ (email, beeper, and/or extension):

Service / Section _____

Source of Funding _____

Administered by _____

Please mark all items that apply; a blank will be considered "No".

YES	Item	Additional information needed
	Is this the PI's <i>first</i> research study here?	Complete "Investigator Data" form
	Will additional clinical (hospital) or laboratory <i>space</i> be needed?	Provide memo detailing area and functional requirements.
	Will experimental <i>animals</i> be used?	Complete "Animal Component of Research Protocol" form.
	Will <i>biohazard</i> materials (human cells / tissue, radioisotopes, infectious agents, chemicals, recombinant DNA) be used?	Complete "Biohazard and Safety Information" form.
	Will <i>investigational drugs</i> or devices be used?	Complete VA Form 10-9012 (Investigational Drug Information).
	Will <i>Pharmacy Service</i> be involved in handling an investigational drug?	Complete Pharmacy Impact Form.
	Will <i>patient care resources</i> (Radiology, Lab Service, EKG, etc.) be used?	Complete a separate Service Impact Form for each Service impacted.
	Will <i>human subjects</i> be involved?	Complete section below.

If any of the following items are marked "Yes", please provide a memo with additional specific details as indicated by the current "Policies of the Human Studies Subcommittee".

Review under expedited procedures is requested. _____

Study meets VA criteria for "special attention". _____

Study involves subjects requiring surrogate consent. _____

DHCP (VISTA, CPRS) will be used to identify subjects. _____

Subjects will be recruited directly by mail or by phone. _____

Informed consent will be obtained by mail or by phone. _____

Study involves subjects at increased risk of coercion. _____

Subjects will be audiotaped or videotaped. _____

Bodily materials will be collected for genetic testing and/or for potential commercial development. _____

For all studies, please also complete HQ form "Request to Review Research Proposal" (duplicate signatures not required).

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