

Typologies of Male Batterers: Three Subtypes and the Differences Among Them

Amy Holtzworth-Munroe and Gregory L. Stuart

Previous typologies of male batterers, including typologies developed by means of rational–deductive and empirical–inductive strategies, are reviewed. On the basis of this review, 3 descriptive dimensions (i.e., severity of marital violence, generality of the violence [toward the wife or toward others], and psychopathology/personality disorders) that consistently have been found to distinguish among subtypes of batterers are identified. These dimensions are used to propose a typology consisting of 3 subtypes of batterers (i.e., family only, dysphoric/borderline, and generally violent/antisocial). A developmental model of marital violence is then presented, and the previous literature is reviewed to examine how each batterer subtype might differ on variables of theoretical interest. Finally, some of the methodological limitations of previous typology research are reviewed, and suggestions for future work are offered.

Marital violence is a serious problem in the United States. Data from the 1985 National Family Violence Survey indicated that one of eight husbands carried out at least one violent act toward his wife and 1.8 million wives were beaten by their husbands during the year of the study (Straus & Gelles, 1988). The costs of this problem are staggering in terms of marital dissatisfaction, psychological and physical health problems, and negative effects on the children of such marriages (e.g., McDonald & Jouriles, 1991; Sonkin, Martin, & Walker, 1985). Although data indicate that both husbands and wives engage in violence (e.g., O'Leary et al., 1989; Straus & Gelles, 1988), husband violence has consistently been found to have more detrimental effects than wife violence; for example, wives are more likely than husbands to suffer severe physical injuries and depressive symptomatology (Cascardi, Langhinrichsen, & Vivian, 1992; Stets & Straus, 1990).

Recent evidence suggests that, when one is trying to understand husband-to-wife violence, studies examining the husband may be the most productive line of inquiry. After reviewing the available data, Hotaling and Sugarman (1986) concluded that "men's violence is men's behavior. As such, it is not surprising that the more fruitful efforts to explain this behavior have focused on male characteristics" (p. 120). Similarly, examining the marital interactions of violent couples, Boeke and Markman (1992) found that "most of the differences between couples were due to differences between the abusive and non-abusive husbands" (p. 13). Such findings suggest that researchers should focus their attention on violent husbands.

Researchers studying maritally violent men have often

treated batterers as a homogeneous group, averaging scores on measures of interest across all of the violent husbands in their sample and then comparing the mean score of the violent sample with that of a nonviolent sample. However, averaging scores across different violent men may result in a lack of significant violent–nonviolent group differences, leading researchers to discount the potential importance of some variables. For example, some researchers have failed to distinguish batterers and nonbatterers on measures of attitudes toward women (e.g., Neidig, Collins, & Friedman, 1986). Saunders (1992) noted that the reason may be the variability of such attitudes among violent men; in his sample of batterers, scores on a measure of attitudes toward women were distributed bimodally (i.e., one group with liberal attitudes and another with conservative attitudes). Similarly, in recent research, violent husbands have been found to vary along a number of important dimensions, including severity of violence, anger, depression, and alcohol abuse (see later review of typologies).

Such findings suggest that a reliable and valid typology of male batterers would yield valuable information. Comparing the various subtypes of violent husbands with each other, and pinpointing how each type of violent man differs from nonviolent men, could increase the understanding of marital violence and help in identifying different underlying processes resulting in violence. Developing a typology of violent men would allow a systematic examination of how and why different men use violence against their wives.

Moreover, such a typology could lead to increases in therapy effectiveness, eventually resulting in patient–treatment matching. Many current treatment programs for batterers are standardized and uniformly applied to all violent men seeking help. However, one treatment may be better suited for one subtype of violent men than for another. Tailoring treatments to meet the needs of each subtype of violent men might improve therapy efficacy (Gondolf, 1988; Saunders, 1992).

Researchers have occasionally derived subtypes of violent couples (i.e., Deal & Wampler, 1986—study of dating couples;

Amy Holtzworth-Munroe and Gregory L. Stuart, Department of Psychology, Indiana University.

We would like to thank the anonymous reviewers for their helpful comments and feedback.

Correspondence concerning this article should be addressed to Amy Holtzworth-Munroe, Department of Psychology, Indiana University, Bloomington, Indiana 47405.

Hanks, 1992—clinical descriptions of couples; Johnston & Campbell, 1993—clinical descriptions of couples involved in child custody disputes during divorce proceedings; Steinmetz, 1978—clinical descriptions of couples; Whitchurch, 1988—unpublished dissertation) or battered women (i.e., two cluster-analytic studies of battered women in marital-type relationships—Follingstad, Laughlin, Polek, Rutledge, & Hause, 1991, and Snyder & Fruchtmann, 1981; clinical descriptions of women married to violent and alcohol-abusing men—Hanks & Rosenbaum, 1977; one study of dating violence, comparing women who had experienced only one violent incident with those who experienced ongoing violence—Follingstad, Rutledge, Polek, & McNeill-Hawkins, 1988). We do not review these studies here for two reasons. First, and most important, our interest is in research delineating subtypes of male batterers rather than violent couples or battered women; it is unclear whether studies of women or couples are applicable to male batterers. Second, as can be noted in the studies just listed, previous research examining typologies of couples or women is limited in scope, often lacks empirical data (i.e., descriptions based on clinical descriptions only), and has involved varied methodologies, making it difficult to draw conclusions across studies. For example, researchers studying couples or women have examined a wide variety of samples (e.g., dating couples, alcohol-abusing men, and couples in child custody disputes).

In this article, we have chosen to examine existing male batterer typologies to determine the subtypes that consistently appear across typological models and to identify the underlying descriptive dimensions used by previous researchers to discriminate subgroups. On the basis of this review, we suggest three possible subtypes of batterers. We also present a developmental model of marital violence, identifying variables of theoretical interest that may distinguish among subtypes of batterers. Finally, we examine the methodological limitations of previous typology research and make suggestions for future work.

Review of Previous Typologies

To locate previous batterer typology research, we reviewed the available marital violence literature and contacted colleagues who were conducting this type of research (e.g., Hamberger and Saunders); we used both sources to locate additional studies. We also conducted a computer search, using a wide variety of topic keywords (e.g., marital violence, relationship violence, dating violence, or couple violence, combined with subtypes or typology) to search for relevant journal articles, books, and book chapters. Given the early stage of research in this area, we chose to include all of the studies we located.

Table 1 summarizes the previous research, presenting the studies in the order in which they are reviewed in the text. In Table 1, each previous typology is presented, along with information (if such information was available) regarding how the identified subtypes differed along the three descriptive dimensions used in previous research (i.e., severity of marital violence, generality of violence, and psychopathology or personality disorders; see later discussion).

Rational/Deductive Studies

Early attempts to develop typologies of batterers generally used one of two rational/deductive strategies. Researchers either described subtypes of batterers on the basis of their clinical observations (e.g., Elbow, 1977) or split batterers into groups on the basis of a priori theoretical speculation and compared them on available data (e.g., Hershorn & Rosenbaum, 1991). In general, work using a rational/deductive approach has identified three major dimensions for classifying batterers.

The first dimension identified is the *severity* of marital violence; with few exceptions (i.e., Hershorn & Rosenbaum, 1991), severity and frequency have been positively correlated, and usually considered together, in previous typologies. Some early typologies simply split batterers into groups on the basis of this one dimension. For example, Mott-McDonald Associates (1979) distinguished "hitters" from "batterers," with batterers engaging in more frequent and severe violence and more psychological abuse; Sweeney and Key (1982) proposed that there are "infrequent," "frequent," and "mixed" batterers.

The second major dimension that has been used to differentiate subtypes of batterers is the *generality* of the husband's violence: Is the batterer violent only with his wife and family or in other relationships as well? Some previous researchers (i.e., J. A. Fagan, Stewart, & Hansen, 1983, who interviewed 270 abused women; Shields, McCall, & Hanneke, 1988, who interviewed more than 80 men referred by social service agencies; and Cadsky & Crawford, 1988, who interviewed and tested 172 men seeking domestic violence treatment) have split batterers into two groups—family only and generally violent—on the basis of this distinction. Across these studies, generally violent men have been found to engage in more severe violence than family-only men.

The third dimension emerging from rational/deductive methods of identifying subtypes of batterers is the batterer's *psychopathology* or *personality disorders*, or both. Previous researchers have often discussed these potentially separate categories—psychopathology (e.g., Axis I), personality disorders (e.g., Axis II), and motivation for violence—interchangeably.¹

Three early researchers used psychopathology and personality disorders to explain possible motivations for violence among subtypes of batterers. After interviewing 23 men arrested for marital violence, Faulk (1974) proposed five types of male batterers: the stable/affectionate batterer (17% of the sample), who has a stable marriage but uses violence during a time of mental disturbance, particularly during a depressive episode; the dependent/passive batterer (39% of the sample), who generally tries to please his wife but explodes violently in response to some precipitating action by the wife; the dependent/suspicious batterer (17% of the sample), who is irrationally jealous of his wife, very dependent on her, and controlling of her actions; the

¹ In future research, it is possible that these dimensions (e.g., Axis I psychopathology, Axis II personality disorders, and motivation for violence) may emerge as separate dimensions, each contributing uniquely to an understanding of the subtypes of batterers. At this point, however, given the nature of the past research, we leave these distinctions merged into one dimension.

Table 1
Summary of Previous Batterer Typologies

Study	Descriptive dimension		
	Severity of marital violence	Generality of violence	Psychopathology/personality disorder
Rational/deductive			
Mott-McDonald Associates (1979)			
Hitter	Low		
Batterer	High, more psychological abuse		
Sweeney & Key (1982)			
Infrequent	Low		Rigidly inhibited
Mixed	Varying		
Frequent	High		Aggressive whenever frustrated
J. A. Fagan, Stewart, & Hansen (1983)			
Family only	Low	Family	
Generally violent	High	In and out of home	
Shields, McCall, & Hanneke (1988)			
Family only	Low	Family	
Generally violent	High	In and out of home	More criminal and drug involvement
Cadsky & Crawford (1988)			
Family-only/wife assaulter	Low	Only violent toward female partner in past year	Normal levels of self-esteem, not depressed, not diagnosed as having antisocial personality disorder
Generally violent/mixed assaulter	High	Violent toward female partner and other men or women in past year; assaulted others less frequently than partner	Lower self-esteem, not depressed, almost one third received diagnosis of antisocial personality disorder
Faulk (1974)			
Stable/affectionate	Less frequent		Marital violence occurred during time of mental disturbance (e.g., depression)
Dependent/passive			Tries to please wife
Dependent/suspicious	Psychological abuse		Jealous; very dependent on wife
Dominating	Psychological abuse		Needs to control wife
Violent/bullying	More frequent psychological abuse		Uses violence to solve problems
Elbow (1977)			
Approval seeker			Dependent on wife's approval
Defender			Overprotects wife
Incorporator	High		Wife is part of himself
Controller	High, high psychological abuse		Controls wife
Caesar (1986)			
Nonexposed altruist			Unassertive, dependent
Exposed rescuer			Histrionic traits
Tyrant	Psychological abuse		Psychopathic, paranoid
Hershorn & Rosenbaum (1991)			
Overcontrolled	More severe, less frequent	Family	Overcontrolled hostility
Undercontrolled	Less severe, more frequent	In and out of home	More general hostility
Empirical/inductive			
Hamberger & Hastings (1985, 1986)			
Normal			Normal
Passive-dependent/compulsive			Passive-dependent/compulsive
Schizoid/borderline			Schizoid/borderline
Narcissistic/antisocial			Narcissistic/antisocial
Hale, Zimostad, Duckworth, & Nicholas (1988)			
Normal (Cluster 2)			Normal
All MMPI scales elevated (Cluster 1)			Faking bad or very disturbed
MMPI Scales 2 and 4 elevated (Cluster 3)			Antisocial

(table continues)

Table 1 (continued)

Study	Descriptive dimension		
	Severity of marital violence	Generality of violence	Psychopathology/personality disorder
Flournoy & Wilson (1991) Normal (Cluster 2) MMPI Scales 2 and 4 elevated (Cluster 1)			Normal Antisocial
Saunders (1992) Family only	Low	Family	Low distress
Emotionally volatile	High, but less frequent than generally violent	Family	High distress
Generally violent	High	In and out of home	Arrest, alcohol; Low-moderate distress
Gondolf (1988; Gondolf with Fisher, 1988) Typical			
Sporadic	Low	Family	
Chronic	Low-moderate	Mostly family	
Antisocial	High	In and out of home	Substance use
Sociopathic	High	In and out of home	Substance abuse, arrest
Stith, Jester, & Bird (1992) Secure lover	Low, low psychological abuse		High self-esteem and mastery
Stable minimizer	Low, low psychological abuse		
Hostile pursuer	Moderate, high psychological abuse		
Hostile disengaged	Severe, frequent, low psychological abuse		

Note. MMPI = Minnesota Multiphasic Personality Inventory.

dominating batterer (22%), who wants to control his wife and uses violence to do so; and the violent/bullying batterer (4%), who uses violence and intimidation to solve many of his problems and to get what he wants. On the basis of clinical observations, Elbow (1977) identified four groups of batterers: the approval seeker, who needs his wife to approve of him and uses violence to bolster his self-image; the defender, who is dependent on his wife and overprotects her, mixing love and hate; the incorporator, who sees his partner as part of himself and needs her to define himself; and the controller, who views his wife as an object he controls and will use violence to achieve that control. Caesar (1986), on the basis of interviews and administration of the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967) to 26 wife assaulters, suggested three types of batterers. The first type, the nonexposed altruist, is unassertive and tries to inhibit his anger and please his wife, but he is ambivalent about his dependence on her. The exposed rescuer has histrionic personality traits, is unable to express his resentment, and wants his wife to be dependent on him. Finally, the tyrant shows psychopathic, hostile, and paranoid traits; uses fear and psychological abuse; and shows little remorse for his violence.

In a recent study, Hershorn and Rosenbaum (1991) used an MMPI-derived scale measuring overcontrolled hostility to divide 41 batterers in domestic violence treatment into two subgroups: those who overcontrol their hostility (i.e., do not express anger until it summates and explodes) and those who undercon-

trol hostility (i.e., have few controls against the expression of angry and aggressive impulses). They found that overcontrolled hostile batterers engaged in more severe marital violence; undercontrolled hostile batterers engaged in less severe but more frequent violence, were more likely to engage in aggression outside of their marital relationship, and were more generally hostile.

Empirical/Inductive Studies

Other researchers have used an empirical/inductive strategy, employing factor analysis or cluster analysis to identify subgroups of batterers. The typologies derived with these empirical/inductive strategies have resulted in the same three descriptive dimensions used to categorize batterers in the rational/deductive literature: the severity of marital violence, the generality of the violence, and the batterer's psychopathology or personality disorders.

Several research groups have factor or cluster analyzed batterers' scores on standardized tests (i.e., the Millon Clinical Multiaxial Inventory [MCMI; Millon, 1983] or the MMPI [Hathaway & McKinley, 1967]) to identify subgroups of batterers. These typologies have focused only on the psychopathology/personality disorders dimension.

The first typology derived in this way was developed and replicated by Hamberger and Hastings (1985, 1986). They factor analyzed batterers' scores on the MCMI (Millon, 1983), a ques-

tionnaire measure of personality disorders, and then compared identified subtypes on measures of depression and anger. One hundred five male subjects participated in the 1985 investigation, and 99 men participated in the 1986 replication study; all were attending a domestic violence treatment program.

Factor analysis of the MCMI data revealed three key personality factors: schizoid/borderline, narcissistic/antisocial, and passive-dependent/compulsive. On the basis of descriptions of typical individuals with similar MCMI profiles and data gathered from the men in their studies, Hamberger and Hastings (1985, 1986) concluded that passive-dependent/compulsive men are tense and rigid individuals who lack self-esteem and depend on one or a few significant others; rebellious feelings and hostility may break through when their needs are not met by these others. These men were depressed, but findings regarding their anger proneness were contradictory across the two samples. Schizoid/borderline men are withdrawn, asocial, moody, and hypersensitive to interpersonal slights; they are volatile and likely to overreact to trivial interpersonal disputes. The men in this group had high levels of anxiety, depression, and anger proneness and may have had alcohol problems. Narcissistic/antisocial men have a self-centered approach to life, using others to meet their own needs and believing that they are entitled to be treated well by others; this group did not report feeling depressed or angry but showed tendencies for alcohol and drug problems.

On the basis of various combinations of these three personality factors, Hamberger and Hastings (1985, 1986) identified eight subgroups of violent men; the men fell almost evenly into each of the subtypes (i.e., 10–16 subjects per group in each study). Seven of the subtypes involved psychopathology, whereas one “normal” subgroup, constituting 12% of the sample, had no clinical elevations on any MCMI scale and did not report depression or anger problems.

Similarly focusing on psychopathology to distinguish subtypes of batterers, other researchers have examined the MMPI (Hathaway & McKinley, 1967) profiles of male batterers. Hale, Zimostad, Duckworth, and Nicholas (1988) cluster analyzed the MMPI profiles of 67 men who were seeking spouse abuse treatment. The analysis revealed three clusters. Cluster 1 (10% of the sample) included men who were either “faking bad” or had severe psychopathology, with elevations on nearly all of the MMPI scales. Fifteen percent of the sample fell into Cluster 2, having no MMPI scale elevations. Men in Cluster 3 (75%) had elevations on MMPI Scales 2 (depression) and 4 (psychopathy), indicating psychopathy or antisocial personality disorder with depressive features that may be produced by specific situations and may be short lived; this profile is often associated with alcohol, drug, and legal problems and suggests a group with antisocial personality characteristics and/or external stressors caused by family disputes and legal problems.

In a similar study, Flournoy and Wilson (1991) cluster analyzed the MMPI profiles of 56 batterers court ordered to treatment. Two profiles emerged. The first (44% of the sample) involved elevations on Scales 2 (depression) and 4 (psychopathy), similar to Hale et al.’s (1988) Cluster 3. The second group (56% of the sample) did not have clinical elevations on any MMPI scale, similar to Hale et al.’s (1988) Cluster 2.

Two researchers (Gondolf, 1988; Saunders, 1992) used cluster analysis to examine what subtypes of male batterers emerged from available data and then compared the resulting clusters on other, external variables. These researchers examined more than one descriptive dimension in their studies.

Saunders (1992) performed a cluster analysis on self-report data gathered from 165 maritally violent men entering treatment for spouse abuse. Saunders entered 6 variables into a cluster analysis (i.e., depression, anger, generalized violence, severity of marital violence, attitudes toward women, and alcohol use during violent incidents); he compared the resulting clusters on 10 external variables, with significant differences emerging on 6 (i.e., marital satisfaction, psychological abuse, marital conflict, impression management, childhood abuse, and arrests for drunk driving). Three subtypes emerged.

Family-only aggressors (52% of the sample) were the least likely to be violent outside the home. They had the highest marital satisfaction and the least marital conflict, were the least psychologically abusive, and held the most liberal attitudes toward women. They reported low levels of anger, depression, and jealousy but had the highest scores on measures of impression management; their violence was associated with alcohol use about half of the time. They were the least likely to have been abused as children. Generally violent aggressors (29% of the sample) were the most likely to report extrafamilial violence and engaged in the most severe marital violence. They were the most severely abused as children. Their violence was usually associated with alcohol use, and they had relatively high rates of arrest for drunk driving and violence. They reported moderate marital satisfaction, moderate marital conflict, and low to moderate levels of anger and depression, and they held the most rigid, conservative attitudes toward women. Emotionally volatile aggressors (19% of the sample) reported being severely violent less frequently than the generally violent men. However, they were the most psychologically abusive and were the least satisfied with their marriages. They had the highest levels of anger, depression, and jealousy and had the most suicidal ideation and guilt; approximately half of these men had received previous psychological treatment. Alcohol use was generally not associated with their violence.

Gondolf (1988; Gondolf, with Fisher, 1988) developed a typology of wife assaulters using data obtained during intake interviews with 6,000 women seeking help at shelters. Data from a random subsample of 525 of the women were used to establish preliminary clusters; the replicability of these clusters was examined with two replication subsamples, each involving 525 women. Six variables were entered into a cluster analysis (i.e., amount of physical abuse, amount of verbal abuse, how the man responded after the abuse in terms of blame or remorse, the man’s substance abuse, his use of general violence, and his previous arrest record); the derived clusters were compared on other variables (e.g., demographic variables).

Three main clusters of abusive men were consistently derived. Two clusters—sociopathic (5%–8% of the samples) and antisocial (30%–42% of the samples)—were characterized by severely abusive actions, including sexual abuse and child abuse, and antisocial behavior. These groups were likely to use weapons and tended to inflict injuries on their wives, and both engaged

in extrafamilial violence. However, these two groups were distinguished from one another in that the sociopathic group had higher levels of substance abuse and more previous arrests for violence against nonfamily members than the antisocial group; sociopathic batterers were characterized by extensive arrest records. The third cluster, typical batterers (approximately 50% of the samples), was substantially less abusive than the other subtypes. Men in this cluster engaged in less severe physical and verbal abuse and were less likely than the other batterers to have used weapons or to have engaged in sexual abuse of their partners or child abuse. In addition, this group engaged in less general aggression and was less likely to have arrest records; these men were the most likely to apologize, and the least likely to blame their partners, after their violence. In an early analysis of these data, Gondolf, with Fisher (1988), divided the typical batterer group into two subcategories: chronic and sporadic batterers. Relative to sporadic batterers, chronic batterers abused their partners more frequently and severely and were more likely to commit extrafamilial violence and to threaten their partners or hold their partners accountable for the abuse. Of all of the groups, the sporadic batterers exhibited the least physical, verbal, and sexual abuse; were least likely to have had previous arrest records and alcohol problems; and were most likely to apologize after the violence.

Stith, Jester, and Bird (1992) used cluster analysis to derive subtypes of male and female college students who had used violence in their dating relationships. This study differed from the others reviewed in two important ways. First, Stith et al. (1992) examined dating violence among college students rather than violence in the context of a marital-type relationship. Second, in their sample, they included both men ($n = 69$) and women ($n = 97$) who had used physical aggression. Thus, their batterer subtypes may or may not be directly comparable to those derived in studies examining only male batterers involved in marital-type relationships. However, given the similarity of their derived subtypes to those already reviewed, we included this study in our review.

In their cluster analysis, Stith et al. (1992) entered questionnaire measures of relationship functioning (i.e., love, relationship maintenance activities, relationship conflict, and ambivalence about the relationship), relationship negotiation styles, and general coping strategies. Four clusters of physically aggressive individuals were derived. These clusters were then compared on additional variables (e.g., severity of violence, level of emotional/verbal abuse, self-esteem, mastery, and length of relationship).

One cluster was labeled secure lovers. For these individuals, use of physical violence and emotional abuse was rare and less severe than that of the other subtypes. These individuals had the highest levels of self-esteem and mastery, suggesting a lack of psychological problems. They had relatively good relationships (e.g., the most love, least relationship conflict, and least ambivalence about their relationships). Stable minimizers also reported low levels of violence and emotional abuse. Whereas they reported moderate levels of relationship functioning (e.g., love and conflict), they had been in their relationships the longest of any subgroup. A third cluster, hostile pursuers, engaged in the highest levels of emotional abuse and in moderate levels

of physical violence. They were the most ambivalent about their relationships; they reported a high level of involvement in relationship maintenance activities but also had the highest levels of relationship conflict. The final group, hostile disengaged individuals, reported using the most frequent and most severe physical violence, although they did not engage in high levels of emotional abuse. Their relationships were the shortest and the most troubled (i.e., high levels of conflict and low levels of love and relationship maintenance activities).

Three Major Descriptive Dimensions

In summary, across existing typologies, including those developed with a rational/deductive approach and those developed with an empirical/inductive approach, three major dimensions have been used to distinguish among subtypes. These dimensions are (a) the severity of marital physical violence and related abuse, such as frequency of the violence and psychological and sexual abuse; (b) the generality of the violence (i.e., family-only or extrafamilial violence) and related variables such as criminal behavior and legal involvement; and (c) the batterer's psychopathology or personality disorders.

The three dimensions are primarily descriptive in nature. Although it is possible to view the psychopathology/personality disorders dimension as causally important (e.g., generally violent/antisocial men are maritally violent as part of their more general pattern of antisocial behavior), this has generally not been the case in previous research. Past researchers have often used the psychopathology/personality disorders dimension descriptively to distinguish among subtypes of batterers rather than integrating this dimension into a theoretical model regarding the development of maritally violent behavior.

Proposed Typology of Male Batterers

Given this literature review, we hypothesize that researchers using these three descriptive dimensions will usually identify three major subtypes of batterers; we label these subtypes family only, dysphoric/borderline, and generally violent/antisocial. Our estimates regarding the percentage of batterers who will fall into each subtype are based on our review of the previous literature, adjusted for the fact that previous researchers have primarily examined clinical samples, whereas we are interested in prevalence rates among all batterers irrespective of whether they are in treatment. For example, we hypothesize that a lower percentage of generally violent/antisocial batterers will be found among batterers in the community than among batterers who have been arrested and are in court-ordered treatment. The proposed differences between these subgroups on the three descriptive dimensions are presented in Table 2 and discussed subsequently.

First, family-only batterers should engage in the least severe marital violence and be the least likely to engage in psychological and sexual abuse. The violence of this group is generally restricted to family members; these men are the least likely to engage in violence outside the home or to have related legal problems. Also, they evidence little psychopathology and either no personality disorder or a passive-dependent personality dis-

Table 2

Proposed Subtypes of Male Batterers: How They Differ on the Descriptive Dimensions

Dimension	Family-only batterer	Dysphoric/borderline batterer	Generally violent/antisocial batterer
Severity of marital violence	Low	Moderate-high	Moderate-high
Psychological and sexual abuse	Low	Moderate-high	Moderate-high
Generality of violence			
Extrafamilial violence	Low	Low-moderate	High
Criminal behavior, legal involvement	Low	Low-moderate	High
Psychopathology/personality disorder			
Personality disorder	None or passive/dependent	Borderline or schizoid	Antisocial/psychopathy
Alcohol/drug abuse	Low-moderate	Moderate	High
Depression	Low-moderate	High	Low
Anger	Moderate	High	Moderate

order. They are similar to men included in the following groups by previous researchers: hitters (Mott-McDonald Associates, 1979), infrequent batterers (Sweeney & Key, 1982), some of the family-only batterers (e.g., Cadsky & Crawford, 1988; J. A. Fagan et al., 1983; Shields et al., 1988), stable/affectionate and dependent/passive batterers (Faulk, 1974), approval seekers (Elbow, 1977), nonexposed altruists (Caesar, 1986), some of the overcontrolled hostile batterers (Hershorn & Rosenbaum, 1991), normal and passive-dependent/compulsive batterers (Hamberger & Hastings, 1986), batterers with no clinical elevations on MMPI scales (Flournoy & Wilson, 1991; Hale et al., 1988), Saunders's (1992) family-only batterer, Gondolf's (1988) sporadic typical batterer, and Stith et al.'s (1992) secure lovers and stable minimizers. This group could constitute up to 50% of batterer samples if researchers recruit violent husbands not only from treatment programs but also from the community (i.e., we hypothesize that many men who are not seeking therapy will be found to have engaged in only less severe violence and only violence inside the home).

Second, dysphoric/borderline batterers should be found to engage in moderate to severe wife abuse, including psychological and sexual abuse. This group's violence is primarily confined to the family, although some extrafamilial violence and criminal behavior may be evident. These men are the most dysphoric, psychologically distressed, and emotionally volatile. They may evidence borderline and schizoid personality characteristics and may have problems with alcohol and drug abuse. These men parallel some of the batterers (Mott-McDonald Associates, 1979) and frequently violent men (Sweeney & Key, 1982) categorized in previous studies, as well as some of the family-only batterers (Cadsky & Crawford, 1988; J. A. Fagan et al., 1983; Shields et al., 1988), and overcontrolled hostility batterers (Hershorn & Rosenbaum, 1991). Also, they are similar to Faulk's (1974) dependent/suspicious batterers, Elbow's (1977) incorporator and defender batterers, Caesar's (1986) exposed rescuers, Hamberger and Hastings's (1986) schizoid/borderline batterers, Hale et al.'s (1988) group of batterers with elevations on every MMPI scale, Saunders's (1992) emotionally volatile batterers, Gondolf's (1988) chronic typical batterers, and Stith et al.'s (1992) hostile pursuers. Estimates from past research indicate that this group should constitute approximately 25% of batterer samples.

We hypothesize that the third cluster of batterers, the generally violent/antisocial batterers, engages in moderate to severe marital violence, including psychological and sexual abuse. These men should engage in the most extrafamilial aggression and have the most extensive history of related criminal behavior and legal involvement. They are likely to have problems with alcohol and drug abuse, and they are the most likely to have an antisocial personality disorder or psychopathy. These men resemble some of the batterers (Mott-McDonald Associates, 1979), frequently violent men (Sweeney & Key, 1982), and generally violent men (e.g., Cadsky & Crawford, 1988; J. A. Fagan et al., 1983; Shields et al., 1988) identified in previous research, and they parallel Faulk's (1974) dominating and violent/bullying batterers, Elbow's (1977) controllers and Caesar's (1986) tyrants, Hershorn and Rosenbaum's (1991) undercontrolled hostility batterers, Hamberger and Hastings's (1986) narcissistic/antisocial subgroup, batterers with MMPI Scale 2 and 4 elevations (Flournoy & Wilson, 1991; Hale et al., 1988), Saunders's (1992) generally violent batterers, Gondolf's (1988) antisocial and sociopathic batterers, and Stith et al.'s (1992) hostile disengaged batterers. Given past research, we estimate that this group will constitute approximately 25% of batterer samples.

Developmental Model of the Various Subtypes of Male Batterers

The previous research regarding typologies of batterers has generally been descriptive in nature, using dimensions to distinguish among subtypes of violent husbands. With few exceptions (e.g., Hershorn & Rosenbaum, 1991), previous researchers have not examined explicit theoretical assumptions; they have not systematically attempted to differentiate identified subtypes on the basis of variables hypothesized to be related to the use of violence by each subtype.

Although further work is needed to more firmly establish the existence and replicability of various subtypes of batterers (see later discussion of methodological issues), we believe that the ultimate purpose of such work is to provide information on the correlates of violence within each of the identified subtypes of batterers so that the risk factors and causes of marital violence in each subtype can be better understood. Such an approach was discussed by Gondolf (1988): "Each type of batterer, in this

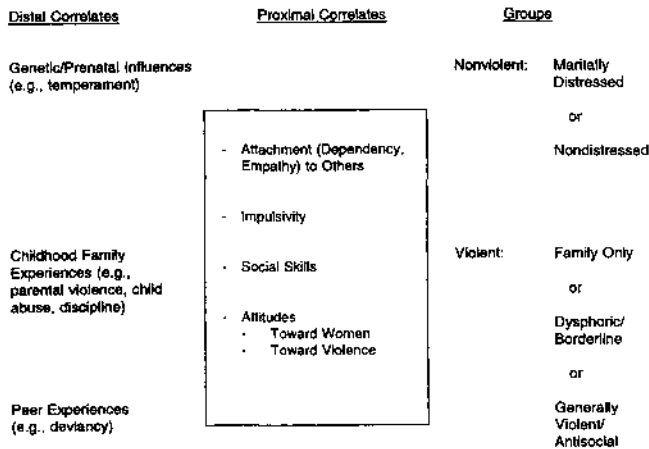


Figure 1. Developmental model of marital violence.

view, is liable to be distinguished by a unique set of causal factors. . . . A subtheory for each type of batterer may be constructed around these factors" (p. 198). To move toward this goal, we propose a developmental model of marital violence. The model is presented in Figure 1.

Before discussing our model, we should note that many models of marital violence have been offered by previous researchers (e.g., see reviews of theories in Bersani & Chen, 1988; Gelles & Straus, 1979). In general, these theories can be divided into three groups on the basis of their level of analysis (see Margolin, Sibner, & Gleberman, 1988, for a similar distinction). At the broadest level, sociocultural theories have been offered, including feminist (e.g., Ganley, 1989; Pence, 1989; Smith, 1990) and culture of violence (e.g., Gelles & Straus, 1979) theories that propose that marital violence exists because today's violent and patriarchal society tolerates, and even encourages, the use of physical aggression in families and the use of violence to dominate women. At the next level of analysis, interpersonal theories have been offered, with dyadic and family-level variables being examined. For example, family systems models propose that the etiology of marital violence lies in family interaction patterns (e.g., Lane & Russell, 1989; Madanes, 1990). Finally, a variety of models have been offered at the individual, or intrapersonal, level. These theories attempt to explain why particular individuals engage in physical aggression and others do not, and they assume that some characteristic, or combination of characteristics, of the individual increases the risk that the individual will engage in marital violence. Some examples of theories at the intrapersonal level are social learning/social skills models (e.g., Hamberger & Lohr, 1989; Holtzworth-Munroe, 1992; O'Leary, 1988; Saunders, 1989), psychopathology models (focusing, for example, on the role of attachment, jealousy, and dependency [e.g., Dutton & Browning, 1988; Holtzworth-Munroe, Hutchinson, & Stuart, 1994; Sonkin et al., 1985]; impulse control problems [e.g., Faulk, 1974]; or low self-esteem [e.g., Sonkin et al., 1985]), and attitudinal or cognitive models (including a focus on attitudes toward women [e.g., Sonkin et al., 1985; Walker, 1979] and attitudes regarding the

acceptability of violence [e.g., Saunders, Lynch, Grayson, & Linz, 1987]).

We thought it necessary to develop a model of marital violence because previous theorists have virtually ignored the question of subtypes of marital violence; existing theories of marital violence generally have not provided hypotheses regarding the etiology of various subtypes of male batterers. Given that we were interested in explaining the etiology of marital violence in various subtypes of batterers (i.e., individuals), we thought that it was most appropriate to focus on factors at the intrapersonal, or individual, level. We do not discuss potentially theoretically relevant variables related to broader systems (e.g., couples' interactions) and societal/cultural influences (e.g., a patriarchal society and violence in the media), at least directly (e.g., an individual's negative attitudes toward women may reflect society's views of women, whereas the poor social skills of a violent husband would presumably be observed in a couple's interactions). Although we are interested in intrapersonal factors, we did not directly include psychopathology (e.g., personality disorder) in our model because we considered it to be a descriptive dimension used to differentiate the subtypes of batterers.

In developing our model, we chose to integrate many of the currently available intrapersonal theories; integration of existing theories rarely occurs in the marital violence literature (see Gelles & Straus, 1979, for an exception). Thus, we included important variables from several major intrapersonal-level theories of marital violence (e.g., family of origin violence, social skills, attachment, and attitudes toward women and toward violence). In our model, we used time to demarcate two major sets of proposed etiological variables. Distal variables are factors occurring in childhood or before (e.g., genetic factors); as revealed by our literature search (described later), these variables have rarely been examined in previous marital violence research. Proximal variables are adult characteristics believed to increase the risk that an individual man will engage in marital violence. Relative to the distal variables, the proximal variables have more frequently been discussed by previous theorists and have received more empirical attention.

In the following sections, we introduce each etiological variable proposed in our model. When possible, we present examples of data (i.e., not an exhaustive review) linking these variables to the occurrence of marital violence in general. Then, in Table 3 (and briefly in the text), we present data from the previous typology studies regarding how the proposed subtypes of batterers differ on each of the variables in our model.

Distal, Historical Correlates of Marital Violence

As can be seen in Figure 1, we propose that certain background variables are distal, historical correlates of marital violence. These include genetic/prenatal influences, early childhood family experiences, and peer experiences.

Genetic/prenatal factors are believed to include an inherited tendency for impulsivity, an irritable temperament, or both. Interest in such factors comes both from behavioral genetic research, suggesting that aggressive and criminal or antisocial behavior patterns can be inherited (e.g., Dilalla & Gottesman, 1989; Mednick & Kandel, 1988; Mednick, Pollock, Volavka, &

Table 3
Relationship Between Previous Typologies and Variables in the Developmental Model

Variable	Batterer subtype		
	Family only	Dysphoric/borderline	Generally violent/antisocial
Genetic/prenatal factors			
Early childhood family experiences			
Witnessed parental violence			
J. A. Fagan, Stewart, & Hansen (1983)	Family-only batterers less likely to witness parental violence as child		Generally violent batterers more likely to witness parental violence as child
Hershorn & Rosenbaum (1991)	Overcontrolled batterers less likely to have witnessed father abusing mother		Undercontrolled batterers more likely to have witnessed father abusing mother
Cadsky & Crawford (1988)	Wife assaulters tended to report lower rates of violence between parents		Mixed assaulters tended (nonsignificantly) to report higher rates of violence between parents
Abused as child			
Shields, McCall, & Hanneke (1988)	Family-only batterers more likely to have fathers who were violent toward them as children		Generally violent batterers less likely to have fathers who were violent toward them as children
Hershorn & Rosenbaum (1991)	Overcontrolled batterers more likely to have rejecting mothers and parents who were firm disciplinarians		
J. A. Fagan et al. (1983)	Family-only batterers less likely to have been abused as a child		Generally violent batterers more likely to have been abused as a child
Saunders (1992)	Family-only batterers least likely to have been abused		Generally violent batterers most severely physically abused
Cadsky & Crawford (1988)	Wife assaulters tended to report less violence from parents		Mixed assaulters tended (nonsignificantly) to report more violence from parents and were more likely to require medical attention as a result
Peer experience			
Cadsky & Crawford (1988)	Wife assaulters: as juveniles, were less likely to join a street gang or engage in other deviant behavior		Mixed assaulters: as juveniles, were more likely to join a street gang, more likely to skip school, be expelled from school, run away from home, set fires, hit others, get drunk, smash a car, be arrested; left home at younger age
Attachment			
Marital relationship/dependency			
Shields et al. (1988)	Family-only batterers more maritally satisfied; more stable relationships; more committed to marriage; less likely to have extramarital affair		Generally violent batterers less maritally satisfied; less stable relationships; less committed to marriage; more likely to have extramarital affair
Cadsky & Crawford (1988)	Wife assaulters: more likely to be legally married, longer current relationship, tended to be more satisfied with relationship		Mixed assaulters: less likely to be married, shorter current relationship, tended (nonsignificantly) to be less satisfied with relationship
Saunders (1992)	Family-only batterers more maritally satisfied and less marital conflict; lowest levels of jealousy	Emotionally volatile batterers least maritally satisfied and most jealous	Generally violent batterers: moderate marital satisfaction and conflict

(table continues)

Table 3 (continued)

Variable	Batterer subtype		
	Family only	Dysphoric/borderline	Generally violent/antisocial
Faulk (1974)	Stable/affectionate batterers: long-standing relationship; dependent/passive batterers: dependent on wife	Dependent/suspicious batterers: very jealous; very dependent on wife	
Elbow (1977)	Approval seekers dependent on wife; needs wife's approval	Incorporators and defenders view wife as part of self; very needy/clingy to wife; want wife to depend on them and are jealous	Controllers view wife as an object they control; relationship lacks reciprocity
Caesar (1986)	Nonexposed altruists dependent on wife	Exposed rescuers want wife dependent on them	Controllers view wife as object, are emotionally void in close relationships
Hamberger & Hastings (1985, 1986)	Passive-dependent/compulsive batterers: dependent on significant others	Schizoid/borderline batterers: high levels of strife in relationships	Narcissistic/antisocial batterers: self-centered in relationships; use others to meet own needs
Stith, Jester, & Bird (1992)	Secure lovers: most love for partners, most relationship maintenance activities, lowest levels of relationship conflict and ambivalence, long relationships; stable minimizers: moderate love and relationship maintenance, moderate relationship conflict and ambivalence, longest relationships	Hostile pursuers: high level of relationship maintenance activities and moderate levels of love, highest levels of relationship conflict and high level of ambivalence regarding relationship	Hostile disengaged batterers: lowest levels of love and relationship maintenance activities, high levels of relationship conflict and ambivalence, shortest relationships
Remorse/empathy Caesar (1986) Mott-McDonald Associates (1979) Elbow (1977)	Hitters feel more remorse, will take responsibility for violence and seek treatment Approval seekers experience guilt	Exposed rescuers feel remorse	Tyrants show little remorse Batterers feel little remorse and refuse to take responsibility for violence Controllers project blame for violence onto others; believe their violence is justified
Gondolf (1988)	Sporadic batterers most likely to apologize and least likely to blame wife	Chronic typical batterers blame victim	Sociopathic and antisocial batterers most likely to blame victim
Hamberger & Hastings (1985, 1986) Shields et al. (1988)	Family-only batterers more likely to seek treatment for marital problems		Narcissistic/antisocial batterers least likely to feel empathy Generally violent batterers less likely to seek treatment for marital problems
Impulsivity Anger: substance abuse and criminal behavior Hershorn & Rosenbaum (1991) Cadsky & Crawford (1988)	Overcontrolled batterers most likely to explode after letting anger simmer Wife assaulters: lower levels of hostility and fewer problems with behavior control; less likely to abuse alcohol, be arrested for drunk driving, or meet criteria for alcohol abuse; first conviction for crime at older age and fewer criminal convictions		Undercontrolled batterers impulsive, with few controls over anger or aggression Mixed assaulters: higher levels of hostility and more symptoms of behavior noncontrol; more likely to abuse alcohol, be arrested for drunk driving, and meet criteria for alcohol abuse; first conviction for crime at younger age and more criminal convictions
Hamberger & Hastings (1985, 1986)	Passive-dependent/compulsive batterers: mixed findings regarding anger proneness across two samples	Schizoid/borderline batterers overreact to trivial interpersonal disputes, high levels of anger, some alcohol problems	Narcissistic/antisocial batterers: lower levels of anger, tendency for alcohol/drug problems

(table continues)

Table 3 (continued)

Variable	Batterer subtype		
	Family only	Dysphoric/borderline	Generally violent/antisocial
Hale, Zimostad, Duckworth, & Nicholas (1988)			Elevated on MMPI Scales 2 and 4; alcohol/drug/legal problems
Flournoy & Wilson (1991)			Elevated on MMPI Scales 2 and 4; alcohol/drug/legal problems
J. A. Fagan et al. (1983)	Family-only batterers: violence less likely to be accompanied by drinking		Violence of generally violent batterers more likely to be accompanied by drinking
Shields et al. (1988)	Family-only batterers less likely to use drugs when violent; less likely to have sought help for alcohol/drug problem; less likely to have been arrested; less likely to support self illegally or gamble large sums of money; higher occupational status		Generally violent batterers more likely to use illegal drugs when violent; more likely to have sought help for alcohol or drug problem; more likely to have been arrested for any crime; more likely to support self through illegal means; more likely to have gambled large sums of money; lower occupational status
Faulk (1974)	Dependent/passive batterers: violent outbursts	Dependent/suspicious batterers: violent outbursts	Dominating batterers: violent outbursts; violent/bullying batterers: violence sometimes associated with alcohol abuse
Elbow (1977)	Approval seekers: drinking may or may not be part of violence	Incorporators have public displays of anger; are impulsive; may heavily use alcohol/drugs	Controllers have most extensive involvement in illegal activities
Saunders (1992)	Family-only batterers: low levels of anger; violence associated with alcohol about half of the time	Emotionally volatile batterers: highest levels of anger; least likely to have used alcohol before/during a violent incident	Generally violent batterers: low to moderate anger levels; had most violent episodes when under influence of alcohol; most arrests for drunk driving and violence
Gondolf (1988)	Sporadic batterers had fewest alcohol problems; fewest arrests	Chronic typical batterers had moderate levels of substance abuse; few arrests	Sociopathic batterers had extensive arrest records (for violence, drug use, property crimes) and highest levels of substance abuse
Social skills Stith et al. (1992)	Secure lovers: highest level of direct relationship negotiation; use nonavoidant coping strategies; stable minimizers: wide variety of direct and indirect coping strategies and relationship negotiation styles	Hostile pursuers: wide variety of direct and indirect coping strategies and relationship negotiation styles	Hostile disengaged batterers: use violence to resolve relationship conflicts
Faulk (1974)			Violent/bullying batterers: use violence and intimidation to solve many problems
Caesar (1986)	Nonexposed altruists unassertive		
Attitudes Toward women Saunders (1992)	Family-only batterers had most liberal sex role attitudes	Emotionally volatile batterers had relatively conservative sex role attitudes	Generally violent batterers had most rigid, conservative sex role attitudes
Toward violence ^a Shields et al. (1988)	Family-only batterers have most remorse/guilt Family-only batterers least likely to believe violence is justified or to have positive attitudes toward violence		Generally violent batterers have least remorse Generally violent men had positive attitudes toward violence and believed that violence is justified
Cadsky & Crawford (1988)	Wife assaulters: less likely to find circumstances under which they believe it is permissible to hit partner		Mixed assaulters: more easily find circumstances under which they believe it is permissible to hit partner

Note. MMPI = Minnesota Multiphasic Personality Inventory.

^a See section on empathy/remorse.

Gabrielli, 1982; Rutter et al., 1990), and from general theories of personality, suggesting that certain personality dimensions, specifically impulsivity, are related to aggression and are inherited and biologically based (i.e., specific neurological substrates for each personality dimension; see the brief review, under the later section on impulsivity, of work conducted by Gray, Fowles, Eysenck, Newman, Cloninger, and Zuckerman).

To our knowledge, research has not been conducted examining the relationship between genetic/prenatal influences and the occurrence of marital violence in general, although researchers have documented a relationship between growing up in a violent home and becoming violent oneself (e.g., see review by Hotelling & Sugarman, 1986) that could be based, in part, on genetics. In addition, as can be seen in Table 3, researchers have not directly examined possible links between genetic/prenatal influences and the development of various subtypes of marital violence. However, as reviewed later, some attention has been given to personality dimensions, such as impulsivity, that may result from genetic/prenatal influences.

The second distal factor, *early childhood family experiences* (e.g., witnessing parental violence, experiencing child abuse, and methods of child discipline), has been examined more extensively in the general marital violence literature. First, researchers have repeatedly documented a general link between growing up in a violent home and using physical aggression against one's spouse in adulthood (see review by Hotelling & Sugarman, 1986). Although such a link may be genetic, other theoretical explanations are possible, including social learning theory (i.e., violent men observed the use and reinforcement of marital violence in their family of origin, learning to use violence and failing to learn nonviolent methods for resolving marital disputes) and attachment theory (i.e., violent men were unable to form trusting relationships with an abusive parent and thus have relationship difficulties as adults).

Regarding previous typologies of male batterers, several researchers have gathered retrospective reports of childhood family experiences (see Table 3). In studies of whether or not a man witnessed his parents engaged in marital violence, the data consistently demonstrate that generally violent batterers are the most likely to have witnessed physical violence between their parents, whereas family-only batterers are the least likely to have been exposed to parental violence (Cadsky & Crawford, 1988; J. A. Fagan et al., 1983; Hershorn & Rosenbaum, 1991). Thus, we propose that the more parental violence a man witnessed as a child, the more violent he will end up being himself as an adult (i.e., a generally violent/antisocial batterer).

In contrast, data regarding the relationship of childhood abuse of the batterer himself to the various batterer subtypes are contradictory. Two research groups have found evidence that family-only batterers are more likely than generally violent batterers to have abusive or rejecting parents (Hershorn & Rosenbaum, 1991; Shields et al., 1988). In direct contrast, other researchers have found that generally violent batterers are more likely than family-only batterers to have experienced child abuse (Cadsky & Crawford, 1988; J. A. Fagan et al., 1983; Saunders, 1992). For theoretical reasons (discussed later), we would argue that child abuse is also a risk factor for dysphoric/borderline batterers.

The third distal variable we have proposed is *peer experiences*, specifically involvement with delinquent and deviant peers. This factor is discussed extensively in general theories of criminal and antisocial behavior, such as theories of differential association (e.g., Burgess & Akers, 1966; Sutherland, 1947) and social interaction models (e.g., Elliott, Huizinga, & Ageton, 1985; Patterson, Reid, & Dishion, 1992). Research also supports the notion that association with deviant peers is related to antisocial behavior and substance use or abuse in adolescents (e.g., Elliott & Huizinga, 1985; Huba & Bentler, 1983; Patterson, Reid, & Dishion, 1992) and to adult criminality (e.g., West & Farrington, 1977). Similarly, involvement with delinquent peers has been related to the development of male sexual aggression toward women (Malamuth, Sockloskie, Koss, & Tanaka, 1991).

Few researchers have, to date, examined the role of delinquent peer relationships in the development of marital violence in general. In one of the few studies of this issue, wives of abusive husbands were more likely than wives of nonabusive husbands to report that their husbands' friends approved of violence against women and believed that men should be in control in the marital relationship (Smith, 1991). Similarly, on the basis of interviews with battered wives, Bowker (1983) found that husbands who spent more time with male peers (e.g., daily contact) were more likely to engage in frequent and severe marital violence and were less likely to make efforts to end their marital violence; he suggested that such men were immersed in a subculture of violence, with peers who encouraged their use of violence.

As shown in Table 3, previous batterer typology researchers generally have not examined this variable. In the one exception, Cadsky and Crawford (1988) found that generally violent batterers were more likely than family-only batterers to have joined a street gang in their youth. In addition, generally violent batterers were more likely than family-only batterers to have engaged in a wide variety of delinquent behaviors during childhood and adolescence; such activities might reflect involvement with deviant peers.

On the basis of previous work, we propose that association with deviant peers is related to more deviant and delinquent behavior. Thus, it should be a factor related to violence, particularly among the generally violent/antisocial group of batterers.

Proximal Correlates of Marital Violence

As shown in Figure 1, we propose that the three distal variables influence the development of five more proximal correlates of marital aggression. These correlates are attachment to others, impulsivity, social skills, attitudes toward women, and attitudes toward violence.

The first proximal variable, *attachment* to other individuals (including dependency on others and empathy for others, particularly the wife), is generally viewed as resulting from childhood experiences with caregivers. These experiences lead to secure or insecure cognitive representation of relationships, or "working models" of attachment, that influence one's attitudes toward later adult relationships (e.g., Bowlby, 1973, 1988). Along with others (e.g., Bowlby, 1988), we have proposed that

men who are ambivalently attached to, and preoccupied with, their wives (e.g., experiencing pathological levels of dependency, jealousy, and fear of rejection) are at risk to engage in marital violence when threatened with the loss of their relationships (Holtzworth-Munroe, Hutchinson, & Stuart, 1994).

Although few researchers have examined the role of attachment in marital violence in general, emerging findings support our proposed link between these variables. For example, when maritally violent men are presented with conflicts involving issues of wife abandonment, rejection from their wives, or jealousy (i.e., situations that can be conceptualized as threats to the relationship, eliciting attachment behaviors), they report more anger and provide less competent responses than nonviolent men (Dutton & Browning, 1988; Holtzworth-Munroe & Anglin, 1991). In a recent study using measures of attachment patterns, batterers were more preoccupied with and more dependent on their wives and had more unresolved attachment strategies than nonviolent husbands (Holtzworth-Munroe et al., 1994).

Similarly, childhood experiences are assumed to teach, or fail to teach, children to empathize with others. We assume that the more empathy a man feels for others, the less likely he is to engage in aggression.

As seen in Table 3, previous typology researchers have not directly examined attachment. However, some have measured related constructs, such as marital satisfaction and dependency on the wife, and others have gathered indirect measures of empathy (e.g., remorse for violence). A review of these related variables suggests that, in contrast to the limited data linking one particular type of attachment (i.e., ambivalent/preoccupied) to marital violence in general, each subtype of male batterer may be characterized by a different pattern of attachment.

In examining marital functioning, previous researchers have found that, relative to other subgroups of batterers, family-only batterers have better marriages; they are more maritally satisfied, have more stable and less conflictual marriages, and are more committed to their marriage and less likely to have extra-marital affairs (Cadsky & Crawford, 1988; Faulk, 1974; Saunders, 1992; Shields et al., 1988; Stith et al., 1992). However, they may be overly dependent on their wives (Caesar, 1986; Elbow, 1977; Faulk, 1974; Hamberger & Hastings, 1985, 1986). These findings suggest that family-only batterers will have the fewest attachment problems, although they may show evidence of a preoccupied attachment style.

In contrast, previous researchers have usually portrayed generally violent/antisocial batterers as experiencing marital problems (Cadsky & Crawford, 1988; Saunders, 1992; Shields et al., 1988; Stith et al., 1992) and as viewing their wives as objects, because these men are narcissistic and self-centered in close relationships (Caesar, 1986; Elbow, 1977; Hamberger & Hastings, 1985, 1986); such factors might be reflected in a dismissing attachment style. Regarding dysphoric/borderline batterers, researchers have generally hypothesized that these men are pathologically dependent on their wives, viewing their wives as part of themselves (Caesar, 1986; Elbow, 1977; Faulk, 1974) and experiencing high levels of jealousy, marital dissatisfaction, relationship strife, and ambivalence about their relationships (Faulk, 1974; Hamberger & Hastings, 1985, 1986; Saunders, 1992;

Stith et al., 1992); this would be reflected in a preoccupied attachment style.

Previous typology researchers have also gathered indirect measures of empathy (see Table 3), examining feelings of remorse and attributions of blame for violence. Researchers have found that the generally violent/antisocial batterer feels little remorse and is the most likely to blame his victim (Caesar, 1986; Elbow, 1977; Gondolf, 1988; Hamberger & Hastings, 1985, 1986; Mott-McDonald Associates, 1979). In contrast, family-only batterers are the most likely to feel remorse and the most likely to admit having marital problems and to seek help for such problems (Elbow, 1977; Gondolf, 1988; Mott-McDonald Associates, 1979; Shields et al., 1988). Less information is available regarding the dysphoric/borderline batterer, and the available data are contradictory (i.e., Caesar, 1986, found that the exposed rescuer feels remorse, but Gondolf, 1988, found that the chronic typical batterer blames his victim). In summary, consistent with their attachment patterns, generally violent/antisocial batterers feel the least empathy for their wives, whereas family-only batterers are the most empathetic toward their wives; dysphoric/borderline batterers may experience an intermediate level of empathy.

As mentioned earlier, the second proximal variable, *impulsivity*, is presumably an inherited, biologically based personality dimension related to temperament, physiological reactivity, and neurologically based behavioral control systems. Of particular interest, personality theorists have related impulsivity to aggressiveness and psychopathy, or antisocial personality disorder.

H. J. Eysenck (1967; S. B. G. Eysenck & Eysenck, 1978) identified three personality dimensions: neuroticism, introversion-extraversion, and psychoticism (i.e., tough-mindedness). Various combinations of these traits presumably predispose an individual to engage in impulsive or aggressive behavior; specifically, primary (low-anxiety) psychopaths tend to score low on the neuroticism dimension but high on the extraversion and psychoticism dimensions (Eysenck & Eysenck, 1976, cited in Gray, 1981). Similarly focusing on personality dimensions, Gray (e.g., Gray, 1981, 1987; Gray, Owen, Davis, & Tsaltas, 1983) rotated Eysenck's neuroticism and introversion-extraversion dimensions 45 degrees to form dimensions of anxiety and impulsivity. Although the relationship between these personality dimensions and underlying emotional systems is complex, Gray (e.g., 1987) suggested that there are three interacting systems governing the control of emotional behavior: The behavioral activation system (BAS) regulates behavior in response to unconditioned rewards or nonpunishment (e.g., it activates behavior in response to cues for reward); the behavioral inhibition system (BIS) regulates appetitively motivated behavior in response to stimuli indicating that punishment will occur if the response is made (e.g., it inhibits behaviors that would otherwise occur when cues for response-contingent punishment are present); and the fight/flight system regulates behavior in response to unconditioned punishment or unconditioned nonreward. Presumably, individuals who have either high activity in the BAS or low activity in the BIS may be impulsive (Gray et al., 1983); for example, Gray (1987) suggested that primary psychopaths are more sensitive to stimuli related to rewards than to stimuli related to punishment. Although both systems may

be involved in producing antisocial behavior, researchers have generally focused more attention on activity in the BIS than on activity in the BAS (Fowles, 1987). Indeed, numerous researchers have demonstrated that primary psychopaths manifest passive-avoidance learning deficits. For example, Newman's work (e.g., 1987) suggests that psychopaths, once focused on obtaining rewards through certain responses, continue to respond despite cues that punishment may occur if they continue with their responses; thus, in approach-avoidance situations, they are unable to modify their dominant response set, and they are less likely to inhibit punished responses.

In addition to the personality dimensions and underlying behavioral control systems outlined earlier, other theorists have suggested that another personality dimension (e.g., novelty seeking or sensation seeking) may be important in understanding impulsive, aggressive behavior. For example, Cloninger (1986, 1987) identified novelty seeking, harm avoidance, and reward dependence as heritable dimensions that can be used to describe personality. Harm avoidance parallels Gray's BIS, and reward dependence parallels Gray's BAS (Fowles, 1987); Cloninger's novelty-seeking dimension does not directly correspond to Gray's model (Fowles, 1987), yet is proposed to be related to aggressive, impulsive behavior. Cloninger (1987) predicted that individuals at high risk for aggression tend to be high in novelty seeking and low in harm avoidance; primary psychopaths were predicted to be high in novelty seeking, low in harm avoidance, and low in reward dependence. Similar to Cloninger's dimensions of novelty seeking and reward dependence, Zuckerman (1991a, 1991b) has focused on sensation seeking as a trait, proposing that impulsive and aggressive behaviors are related to high levels of sensation seeking.

In summary, personality theorists have focused on how various personality dimensions may interact to produce impulsive, aggressive, and antisocial behavior. These personality traits are presumably inherited and biologically based. Across the theories, impulsive individuals have been hypothesized to be overly sensitive to rewards, deficient in their ability to inhibit responses despite potential punishment, and likely to engage in novelty- and sensation-seeking experiences. These hypotheses are potentially relevant to marital violence, particularly to the violence of generally violent/antisocial batterers, who (as discussed later) are presumed to have problems with impulsivity and to be at risk for engaging in antisocial, psychopathic behavior.

Impulsivity has rarely been directly studied in general investigations of marital violence. However, potentially related variables have been given some attention. For example, anger problems (e.g., explosive, uncontrolled anger) may reflect problems with impulsivity. Researchers comparing violent and nonviolent husbands have demonstrated that violent husbands experience more anger, both in general (e.g., Maiuro, Cahn, Vitaliano, Wagner, & Zegree, 1988) and during marital conflicts (e.g., Dutton & Browning, 1988; Margolin, John, & Gleberman, 1988). Similarly, substance abuse, criminal behavior, and the use of violence when under the influence of alcohol or drugs may reflect impulsivity. For example, in studies of marital violence in general, violent husbands have been found to have more problems with substance abuse than nonviolent men (e.g., R. W. Fagan, Barnett, & Patton, 1988; Kantor & Straus, 1987; Leo-

nard & Blane, 1992; Leonard, Bromet, Parkinson, Day, & Ryan, 1985; Van Hasselt, Morrison, & Bellack, 1985).

As shown in Table 3, previous typology researchers have also often indirectly assessed impulsivity. Researchers have studied differences in the anger experienced by various subtypes of male batterers. Findings regarding levels and expression of anger among family-only batterers are mixed. In two studies, this group reported lower levels of anger (Saunders, 1992) and hostility (Cadsky & Crawford, 1988) than the other batterer subgroups; in two other studies, family-only batterers were hypothesized to express their anger in a volatile fashion (Faulk, 1974; Hershorn & Rosenbaum, 1991); and, across their two samples, Hamberger and Hastings (1985, 1986) found contradictory evidence regarding the level of anger experienced by this group. In contrast, dysphoric/borderline batterers are consistently found to be volatile in their expression of anger, experiencing high levels of anger in general (Saunders, 1992) and having difficulty controlling their expression of anger; they are likely to overreact to trivial interpersonal disputes and to explode after letting anger summate (Elbow, 1977; Faulk, 1974; Hamberger & Hastings, 1985, 1986; Hershorn & Rosenbaum, 1991). Interestingly, although some researchers have found that generally violent/antisocial batterers have high levels of anger or problems controlling their anger (Cadsky & Crawford, 1988; Faulk, 1974; Hershorn & Rosenbaum, 1991), others have found that this group reports only low to moderate levels of anger (Hamberger & Hastings, 1985, 1986; Saunders, 1992).

As another indirect measure of impulsivity, variables such as substance abuse, criminal behavior, and the use of alcohol and drugs when engaged in violence have proven to be powerful discriminators among subtypes of male batterers. These problems are consistently found to characterize generally violent/antisocial batterers more than the other subgroups (Cadsky & Crawford, 1988; Elbow, 1977; J. A. Fagan et al., 1983; Faulk, 1974; Gondolf, 1988; Saunders, 1992; Shields et al., 1988). Indeed, the fact that researchers have hypothesized that generally violent/antisocial batterers have an antisocial personality disorder (Cadsky & Crawford, 1988; Flournoy & Wilson, 1991; Hale et al., 1988; Hamberger & Hastings, 1985, 1986) is relevant because such disorders are theoretically linked to impulsive behavior. In contrast, family-only batterers are consistently found to have fewer substance abuse or legal problems than the other subtypes (Cadsky & Crawford, 1988; Elbow, 1977; J. A. Fagan et al., 1983; Gondolf, 1988; Saunders, 1992; Shields et al., 1988). Although dysphoric/borderline batterers generally do not have as many legal problems as generally violent/antisocial batterers, findings regarding substance abuse for dysphoric/borderline batterers are mixed. Some researchers have suggested that they abuse alcohol and drugs (Elbow, 1977), others have found only moderate levels of substance abuse in this group (Gondolf, 1988; Hamberger & Hastings, 1985, 1986), and still others have found that this subgroup is the least likely to have used alcohol before or during a violent incident (Saunders, 1992).

Thus, across the previous typology studies, the data consistently suggest that the generally violent/antisocial batterer is the most impulsive batterer, whereas the family-only batterer is the least impulsive. Fewer data are available regarding dysphoric/

borderline batterers, but the data suggest that they will have an intermediate level of problems with impulsive behavior: Although they may not have severe problems with substance abuse or criminal behavior, they experience problems controlling their volatile anger.

Social skills, the third proximal variable in our developmental model, are generally viewed as learned behaviors shaped by the environment (e.g., family of origin and peers), although biological influences are possible (e.g., overarousal may interfere with the ability to process social information). Included in this category are a wide variety of communication, assertion, and relationship skills that are theoretically necessary to maintain a nonviolent, happy marriage.

The available data regarding the social skills of violent versus nonviolent men were recently reviewed by Holtzworth-Munroe (1992); this review led to the conclusion that, relative to nonviolent men, violent husbands have a variety of social skills deficits. For example, violent husbands interpret negative wife behaviors as involving hostile intent (e.g., Holtzworth-Munroe & Hutchinson, 1993) and are unable to generate competent responses in marital conflict situations (e.g., Holtzworth-Munroe & Anglin, 1991). Similarly, researchers have consistently demonstrated that violent men are more likely than nonviolent men to have difficulty being assertive with their wives (e.g., Rosenbaum & O'Leary, 1981). Also, in research directly observing the marital interactions of couples, violent men have been found to engage in more negative behavior than nonviolent men (e.g., Margolin, John, & Gleberman, 1988). Thus, in general, violent men have been found to lack social skills in marital situations, suggesting that they will be unable to successfully resolve marital conflicts nonviolently. Recently, Anglin and Holtzworth-Munroe (1994) documented that violent men also provide less competent responses than nonviolent men in response to problematic nonmarital situations.

Although the findings regarding the general lack of social skills among maritally violent men are consistent, this variable has received little attention, and has been only indirectly addressed, in the previous typology research (as revealed in Table 3). In general, subtypes proposed to be like the generally violent/antisocial batterer have been assumed to be relatively incompetent, using violence to resolve conflicts and solve problems (Faulk, 1974; Stith et al., 1992), whereas subtypes proposed to be like the family-only batterer have been assumed to have relatively good or mixed problem-solving skills (Stith et al., 1992) and some problems with assertiveness (Caesar, 1986).

On the basis of our review of the data, we suggest that all violent husbands have some social skills deficits. However, we expect that the skills deficits of family-only men are primarily restricted to marital situations; as a result, their violence is restricted to the family. Similarly, the skills deficits of dysphoric/borderline batterers would be most evident in marital situations. In contrast, generally violent batterers should have skills deficits in both marital and nonmarital situations.

The fourth and fifth proximal variables involve *attitudes* that may influence one's use of marital violence, namely attitudes, particularly hostile or adversarial attitudes, toward women and attitudes supporting violence. Such attitudes may be learned in the home or from peers or society. Both types of attitudes have

been related to sexual aggression against women (e.g., Malamuth et al., 1991).

Researchers have demonstrated that, in general, violent husbands are more likely than nonviolent men to have positive attitudes toward violence and are more likely to endorse the use of marital violence (Saunders et al., 1987). In contrast, data comparing violent and nonviolent husbands' attitudes toward women have been mixed. In summarizing research using questionnaire measures that directly assess attitudes toward women and traditional sex roles, Arias and O'Leary (1988) concluded that research "has failed to confirm" the hypothesis that "having conservative attitudes about appropriate role behavior for women . . . would be related to men's use of physical aggression against their spouses" (p. 121). However, researchers using other measures have gathered data suggesting that violent husbands believe that they should have control or power over their wives (e.g., Dutton & Strachan, 1987; Smith, 1990).

As shown in Table 3, previous typology researchers have rarely examined attitudes toward women in general. In one exception, Saunders (1992) found that family-only batterers had the most liberal attitudes; generally violent men had the most rigid, conservative attitudes; and emotionally volatile batterers (proposed to be like dysphoric/borderline batterers) had relatively conservative sex role attitudes. Other researchers have suggested that the subgroups of batterers differ in their attitudes toward their wives (e.g., generally violent/antisocial batterers view their wives as objects to control; see earlier discussion of attachment).

Findings regarding remorse, blame, and apologies (reviewed earlier) may be related to attitudes toward violence. As summarized earlier, generally violent batterers appear to have the most positive attitudes toward violence, reflected in their lack of remorse, whereas family-only men have the least positive attitudes (e.g., they experience the most remorse and guilt). Directly assessing this variable, Shields et al. (1988) found that generally violent men had positive attitudes toward violence and believed that violence is justified, whereas family-only batterers were the least likely to view violence as justified or to have positive attitudes toward violence. Similarly, Cadsky and Crawford (1988) found that generally violent batterers were more likely than family-only batterers to identify a wide variety of circumstances in which they believed that it was acceptable to use violence toward their partner.

In summary, the data across studies suggest that, relative to the other subtypes, the family-only batterer generally has liberal attitudes toward women and the least positive attitudes toward violence. In contrast, the generally violent/antisocial batterer has conservative attitudes toward women and the most positive attitudes toward violence. The dysphoric/borderline batterer has conservative attitudes toward women; his attitudes toward violence are less clear.

Applying the Developmental Model to the Proposed Subtypes of Batterers

We developed our model to form hypotheses regarding the etiology and maintenance of marital violence, both in general and across the various subtypes of male batterers. In doing so,

we assumed that the variables proposed in our model interact to increase the risk of various forms of marital violence.

For example, we view the distal variables (i.e., a genetic/pre-natal loading for impulsive/aggressive behavior, exposure to violence in the family of origin, and involvement with deviant peers) as early risk factors for marital violence. The more of these risk factors an individual experiences, the more likely he is to engage in marital violence as an adult. More specifically, the frequency of exposure to, and the severity of, these distal risk factors should be directly related to the use of more severe violence as an adult. In other words, the cumulative effect of these factors, and the increasing severity of each, increases the risk for more general and more severe violence (i.e., generally violent/antisocial batterers).

However, we are not proposing that the distal risk factors directly cause a man to engage in marital violence but, rather, that they influence the development of the proximal risk factors in a series of multifaceted and complex interactions. To illustrate this point in regard to the development of marital violence in general, we consider one of the distal risk factors: growing up in a violent home. Exposure to violence in one's family of origin may lead to marital violence through several pathways, affecting each of the proposed proximal variables. For example, being abused by one's parents would presumably lead to problems in attachment. In addition, a child exposed to parental violence may have difficulty learning to regulate his negative emotional reactions to such interactions and may thus fail to develop mechanisms for regulating anger (e.g., impulsivity). Through social learning and modeling, a child in an aggressive home would see the use of violence being reinforced and would fail to learn more constructive ways of resolving marital conflicts. As a final example, such experiences might lead to the formation of positive attitudes toward violence and negative attitudes toward women.

Continuing our example, we would propose that, through all of these pathways, children growing up in violent homes would be at risk to engage in physical aggression themselves. Initially this aggression might be directed at peers; this proposed connection is supported by several recent research findings. For example, Dodge, Bates, and Pettit (1990) demonstrated that children who had been physically harmed (i.e., abused) by an adult evidenced social skills deficits in peer interactions (e.g., relative to nonabused children, they were more likely to attribute hostile intent to a peer and were less likely to generate competent responses to peer conflict situations); 6 months later, these children engaged in more aggressive behavior toward their peers than did nonabused children. As another example, research by Cummings and colleagues indicates that children exposed to adult (e.g., parental) physical conflict exhibit distress (e.g., Cummings, Vogel, Cummings, & El-Sheikh, 1989) and are at increased risk to behave aggressively toward playmates (e.g., Cummings, Iannotti, & Zahn-Waxler, 1985).

Further developing this example, a child who engages in physical aggression toward his peers would, in turn, be at risk to enter a deviant peer group (i.e., another distal risk factor). Involvement in such a group would also influence the development of proximal risk factors for marital violence. For example, the child/adolescent's involvement with deviant peers would

further foster his positive attitudes toward violence, inhibit his development of social skills, and increase the risk of engaging in deviant behavior. All of these proximal risk factors would then increase the probability of engaging in marital violence.

In addition to helping to explain the development of marital violence in general, we assume that the variables included in our model will help to differentiate the subtypes of maritally violent men—from one another and from nonviolent comparison samples—as outlined in Table 4 and discussed later. In this section, for each of the batterer subtypes, we first outline the distal and proximal risk factors that are relevant to that subtype and then provide examples of how these relevant risk factors could interact to produce and maintain the marital violence of men in that subgroup.

As shown in Table 4, we hypothesize that family-only batterers will most closely resemble nonviolent comparison groups, being the least deviant on the variables outlined in our model. Regarding distal variables, they will be at low genetic risk for aggression and impulsivity and will report only low to moderate levels of aggression in their family of origin and little involvement in deviant peer activities. On measures of the proximal variables, they will be able to empathize with others but will evidence some preoccupation with, or dependency on, their wives. They will experience low to moderate problems with impulsivity. They will have low to moderate levels of social skills in marital situations but adequate social skills in nonmarital situations. They generally will not report hostile attitudes toward women or attitudes supportive of violence.

Overall, these men are well functioning relative to the other batterer subgroups. However, several factors differentiating this group from the nonviolent comparison groups are hypothesized to be related to their use of marital violence. For example, although their exposure to distal risk factors is low relative to the other batterer subtypes, exposure to family of origin aggression should be higher for this group than for nonviolent men. Through their exposure to low levels of distal risk factors, these men would develop limited problems with more proximal variables, including insecure (i.e., dependent and preoccupied) attachment patterns, mild social skills deficits, and low levels of impulsivity. Specifically, we hypothesize that the use of physical aggression emerges in this group as a result of a combination of poor spouse-specific communication skills, dependence on and preoccupation with their partners, and mild problems with impulsivity. Given their lack of marital skills and impulsivity, marital conflicts escalate. In such conflicts, their fear of rejection and abandonment (i.e., preoccupied attachment and dependency) reduces the probability that withdrawal from the marital conflict will be seen as an acceptable option, further escalating a negative, destructive argument. On occasion, physical aggression is introduced as an extreme negative behavior in marital arguments. However, guilt and remorse, generally negative attitudes about violence, generally positive attitudes toward women, empathy for their wives, and a lack of psychopathology combine to limit the extensive or regular use of violence among this group.

In contrast, as shown in Table 4, we propose that dysphoric/borderline batterers may have some genetic loading for psychopathology, impulsivity, and aggression. We propose that they

Table 4

How the Proposed Subtypes Differ on Theoretical Variables From the Developmental Model

Variable	Nonviolent/ nondistressed	Nonviolent/ distressed	Violent subtype		
			Family only	Dysphoric/ borderline	Generally violent/ antisocial
Genetic influences	Low	Low	Low	Moderate	High
Childhood family experiences					
Parental violence	Low	Low	Low-moderate	Moderate	Moderate-high
Child abuse/rejection	Low	Low	Low-moderate	Moderate-high	High
Association with deviant peers	Low	Low	Low	Low-moderate	High
Attachment	Secure	Secure	Secure or preoccupied	Preoccupied	Dismissing
Dependency	Moderate	Low	Moderate	High	Low
Empathy	High	Moderate	Moderate	Low-moderate	Low
Impulsivity	Low	Low	Low-moderate	Moderate	High
Social skills					
Marital	High	Moderate	Low-moderate	Low	Low
Nonmarital	High	High	Moderate-high	Moderate	Low
Attitudes					
Hostile attitudes toward women	No	No	No	Moderate-high	High
Attitudes supporting violence	No	No	Low	Moderate	High

have experienced parental rejection and child abuse and will have some involvement in peer deviant activities. Regarding proximal variables, we hypothesize that these batterers will experience very high levels of dependency on, and preoccupation with, their wives. They will have moderate problems with impulsivity and be generally unskilled in marital relationships. They will report hostile attitudes toward women and moderately positive attitudes toward violence.

As a result of family of origin violence, particularly parental rejection and child abuse, these men develop attachment problems and hostile attitudes toward women. They have difficulty trusting others and easily feel rejected, abandoned, or slighted, as reflected in their preoccupation with and overdependence on their wives and their oversensitivity to trivial interpersonal disputes. As discussed by Bowlby (1988), when men with such patterns of attachment perceive threats to their relationship or possible abandonment by their wives, they may use desperate means, including violence, to prevent their wives from leaving. We hypothesize that this is a particular risk given these men's low level of marital skills and moderate levels of impulsivity. Confronted with marital conflicts, which they perceive as threats of abandonment, and lacking the skills to resolve such conflicts, these men may impulsively use physical aggression to express their distress and intense anger. Given their negative attitudes toward women, their low to moderate empathy levels, and their relatively positive attitudes toward violence, they may feel little remorse for their actions and may thus be willing to escalate their violence in future interactions. This group is consistent with a description of some batterers provided by Dutton and Browning (1988):

We might expect sons who were verbally or physically abused by their mothers to feel quite powerless in adult relationships. Male sex-role socialization, however, teaches men that powerlessness and vulnerability are unacceptable feelings and behaviors. . . . As a

consequence we might expect exaggerated power concerns in such men, along with mistrust of females and anxiety about intimacy with a female. (p. 115)

As shown in Table 4, we propose that, on measures of the distal variables, generally violent/antisocial batterers will have the highest genetic loading for aggressive, impulsive, antisocial behavior; will have experienced the most violence (i.e., both witnessing parental violence and being abused as a child) in their family of origin; and will have had the most extensive involvement with deviant and delinquent peers. On the proximal variables, these batterers will be dismissing of relationships, have little empathy for others, and hold rigid, conservative attitudes toward women. They will report attitudes that are supportive of violence. Whereas the other two subgroups of batterers are hypothesized to have skills deficits in marital situations, generally violent/antisocial batterers are hypothesized to lack conflict resolution skills in a wide variety of situations, both marital and nonmarital. They are hypothesized to be impulsive and narcissistic; when angered, they view violence as an appropriate retaliation against a provocation.

For the generally violent/antisocial batterer, the combination of multiple and severe distal risk factors influences the development of proximal risk factors that increase not only the risk of marital violence but the risk of severe and generalized violence. For example, genetic loading will lead to the development of impulsivity in these men, increasing the risk that they will become involved in deviant behaviors with peers and will engage in aggressive behavior. Growing up in an abusive home and interacting with deviant peers results in the development of dismissing attachment patterns and a lack of empathy for others. These early experiences increase the risk that a man will develop positive attitudes toward violence and negative attitudes toward women while failing to develop social skills in marital or nonmarital situations. As a combination of multiple risk factors,

these men become generally violent and engage in a variety of antisocial behaviors. For such men, marital violence is simply a part of their general pattern of violent and criminal behavior.

Methodological Limitations of Past Research and Suggestions for Future Work

The past research identifying subtypes of maritally violent men suffers from a variety of methodological limitations, as outlined in the following sections.

Need to Validate Existing and Proposed Typologies

Several steps are necessary to validate existing typologies or the proposed typology. First, none of the previous typologies were based on a systematic examination of all three of the descriptive dimensions found to differentiate the groups. Thus, whereas some researchers included only measures of severity of violence (e.g., Sweeney & Key, 1982) or generality of violence (e.g., Shields et al., 1988), or both (e.g., Gondolf, 1988), others included only measures of personality disorder and psychopathology (e.g., Hale et al., 1988; Hamberger & Hastings, 1986). In an apparent exception, Saunders (1992) included measures relevant to all three dimensions, but his psychopathology measures did not assess personality disorders, which have proven important in other typologies. We recommend that future researchers include measures of all three dimensions found to differentiate batterer subtypes in previous work. Inclusion of such measures will build on previous research and allow more direct comparisons of derived subtypes across studies.

Second, with two exceptions (Gondolf, 1988; Hamberger & Hastings, 1985, 1986), previous researchers have not replicated their findings by gathering data from two or more samples. Future researchers should do so, developing an initial typology based on data from one sample of violent men and then attempting to replicate the typology with a second sample of such men.

Third, no previous researchers have examined the stability, or test-retest reliability, of their typologies; thus, it is unknown whether the identified clusters are stable over time. Saunders (1992) and Gondolf (1988) have suggested that each subtype of violent husband could exemplify different phases of violence rather than a stable subtype. This hypothesis has yet to be empirically investigated because data in the previous studies were gathered at only one point in time. Future researchers should assess batterers at two or more points in time to examine the stability of their typologies.

Fourth, previous researchers have generally not presented causal models of aggression or attempted to explain why each subtype of batterer develops the observed pattern of marital violence. Ultimately, typologies of batterers will prove relatively useless if they remain descriptive; their potential fruitfulness comes from the ability to use them to better understand the causes and functions of various types of marital violence. For example, in future research, we hope to test the many hypotheses presented in our developmental model about the proposed differences between various subtypes of batterers.

Finally, it should be noted that the previous research and the

proposed typology are based on a categorical approach to classifying male batterers. In previous studies, the decision of at what point, along each descriptive dimension, to make a distinction between subtypes of batterers has been made either on an a priori, theoretical basis or by using statistical techniques such as cluster analysis, a deterministic method of assigning subjects to clusters without consideration of the probability that a subject belongs in one cluster versus another. However, there has been considerable debate over the relative merits of a categorical versus a dimensional approach to the classification of psychopathology (e.g., Blashfield, 1984; Kendell, 1975). These two approaches are not necessarily incompatible. For example, Kendell (1975) noted that dimensional systems often must be converted into categories before the information included in them can be used. Whereas previous male batterer typology researchers have not grappled with these classification issues, we suggest that future researchers do so by considering alternative strategies. One possibility is to use hybrid models (Skinner, 1981) that combine both dimensional and categorical systems. Another approach would be to use mixture analysis, which is a multivariate approach to cluster analysis (Everitt & Hand, 1981; McLachlan & Basford, 1988; Titterton, Smith, & Makov, 1985). Mixture analysis allows a researcher to assign a posterior probability for each man regarding the probability that he belongs in the cluster to which he is assigned, thus assessing the uncertainty problem inherent in classification. We suggest that future researchers consider the use of such approaches.

Sampling Issues

Several sampling issues also need to be addressed in future batterer typology research. One important limitation of the previous studies of subtypes of batterers is that they have included only clinical samples: men entering treatment for wife assault (e.g., Flournoy & Wilson, 1991; Hale et al., 1988; Hamberger & Hastings, 1985, 1986; Hershorn & Rosenbaum, 1991; Saunders, 1992) or battered women in shelters (e.g., Gondolf, 1988; one exception is the Stith et al., 1992, study of college students engaged in dating violence). Many violent husbands have not yet been publically identified as violent (e.g., they have not been arrested or sought treatment); indeed, many marital violence researchers have studied violent men from the community (e.g., Margolin, John, & Gleberman, 1988; O'Leary et al., 1989). The previous subtypes, identified with clinical samples, may not reflect the full range of variability, on variables of interest, among a broader sample of violent husbands. For example, Hamberger and Hastings (1986) noted that

one potentially limiting factor . . . is the source of subject selection. Subjects consisted of individuals who had been arrested and ordered to assessment. As a result, the findings are based on those who were "caught" and may not represent abusers who go undetected. (pp. 339-340)

Future researchers should recruit violent men from a wide variety of sources, including both the community and domestic violence treatment programs.

Similarly, an important limitation of the previous research is that researchers generally have not compared their subtypes of

violent men with samples of nonviolent men. Such comparisons are essential if one is to understand how each type of violent man differs from nonviolent men, and they may be particularly useful for distinguishing men who are not severely violent (i.e., family-only batterers) from nonviolent men. Failure to include nonviolent comparison groups may lead to descriptions of the violent subgroups that are confusing because they are not based on comparisons with a normative sample. For example, when comparing the subtypes of batterers, researchers often describe one subtype of violent men (usually family-only batterers) as being relatively maritally satisfied or as having few drinking problems; however, relative to a nonviolent sample, even this subgroup may be pathological. Summarizing this point, Gondolf (1988) stated that "sampling of the larger population is needed to assure a more diverse cross-section of men—batterers and nonbatterers" (p. 199). Similarly, Hershorn and Rosenbaum (1991) suggested that "future research might usefully compare maritally violent to maritally discordant and satisfactorily married men . . . to assess the theoretical utility of the construct in understanding marital violence" (p. 156).

In future work, we recommend that researchers recruit two comparison groups of nonviolent married men. One should be maritally distressed, given the overlap of marital violence and marital distress (e.g., Holtzworth-Munroe et al., 1992; Rosenbaum, 1988), and the other should be nondistressed to represent a "normative," or well-functioning, comparison group. Each subtype of violent men could be compared with these nonviolent samples on variables hypothesized to differentiate violent from nonviolent men.

Practical Applications of Typologies

Several steps will be necessary if the findings of typology researchers are to be translated into practical applications. First, previous researchers have not developed short assessment procedures for identifying subtypes of violent men. Indeed, in most of the previous work, researchers have gathered information on a large number of measures and have included all of the gathered information in their typology. Such lengthy assessment procedures must be shortened if future researchers and clinicians are to begin identifying subtypes of violent men within their own samples. To increase the usefulness of their work to others, typology researchers should identify the smallest subset of measures needed to reliably distinguish among batterer subtypes.

In addition, to our knowledge, no previous researchers have empirically examined the relationship between batterer typologies and the efficacy of various treatment options, although they have speculated about such relationships (e.g., Cadsky & Crawford, 1988; Gondolf, 1988; Saunders, 1992). For example, it could be postulated that generally violent/antisocial batterers, like other criminals with antisocial personality disorder, are unlikely to benefit from the currently available psychoeducational treatments (Cadsky & Crawford, 1988). Once typologies of batterers are identified and replicated (and, ideally, once shortened assessment procedures to identify the subtypes are developed), future researchers should begin to empirically examine how the

various subtypes of violent men respond to different treatment programs.

Conclusion and Discussion

This article is based on the premise that maritally violent men constitute a heterogeneous group. Although all violent husbands share a common behavioral problem (i.e., marital violence), previous research suggests that the shape and form of that problematic behavior differ across subgroups of maritally violent men. Our assumption is that these differences in behavioral topography reflect differences in the function and the causes of the behavior. Although our premise does not rule out the possibility that all maritally violent men share similar features (e.g., an acceptance of violence, skills deficits, and negative attitudes toward women), it does suggest that the relative importance of the common features will vary across the subtypes of batterers. Perhaps an appropriate analogy from the field of medicine is that of cancer: All cancer patients share a common underlying pathology; however, the features of each type of cancer vary tremendously, each having its own causes, risk factors, and treatments. Given this viewpoint, it may no longer make sense to conduct studies that involve comparisons between violent and nonviolent husbands. Rather, future researchers should identify subtypes of batterers and then compare each subtype with the others and with nonviolent comparison groups.

We must end by noting the hypothetical nature of our proposed batterer typology and our developmental model of marital violence. Given the current lack of data, we cannot offer our typology and model as empirically validated truths. Rather, we hope that they will provide others with a theory-driven framework for future research.

References

- Anglin, K., & Holtzworth-Munroe, A. (1994). *Comparing the responses of violent and nonviolent couples to problematic marital and nonmarital situations: Are the skills deficits of violent couples global?* Manuscript submitted for publication.
- Arias, I., & O'Leary, K. D. (1988). Cognitive-behavioral treatment of physical aggression in marriage. In N. Epstein, S. E. Schlesinger, & W. Dryden (Eds.), *Cognitive-behavioral therapy with families* (pp. 118-150). New York: Brunner/Mazel.
- Bersani, C. A., & Chen, H. (1988). Sociological perspectives in family violence. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp. 57-86). New York: Plenum.
- Blashfield, R. K. (1984). *The classification of psychopathology: Neo-Kraepelinian and quantitative approaches*. New York: Plenum.
- Boeke, K. M., & Markman, H. J. (1992). *The interaction patterns of violent couples: A home observation study*. Manuscript submitted for publication.
- Bowker, L. H. (1983). *Beating wife beating*. Lexington, MA: Lexington Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. London: Hogarth Press.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Burgess, R., & Akers, R. L. (1966). A differential association-reinforcement theory of criminal behavior. *Social Problems*, 14, 128-147.

- Cadsky, O., & Crawford, M. (1988). Establishing batterer typologies in a clinical sample of men who assault their female partners. *Canadian Journal of Community Mental Health*, 7, 119-127.
- Caesar, P. L. (1986, August). Men who batter: A heterogeneous group. In L. K. Hamberger (Chair), *The male batterer: Characteristics of a heterogeneous population*. Symposium conducted at the 94th Annual Convention of the American Psychological Association, Washington, DC.
- Cascardi, M., Langhinrichsen, J., & Vivian, D. (1992). Marital aggression: Impact, injury, and health correlates for husbands and wives. *Archives of Internal Medicine*, 152, 1178-1184.
- Cloninger, C. R. (1986). A unified biosocial theory of personality and its role in the development of anxiety states. *Psychiatric Developments*, 3, 167-226.
- Cloninger, C. R. (1987). A systematic method for clinical description and classification of personality variants: A proposal. *Archives of General Psychiatry*, 44, 573-588.
- Cummings, E. M., Iannotti, R. J., & Zahn-Waxler, C. (1985). Influence of conflict between adults on the emotions and aggression of young children. *Developmental Psychology*, 21, 495-507.
- Cummings, E. M., Vogel, D., Cummings, J. S., & El-Sheikh, M. (1989). Children's responses to different forms of expression of anger between adults. *Child Development*, 60, 1392-1404.
- Deal, J., & Wampler, K. (1986). Dating violence: The primacy of previous experience. *Journal of Social and Personal Relationships*, 3, 457-471.
- Dilalla, L. F., & Gottesman, I. I. (1989). Heterogeneity of causes for delinquency and criminality: Lifespan perspectives. *Development and Psychopathology*, 1, 339-349.
- Dodge, K. A., Bates, J. E., & Pettit, G. S. (1990). Mechanisms in the cycle of violence. *Science*, 250, 1678-1683.
- Dutton, D. G., & Browning, J. J. (1988). Concern for power, fear of intimacy, and aversive stimuli for wife abuse. In G. T. Hotaling, D. Finkelhor, J. T. Kirkpatrick, & M. Straus (Eds.), *New directions in family violence research* (pp. 113-121). Newbury Park, CA: Sage.
- Dutton, D. G., & Strachan, C. E. (1987). Motivational needs for power and spouse-specific assertiveness in assaultive and nonassaultive men. *Violence and Victims*, 2, 145-155.
- Elbow, M. (1977). Theoretical considerations of violent marriages. *Social Casework*, 58, 515-526.
- Elliott, D. S., & Huizinga, D. (1985). *The dynamics of deviant behavior: A national survey continuation grant application* (Progress report of the National Youth Survey). Washington, DC: U.S. Department of Health and Human Services.
- Elliott, D. S., Huizinga, D., & Ageton, S. S. (1985). *Explaining delinquency and drug use*. Beverly Hills, CA: Sage.
- Everitt, B. J., & Hand, D. J. (1981). *Finite mixture distributions*. London: Chapman & Hall.
- Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL: Charles C. Thomas.
- Eysenck, S. B. G., & Eysenck, H. J. (1978). Impulsiveness and venturesomeness: Their position in a dimensional system of personality description. *Psychological Reports*, 43, 1247-1255.
- Fagan, J. A., Stewart, D. K., & Hansen, K. V. (1983). Violent men or violent husbands? Background factors and situational correlates. In D. Finkelhor, R. J. Gelles, G. T. Hotaling, & M. A. Straus (Eds.), *The dark side of families: Current family violence research* (pp. 49-68). Beverly Hills, CA: Sage.
- Fagan, R. W., Barnett, O. W., & Patton, J. B. (1988). Reasons for alcohol use in maritally violent men. *American Journal of Drug and Alcohol Abuse*, 14, 371-392.
- Faulk, M. (1974, July). Men who assault their wives. *Medicine, Science, and the Law*, pp. 180-183.
- Flournoy, P. S., & Wilson, G. L. (1991). Assessment of MMPI profiles of male batterers. *Violence and Victims*, 6, 309-320.
- Follingstad, D. R., Laughlin, J. E., Polek, D. S., Rutledge, L. L., & Hause, E. S. (1991). Identification of patterns of wife abuse. *Journal of Interpersonal Violence*, 6, 187-204.
- Follingstad, D., Rutledge, L., Polek, D., & McNeill-Hawkins, K. (1988). Factors associated with patterns of dating violence toward college women. *Journal of Family Violence*, 3, 169-182.
- Fowles, D. C. (1987). Application of a behavioral theory of motivation to the concepts of anxiety and impulsivity. *Journal of Research in Personality*, 21, 417-435.
- Ganley, A. L. (1989). Integrating feminist and social learning analyses of aggression: Creating multiple models for interventions with men who batter. In P. L. Caesar & L. K. Hamberger (Eds.), *Treating men who batter: Theory, practice, and programs* (pp. 196-235). New York: Springer.
- Gelles, R. J., & Straus, M. A. (1979). Determinants of violence in the family: Toward a theoretical integration. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary theories about the family* (Vol. 1, pp. 549-581). New York: Free Press.
- Gondolf, E. W. (1988). Who are those guys? Toward a behavioral typology of batterers. *Violence and Victims*, 3, 187-203.
- Gondolf, E. W., with Fisher, E. R. (1988). *Battered women as survivors: An alternative to treating learned helplessness*. Lexington, MA: Lexington Books.
- Gray, J. A. (1981). A critique of Eysenck's theory of personality. In H. J. Eysenck (Ed.), *A model for personality* (pp. 246-276). New York: Springer.
- Gray, J. A. (1987). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality*, 21, 493-509.
- Gray, J. A., Owen, S., Davis, N., & Tsaltas, E. (1983). Psychological and physiological relations between anxiety and impulsivity. In M. Zuckerman (Ed.), *Biological bases of sensation-seeking, impulsivity, and anxiety* (pp. 181-217). Hillsdale, NJ: Erlbaum.
- Hale, G., Zimostad, S., Duckworth, J., & Nicholas, D. (1988). Abusive partners: MMPI profiles of male batterers. *Journal of Mental Health Counseling*, 10, 214-224.
- Hamberger, L. K., & Hastings, J. E. (1985, March). *Personality correlates of men who abuse their partners: Some preliminary data*. Paper presented at the meeting of the Society for Personality Assessment, Berkeley, CA.
- Hamberger, L. K., & Hastings, J. E. (1986). Personality correlates of men who abuse their partners: A cross validation study. *Journal of Family Violence*, 1, 323-341.
- Hamberger, L. K., & Lohr, J. M. (1989). Proximal causes of spouse abuse: A theoretical analysis for cognitive-behavioral interventions. In P. L. Caesar & L. K. Hamberger (Eds.), *Treating men who batter: Theory, practice, and programs* (pp. 53-76). New York: Springer.
- Hanks, S. E. (1992). Translating theory into practice: A conceptual framework for clinical assessment, differential diagnosis, and multimodal treatment of maritally violent individuals, couples, and families. In E. C. Viano (Ed.), *Intimate violence: Interdisciplinary perspectives* (pp. 157-176). Washington, DC: Hemisphere.
- Hanks, S. E., & Rosenbaum, C. P. (1977). Battered women: A study of women who live with violent alcohol-abusing men. *American Journal of Orthopsychiatry*, 47, 291-306.
- Hathaway, S. R., & McKinley, J. C. (1967). *MMPI inventory manual*. New York: Psychological Corporation.
- Hershorn, M., & Rosenbaum, A. (1991). Over- vs. undercontrolled hostility: Application of the construct to the classification of maritally violent men. *Violence and Victims*, 6, 151-158.
- Holtzworth-Munroe, A. (1992). Social skill deficits in maritally violent

- men: Interpreting the data using a social information processing model. *Clinical Psychology Review*, 12, 605-617.
- Holtzworth-Munroe, A., & Anglin, K. (1991). The competency of responses given by maritally violent versus nonviolent men to problematic marital situations. *Violence and Victims*, 6, 257-269.
- Holtzworth-Munroe, A., & Hutchinson, G. (1993). Attributing negative intent to wife behavior: The attributions of maritally violent versus nonviolent men. *Journal of Abnormal Psychology*, 102, 206-211.
- Holtzworth-Munroe, A., Hutchinson, G., & Stuart, G. (1994). *Comparing the working models of attachment of violent and nonviolent husbands*. Manuscript submitted for publication.
- Holtzworth-Munroe, A., Waltz, J., Jacobson, N. S., Monaco, V., Fehrenbach, P. A., & Gottman, J. M. (1992). Recruiting nonviolent men as control subjects for research on marital violence: How easily can it be done? *Violence and Victims*, 7, 79-88.
- 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.
- Huba, G. J., & Bentler, P. M. (1983). Causal models of the development of law abidance and its relationship to psychosocial factors and drug use. In W. S. Laufer & J. M. Day (Eds.), *Personality theory, moral development, and criminal behavior* (pp. 165-215). Lexington, MA: Lexington Books.
- Johnston, J. R., & Campbell, L. E. G. (1993). A clinical typology of interparental violence in disputed-custody divorces. *American Journal of Orthopsychiatry*, 62, 190-199.
- Kantor, G. K., & Straus, M. A. (1987). The "drunken bum" theory of wife beating. *Social Problems*, 34, 213-230.
- Kendell, R. E. (1975). *The role of diagnosis in psychiatry*. Oxford, England: Blackwell Scientific.
- Lane, G., & Russell, T. (1989). Second-order systemic work with violent couples. In P. L. Caesar & L. K. Hamberger (Eds.), *Treating men who batter: Theory, practice, and programs* (pp. 134-162). New York: Springer.
- Leonard, K. E., & Blane, H. T. (1992). Alcohol and marital aggression in a national sample of young men. *Journal of Interpersonal Violence*, 7, 19-30.
- Leonard, K. E., Bromet, E. J., Parkinson, D. K., Day, N. L., & Ryan, C. M. (1985). Patterns of alcohol use and physically aggressive behavior in men. *Journal of Studies on Alcohol*, 46, 279-282.
- Madanes, C. (1990). *Sex, love, and violence: Strategies for transformation*. New York: Norton.
- Maiuro, R. D., Cahn, T. S., Vitaliano, P. P., Wagner, B. C., & Zegree, J. B. (1988). Anger, hostility, and depression in violent versus generally assaultive men and nonviolent control subjects. *Journal of Consulting and Clinical Psychology*, 56, 17-23.
- Malamuth, N. M., Sockloskie, R. J., Koss, M. P., & Tanaka, J. S. (1991). Characteristics of aggressors against women: Testing a model using a national sample of college students. *Journal of Consulting and Clinical Psychology*, 59, 670-681.
- Margolin, G., John, R. S., & Gleberman, L. (1988). Affective responses to conflictual discussions in violent and nonviolent couples. *Journal of Consulting and Clinical Psychology*, 56, 24-33.
- Margolin, G., Sibner, L. G., & Gleberman, L. (1988). Wife battering. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp. 89-117). New York: Plenum.
- McDonald, R., & Jouriles, E. N. (1991, September). Marital aggression and child behavior problems: Research findings, mechanisms, and intervention strategies. *Behavior Therapist*, pp. 189-192.
- McLachlan, G. J., & Basford, K. E. (1988). *Mixture models: Inference and applications to clustering*. New York: Dekker.
- Mednick, S. A., & Kandel, E. S. (1988). Congenital determinants of violence. *Bulletin of the American Academy of Psychiatry and Law*, 16, 101-109.
- Mednick, S. A., Pollock, V., Volavka, J., & Gabrielli, W. F. (1982). Biology and violence. In M. E. Wolfgang & N. A. Weiner (Eds.), *Criminal violence* (pp. 21-80). Beverly Hills, CA: Sage.
- Millon, T. (1983). *Millon Clinical Multiaxial Inventory manual*. Minneapolis, MN: Interpretive Scoring Systems.
- Mott-McDonald Associates. (1979). *The report from the conference on intervention programs for men who batter*. Washington, DC: U.S. Department of Justice.
- Neidig, P. H., Collins, B. S., & Friedman, D. H. (1986). Attitudinal characteristics of males who have engaged in spouse abuse. *Journal of Family Violence*, 1, 223-233.
- Newman, J. P. (1987). Reaction to punishment in extraverts and psychopaths: Implications for the impulsive behavior of disinhibited individuals. *Journal of Research in Personality*, 21, 464-480.
- O'Leary, K. D. (1988). Physical aggression between spouses: A social learning perspective. In V. B. Van Hasselt, R. L. Morrison, A. S. Bellack, & M. Hersen (Eds.), *Handbook of family violence* (pp. 31-55). New York: Plenum.
- O'Leary, K. D., Barling, J., Arias, I., Rosenbaum, A., Malone, J., & Tyree, A. (1989). Prevalence and stability of physical aggression between spouses: A longitudinal analysis. *Journal of Consulting and Clinical Psychology*, 57, 263-268.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys approach* (Vol. 4). Eugene, OR: Castalia.
- Pence, E. (1989). Batterer programs: Shifting from community collusion to community confrontation. In P. L. Caesar & L. K. Hamberger (Eds.), *Treating men who batter: Theory, practice, and programs* (pp. 24-50). New York: Springer.
- Rosenbaum, A. (1988). Methodological issues in marital violence research. *Journal of Family Violence*, 3, 91-104.
- Rosenbaum, A., & O'Leary, K. D. (1981). Marital violence: Characteristics of abusive couples. *Journal of Consulting and Clinical Psychology*, 49, 63-71.
- Rutter, M., Macdonald, H., Le Couteur, A., Harrington, R., Bolton, P., & Bailey, A. (1990). Genetic factors in child psychiatric disorders—II. Empirical findings. *Journal of Child Psychology and Psychiatry*, 31, 39-83.
- Saunders, D. G. (1989). Cognitive and behavioral interventions with men who batter: Application and outcome. In P. L. Caesar & L. K. Hamberger (Eds.), *Treating men who batter: Theory, practice, and programs* (pp. 77-100). New York: Springer.
- Saunders, D. G. (1992). A typology of men who batter women: Three types derived from cluster analysis. *American Orthopsychiatry*, 62, 264-275.
- Saunders, D. G., Lynch, A. B., Grayson, M., & Linz, D. (1987). The inventory of beliefs about wife beating: The construction and initial validation of a measure of beliefs and attitudes. *Violence and Victims*, 2, 39-57.
- Shields, N. M., McCall, G. J., & Hanneke, C. R. (1988). Patterns of family and nonfamily violence: Violent husbands and violent men. *Violence and Victims*, 3, 83-97.
- Skinner, H. A. (1981). Toward the integration of classification theory and methods. *Journal of Abnormal Psychology*, 90, 68-87.
- Smith, M. D. (1990). Patriarchal ideology and wife beating: A test of a feminist hypothesis. *Violence and Victims*, 5, 257-273.
- Smith, M. D. (1991). Male peer support of wife abuse: An exploratory study. *Journal of Interpersonal Violence*, 6, 512-519.
- Snyder, D. K., & Fruchtmann, L. A. (1981). Differential patterns of wife abuse: A data-based typology. *Journal of Consulting and Clinical Psychology*, 49, 878-885.

- Sonkin, D. J., Martin, D., & Walker, L. E. A. (1985). *The male batterer: A treatment approach*. New York: Springer.
- Steinmetz, S. K. (1978). Wife beating: A critique and reformulation of existing theory. *Bulletin of the American Academy of Psychiatry and the Law*, 6, 322-334.
- Stets, J. E., & Straus, M. A. (1990). Gender differences in reporting marital violence and its medical and psychological consequences. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptation to violence in 8,145 families* (pp. 227-244). New Brunswick, NJ: Transaction.
- Stith, S. M., Jester, S. B., & Bird, G. W. (1992). A typology of college students who use violence in their dating relationships. *Journal of College Student Development*, 33, 411-421.
- Straus, M. A., & Gelles, R. J. (1988). Violence in American families: How much is there and why does it occur? In E. W. Nunnally, C. S. Chelmau, & F. M. Cox (Eds.), *Families in trouble* (Series 3, pp. 141-162). Newbury Park, CA: Sage.
- Sutherland, E. H. (1947). *Principles of criminology* (4th ed.). Philadelphia: Lippincott.
- Sweeney, S., & Key, L. J. (1982, June). Psychological issues in counseling batterers. *Theology, News, and Notes*, pp. 12-16.
- Titterton, D. M., Smith, A. F. M., & Makov, U. E. (1985). *Statistical analysis of finite mixture distributions*. New York: Wiley.
- Van Hasselt, V. B., Morrison, R. L., & Bellack, A. S. (1985). Alcohol use in wife abusers and their spouses. *Addictive Behaviors*, 10, 127-135.
- Walker, L. E. (1979). *The battered woman*. New York: Harper & Row.
- West, D. J., & Farrington, D. P. (1977). *The delinquent way of life*. London: Heinemann.
- Whitchurch, G. G. (1988). *A typology of relationship process in inter-spousal violence*. Unpublished doctoral dissertation, University of Delaware, Newark.
- Zuckerman, M. (1991a). A biological theory of sensation seeking. In M. Zuckerman (Ed.), *Biological bases of sensation seeking, impulsivity, and anxiety* (pp. 37-76). Hillsdale, NJ: Erlbaum.
- Zuckerman, M. (1991b). *Psychobiology of personality*. Cambridge, England: Cambridge University Press.

Received May 4, 1993

Revision received May 31, 1994

Accepted June 1, 1994 ■

P&C Board Appoints Editor for New Journal: *Psychological Methods*

The Publications and Communications Board of the American Psychological Association has appointed an editor for a new journal. In 1996, APA will begin publishing *Psychological Methods*. Mark I. Appelbaum, PhD, has been appointed as editor. Starting January 1, 1995, manuscripts should be directed to

Mark I. Appelbaum, PhD
Editor, *Psychological Methods*
Department of Psychology and Human Development
Box 159 Peabody
Vanderbilt University
Nashville, TN 37203

Psychological Methods will be devoted to the development and dissemination of methods for collecting, understanding, and interpreting psychological data. Its purpose is the dissemination of innovations in research design, measurement, methodology, and statistical analysis to the psychological community; its further purpose is to promote effective communication about related substantive and methodological issues. The audience is diverse and includes those who develop new procedures, those who are responsible for undergraduate and graduate training in design, measurement, and statistics, as well as those who employ those procedures in research. The journal solicits original theoretical, quantitative empirical, and methodological articles; reviews of important methodological issues; tutorials; articles illustrating innovative applications of new procedures to psychological problems; articles on the teaching of quantitative methods; and reviews of statistical software. Submissions should illustrate through concrete example how the procedures described or developed can enhance the quality of psychological research. The journal welcomes submissions that show the relevance to psychology of procedures developed in other fields. Empirical and theoretical articles on specific tests or test construction should have a broad thrust; otherwise, they may be more appropriate for *Psychological Assessment*.