

Behavioral and Psychological Differences Among Abused Women Who Use Violence in Intimate Relationships

SUZANNE C. SWAN

DAVID L. SNOW

Yale University

This article examines behavioral and psychological differences among women who used violence in four types of relationships. Nearly all of the women experienced physical abuse from their male partners. Types were compared on the extent of childhood abuse experienced, use of avoidance coping, anger, motivations for using violence, injuries, psychological symptoms, and alcohol use. Women in the Victim type (the partner used more physical violence and coercion against her than she against him) and the Abused Aggressor type (the woman used more violence and coercion against the partner than he against her) had the poorest behavioral and psychological indices. Women in Mixed-Female Coercive relationships (the woman's use as of coercion was equivalent to or greater than her partner, but the partner used as much or more violence) had the fewest difficulties. Scores for women in Mixed-Male Coercive relationships (the partner was more coercive than the woman, but the woman's use of violence was equivalent to or greater than the partner's) generally fell in between the other groups.

Women's use of violence in intimate relationships is an issue that only began to be examined by family violence researchers in the mid-1980s. Much of the recent interest comes from criminal justice system personnel and battered women's advocates, who are trying to determine how to respond to the substantial numbers of women arrested for domestic violence in many states. The majority of these women are themselves victims of abuse (Hamberger & Potente, 1994). The domestic violence laws leading to the high number of female arrests in recent years were originally enacted

AUTHORS' NOTE: This research was supported in part by a grant from The Ethel F. Donaghue Women's Health Investigator Program at Yale. Correspondence regarding this article should be sent to Suzanne Swan at suzanne.swan@yale.edu.

VIOLENCE AGAINST WOMEN, Vol. 9 No. 1, January 2003 75-109

DOI: 10.1177/1077801202238431

© 2003 Sage Publications

to deal with cases in which men were offenders and women were victims (Martin, 1997; Miller, 2001). Similarly, most court-mandated programs for domestic violence arrestees are based on a model of male violence (National Institute of Justice, 1998). Yet, in many states, women are being arrested and mandated to these same programs (Hamberger & Potente, 1994; Miller, 2001).

Evidence is beginning to suggest that women's motivations for violence against male intimate partners, and the context in which the violence takes place, are qualitatively different than when men use violence against women (Miller, 2001; Renzetti, 1999; Swan, 2001). For example, the evidence gathered to date strongly suggests that women are almost always violent in the context of violence against them by their male partners (Abel, 1999; Dasgupta, 1999; Hamberger & Potente, 1994; Swan & Snow, 2002). It is also likely that there are culturally based gender differences in the meaning of abusive behaviors committed by women as compared to men (Miller, 2001). One important difference is that women's violence is generally less frightening to men than vice-versa. For example, the National Youth Survey data indicated that 30% of female respondents felt they were in danger of getting hurt during fights with their partner as opposed to 14% of men (Morse, 1995). This fear is not surprising: In domestic violence situations, women are much more likely than men to be injured and injured severely (Archer, 2000; Brush, 1990; Langhinrichsen-Rohling, Neidig, & Thorn, 1995; Makepeace, 1986; Morse, 1995; Sorenson, Upchurch, & Shen, 1996; Zlotnick, Kohn, Peterson, & Pearlstein, 1998).

Presently, there is very little theory and virtually no data regarding women's use of violence against male intimate partners. Recognizing this fact, the National Institute of Justice held a "Gender Symmetry Workshop" in 2000 that brought together researchers in the field to discuss intimate partner violence by men and by women and how best to assess and understand the similarities and differences (National Institute of Justice, 2000). Recent literature on women's violence tends to reflect one of two themes. The first theme is that women are just as violent as men. Writings reflecting this theme typically cite the numerous survey studies of physically violent behavior, primarily using the Conflict Tactics Scale (Straus, 1990), in which women self-report as much perpetration of physical aggression as men. The alternative

theme is that women's violence is not just like men's. The context of women's violence differs from that of men's violence (Miller, 2001; White & Humphrey, 1994). For example, studies that examine sexual assault, as well as crime surveys, find higher rates of violence committed by males in intimate relationships (Straus, 1999; White, Smith, Koss, & Figueredo, 2000). Similarly, when stalking behavior is examined, gender differences also emerge (Tjaden & Thoennes, 2000). Furthermore, women's violence is more likely to be used in self-defense as compared to male violence (Barnett, Lee, & Thelen, 1997; Browne, 1987; Cascardi & Vivian, 1995; Kellerman & Mercy, 1992; Makepeace, 1986).

But what is women's violence, other than being not like men's? As Renzetti (1999) wrote,

Are all female perpetrators the same? I doubt it. Is all violence perpetrated by women the same? Of course not. Is it caused by the same factors? That's highly unlikely. *But what kinds of answers are these to such important questions?* . . . What is necessary . . . is careful attention to those situations in which women use violence in intimate relationships as perpetrators, not in self-defense or even in retaliation. It is feminists who must undertake this work. (p. 47, emphasis in the original)

Theory and data that examine women's violence per se, that move beyond using male violence as the standard and comparing women's violence to it, is sorely needed if we are going to develop an understanding of women's violence that can be used by the criminal justice system and other practitioners to develop appropriate interventions for female domestic violence defendants.

OVERVIEW OF THE STUDY

In a previous article examining the same sample of women who are the focus of the present study (Swan & Snow, 2002), we analyzed the frequency of the women's commission of abusive behaviors against their male partners and the partners' commission of abusive behaviors against the women. The women in this sample used equivalent levels of emotional abuse and more moderate physical violence against their male partners than the partners used against them. However, the women were more often victims of quite serious types of abuse, including sexual violence,

injury, and coercive control behaviors (i.e., nonphysical tactics such as intimidation, isolation, economic control, and controlling the partner's activities and decisions). All but 6 of the 108 women in the sample experienced physical abuse from their male partners. It is important to note that almost all the women in this study have been physically abused *and* they have used violence against their partners.

DESCRIPTION OF THE TYPOLOGY

The present article examines differences and similarities on a number of behavioral and psychological dimensions among these women. A pattern of four types of relationships was described in our previous article (Swan & Snow, 2002). The types are based on a comparison of the women's commission of severe physical and/or sexual violence and coercive control behaviors against their partners and the partners' commission of these same behaviors against the women. The four types are described in Swan and Snow (2002) as relationships in which (a) women are Victims (i.e., the partner commits more severe violence and coercion against the woman than she commits against him), (b) women are Aggressors (i.e., the woman commits more severe violence and coercion against the partner than he commits against her), (c) women are in Mixed-Male Coercive relationships (i.e., women's partners use more coercive control relative to the women, but the women's use of severe physical violence is equivalent to or greater than that used by their partners), and (d) women are in Mixed-Female Coercive relationships (i.e., women's use of coercive control is equivalent to or greater than their partners' use of coercive control, but the partners' use of severe physical violence is equivalent to or greater than that used by the women).

On further reflection and at the suggestion of the editors of this special issue, we revised the Aggressor label. The label tends to obscure the significant victimization this group experienced at the hands of their partners. Because all but a few of the women in our sample were victims of violence, including those women in the Aggressor category, it is important that our typology reflects this reality.

The four types of relationships examined in the present article include those in which (a) women are Victims, (b) women are Abused Aggressors, (c) women are in Mixed-Male Coercive relationships, and (d) women are in Mixed-Female Coercive relationships. Comparisons among women in the four types are made regarding experiences of childhood abuse, strategies for coping with relationship stress, styles of expressing anger, motivations for using violence, extent of physical injuries for both the woman and her partner, psychological symptoms, and alcohol use. The following section provides a brief review of each of these factors as it relates to women's use of violence.

BEHAVIORAL AND PSYCHOLOGICAL DIMENSIONS OF WOMEN'S VIOLENCE

CHILDHOOD ABUSE AND WOMEN'S VIOLENCE

Some studies have found high rates of childhood trauma among women arrested for domestic violence. For example, one study of women mandated to an anger management program found that 40% were physically abused by a parent, 25% were sexually abused by a family member, and 15% were sexually abused by a non-family member (Leisring, Dowd, & Rosenbaum, 1999). Another study of women arrested for domestic violence found that 48% had been abused as children (Hamberger & Potente, 1994).

Other studies suggest that childhood trauma may be a risk factor for later abusive behavior by women toward their partners. A longitudinal study of 992 21-year-olds, who had been followed from birth, assessed both physical and psychological abuse perpetrated by the women toward their partners at age 21 (Magdol, Moffitt, Caspi, & Silva, 1998). Physical abuse was measured by items from the Conflict Tactics Scale (Straus, 1990) and psychological abuse items assessed controlling, terrorizing, demeaning, and other psychologically abusive behaviors. The context of the behaviors (e.g., the behaviors were used in self-defense or were used to control the partner) was not assessed. Childhood abuse from the ages of 7 to 9 was assessed by asking participants'

parents if they engaged in 10 "harsh discipline" behaviors, such as hitting their children or trying to frighten them. The study found that harsh discipline at ages 7 to 9 was one of several variables, including family conflict, parent-child attachment, conduct and delinquency problems, and substance abuse, that significantly correlated with women's use of both physical and psychological abuse.

Another study of 199 military couples mandated for marital violence treatment found that for women, being "yelled at" by their mothers during childhood predicted later perpetration of physical abuse (again measured with the Conflict Tactics Scale) (Langhinrichsen-Rohling et al., 1995). Other indices of childhood victimization (e.g., being hit or beaten by parents, being yelled at by their father, witnessing parents hitting each other) did not predict women's physical aggression toward their partners.

COPING WITH RELATIONSHIP STRESS

The issue of how women cope with an abusive partner has received some attention in the domestic violence literature, but little research from a stress-and-coping framework has been conducted. One study coded Mexican American and Anglo American battered women's responses to an open-ended measure for coping strategies (Fernandez-Esquer & McCloskey, 1999). For Anglo women, one of the most commonly used strategies was attacking the abuser, either verbally or physically. For Mexican American women, one of the top strategies was to verbally attack the abuser. Another study of 1,000 battered women also found that fighting back physically was one of the coping strategies women used (Bowker, 1993). A study of 406 battered women found that 81% of women fought back, 69% sought support from family and friends, 85% called the police, and 72% filed for a protective order (Dutton, 2001). Although it is difficult to generalize across studies due to variations in coping instruments used, it appears that fighting back against the abuser is a common coping strategy. Whether this strategy leads to more positive or negative outcomes is unclear.

Coping in general is often grouped into three types: avoidant, problem solving, and support seeking (Amirkhan, 1990). Studies relating coping to a variety of psychological and physical health

outcomes typically find that avoidant strategies are related to poorer outcomes, whereas problem solving and support seeking are related to positive outcomes (Snow, Swan, Raghavan, Connell, & Klein, 2002). In addition, among assault victims, avoidance coping has been related to the development of psychological difficulties (Foa, Cascardi, Zoellner, & Feeny, 2000).

STYLES OF EXPRESSING ANGER

Anger is a common emotion among women experiencing violence in their relationships (Dutton, 1992). Spielberger and colleagues have studied anger extensively and have found that the manner in which individuals express anger is an important predictor of health (Spielberger, Reheiser, & Sydeman, 1995). Generally, individuals may express their anger in behavior directed toward other people or objects, ranging from making sarcastic remarks to striking out at others (anger-out), holding anger in by withdrawing from people or boiling inside but not showing it (anger-in), or calming themselves down and keeping their cool (anger-control). It is likely that women's styles of expressing anger are related to how they behave in violent relationships. Suppressed anger may lead to somatic symptoms and depression, whereas expressing anger outwardly may help women take steps toward ending the relationship (Dutton, 1992; Foa et al., 2000). However, a number of studies have found that a general tendency to react to life events with anger, either anger-in or anger-out, was positively associated with post-traumatic stress disorder (PTSD) and that anger was associated with a detrimental response to treatment (Foa et al., 2000).

MOTIVATIONS FOR USING VIOLENCE

Research suggests that the motivations for women's violent behavior in intimate relationships are often quite different from those of men. A consistent finding across a number of studies is that women cite self-defense as a motivation for violence more frequently than do men. For example, one study comparing the motivations for violence of 30 battered women in shelters and 34 men in court-mandated batterers' groups found that women listed "protecting myself from physical harm" as a motivation

significantly more often than men did (Barnett et al., 1997). Similar results have been found in clinical studies (Browne, 1987; Cascardi & Vivian, 1995), among women and men who have committed homicide against their partners (Kellerman & Mercy, 1992), and in a student sample (Makepeace, 1986).

Studies consistently show that men are more likely than women to use violence to regain control of the relationship or a partner who is challenging their authority (Barnett et al., 1997; Cazenave & Zahn, 1992; Ehrensaft, Langhinrichsen-Rohling, Heyman, O'Leary, & Lawrence, 1999; Jacobson, 1994; Makepeace, 1986; Renzetti, 1999). However, this does not mean that control motives are completely absent from women's violence. In a study of 391 college students who said that they had experienced dating violence, 7% of women said that their motive for using violence was to intimidate their partner, compared to 21% of men (Makepeace, 1986).

Finally, some studies suggest that retribution—abuse against a partner to get even with him or her for some real or perceived wrongdoing—is a common motivator of both women's and men's violent behavior. In a study of student dating violence, 17% of male and 19% of female students stated that they used violence in retaliation (Makepeace, 1986). Similarly, Barnett et al. (1997) compared battered women with men in court-mandated batterers' programs and found no significant gender difference in attributing violent behavior to "teaching my partner a lesson."

INJURY

As mentioned earlier, a very robust finding in the intimate partner violence literature is that women are more likely than men to be injured (Archer, 2000). For example, in a study of 180 military couples referred to a domestic violence treatment program, 108 of the wives were injured, as compared to 49 of the husbands. Twenty-one percent of the women reported injuries that required medical attention, as opposed to 4% of the men (Cantos, Neidig, & O'Leary, 1994). Another study of 93 maritally discordant couples presenting to a psychological treatment clinic also found that wives sustained more injuries than husbands (Cascardi, Langhinrichsen, & Vivian, 1992). Finally, the National Violence Against Women survey, a telephone survey of a nationally

representative sample of 8,000 men and 8,000 women, found that 41% of women and 19% of men who were physically assaulted by an intimate partner were injured during their most recent assault (Tjaden & Thoennes, 2000).

PSYCHOLOGICAL SYMPTOMS AND SUBSTANCE USE

Depression, anxiety, PTSD, and substance abuse have been associated with traumatic experiences in general and domestic violence victimization in particular (Foa et al., 2000). It is estimated that 60% of battered women are depressed (Gleason, 1993), and severity of depression is related to severity of violence (Campbell & Lewandowski, 1997). Battered women have elevated anxiety and a higher prevalence of anxiety disorders compared to the general female population (Foa et al., 2000). Battered women are also at risk for substance abuse (Watson et al., 1997), often using concurrently with the abuser (Telch & Lindquist, 1984). Finally, the rate of PTSD among women in violent relationships is considered "extremely high" (Foa et al., 2000).

OVERVIEW OF THE CURRENT STUDY

The current study examines differences on a number of behavioral and psychological dimensions among women who use violence in four types of relationships. The development of this typology was reported in Swan and Snow (2002) with the same data set used in the present study. The four types were derived as follows. Female participants indicated the frequency of their own abusive behaviors (i.e., perpetration) and their partners' abusive behaviors (i.e. women's victimization) on the Conflict Tactics Scale-2 (CTS-2) measure of physical, emotional, and sexual abuse (Straus, Hamby, Boney-McCoy, & Sugarman, 1996) and the Psychological Maltreatment of Women Inventory (PMWI) measure of coercive control (Tolman, 1989). A listing of all the items used to measure abuse is shown in Table 1.

To classify relationships into those in which the woman was the Victim or the Abused Aggressor or the relationship was Mixed, severe violence (consisting of a sum of severe physical violence, severe sexual violence, and severe injury) and coercive control

TABLE 1
Items Assessing Physical, Sexual, and Emotional Abuse,
Coercive Control, and Injury

<i>Type of Abuse</i>	<i>Item</i>
Emotional abuse	Insulting or swearing at partner Telling your partner he or she couldn't manage without you Destroying something belonging to partner Stomping out of the room during a disagreement Doing something to spite your partner Trying to make your partner feel like he or she is crazy
Moderate physical abuse	Throwing things at partner that could hurt Pushing and shoving Threatening to hit or throw something Slapping
Severe physical abuse	Beating up Hitting or punching partner with something that could hurt Choking Using knife or gun
Moderate injury	Sprain, bruises, or small cut Feel physical pain that still hurt the next day
Severe injury	Passing out from being hit on the head Going to the doctor for injuries Needing to see a doctor but not going Broken bone
Coercive control	Not wanting partner to see friends Restrict use of car/telephone Jealous or suspicious of partner's friends Monitor partner's time, make him or her account for whereabouts Keep partner from school or other self-improvement Keep partner from family Not allow partner to leave the house Keep partner from medical care Follow partner to check on what he or she is doing Demand partner stay home and take care of children Treat partner like an inferior Act like partner was your personal servant Get upset if housework was not done when you wanted Keep partner from doing things to help himself or herself
Moderate sexual coercion	Insist on sex when partner did not want to (but no force)
Severe sexual coercion	Using threats to make partner have sex

were used as benchmarks. The decision rule was that if the woman committed more acts of severe violence and coercive control than her partner committed against her, she would be classified as an Abused Aggressor. If the partner committed more acts of severe violence and coercive control against her, she would be

classified as a Victim. If the woman committed more severe violence, but the partner committed more coercion or vice-versa, the relationship was classified as Mixed.

The four types consist of the following groups: (a) Victims (34% of the sample), (b) Abused Aggressors (12%), (c) Mixed-Male Coercive (32%), and (d) Mixed-Female Coercive (18%).

The Abused Aggressor and Victim categories had the highest levels of abusive behaviors committed by both partners, averaging 168 abusive behaviors in the previous 6 months across all categories of abuse. The women in the Abused Aggressor category and the male partners of the women in the Victim category differed little in the frequencies of their commission of severe violence, moderate violence, or emotional abuse. However, they did differ in the number of coercive control behaviors they used against partners. Women in the Abused Aggressor category used an average of 20 more coercive control behaviors against their male partners than the partners used against them. But male partners of women in the Victim category used an average of 36 more coercive control behaviors against the women than the women used against them.

In both the Victim and Abused Aggressor types, there was a large disparity between partners' frequencies of abuse. Across all categories of abuse, women in the Abused Aggressor type used an average of 114 abusive behaviors against partners within the past 6 months, whereas their male partners used 49 abusive behaviors against them. Partners of women in the Victim type used an average of 122 abusive behaviors against the women, whereas women used 52 abusive behaviors against them. It was concluded that the most dangerous and violent relationships may be those with a very skewed distribution of power and control.

In contrast, the Mixed-Female Coercive relationships had the lowest levels of total abuse, averaging 61 abusive behaviors committed by both partners. Both women and partners were less abusive overall as compared to the other types, and the number of abusive behaviors committed by each were much less skewed than in the Victim and Abused Aggressor categories. Women in the Mixed-Female Coercive group committed an average of 37 abusive behaviors, and their male partners committed 25 abusive behaviors. Women committed an average of 9 more coercive behaviors than their partners committed against them.

Mixed-Male Coercive relationships reflected a different pattern. In these relationships, the average sum of the number of abusive behaviors committed by both the women and their partners was 132, not significantly different than the total number of abusive behaviors in the Victim or Abused Aggressor types. Women committed an average of 60 abusive behaviors, and their partners perpetrated an average of 72 abusive behaviors. Male partners used an average of 22 more coercive behaviors than the women used against them, a much greater discrepancy than found in Mixed-Female Coercive relationships. Please see Swan and Snow (2002) for more details about the typology.

HYPOTHESES

Our review of the literature led to the development of the following hypotheses:

1. Women in the Abused Aggressor type will be more likely to have experienced traumatic childhood abuse, as compared to women in the other types of relationships.
2. Women in the Mixed-Female Coercive type will report the lowest use of avoidance coping. No predictions are made in relation to problem-solving and social-support coping.
3. Women in the Abused Aggressor type will have the highest level of anger directed outward toward others. Victims will have the highest level of anger contained inward. Women in the Mixed-Female Coercive group will have the highest level of anger control.
4. Women in the Victim type will report the highest level of self-defensive motivations. Women in the Abused Aggressor type will report the highest level of control and retribution motives.
5. Women in the Victim type will report the highest frequency of injuries. Women in the Abused Aggressor type will report the highest frequency of injuries to their partners.
6. Psychological symptoms and substance use will be least present for the women in the Mixed-Female Coercive group and most present for women in the Victim group.
7. Women in the Abused Aggressor type will be the most likely of the four types to report that they are the first to use violence.
8. If the findings demonstrate a pattern of support for the first seven hypotheses, it will provide evidence that the typology of relationships in which women use violence employed in this study has some degree of construct validity.

METHOD

SAMPLE

The study was conducted in a moderate-sized New England city. The first group of participants were women who had been arrested for a domestic violence offense and were court mandated to attend a family violence program. These women were contacted via a letter inviting them to participate in a study of relationship conflict. The letter gave a phone number for women to call with questions or to request that we not call them. The letter clearly stated that the study was separate from the program and their decisions regarding participation would have no bearing on their court case or the program. A sign advertising the study was also posted in the waiting rooms of three sites: a large inner-city health clinic for low-income residents; a division of family court that provides services for people with domestic violence, divorce, and child custody cases; and a local domestic violence shelter. Women interested in participating in the study left their names and phone numbers in a box posted next to the sign.

The criterion for entry into the study was that the woman had to have used some form of physical violence against a male intimate partner within the previous 6 months. Women were screened over the telephone with items from the Conflict Tactics Scale (Straus et al., 1996) to determine whether they met this criterion. A face-to-face interview was scheduled with women who met participation criteria and agreed to participate. Before the interview began, women were informed that their participation was voluntary and that they could discontinue the interview at any time. Women were paid \$45 for participating in the approximately 2-hour, in-depth interview. Assessments included current and past violence and abuse committed by the woman and her partner, motivations for violence, childhood trauma, coping styles, use of domestic violence resources, psychological symptoms, and social desirability. One hundred and eighteen women participated in the study. Ten participants were dropped from the sample because their data revealed that they had not used physical violence against a male partner in the previous 6 months. In addition, because complete data are required for the MANOVA

analyses performed, 13 participants with missing data were removed, leaving a final sample of 95.

The majority of the 95 women in the sample (77%) were patients of the inner-city health clinic. Thirteen percent of the participants were recruited from the court-mandated family violence program, and 10% were recruited from the family court waiting room. Although only 13% of the women were recruited from the court-mandated family violence program, 28% of the overall sample had been arrested in the 6 months prior to the time they participated in the study, and 65% had been arrested before that 6-month period. Seventy-one percent of the participants were African American, 14% were White, 12% were Latina, and 3% used other categories to describe themselves (1 Black/White, 1 Puerto Rican/Italian, 1 "Other"). The majority of participants (63%) were between the ages of 25 and 40, 17% were younger than 25, and 20% were older than 40. Twenty-seven percent of the sample had not completed high school, 45% had completed high school, 5% had graduated from a vocational school, 18% had attended some college, and 5% had a college or graduate degree. Overall, the income range of the women was quite low, with 69% earning less than \$10,000 per year, 18% earning between \$10,000 and \$19,999, and 13% earning \$20,000 or more. Seventy-six percent of the sample was unemployed, 10% had some part-time work, and 14% worked full-time. Fifteen percent had no children, 45% had one or two children, and 40% had three or more children.

MEASURES

WOMEN'S VIOLENCE AND VICTIMIZATION

Five dimensions of partner abuse were assessed: physical abuse, sexual coercion, and injury, based on items from the CTS-2 (Straus et al., 1996); coercive control, based on items from the dominance/isolation subscale of the PMWI (Tolman, 1989); and emotional abuse, based on items from the CTS-2 and the PMWI. Participants were asked whether they had committed each of the behaviors in the last 6 months. The response scale included *never*, *once*, *twice*, *3 to 5 times*, *6 to 10 times*, and *more than 10 times in the past 6 months*. Following each item assessing her own behavior, each

participant was then asked if her partner had ever done that behavior to her, using the same response scale.

The CTS has been used in hundreds of studies since 1972, with more than 70,000 participants of diverse cultural and ethnic backgrounds around the world (Straus et al., 1996). The CTS-2 has been shown to have good internal consistency and validity (Straus et al., 1996). The reliability of the CTS-2 items for women's perpetration was $\alpha = .84$ in the present study. The reliability of the CTS-2 items for women's victimization was $\alpha = .82$. The reliability coefficient for injury perpetration was $\alpha = .67$, and the reliability for injury victimization was $\alpha = .80$. The PMWI (Tolman, 1989) was used to assess emotional abuse and coercive control behaviors. This scale has also been shown to have good reliability and validity with a sample of primarily White and African American women (Tolman, 1999). In the present study, the reliabilities of the PMWI items for women's victimization ($\alpha = .84$) and women's perpetration ($\alpha = .75$) were acceptable.

CHILDHOOD ABUSE

Items from the Early Trauma Inventory (Bremner, Vermetten, & Mazure, 2000) were used to assess experiences of physical, emotional, and sexual abuse before the age of 18. Interviewers were trained to elicit information about the abuse events and rate the magnitude of the stressors along the following scale: 0 = *event occurred but caused no change in daily living*, 1 = *low magnitude*, 2 = *high magnitude*, and 3 = *extreme changes in daily living*. Only events rated 2 or 3 are defined in the present study as "traumatic" and are included in the analyses. The reliability of the items assessing childhood abuse was $\alpha = .85$.

COPING WITH RELATIONSHIP STRESS

Coping was measured using the 33-item Coping Strategy Indicator (Amirkhan, 1990). An extensive factor analysis study conducted by Amirkhan (1990) revealed three factors: problem solving (e.g., I tried to carefully plan a course of action rather than acting on impulse); seeking support (e.g., I confided my fears and worries to a friend or relative); and avoidance (e.g., I avoided

being with people in general). Amirkhan has found that the measure has good reliability and validity. In the present study, internal consistencies were $\alpha = .81$ for the avoidance subscale, $\alpha = .93$ for support seeking, and $\alpha = .83$ for problem solving. To focus the measure on relationship stress in particular, the measure began with these instructions: "I'm going to ask you a few questions about how you cope with the problems and troubles in your relationship . . . try to think of one problem or conflict you have encountered in the last 6 months in your relationship." The response scale ranged from 1 (*not at all*) to 3 (*a lot*).

ANGER

Women's styles of expressing anger were assessed using the Anger Expression Scale (Spielberger et al., 1995). The scale contains three 8-item subscales: anger-out, expressing anger overtly and directly ("I say nasty things," "I lose my temper."); anger-in, which involves holding in or suppressing anger ("I boil inside, but I don't show it."); and anger-control ("I keep my cool," "I control my angry feelings."). The response scale ranges from 1 (*almost never*) to 4 (*almost always*). The Anger Expression Scale has been found to be reliable and valid in a number of studies (Forgays, Forgays, & Spielberger, 1997; Spielberger et al., 1995). Reliabilities of the anger subscales were $\alpha = .81$ for anger-in, $\alpha = .82$ for anger-out, and $\alpha = .80$ for anger-control.

MOTIVATIONS

The Motivations for Violence scale (Swan & Gill, 1998) was developed for this study to assess participants' motivations for violent or abusive behaviors. Using violence in self-defense was measured with two items: "How often do you use violence to defend yourself from your partner?" and "How often do you use violence to get him to stop hitting or otherwise hurting you?" Responses ranged from 1 (*almost never*) to 4 (*almost always*). Reliability for this subscale was $\alpha = .78$. Using violence for control was assessed with the question, "How often do you threaten to use violence to make your partner do the things you want him to do?" Using violence to get even was assessed with the item, "How often do you use violence to get even with your partner for

something he has done?" Following each item, participants were asked how effective the violence was in achieving their goals.

PSYCHOLOGICAL SYMPTOMS AND ALCOHOL USE

Measures of psychological symptoms of depression, anxiety, and posttraumatic stress as well as problem alcohol use were obtained. Depressive symptoms were assessed via the widely used Center for Epidemiological Studies–Depression (CES-D) Scale, a screening instrument (Radloff, 1977). The instrument has established validity and reliability and has been used with many populations. It has discriminated between samples of psychiatric patients and the general population (Radloff, 1977). The 20-item screening measure assesses depressive symptoms within the past week. The response scale ranges from 0 (*experienced symptoms 0 days in the last week*) to 3 (*experienced symptoms 5 to 7 days in the last week*). In the present study, internal consistency for the measure was $\alpha = .93$.

Anxiety symptoms were measured with the 20-item state-anxiety subscale of the Spielberger State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970). The measure assesses transitory feelings of tension, apprehension, and heightened autonomic nervous system activity. Responses range on a scale from 1 (*not at all*) to 4 (*very much so*). Reliability for the anxiety measure was $\alpha = .90$ in this study.

Posttraumatic stress symptoms were assessed with 10 items from the Crime-Related PTSD Scale for women (Saunders, Arata, & Kilpatrick, 1990). This scale has been useful in discerning victims of rape from nonvictims (Saunders et al., 1990) as well as sexually harassed and nonharassed women (Schneider, Swan, & Fitzgerald, 1997). Responses ranged from 0 (*no discomfort*) to 4 (*extreme discomfort*). Reliability for the PTSD scale was $\alpha = .87$ in this study.

Alcohol use was assessed via the Alcohol Use Disorders Identification Test (AUDIT) (Babor & Grant, 1989), a commonly used screening measure for assessing problem drinking. The measure has been used with thousands of individuals around the world and has high and well-established sensitivity and specificity (Allen, Litten, Fertig, & Babor, 1997). Cronbach's alphas for the measure are generally between .80 and .90 (Allen et al., 1997). In

the present study, internal consistency for the AUDIT was $\alpha = .92$. The measure assesses three types of problem drinking (Babor & Grant, 1989) as follows: (a) hazardous drinking—a pattern of drinking likely to cause damage to physical or mental health ($\alpha = .75$ in this study); (b) dependent drinking—a pattern of drinking characterized by withdrawal states and impaired control over drinking ($\alpha = .90$); and (c) harmful drinking—a pattern of drinking that is already causing damage to physical or mental health ($\alpha = .86$). The response scale ranges from 0 (*never experiences this symptom*) to 4 (*experiences this symptom daily or almost daily*).

RESULTS

To control for Type I error, a multivariate analysis of variance (MANOVA) was conducted to determine whether there were differences among the four types of relationships—Victim, Abused Aggressor, Mixed-Female Coercive, and Mixed-Male Coercive—on the 20 study variables. The predictor variable was the typology, and the dependent variables consisted of abuse experienced as a child; how women coped with their violent relationships; women's styles of handling anger; their motivations for using violence; levels of physical injury; symptoms of depression, anxiety, and posttraumatic stress; and problem drinking.

The overall MANOVA test revealed a significant difference among the four types of violent relationships with respect to the dependent variables (Wilks's lambda $F = 3.23 [54, 221], p < .0001$). Univariate tests were then conducted to examine which variables differed across the four types, and Bonferroni post hoc analyses were conducted to determine which means differed significantly from one another.

TRAUMATIC CHILDHOOD ABUSE

The women's experiences of traumatic physical, emotional, and sexual abuse before the age of 18 were assessed. Thirty-five percent of the sample experienced physical abuse, 37% experienced emotional abuse, and 52% were subjected to sexual abuse as children. Thirty-seven percent reported no childhood trauma; 20% only sexual abuse; 4% only emotional or physical abuse; 8%

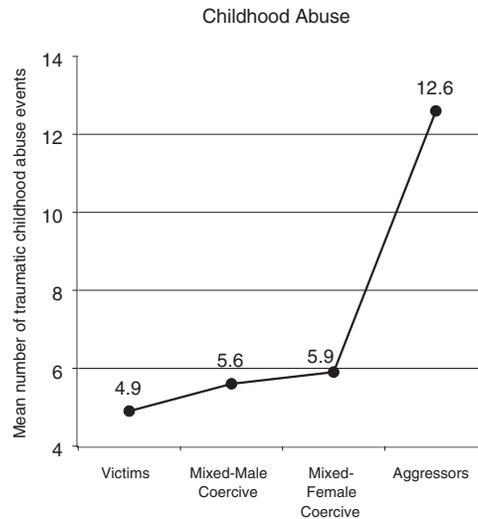


Figure 1: Traumatic Childhood Abuse Events for Each of the Four Types

both physical and emotional abuse; 6% sexual and emotional abuse; 4% physical and sexual abuse; and 21% all three types of abuse.

A significant difference in level of traumatic childhood abuse was observed by type of violent relationship ($F = 3.29, p < .05$). Hypothesis 1, that Abused Aggressors will be more likely to have experienced traumatic childhood abuse, was mostly confirmed. As shown in Figure 1, women classified as Abused Aggressors experienced significantly greater levels of childhood abuse than Victims or women in the Mixed-Male Coercive group, but did not differ significantly from women in the Mixed-Female Coercive group. The mean number of events for this latter group, however, was still substantially lower than for Abused Aggressors.

COPING WITH RELATIONSHIP STRESS

As shown in Figure 2, and as predicted in Hypothesis 2, women in the Mixed-Female Coercive group engaged in significantly less avoidance coping ($F = 7.21, p < .0001$) as compared to women in the other three groups. No differences were observed for use of social-support or problem-solving coping.

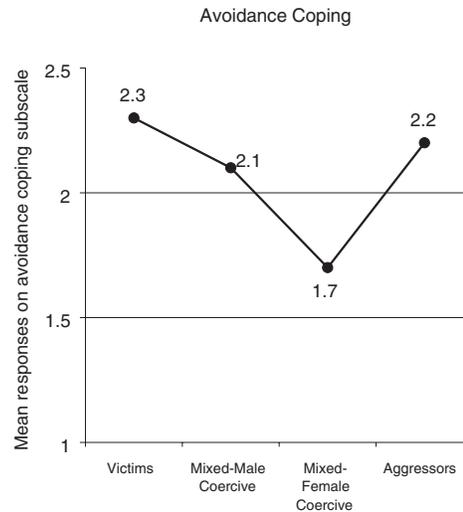


Figure 2: Avoidance Coping for Each of the Four Types

ANGER EXPRESSION

Women in the different types of relationships varied in their styles of expressing anger (see Figure 3). Significant group differences existed for anger-in ($F = 5.02, p < .01$), anger-out ($F = 6.64, p < .0001$), and anger control ($F = 4.51, p < .01$). Hypothesis 3 states that Abused Aggressors will have the highest level of anger directed outward and the lowest level of anger control. This general pattern did emerge. Women in the Abused Aggressor type had the highest levels of anger directed outward, with the mean for anger-out differing significantly from women in the Mixed-Female Coercive group and from Victims at a trend level of significance. Women in the Mixed-Female Coercive group were less likely to direct anger outward, as compared to women in the Abused Aggressor and Mixed-Male Coercive groups.

Women in the Abused Aggressor type also reported the lowest level of control over their anger, as predicted. Abused Aggressors had a significantly lower level of anger control compared to women in the Mixed-Female Coercive group and in relation to women in the Mixed-Male Coercive group at a trend level of significance. However, no difference was found on anger control between Abused Aggressors and Victims.

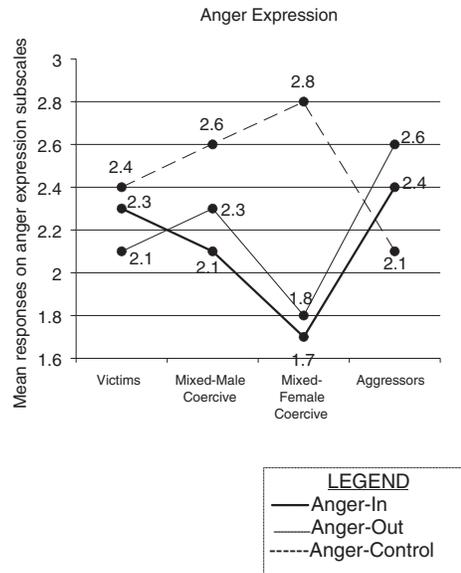


Figure 3: Anger Expression for Each of the Four Types

Hypothesis 3 also states that Victims will have the highest levels of suppressed anger (i.e., anger-in), which received partial support. Surprisingly, women in the Victim and Abused Aggressor types reported comparable levels of anger-in, and both had levels of suppressed anger that were significantly higher than women in the Mixed-Female Coercive group.

MOTIVATIONS

Three types of motivations for using violence were assessed: self-defense, attempting to control one's partner and retribution. A very large number (75%) of participants reported that they used violence in self-defense at least some of the time; of those who did use violence in self-defense, 86% stated that it was effective in stopping the violence at least sometimes. Thirty-eight percent of the women said that they had used violence to control their partners; of those, 53% stated that it was effective at least sometimes. Finally, 45% of the participants stated that they had used violence for purposes of retribution.

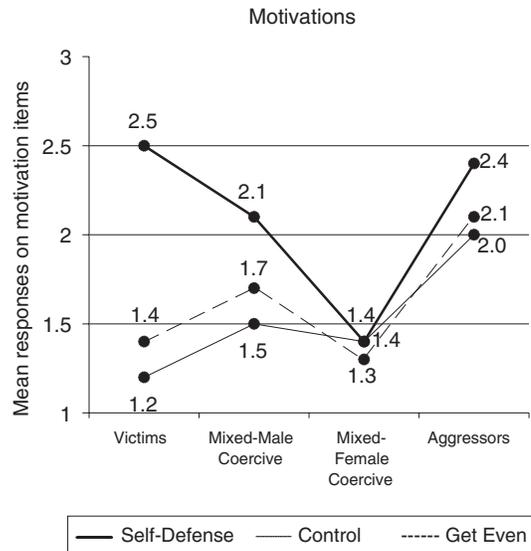


Figure 4: Motivations for Each of the Four Types

Hypothesis 4 states that women in the Victim type will report the highest levels of self-defensive motives, whereas women in the Abused Aggressor type will report the highest levels of control and retribution motives. Univariate tests did reveal group differences in uses of violence for self-defense ($F = 5.44, p < .01$), control ($F = 10.77, p < .0001$), and retribution ($F = 3.31, p < .05$). Victims did report using violence for purposes of self-defense more often than women in any other group, but this difference was only significant in relation to women in the Mixed-Female Coercive type (see Figure 4), providing partial support for Hypothesis 4. Women in the Abused Aggressor group did use violence to control their partners significantly more often than women in the other three types of relationships, providing support for Hypothesis 4. And women in the Abused Aggressor type used violence for purposes of retribution significantly more often than women in the Mixed-Female Coercive group and more often than Victims at a trend level of significance. Although Abused Aggressors used retribution more often than women in the Mixed-Male Coercive

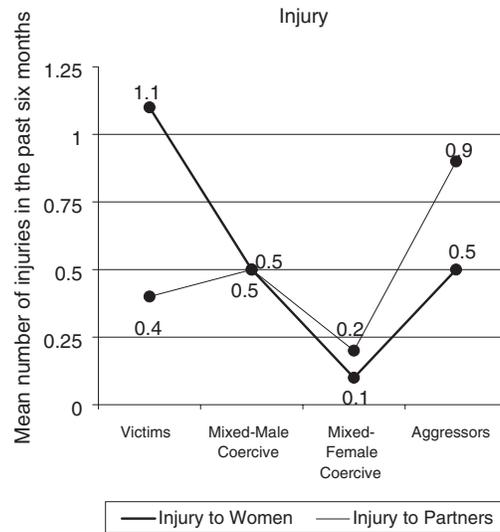


Figure 5: Injuries in the Past 6 Months for Each of the Four Types

group, this difference did not reach significance. Overall, the findings provide considerable support for Hypothesis 4.

PHYSICAL INJURY

The four types differed in the extent of injury to the woman ($F = 5.87, p < .01$) and injury to the partner ($F = 3.00, p < .05$). Hypothesis 5, that women in the Victim group will report the highest frequencies of injuries and women in the Abused Aggressor group will report the highest rate of inflicting injuries, was partially supported. Victims did report receiving significantly more injuries than women in the two Mixed groups, but even though they reported twice the rate of injuries as those classified as Abused Aggressors, the difference was not statistically significant (see Figure 5). Also providing partial support for this hypothesis, women in the Abused Aggressor type injured their partners more often than women in the Mixed-Female Coercive type. However, the injury inflicted by Abused Aggressors, although in the predicted direction, was not statistically greater than the injuries inflicted by women in the Victim or Mixed-Male Coercive groups.

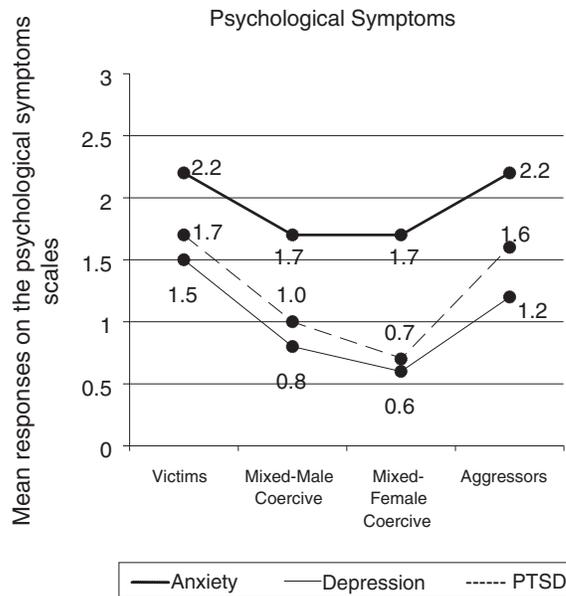


Figure 6: Psychological Symptoms for Each of the Four Types

PSYCHOLOGICAL SYMPTOMS

Women in the four groups differed in the extent to which they experienced symptoms of depression ($F = 14.24, p < .0001$), anxiety ($F = 6.46, p < .01$), and PTSD ($F = 7.92, p < .0001$). Overall, levels of depressive symptoms were high: 60% of the women scored at or above the screening cutoff of 16 on the CES-D. Hypothesis 6 states that psychological symptoms and substance use will be the least evident for women in the Mixed-Female Coercive group and the most problematic for Victims. The pattern of results partially supports this hypothesis, although the findings are more complex than the hypothesis predicts (see Figure 6). Women in the Mixed-Female Coercive group did report the fewest symptoms of depression and PTSD, but their scores did not differ significantly from women in the Mixed-Male Coercive group. Women in the two Mixed groups had lower (and equal) levels of anxiety as compared to women in the Victim and Abused Aggressor groups. Also in partial support of the hypothesis, Victims reported more symptoms of depression, anxiety, and PTSD than women in either of the two Mixed groups. However, women in the Abused

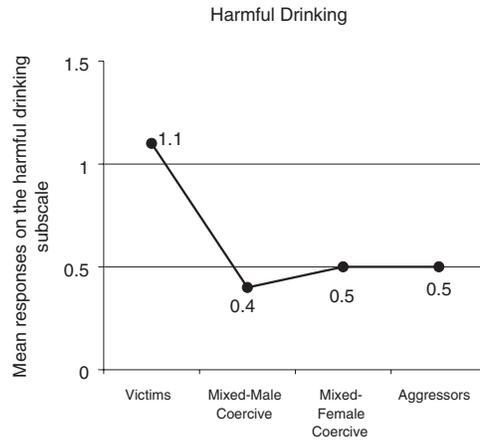


Figure 7: Harmful Drinking for Each of the Four Types

Aggressor group also had elevated scores on these three measures and did not differ significantly from Victims on any of them. In sum, the general pattern is for women in both Victim and Abused Aggressor types to report greater levels of psychological symptoms than women in the two Mixed groups.

ALCOHOL USE

Overall, 24% of the sample met criteria on the AUDIT screening measure for problem alcohol use. The four types differed in the extent to which they engaged in harmful drinking ($F = 2.77, p < .05$). Specifically, Victims engaged in more harmful drinking than women in the other three types, consistent with Hypothesis 6. However, this difference was only significant in relation to women in the Mixed-Female Coercive group. The two Mixed groups and women in the Abused Aggressor group had comparable levels of harmful drinking. The overall AUDIT measure and the two other subscales, hazardous drinking and dependent drinking, did not differ by type.

WHO IS THE FIRST TO USE VIOLENCE?

A chi-square analysis was conducted to examine whether the four types differed in their responses to the question, "Who usually is the first one to use physical violence—you, him, or both?"

TABLE 2
Differences in Who Uses Violence First by Type (in percentages)

	<i>Victim</i> (n = 32)	<i>Mixed-Male</i> <i>Coercive</i> (n = 32)	<i>Mixed-Female</i> <i>Coercive</i> (n = 19)	<i>Abused</i> <i>Aggressor</i> (n = 12)
Who usually is the first one to use physical violence?				
Woman	9	66	63	83
Man	88	28	26	17
Both	3	6	11	0

The four types did differ, as shown in Table 2 (Pearson $\chi^2 = 35.80$, $p < .0001$). Hypothesis 7 states that women in the Abused Aggressor type will be the most likely to report that they are the first to use violence. This prediction was confirmed. Eighty-three percent of women in the Abused Aggressor group stated that they were usually the first to use violence, as compared to 9% of Victims and approximately 64% of the Mixed groups. In contrast, 88% of Victims stated that the man was the first to use violence, as compared to 17% of women in the Abused Aggressor type and approximately 27% for the two Mixed groups.

Finally, Hypothesis 8 states that if there is a pattern of support for the first seven hypotheses, evidence of construct validity will be shown for the four types of relationships in which women use violence employed in this study. All of the hypotheses received at least partial support and, in some instances, full support, providing evidence that the types differ from one another in theoretically consistent and meaningful ways.

DISCUSSION

Overall, the majority of women in this study were experiencing many difficulties. A high percentage of women had experienced traumatic emotional, physical, or sexual childhood abuse. The prevalence of sexual abuse was particularly alarming, involving approximately half of the sample. Thirty-nine percent of the women experienced more than one of the three types of abuse assessed; 1 in 5 were subjected to all three types of abuse. Sixty percent of the sample scored above the cutoff on the depression

screening measure, and nearly one quarter scored above the cutoff on the problem drinking screen. Sixty-one percent of the women had been injured by their partners in the past 6 months. Self-defense was the most common motive for violence, with three quarters of the sample stating that they used violence for this reason. Retribution—getting even with the partner for something he had done—was a motive for almost half the sample. More than one third of the women stated that they threatened to use violence to get their partners to do the things they wanted him to do.

Overall, the multivariate analysis of variance conducted with the 20 behavioral and psychological health indicators found that women in the four types of relationships did differ. Relative to the other three groups, women in the Mixed-Female Coercive group had the most positive findings on almost every measure. Women in this group had the lowest levels of avoidance coping when dealing with problems in their relationships. They were the least angry of the groups and were able to control their anger the most. They experienced the least injury and inflicted injury less than the other groups. They were the least depressed, had the fewest posttraumatic stress symptoms, and (along with the women in the Mixed-Male Coercive group) were the least anxious.

Can the relationships classified as Mixed-Female Coercive be characterized as “common couple violence”? This term, coined by Johnson (1995, 2000), refers to “an intermittent response to the occasional conflicts of everyday life, motivated by a need to control in the specific situation but not a more general need to be in charge of the relationship” (Johnson, 1995, p. 286). This type of violence usually does not escalate, is conflict based, and happens on average once every 2 months, according to Johnson’s (1995) estimate. Moreover, it seems to be equally initiated by men and women (Johnson, 2000). Johnson distinguishes common couple violence from “intimate terrorism,” which is severe, frequent violence that escalates over time and is perpetrated almost exclusively by men (Johnson, 1995).

The Mixed-Female Coercive type was the group with the lowest overall levels of abuse. Although women in this group used, on average, nine more coercive control behaviors than their partners, the relationships showed the smallest disparity between the woman and her partner in terms of physical and emotional abuse.

Relationships in this type may be similar to Johnson's "common couple violence" category. However, although the abuse was happening much less frequently as compared to the other three types, these are not healthy relationships. A relationship in which two people together are committing an average of 60 acts of abuse in a 6-month period (Swan & Snow, 2002) and injuring each other an average of once per year is cause for concern. The relationships do seem to have a balance of power that often constrains the level of violence, but the abuse that does occur may escalate into more frequent and severe violence and coercion. Furthermore, in states with mandatory arrest laws in cases of domestic violence, these women are at risk of arrest. Although the women in the Mixed-Female Coercive relationships were having the least difficulties on the behavioral and psychological indicators assessed in this study, they are still a group at risk.

As we predicted, women in the Victim group were not doing well. They had the highest rates of avoidance coping, high levels of suppressed anger, and not much anger control. Not surprisingly, their primary motive for violence was self-defense, and they had the highest frequency of injuries. Along with women in the Abused Aggressor group, they reported elevated levels of depression, anxiety, and PTSD. Finally, they indicated much higher levels of harmful drinking than the other types.

Women in the Abused Aggressor group were faring almost as poorly as Victims on most measures. Abused Aggressors had much higher levels of childhood trauma than the other three groups, supporting those studies finding that childhood trauma is a predictor of female aggression. Women in the Abused Aggressor and Victim groups both had high avoidance coping scores, as compared to the other two types. Surprisingly, women in the Abused Aggressor and Victim groups did not differ in their levels of suppressing anger, and both had higher scores on anger suppression as compared to the two Mixed types. Not surprisingly, Abused Aggressors did have the highest levels of anger-out, and they had the lowest anger control. And, of the four types, women in the Abused Aggressor type were indeed the most motivated by control and retribution motives. Injuries experienced by Abused Aggressors were not significantly less than what Victims experienced. Finally, women in the Abused Aggressor type had very similar symptoms of depression, anxiety, and posttraumatic

stress as compared to Victims. Abused Aggressors may respond to their partners' violence by fighting back with even more violence, but their poor indices of well-being indicate that this strategy does not serve them well.

What picture emerges for the Mixed-Male Coercive group? In this group, women and their partners were roughly equivalent in terms of physical violence, but men were much more coercive than women. Overall levels of violence were high in this group. Women in the Mixed-Male Coercive group typically fell in between the other groups—they were not doing as well as women in the Mixed-Female Coercive group, but generally they were better off than Victims or Abused Aggressors. Like Victims and Abused Aggressors, women in the Mixed-Male Coercive group reported greater use of avoidance coping to deal with relationship problems and self-defense as a motivation for their violence, as compared to women in the Mixed-Female Coercive group. Their scores on anger expression and psychological symptoms generally fell between the Mixed-Female Coercive group and women in the Victim and Abused Aggressor groups. And, like women in the Mixed-Female Coercive group, women in the Mixed-Male Coercive group showed relatively low scores on childhood abuse and harmful drinking.

What explains the pattern of findings observed in this study? Although it was not measured in this study, we propose that a key predictor of women's use of violence and women's well-being is the women's sense of control over their lives, their autonomy and agency within their relationships. Stark (2000) described intimate partner abuse as a "liberty crime" that deprives women of the most basic human rights of self-determination. Much more detrimental than physical violence, he argues, is the psychologically devastating effects of being told when one will leave the house, eat, or sleep; being isolated from all other social contacts; being humiliated and continually told that one is despicable or less than human; and living in constant fear of violence. The women in the Mixed-Female Coercive group do not seem to have been subjected to this kind of abuse. Although the relationships involved violence, the balance of power seems to be relatively equitable. In the Mixed-Male Coercive relationships, frequencies of abuse were much higher, and the balance of power seems to have tilted more to the male partner, particularly in the use of coercive control.

Relationships in which women are Victims and in which women are Abused Aggressors seem to be the most worrisome. We would also predict that despite the balance of power being tilted toward the women in the Abused Aggressor group, as indicated by the greater levels of abuse committed by Abused Aggressors in comparison to their partners, Abused Aggressors do not feel a sense of control, autonomy, or agency in their relationships or their lives in general. Perhaps, like some male abusers, they use abuse to try to create this sense of control. The finding from this study and others that women who are aggressive against their male partners have experienced the highest levels of childhood trauma may help to explain where this lack of autonomy and sense of self is coming from. We would like to note, however, that we do not wish to equate women in the Abused Aggressor group with male batterers. Female Abused Aggressors—even those who are very violent—still lack the patriarchal power structure that aids male intimate terrorists in achieving absolute control over their victims (Dasgupta, 1999).

LIMITATIONS OF THE STUDY

One limitation of this study is that the women's sense of autonomy and power, which we are proposing as a key explanatory variable for these results, was not measured. The pattern of findings from this study, however, clearly suggests that these constructs are worthy of further study. Another limitation is that data concerning the women's and their partners' abuse are based only on the women's self-reports. Furthermore, although some hypotheses proposed in the study were fully supported, others received only partial support. This may be due in part to the relatively small number of women in each of the four groups, which limited the power of the analyses. The overall pattern of results, however, provides evidence that the four types of relationships do differ along a number of important dimensions.

A further limitation of the study is that the four-item scale used to assess women's motivations for violence needs further development. Some of the items may be ambiguous to participants. For example, the item used to assess control—"How often do you threaten to use violence to make your partner do the things you want him to do?"—could include a situation in which a woman

threatens to use violence to make the man stop hitting her. This interpretation would more closely resemble a self-defense motivation rather than a control motivation. However, the low and nonsignificant correlation between the control item and the self-defense two-item subscale ($r = .16$) suggests that the control and self-defense items are assessing different constructs. Another ambiguity is that the retribution item—"How often do you use violence to get even with the partner for something he has done?"—could include getting even with the man for his violence. Again, this item shows a small correlation with the self-defense subscale ($r = .16$). Indeed, the retribution and control items show a highly significant correlation with each other ($r = .50, p < .0001$), suggesting that women who use violence to control their partners also have a tendency to use violence for retribution purposes as well.

The measures used to assess physical abuse and coercive control also have limitations. The items do not assess the context of the behaviors or the impact on the person to whom the behaviors are directed. For example, the woman who hits her partner may cause him little pain, whereas the man who hits his partner may cause her severe injury. Likewise, the woman who is jealous of her partner's friends and tries to keep him from leaving the house may have little impact on his behavior. The man who tries to keep his partner from leaving the house may be more successful in controlling her behavior.

Finally, the women in this study were predominantly very low income, African American, living in an urban environment, and all were in intimate relationships with male partners. The implications of the sample demographics are discussed in Swan & Snow (2002). The findings presented here may or may not generalize to women of other sexual orientations, ethnicities, or different socioeconomic statuses. This is a topic for future research.

CONCLUSION

This study, as well as other related research, underscores the complexity of the phenomenon of women's violence in intimate relationships. It demonstrates that women's violence must be examined in the context of their male partner's violence against

them and that women who use violence are not all alike. Placing the problem of violence in context reveals clearly distinguishable patterns of relationship violence as well as significant variations in women's behavior, motivations, and psychological adjustment depending on the type of violent relationship in which they find themselves.

We are only beginning to build the conceptual frameworks and knowledge base necessary to more fully understand women's violence. There is a strong argument at this point for longitudinal research to identify the precursors, correlates, and outcomes related to different types of violent relationships. Such research should be extended to examine women's violence within sociocultural contexts, including gender, culture, ethnicity, class, and sexual orientation. This approach, along with the knowledge that would be derived from testing more complex models, is required to develop effective intervention strategies and to inform social policy development.

REFERENCES

- Abel, E. M. (1999, July). *Comparing women in batterer intervention programs with male batterers and female victims*. Paper presented at the Sixth International Family Violence Research Conference, Durham, NH.
- Allen, J. P., Litten, R. Z., Fertig, J. B., & Babor, T. (1997). A review of research on the Alcohol Use Disorders Identification Test (AUDIT). *Alcoholism: Clinical and Experimental Research, 21*, 613-619.
- Amirkhan, J. H. (1990). A factor analytically derived measure of coping: The coping strategy indicator. *Journal of Personality and Social Psychology, 59*, 1066-1074.
- Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126*, 651-680.
- Babor, T. F., & Grant M. (1989). From clinical research to secondary prevention: International collaboration in the development of the Alcohol Use Disorders Identification Test (AUDIT). *International Perspectives, 13*, 371-374.
- Barnett, O. W., Lee, C. Y., & Thelen, R. E. (1997). Gender differences in attributions of self-defense and control in interpartner aggression. *Violence Against Women, 3*, 462-481.
- Bowker, L. (1993). A battered woman's problems are social, not psychological. In R. J. Gelles & D. R. Loseke (Eds.), *Current controversies on family violence* (pp. 154-165). Newbury Park, CA: Sage.
- Bremner, J. D., Vermetten, E., & Mazure, C. M. (2000). Development and preliminary psychometric properties of an instrument for the measurement of childhood trauma: The Early Trauma Inventory. *Depression & Anxiety, 12*, 1-12.
- Browne, A. (1987). *When battered women kill*. New York: Free Press.
- Brush, L. D. (1990). Violent acts and injurious outcomes in married couples: Methodological issues in the national survey of families and households. *Gender & Society, 4*, 56-67.

- Campbell, J. C., & Lewandowski, L. A. (1997). Mental and physical health effects of intimate partner violence on women and children. *Psychiatric Clinics of North America*, *20*, 353-374.
- Cantos, A. L., Neidig, P. H., & O'Leary, K. D. (1994). Injuries of women and men in a treatment program for domestic violence. *Journal of Family Violence*, *9*, 113-123.
- Cascardi, M., Langhinrichsen, J., & Vivian, D. (1992). Marital aggression: Impact, injury, and health correlates for husbands and wives. *Archives of Internal Medicine*, *152*, 1179-1184.
- Cascardi, M., & Vivian, D. (1995). Context for specific episodes of marital violence: Gender and severity of violence differences. *Journal of Family Violence*, *10*, 265-293.
- Cazenave, N. A., & Zahn, M. A. (1992). Women, murder, and male domination: Police reports of domestic homicide in Chicago and Philadelphia. In E. C. Viano (Ed.), *Intimate violence: Interdisciplinary perspectives* (pp. 83-97). New York: Hemisphere.
- Dasgupta, S. D. (1999). Just like men? A critical view of violence by women. In M. F. Shepard & E. L. Pence (Eds.), *Coordinating community responses to domestic violence: Lessons from Duluth and beyond* (pp. 195-222). Thousand Oaks, CA: Sage.
- Dutton, M. A. (1992). Treating battered women in the aftermath stage. *Psychotherapy in Private Practice*, *10*, 93-98.
- Dutton, M. A. (2001, April). How battered women cope. In *National Institute of Justice Journal* (NCJ Publication No. 186728, p. 20). Washington, DC: Government Printing Office.
- Ehrensaft, M. K., Langhinrichsen-Rohling, J., Heyman, R. E., O'Leary, K. D., & Lawrence, E. (1999). Feeling controlled in marriage: A phenomenon specific to physically aggressive couples? *Journal of Family Psychology*, *13*, 20-32.
- Fernandez-Esquer, M. E., & McCloskey, L. A. (1999). Coping with partner abuse among Mexican American and Anglo women: Ethnic and socioeconomic influences. *Violence and Victims*, *14*, 293-310.
- Foa, E. B., Cascardi, M., Zoellner, L. A., & Feeny, N. C. (2000). Psychological and environmental factors associated with partner violence. *Trauma, Violence, & Abuse*, *1*, 67-91.
- Forgays, D. G., Forgays, D. K., & Spielberger, C. D. (1997). Factor structure of the State-Trait Anger Expression Inventory. *Journal of Personality Assessment*, *69*, 497-507.
- Gleason, W. J. (1993). Mental disorders in battered women: An empirical study. *Violence and Victims*, *8*, 53-68.
- Hamberger, L. K., & Potente, T. (1994). Counseling heterosexual women arrested for domestic violence: Implications for theory and practice. *Violence and Victims*, *9*, 125-137.
- Jacobson, N. S. (1994). Contextualism is dead: Long live contextualism. *Family Process*, *33*, 97-100.
- Johnson, M. P. (1995). Patriarchal terrorism and common couple violence: Two forms of violence against women. *Journal of Marriage and the Family*, *57*, 283-294.
- Johnson, M. P. (2000, November). *Conflict and control: Symmetry and asymmetry in domestic violence*. Paper presented at the meeting of the National Institute of Justice Gender Symmetry Workshop, Washington, DC.
- Kellerman, A. L., & Mercy, J. A. (1992). Men, women, and murder: Gender-specific differences in rates of fatal violence and victimization. *Journal of Trauma*, *33*, 1-5.
- Langhinrichsen-Rohling, J., Neidig, P., & Thorn, G. (1995). Violent marriages: Gender differences in levels of current violence and past abuse. *Journal of Family Violence*, *10*, 159-176.
- Leisring, P., Dowd, L., & Rosenbaum, A. (1999, July). *Characteristics of women mandated to anger management treatment*. Paper presented at the Sixth International Family Violence Research Conference, Durham, NH.
- Magdol, L., Moffitt, T. E., Caspi, A., & Silva, P. A. (1998). Developmental antecedents of partner abuse: A prospective-longitudinal study. *Journal of Abnormal Psychology*, *107*, 375-389.

- Makepeace, J. M. (1986). Gender differences in courtship violence. *Family Relations*, 35, 383-388.
- Martin, M. E. (1997). Double your trouble: Dual arrest in family violence. *Journal of Family Violence*, 12, 139-157.
- Miller, S. L. (2001). The paradox of women arrested for domestic violence: Criminal justice professionals and service providers respond. *Violence Against Women*, 7, 1339-1376.
- Morse, B. J. (1995). Beyond the Conflict Tactics Scale: Assessing gender differences in partner violence. *Violence and Victims*, 10, 251-272.
- National Institute of Justice. (1998). *Batterer intervention: Program approaches and criminal justice strategies* (NCJ Publication No. 168638). Washington, DC: Government Printing Office.
- National Institute of Justice. (2000, November). Workshop on gender symmetry, Washington, DC. Retrieved from <http://www.ojp.usdoj.gov/nij/vawprog/proceed.htm>
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Renzetti, C. M. (1999). The challenge to feminism posed by women's use of violence in intimate relationships. In S. Lamb (Ed.), *New versions of victims: Feminists struggle with the concept* (pp. 42-56). New York: New York University Press.
- Saunders, B. E., Arata, C. M., & Kilpatrick, D. G. (1990). Development of a crime-related post-traumatic stress disorder scale for women within the Symptom Checklist-90-Revised. *Journal of Traumatic Stress*, 3, 439-448.
- Schneider, K. T., Swan, S. C., & Fitzgerald, L. F. (1997). Job-related and psychological effects of sexual harassment in the workplace: Empirical evidence from two organizations. *Journal of Applied Psychology*, 82, 401-415.
- Snow, D. L., Swan, S. C., Raghavan, C., Connell, C., & Klein, I. (2002). *The effects of work stressors, coping, and social support on psychological symptoms among female secretarial employees*. Manuscript submitted for publication.
- Sorenson, S. B., Upchurch, D. M., & Shen, H. (1996). Violence and injury in marital arguments: Risk patterns and gender differences. *American Journal of Public Health*, 86, 35-40.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *State-Trait Anxiety Inventory manual*. Palo Alto, CA: Consulting Psychologists Press.
- Spielberger, C. D., Reheiser, E. C., & Sydeman, S. J. (1995). Measuring the experience, expression, and control of anger. In H. Kassinove (Ed.), *Anger disorders: Definitions, diagnosis, and treatment* (pp. 49-76). Washington, DC: Taylor & Francis.
- Stark, E. (2000). *The liberty crime*. Manuscript in preparation.
- Straus, M. A. (1990). The Conflict Tactics Scale and its critics: An evaluation and new data on validity and reliability. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families* (pp. 49-73). New Brunswick, NJ: Transaction Books.
- Straus, M. A. (1999). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arriaga & S. Oskamp (Eds.), *Violence in intimate relationships* (pp. 17-44). Thousand Oaks, CA: Sage.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scale (CTS-2). *Journal of Family Issues*, 17, 283-316.
- Swan, S. C. (2001, July). *Women who fight back: The development of a theory of women's use of violence in intimate relationships*. Paper presented at the Seventh International Family Violence Research Conference, Portsmouth, NH.
- Swan, S. C., & Gill, K. (1998). *The Resource Utilization Questionnaire*. Unpublished manuscript, Yale University, New Haven, CT.
- Swan, S. C., & Snow, D. L. (2002). A typology of women's use of violence in intimate relationships. *Violence Against Women*, 8, 286-319.

- Telch, C. F., & Lindquist, C. U. (1984). Violent versus nonviolent couples: Comparison of patterns. *Psychotherapy, 21*, 242-248.
- Tjaden, P., & Thoennes, N. (2000). *Extent, nature, and consequences of intimate partner violence*. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.
- Tolman, R. M. (1989). The development of a measure of psychological maltreatment of women by their male partners. *Violence and Victims, 4*, 159-178.
- Tolman, R. M. (1999). The validation of the Psychological Maltreatment of Women Inventory. *Violence and Victims, 14*, 25-35.
- Watson, C. G., Hancock, M., Gearhart, L. P., Malvorh, P., Mendez, C., & Raden, M. A. (1997). A comparison of the symptoms associated with early and late onset alcohol dependence. *Journal of Nervous and Mental Disease, 185*, 507-509.
- White, J. W., & Humphrey, J. A. (1994). Female aggression in heterosexual relationships. *Aggressive Behavior, 20*, 195-202.
- White, J. W., Smith, P. H., Koss, M. P., & Figueredo, A. J. (2000). Intimate partner aggression: What have we learned? Comment on Archer (2000). *Psychological Bulletin, 126*, 690-696.
- Zlotnick, C., Kohn, R., Peterson, J., & Pearlstein, T. (1998). Partner physical victimization in a national sample of American families. *Journal of Interpersonal Violence, 13*, 156-166.

Suzanne C. Swan, Ph.D., is an associate research scientist and director of family violence programs at the Consultation Center and Division of Prevention and Community Research, Department of Psychiatry, Yale University School of Medicine. Dr. Swan's work has focused on research and interventions with women who use violence in intimate relationships, with a particular emphasis on the contextual factors underlying women's violence. Dr. Swan has also conducted research on the role of depression and coping styles in men's use of violence and an empirical examination of the cycle of violence.

David L. Snow, Ph.D., is professor of psychology in the Psychiatry and Child Study Center, Yale University School of Medicine, and director of the Consultation Center and Division of Prevention and Community Research in the Department of Psychiatry. His work has focused extensively on the design and evaluation of preventive interventions and on research aimed at identifying key risk and protective factors predictive of psychological symptoms, substance use, and family violence. He also has special interests in the protective and stress-mediating effects of coping and social support and in methodological and ethical issues in prevention research.