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Sex of Spouse Abuse Offender and Directionality of Abuse as Predictors of Personal Distress, Interpersonal Functioning, and Perceptions of Family Climate

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This study examines perceptions of personal distress, interpersonal functioning and family climate reported by men and women involved in unidirectional versus bidirectional spouse abuse. Participants were 7253 offenders treated by the USAF Family Advocacy Program from 1988 to 1996. Over a quarter of the sample is female and included among them were both unidirectional and bidirectional offenders. Grouping factors for the analysis are gender, directionality of aggression, history of abuse in childhood, history of recidivism, and severity of aggression. Females and offenders raised in abusive homes reported more negative perceptions across the measured spheres. Unidirectional abusers reported more personal distress, but bidirectional abuse had more conflicted family climates. Few differences were noted in offenders' perceptions based on the severity of their abuse or their history of repeat offenses. Tests for interactions yielded no reliable pattern indicating that grouping factors were related to outcomes in an additive fashion.

KEY WORDS: spouse abuse; sex of offender; mutual abuse; severity of abuse; recidivism; childhood history of abuse.

INTRODUCTION

Research has established that women and men are both involved in the aggressive behaviors associated with spousal aggression (Straus & Gelles, 1990). Additionally, there is evidence that women are sometimes the sole offenders in aggressive relationships (Brinkeroff & Lupri, 1988; Kwong *et al*., 1999; Langhinrichsen-Rohling *et al*., 1995; Madgol *et al*., 1997), dispelling the traditional belief that domestic violence is only a male-offender problem. Nevertheless, men and women have dissimilar experiences of aggression perpetrated by spouses. For example, women are much more likely than men to be injured as the recipient of spouse abuse (Archer, 2000). Furthermore, men and women in aggressive marriages (whether victims or perpetrators of spousal aggression) differ in their perceptions of family climate, interpersonal functioning, relationships with nonfamily members, and relationship quality (Lehr & Fitzsimmons, 1991; Lloyd, 1996; Madgol *et al*., 1997; Meredith *et al*., 1986; Nazroo, 1995; Stets & Straus, 1990; Vivian & Langhinrichsen-Rohling, 1994; Zlotnick *et al*., 1998). The primary purpose of the current study is to examine these discrepant perceptions as reported by abusive males and females when the nature of the abuse is "bidirectional," i.e., both spouses are recognized as aggressive toward one another, versus "unidirectional," i.e., where a clear offender and clear victim exist in the aggressive situation. First, we review the relevant literatures.

Gender and Intimate Aggression

Nationally representative studies document that women perpetrate as much or more emotional and physical aggression as men (Stets & Straus, 1989; Straus, 1980; Straus & Gelles, 1986; Straus & Gelles, 1990; Straus & Sweet, 1992). The 1975 National Family Violence Survey (NFVS) reported relationship aggression for 12.1% of men and 11.6% of women. Comparable statistics in the 1985 National Family Violence Resurvey (NFVR)

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indicate 11.3% of men and 12.1% of women report aggression toward intimate partners (Stets & Straus, 1990). In both surveys, for about half of the couples reporting any aggression, both spouses have a perpetrating role. The remaining half is nearly equally divided into two camps, one with males and the other with females as sole perpetrators.

Similar patterns have been observed other studies. For example, Langhinrichsen-Rohling *et al*. (1995) found that 85% of 199 military couples seeking treatment for domestic violence reported both spouses were aggressive. Wives were sole aggressors in only 3% of the couples, whereas for 12% husbands were the sole aggressors. In a Canadian sample of 562 couples, Brinkeroff and Lupri (1988) 213 couples reported some relationship aggression. Of these, 37.5% reported that both spouses were aggressive, whereas 35.2% claimed the wife was the sole aggressor and 27.3% gave that designation to the husband. In a more recent Canadian sample of 707 couples, Kwong *et al*. (1999) found that, among the men reporting any relationship aggression, 18% said it was perpetrated only by their wives/partners, whereas 20% claimed they were sole perpetrators. Among women reporting any aggression, 35% claimed the sole perpetrator role, while 13% identified that role with their male partners. Finally, in a study of 861 adults, Madgol *et al*. (1997) found that 18.6% of the women, but only 5.7% of the men, reported perpetrating *severe* physical aggression (i.e., kicking, biting, hitting with a fist or an object, beating up, choking or strangling, threatening with or using a knife or gun). Of these aggressive women, 59% denied partner use of physical aggression. Only 20% of aggressive men reported similar asymmetry in behavior.

These studies of married couples clearly suggest that women are as likely to perpetrate spousal aggression as are men. Indeed, several studies suggest that, where asymmetry exists, wives perpetrate *more* aggression than husbands. Also consistent across studies is the preponderance of "mutual" aggression in marriage. In virtually all studies of marital aggression, a pattern of aggression involving both spouses described the largest group.

Gender and the Experience of Victimization

Although the empirical generalization noted above is consistent and compelling, its meaning is controversial. Dobash *et al*. (1992) make the legitimate claim that survey research routinely misses the most severe and the most gendered aggression. Research indicates that the experience of victimization differs by gender and that variation in women's rates of aggression matters little to this difference. For example, compared to men in similar situations, women victims of severe relationship aggression experience more distress and anxiety (Madgol *et al*., 1997; Nazroo, 1995), and reveal poorer mental health (McFarlane & Willson, 2000).

Research on links between victimization and depression reveal similar patterns. Vivian and Langhinrichsen-Rohling (1994) studied 57 mutually aggressive married couples and found that wives reported more depressive symptoms than husbands. Stets and Straus (1990) reported that victims of either sex were more likely than nonvictims to report psychosomatic symptoms, high stress, and depression, but victimized women were even more likely than victimized men to experience depression. Zlotnick *et al*. (1998), however, using the National Survey of Families and Households (NSFH) found that victims of spouse abuse were more likely to be depressed than nonvictims, regardless of gender. The bulk of the evidence across these studies, however, suggests strongly that the impact of aggressive victimization on mental health differs for men and women, and that women get the worst of it.

The Impact of Aggression on Family Climate

Research suggests a number of linkages between aggression and family (or marital) climate. The consensus conclusion is that marital aggression is associated with more negative outcomes for both the marriage and the family. Important to the current investigation, however, is the fact that none of these studies, which generally take the couple as the unit of analysis, recognize that within aggressive relationships male and female offenders may differ in their perceptions of outcomes.

Lehr and Fitzsimmons (1991) examined 75 married couples seeking therapy for marital discord, and found that "highly violent" couples were less cohesive (more disengaged) than "nonviolent" couples. Meredith *et al*. (1986) found, in a sample of 304 married participants, that, as the amount of spousal aggression increased, family strengths (e.g., family pride, trust, loyalty, and problem solving competency) decreased. Lloyd (1996) studied 78 married couples at two time points and found that aggressive couples displayed more negative marital interaction than did nonaggressive couples, and that the more consistent the aggressive behavior through time, the more negative the interaction.

Studies also concur that aggression is associated with lower quality conflict management strategies in intimate relationships. Stets (1992) found in a study of 250 respondents involved in pre-marital relationships that low consensus on relationship matters was

associated with aggression. Anglin and Holtzworth-Munroe (1997) studied problem solving strategies in 25 violent-maritally distressed, 10 nonviolent-maritally distressed, and 23 nonviolent–nondistressed couples. Spouses in violent-maritally distressed couples gave less competent responses to posed vignettes than either of the nonviolent groups. In an earlier study, Lloyd (1990) made comparisons of conflict strategies among 25 nondistressed-nonviolent, 19 nondistressed-violent, 14 distressed-nonviolent, and 20 distressed-violent married couples and found that, compared to the other three groups, distressed-violent couples showed less negotiation, more anger and verbal attack, and fewer apologies.

Use of aggression in intimate relationships may also foretell troubled relationships outside of the family. Anglin and Holtzworth-Munroe (1997), for instance, showed that marital violence was associated with incompetent conflict management with friends, the boss, parents, or other relatives. Skill deficits in conflict management evident in maritally aggressive spouses apparently extend beyond marital boundaries. Similarly, Madgol *et al.* (1997) found that men who used severe physical aggression in intimate relationships had fewer social supports and were more likely to be aggressive towards strangers.

Clearly, marital aggression is associated with negative outcomes for marriages and families. Aggressive spouses revealed fewer family strengths, higher personal distress, more negative perceptions of marriage, lower marital quality, greater difficulties handling conflict, and more complications with relationships outside the family. None of these studies, however, directly addressed the prospect that the impact of marital aggression might vary with the gender of the perpetrator.

The current study looks directly for differences in perceptions of abusive males and females in terms of family climate, relationship quality, and interpersonal functioning. Although we are interested in these "raw" gender differences, we search for them within a context that permits the testing of alternate explanations for gender differences. Thus, we ask whether gender differences are generally robust or whether they depend on the character of aggression itself. Does being both aggressor and victim, as opposed to an aggressor only, matter to reports of personal functioning and family climate? Variation in the severity of aggression may also connect with different perceptions reported by an offender. Further, aggressors that have a history of repeated offenses may hold different perceptions compared to those without such a history. Finally, the experience of abuse in childhood could affect these perceptions. These variables may operate independently to predict offender's perceptions, or they may interact with gender to predict perceptions.

METHOD

Participants

All participants in this analysis have been identified as aggressive through an investigation conducted by the United States Air Force (USAF) Family Advocacy Program (FAP), the organization responsible for monitoring and treating aggressive families in the USAF. The data were collected between 1988 and 1996. Cases were included in the current analysis if the met three criteria: (a) they volunteered to complete the measures employed in this study, (b) they provided complete information on the measures, and (c) they had a validity score (see Milner, 1986, 1994) indicating response patterns that were not inconsistent, random, or exaggerated. The total analysis sample was 7253 offenders.

The sample was largely White (64.6%), but 27.1% were Black, 5% were Hispanic, 2.9% were Asian, and .4% were American Indian. Seventy-five percent of the offenders were USAF personnel and the remaining offenders were spouses of USAF personnel. Family SES was a four category variable based on military rank. Junior enlisted pay grades accounted for 81.7% of the cases, 15.2% were "senior enlisted," 2.8% were "company-level officers," and .2% were "field grade officers." Just over 72% of the offenders were male. The average age of offenders was 27.5 years ($SD = 5.92$) and the modal level of education was "high school graduate or GED."

Measures

Unlike the majority of research in this area, the independent variables used in this analysis represent attributes of offenders or cases of abuse that have been referred to the USAF FAP for at least one specific incidence of spouse abuse. Although these variables describe aspects of a particular incident of aggression, they may not fully or accurately characterize the offender over time. More will be said about the implications of this potentiality later.

Independent Variables

Sex of Offender. The primary grouping factor in this analysis is the offender's sex. Although males outnumber females in the sample by nearly three to one, the number of aggressive females available to this analysis is large compared to other clinical samples, a fact that should increase confidence in the gender-based descriptions that emerge.

Directionality of Aggression. FAP clients could be classified as offenders, victims or both. Given our focus on offenders, we constructed a dichotomous variable to differentiate between offenders classified only as an offender and those classified as both an offender and a victim. The former cases were coded "0" and designated "unidirectional aggression," whereas the latter cases were coded "1" and entitled "bidirectional aggression." Of the 7253 offenders, 41.9% were classified as bidirectional aggression. Note that these categories were based only on those incidences of aggression that were investigated by the FAP. Thus, not all offenders classified as "unidirectional" would necessarily retain that designation if a larger sample of their behavior could be observed over time.

Severity. Severity of aggression was a clinical assessment originally measured on a 4-point scale where 1 was reserved for cases that were not substantiated as abusive, 2 indicated low severity, 3 was moderate, and 4 was severe. Trained clinicians used specific criteria to make this designation. Because only substantiated cases were used in the present analysis, and 64.9% of them were classified as low in severity, a dichotomy was constructed with "0" indicating low severity and "1" indicating moderate-to-severe aggression. This variable represented the severity of the incident that brought the offender into the FAP system, but offenders classified as low in severity on the basis of this incident may have perpetrated more severe abuse at other times that was not reported or detected.

Repetition. A time dimension to the continuity of aggression was based on knowledge of offenders' patterns of repeat offense in the FAP system. A dichotomous variable was computed where "0" indicated only one known incident of aggression for an offender, whereas "1" indicated more than one incident over time. For the analysis sample, 22% of the cases were classified as repeat offenders. This dichotomy is a poor substitute for the self-report measures with which respondents indicate how often a particular behavior occurs over a period of time. Nevertheless, a pattern of repeat offence indicates that aggressive behavior has been sustained over time despite interventions. This assessment, however, should not be confused with self-reports of rates of aggressive behavior.

Experience of Abuse in Family of Origin. This dichotomy indicated whether offenders self-reported the occurrence of abuse during their childhoods. A "0" indicated denial, whereas a "1" meant acknowledgment. No further information regarding the abuse was available, so nothing about the type or pattern of abuse is known. Almost one quarter of the offenders (23.8%) indicated that they had experienced abuse in their family of origin.

Dependent Variables

Marital Problems. Although labeled an "Index of Marital Satisfaction" (IMS; Hudson, 1982) this scale actually assesses offender's self-reported marital problems. Hudson (1982) reported strong internal consistency for the IMS ($\alpha = .94$). Scores over 30 were described as "clinically significant," and intervention was recommended for such individuals. The mean score for the sample was 45.3 ($SD = 22.1$) indicating that marital distress was common.

Perceptions of Personal and Interpersonal Functioning. Self-reports of personal distress, unhappiness, problems with family members, and problems from others outside the family were assessed through subscales of the Child Abuse Potential Inventory (CAP; Milner, 1986). *Distress* (mean = 99.5, $SD = 75.6$) tapped psychological difficulties including frustration, sadness, depression, fear, and anger, while *unhappiness* (mean = 19.3, $SD = 14.4$) assessed feelings of happiness, self-worth, and social embeddedness. *Problems with family* (mean = 18.8, $SD =$ 14.2) and *problems from others* (mean = 10.6, $SD = 8.1$) identified, respectively, difficulties getting along in family and other social relationships. Reliability and validity data for these measures are reported in Milner (1986). Coefficients of internal consistency range from adequate to very high (e.g., .60 to .97).

Family Climate. Cohesion, expressiveness, conflict, independence, organization, and control were measured with subscales of the Family Environment Scales (FES; Moos & Moos, 1986). *Cohesion* (mean = 34.7, $SD =$ 19.3) measured commitment and support; *expressiveness* (mean = 45.8, 11.7) assessed expression of feelings; *conflict* (mean = 61.3, $SD = 12.7$) captured expressed anger, aggression, and conflict; *independence* (mean = 39.0, $SD = 14.9$) evaluated family member's assertiveness and ability to make decisions on their own; *organization* (mean = 44.4, $SD = 11.5$) measured organizational and structural planning in family activities; and *control* (mean = 50.9, $SD = 11.1$) assessed whether set rules and routines were used to run the family. Moos and Moos (1986) reported reliability and validity data for these scales. Coefficients of internal consistency were adequate (ranging from .61 to .78). The scores used in this analysis were developed using the standardizing scoring procedure provided by Moos and Moos. Thus, the "norm" for each scale is 50 with a standard deviation of 10. Comparing sample means with the norms reveals that the average couple/family in the current sample, as described by the offender, had more conflict, but less cohesion, expressiveness, independence, and organization than is normative.

Only scores for family control were consistent with the norm.

RESULTS

The primary goal of the present analysis was to examine differences between males and females known to have abused their spouse in terms of their perceptions of marital problems, aspects of personal and interpersonal functioning, and components of family climate. Differences between the genders could be interpreted as differences in the perception of the social and personal context linked with abusive behavior for male and female spouse abusers. We also sought to evaluate potentially competing or interacting explanations for gender differences. To this end we included as additional independent grouping factors the directionality and severity of the abuse, recidivism status (to tap repetitive abuse), and a history of violence in one's family of origin. Knowing that many self-assessments may vary by education level, we controlled for it in all tests.

The first set of analyses focused on the grouping factors themselves and addressed the question of whether male and female offenders differed in terms of these additional grouping factors. The first panel of Table I shows that there were gender differences in every grouping factor. Only the difference indicating that women were less likely than males to adopt the unidirectional pattern of abuse, however, would qualify as "substantial." The *phi* for this 2×2 cross-tabulation, which may be interpreted as a correlation coefficient, is $-.33$. For the other differences, Table I shows that male offenders, compared to female offenders, were more likely to use severe aggression and to have a history of repeat offending, but they were less likely to report growing up in an abusive family. These differences, however, were considerably less substantial.

Table I. Associations for Offender Sex and Direction of Aggression with Other Grouping Factors

	Offender sex								
	Male		Female		Row total				
	N	%	*N*	%	*N*	%	χ^2	*p*	*Phi*
Direction of aggression									
Unidirectional	3573	68.1	640	32.0	4213	58.1	776.3	.000	−.327
Bidirectional	1677	31.9	1363	68.0	3040	41.9			
Severity of aggression									
Low	3288	62.6	1418	70.8	4706	64.9	42.4	.000	.076
Moderate-to-hi	1962	37.4	585	29.2	2547	35.1			
Repetition of aggression									
None known	4023	76.6	1653	82.5	5676	78.3	29.6	.000	.064
At least one repeat	1227	23.4	350	17.5	1577	21.7			
Family of origin violence									
None acknowledged	4055	77.2	1471	73.4	5526	76.2	11.53	.001	−.040
Some acknowledged	1195	22.8	532	26.6	1727	23.8			
	Direction of aggression								
	Unidirectional		Bidirectional						
	N	%	*N*	%					
Severity of aggression									
Low	2634	62.5	2072	68.2	4706	64.9	24.6	.000	−.058
Moderate-to-hi	1579	37.5	968	31.8	2547	35.1			
Repetition of aggression									
None known	3430	81.4	2246	73.9	5676	78.3	58.9	.000	.090
At least one repeat	783	18.6	794	26.1	1577	21.7			
Family of origin violence									
None acknowledged	3268	77.6	2258	74.3	5526	76.2	10.6	.001	−.038
Some acknowledged	945	22.4	782	25.7	1727	23.8			

Table II. Mean Reports of Marital Problems by Offender Sex, Direction of Aggression, Severity of Aggression, Family of Origin Violence, and Repetition of Aggression

Offender sex		Direction of aggression		Severity of aggression		Family of origin violence		Repetition of aggression	
Female	Male	Unidirect	Bidirect	Low	Mod/high	No	Yes	No	Yes
48.69	44.13*	45.88	46.94	45.36	47.46*	46.62	43.20	46.70	46.12

*$p < .05$.

Table I presents three additional cross-tabulations showing the relation between directionality of abuse and the remaining three grouping variables. In each case, the association with directionality is significant, but small. The unidirectional abuse pattern was connected to more severe abuse, but bidirectional abuse was linked with an increased incidence of repeat offense and to an increased likelihood that the offender grew up in an abusive family.

Turning to our substantive analysis, we present one univariate ANOVA and two multivariate ANOVA's (MANOVA). Each analysis used a 2 (gender) × 2 (directionality) × 2 (severity) × 2 (recidivist status) × 2 (abuse history) design. The univariate ANOVA tested differences in marital problems whereas the two MANOVAs tested differences, respectively, on the four CAP subscales and the six FES subscales. Each analysis was initially conducted as a full factorial model, but with five grouping factors, this strategy generated an unwieldy 26 two-way to five-way interaction terms. Looking across these preliminary full-factorial analyses, of the 78 interaction terms tested (across the three models) only 6 were statistically significant. In subsequent explorations of these six interactions, none revealed statistically significant differences at the univariate level with appropriate Bonferroni corrections applied. Next, custom models were tested with only main effects and two-way interactions. Again only seven interactions were statistically significant and univariate follow up tests with the appropriate Bonferroni corrections were nonsignificant. We therefore refocused the analyses on main effects only (controlling for education).

Table II shows means for marital problems within each category of the five independent variables utilized in the univariate ANOVA. Only sex of offender and severity of abuse were related to marital problems. Women reported more marital problems than men, and offenders involved in more severe abuse reported more problems than low severity offenders. These differences were moderate to small in size. The difference between male and female abusers was about one fifth of a standard deviation, and the severity difference was about a tenth of a standard deviation.

A MANOVA was employed to test differences in the psychological and interpersonal problems of offenders as measured by the four CAP subscales (distress, unhappiness, problems with family members, and problems from others). These results are given in Table III. The first panel shows the multivariate-F for each grouping factor, each of which is statistically significant. Univariate-F follow-up tests were designated statistically significant when they met the conservative criterion of a Bonferonni correction. Because this MANOVA had four dependent variables, the Bonferonni correction involved dividing the conventional alpha-level (.05) by 4, yielding and significance criterion of $p < .0125$. In the case of recidivism status, although the multivariate-F was statistically significant, no univariate follow-up tests met the conservative Bonferonni criterion for significance. Note that

Table III. Means for Selected Subscales of the Child Abuse Potential Inventory by Offender Sex, Direction of Aggression, Severity of Aggression, Family of Origin Violence, and Repetition of Aggression

	Offender sex ($F = 114.62^{***}$)		Direction of aggression ($F = 10.86^{***}$)		Severity of aggression ($F = 3.95^{**}$)		Family of origin violence ($F = 25.80^{***}$)		Repetition of aggression ($F = 3.41^{**}$)	
	Female	Male	Unidirect	Bidirect	Low	Mod/high	No	Yes	No	Yes
Distress	134.10	92.55*	115.63	111.02*	111.30	115.35	103.93	122.72*	114.36	112.29
Unhappiness	22.00	18.69*	21.63	20.06*	20.17	21.51*	19.84	21.84*	20.84	20.84
Prob. w/family	20.88	19.34*	19.81	20.41	19.54	20.27	18.65	21.57*	19.82	20.40
Prob. w/others	12.70	10.38*	11.46	11.62	11.47	11.61	10.98	12.10*	11.33	11.75

Note. For F-test, $^{**}p < .01$. $^{***}p < .001$. For mean comparisons, $^{*}p < .0125$, the alpha level required by Bonferroni correction.

Table IV. Means for Selected Subscales of the Family Environment Scale by Offender Sex, Direction of Aggression, Severity of Aggression, Family of Origin Violence, and Repetition of Aggression

	Offender sex ($F = 8.01^{***}$)		Direction of aggression ($F = 9.63^{***}$)		Severity of aggression ($F = 1.06$)		Family of origin violence ($F = 8.69^{***}$)		Repetition of aggression ($F = 4.62^{***}$)	
	Female	Male	Unidirect	Bidirect	Low	Mod/High	No	Yes	No	Yes
Cohesion	32.29	34.78*	33.67	33.40	33.99	33.08	34.36	32.71*	33.65	33.42
Expressiveness	44.87	45.54	45.17	45.24	45.63	44.78	45.51	44.90	45.45	44.96
Conflict	63.83	61.65*	61.74	63.74*	62.63	62.85	61.60	63.88*	62.48	63.00
Independence	38.05	38.83	38.97	37.91*	38.53	38.56	38.70	38.19	38.66	38.22
Organization	44.26	44.31	44.47	44.09	44.33	44.24	44.63	43.94	44.06	44.51
Control	52.30	51.40*	51.73	51.97	51.85	51.85	51.24	52.46*	51.04	52.66*

Note. For F-test, $^{***}p < .001$. For mean comparisons, $^{*}p < .0083$, the alpha level required by Bonferroni correction.

meeting the conservative significance criterion did not imply substantial effect sizes. We attend below not only to the significance of the difference, but also to its size, gauged to the sample standard deviation for the dependent variable.

Female offenders, compared to male offenders, reported more distress and unhappiness, as well as more problems with family and with others outside the family. The most substantial difference was seen for distress, where females' scores were more than a half standard deviation higher than males'. The gender differences for unhappiness and problems with others outside the family were moderate at about a quarter of a standard deviation in each case. Finally, although problems with family differed by gender, the difference was quite small at about a tenth of a standard deviation.

Offenders who had also experienced the victim role in their marriage (called "bidirectional" abusers in this study) reported less distress and unhappiness than offenders involved only in the aggressor role (designated "unidirectional" abusers). Both differences, however, were quite small at approximately 1/10th of a standard deviation of the respective dependent variables.

Only one difference was found by the severity of aggression. Perpetrators of more severe aggression reported greater unhappiness. This difference was quite modest, however, at about 1/10th of a standard deviation.

Offenders who reported violence in their families of origin revealed a consistent pattern of small to moderate differences compared to those who did not report such a history. Family of origin violence was linked to more distress and unhappiness as well as more problems with family members and others outside the family. The larger differences were seen for distress and problems with family members. These differences were moderate at best, at between one fifth and one fourth of a standard deviation. Differences for unhappiness and problems with people outside the family were somewhat smaller at about one seventh of a standard deviation.

Table IV presents results from the second MANOVA that focused on differences in perceived family climates as reported by offenders. The first panel of Table IV shows the multivariate-F values. Of the five independent variables, only the severity of abuse failed to predict differences in perceived family climate. For a MANOVA with six dependent variables, the Bonferonni correction for univariate follow-up tests requires the very conservative p-level of .0083 ($.05/6 = .0083$) for statistical significance.

Female offenders perceived a slightly more negative family climate than male offenders. Female offenders reported less cohesion, but more conflict and control than male offenders. These gender differences, however, were small at a one sixth of a standard deviation or less.

Offenders involved in bidirectional aggression perceived more conflict but less independence in the family than did unidirectional offenders. These differences were also small at one sixth of a standard deviation or less.

Three small differences in perceived family climate were noted between respondents who did and did not report a history of abuse in their families of origin. Offenders with such a history described their current family climates as more conflicted and controlling but less cohesive than individuals without it. These differences ranged from about 1/5th to 1/10th of a standard deviation.

Recidivists compared to nonrecidivists differed only in terms of the value placed on control in the family. Recidivists reported more control than nonrecidivists, but the difference was again small at around one seventh of a standard deviation.

DISCUSSION

Although research clearly confirms that men and women participate in physically aggressive behaviors at

effectively equivalent rates (Hamby & Sugarman, 1999; Langhinrichsen-Rohling *et al*., 1995; Madgol *et al*., 1997; Straus, 1979; Straus & Gelles, 1986; Thompson, 1991), research is equally clear and convincing that their experiences of the aggression varies. In this study we have explored the prospect that aggressive men and women perceive different personal and interpersonal contexts. We arrived at this hypothesis based on previous research documenting, for example, that women report more depression, distress, and anxiety than men whether they are offenders or victims of relationship aggression (Madgol *et al*., 1997; McFarlane & Willson, 2000; Vivian & Langhinrichsen-Rohling, 1994). Our results support our contention. Aggressive women reported considerably more distress and unhappiness than did aggressive men.

Our review of previous research also noted that, although considerable attention has been given to the link between relationship aggression and its effects on the relationship, little attention has been paid to gender differences in perceptions of that relationship context. Comparing aggressive and nonaggressive *couples*, the former show more conflict, more negative interaction, less cohesion, and less effective problem solving strategies (Anglin & Holtzworth-Munroe, 1997; Lehr & Fitzsimmons, 1991; Lloyd, 1990; Lloyd, 1996; Meredith *et al*., 1986). We proposed that aggressive *men* and *women* may have different perceptions of the relationship context. Identifying such differences if they exist would be important not only in their implications for a gendered context of spouse abuse, which might in turn affect men's versus women's motivations for the use of aggression, but also for understanding gender differences for the purpose of intervention. The use of aggression could have different meanings for those with different views. Interventions would need to account for the differences in meaning even where the problem behavior appears similar.

To pursue this logic, we compared men and women in a large and unusually rich dataset collected over an 8-year period. The aggressive men and women represented in this dataset were known to be aggressive not because of a self-report, but because of a clinical investigation conducted by trained professionals. Offenders were compared in terms of their perceptions of marital problems, family climate, and indicators of personal distress and interpersonal functioning. Our analysis did not stop with tests of simple gender differences. Such differences could be attributed to several other factors including the nature of aggression (i.e., its severity, directionality—bidirectional versus unidirectional, and repetition), or the offender's background history of abuse in childhood. Because each of these variables has been found in previous research to vary by the offender's gender, any one would constitute a competing explanation for gender-based findings.

Our findings indicated that, among the five factors examined, gender accounted for the largest and consistent differences in perception across analyses. Female offenders, compared to male offenders, reported more marital problems, more distress and unhappiness, more problems with family members and others outside the family. In terms of family climate, female offenders perceived more conflict and less cohesion, but felt that the family placed more emphasis on control than did male offenders. Taken together, then, women who use aggression against their husbands appear to be more distressed in their personal, marital, and interpersonal relationships both inside and outside the family and they perceive their families in more negative terms than men who use aggression against their wives.

If women are less reactive than men, then this pattern could indicate that it takes more distress for women to resort to aggression. Alternatively, if women are more sensitive to tension in the family, their more distressed and negative views of family climate in abusive marriages could represent greater accuracy in assessments of family functioning. The fact that women typically do more of the family tasks associated with childcare, housework, and maintenance of outside relationships would suggest more support for the second alternative. Men may be more aware of "trigger" events, but less aware of the general family context. Both suggestions, however, seem to be over-interpretations unless they are contrasted with more normative family climates. Recall that both aggressive men and women reported substantially more negative marital and family contexts than are normative in the general population. The current important point is that female offenders' perceptions are even more negative than those of seemingly similar male offenders. It is not possible to know whether these differences in perception precede and, thus, help explain women's or men's aggressive behavior because the current data were all collected *after* the use of aggression. Thus, these self-reported perceptions may in part reflect gendered reactions to the use of aggression or to being "caught" and referred to an agency for spouse abuse. Nevertheless, this study presents evidence of a substantial gender difference among spouse abusers in reported personal and marital distress and in perceptions of family climate.

A final interpretation of our findings with respect to gender could be related to the findings in previous research that indicate women are more likely than men to receive an injury from an aggressive partner (Kwong *et al*., 1999; Nazroo, 1995; Stets & Straus, 1990). Women suffer more physical injuries than men and they report greater

psychological impact as well. These experiences could lead to a "fear factor" affecting both personal functioning and perceptions of family climate. This "fear factor" could amplify sensitivity to negative situations for women, and cause them to perceive situations as more disturbing than men do. Although plausible, support for this interpretation is slim in this sample. If valid, one would expect an offender sex by directionality of abuse interaction, because women involved in unidirectional abuse would not be expected to encounter the same fear-inducing conditions as women who are both offenders and victims. This interaction, however, was not significant.

We included four other independent variables to examine competing explanations of gender differences or to add context to our findings. The directionality of aggression was the first of these variables. We expected unidirectional aggressors and bidirectional aggressors to differ substantially in their views of personal, interpersonal and family factors, regardless of their gender. We were surprised, however, to find that, although some differences were found and all of them were in the expected direction, none were large differences. Unidirectional aggressors reported a little more personal distress and unhappiness, and felt that their families placed a slightly greater emphasis on independence than did bidirectional offenders. Bidirectional offenders, however, reported slightly higher levels of conflict in their families. We believe that the small differences, and our surprise by them, can be connected to an inaccurate assumption about the meaning of the categories. Our initial assumption about unidirectional abuse was that it would be a more serious form of abuse, whereas bidirectional abuse would be more like the "common couple abuse" described by Johnson (1995) as generally spontaneous, nonescalating, and less severe. This was an unwarranted assumption. Johnson's more recent typology of intimate abuse (Johnson & Ferraro, 2000) suggests the full range of aggressive behavior and motivations for abuse can be found in both unidirectional and bidirectional abuse patterns. Consistent with this thinking, both unidirectional and bidirectional abusers in the current sample reveal the full range of severity and are well represented among both recidivists and nonrecidivists as well as among cases with and without a history of childhood abuse. From this revised perspective on the meaning of the directionality of abuse, expectations about the size of group differences would clearly be reduced.

The difference in perceived levels of family conflict between unidirectional and bidirectional offenders is of interest. It suggests that couples where both spouses participate in aggressive behavior are somewhat more organized around dispute and conflict processes, whereas couples with a unidirectional offender may use relatively less open conflict, perhaps to minimize trigger events. Again, however, it is necessary to emphasize that both couple types report considerably more conflict than is normative in couples. The between-group difference must be interpreted with this in mind.

Severity of aggression and recidivism status did little to differentiate offenders in terms of their reports of personal or interpersonal difficulties or their perceptions of their marriage or family climates. The only differences found by severity of aggression indicated that offenders whose abuse was moderate to high in severity reported more troubled marriages and were more unhappy than those with less severe abuse. Repeat offenders revealed slightly higher levels of family control than one-time offenders.

Although a prime motive for including the directionality, severity, and repetition of abuse as well as offenders' history of abuse in childhood was to examine their main effects, an equally important goal was to examine whether these factors interacted with gender to predict offenders' perceptions. Interactions would indicate that the effect of gender on reported perceptions was not simple, but depended on the behavior or history of the male or female offender. In the case of marital abuse, however, no interactions involving the offender's gender and another variable occurred. The few, seemingly random, interactions that were found at a multivariate level did not involve gender and were not actually statistically significant at the univariate level. What this result means is that the patterns of "effect" noted in this analysis are additive. Thus, the effects of the directionality, severity, and repetition of abuse as well as respondents' abuse history can be expected to be found in approximately similar levels for both male and female offenders.

Limitations

Our study was able to address an area that has not been thoroughly examined (i.e., family climate), and had the advantage of a large sample with unusually large number of female offenders. Although large-scale survey studies have been criticized for their failure to include the more severe forms of aggression, 35% of the current sample consisted of offenders involved in aggression that was moderate to severe. Also important is the fact that *all* participants in the current study were known offenders substantiated through a clinical investigation for spousal abuse. Most studies of spouse abuse utilize self-reports of relationship aggression. Therefore, this study offers an important and atypical window onto the issues under consideration.

This study is not without limitations, however. In fact, there are four important ones that may affect the generalizability of the result. The first two limitations derive from the fact that the data analyzed for this study were originally collected for clinical rather than research purposes. As a secondary analysis of a dataset collected originally for other purposes, the investigators were not able to tailor the data collection procedures to the research questions, nor was a control group of comparable nonaggressive married respondents available for comparison with this aggressive sample.

A third limitation is that, although we treat our independent variables as characteristics of the offender, those variables representing aspects of the abuse itself (directionality and severity) are less a reflection of the abuser than the incident of abuse that brought the offender to the attention of the USAF FAP. Most studies classify an offender by his/her most severe (self-reported) aggression. The present study has only the severity rating associated with the presenting incident. This incident may or may not represent an offender's highest severity aggression. Similarly, bidirectional abuse involves experience in the role of aggressor and victim. Offenders classified here as unidirectional abusers may have experience in the role of victim from unreported (unknown) incidents of abuse. Further, the recidivism variable is based on substantiated subsequent incidents of abuse. The recidivism categories accurately tag cases that return to the FAP with a subsequent known incident of abuse. As an indicator of the repetition of the behavior, however, this variable is at best a proxy. Some offenders here classified as nonrecidivists have likely re-offended their spouses unbeknownst to the FAP. Thus, three of the independent variables (directionality, severity, and recidivism) each consist of two categories that may not be equally "clean." Thus, the results obtained in the current analyses must be interpreted with a degree of caution. However, the direction that this caution should take could be debated. We would suggest that this measurement problem increases Type II error (failure to find real differences) rather than Type I error (getting results that do not actually exist) and may help account for the rarity of effects seen for these three independent variables. In other words, we would speculate that the true effect sizes seen for directionality, severity and recidivism are underestimated in the current study. Replication will be important for the future.

Although the current study is based on a large sample, it was only 28% of the population of cases available through the FAP database. We therefore compared the analysis sample and the excluded sample in terms of age, gender, and race, as well as whether there was a disproportionate loss of military members versus civilian spouses. In terms of age, the analysis sample was slightly younger than the population. By gender, the analysis sample retained slightly more males than females, probably because the analysis sample also retained more active duty military members (who were predominantly male) than civilian spouses. In terms of race, the analysis sample slightly over-represented Whites. Given that these comparisons between the analysis sample and the excluded sample compared only two groups, each with thousands of members, and since all statistical procedures are sensitive to sample size, we were not surprised by the existence of significant differences between the subsamples. Given the very small differences, however, we felt confident in the generalizability our out results to the population from which the sample was selected.

This confidence, however, does not speak to the question of whether the results can be generalized beyond the USAF. Because the participants were all either military members or the spouses of military members, this question deserves review. Where our analyses were designed to replicate previous research conducted with civilians, our findings were consistent with the outcomes of other studies, raising confidence in the generalizability of our results. Compared to the general population, however, any military sample is likely to over-represent youth and males. The current one is certainly no exception. Yet, spouse abuse is largely a phenomenon of youth and although it is not committed exclusively by males, the literature focuses on the male offender much more than the female offender. Thus the youth of the current sample is not a true limitation. Finally, the availability of over 2000 female offenders, over 600 of whom are classified as "unidirectional" abusers, makes results obtained with the current sample both rare and valuable despite its other limitations.

CONCLUSIONS

This study adds weight to the notion that male and female spouse abuse offenders perceive a subtly different personal, interpersonal, and family context. The differences found in this analysis indicate that female offenders perceive a more distressed, less positive context at all levels. Specifically, compared to male offenders, they report greater personal distress, more unhappiness, and more problems with family members and others outside the family. They claim more marital problems, and perceive a family climate that is less cohesive, more controlling, and more conflictual than do male offenders. We interpreted these gender differences as evidence that male and female offenders may place different meanings on their abusive

behavior or may act aggressively out of differing initiating conditions. The differences seen by gender appear to be more powerful than differences noted by the directionality of abuse, the severity of abuse, or the recidivism status of the offender. The experience of abuse in one's childhood, however, also yielded a number of differences. Offenders reporting such experience also claimed more negative outcomes than those without it. Gender did not statistically interact with any of the other variables in the analysis indicating that the effects of the five independent variables are additive.

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