Violence, Separation, and Loss in the Families of Origin of Domestically Violent Men

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The intergenerational transmission of domestic violence is most commonly studied from the perspective of social learning theory, with the consequence that variables external to that perspective are often overlooked. This study was undertaken in an effort to broaden the theoretical basis of intergenerational transmission of domestic violence by assessing if incorporating variables from attachment theory (measures of separation and loss) with exposure to violence in family of origin would increase predictive power of a multiple regression model. Subjects ($N = 74$) were men in treatment for domestic violence. Separation and loss variables were found to exert effects on respondents' violent behavior greater than or comparable to those from exposure to family of origin violence. Findings supported a need to broaden theoretical views of the etiology of domestic violence perpetration.

KEY WORDS: domestic violence; intergenerational transmission; attachment; theories of violence.

The intergenerational transmission of domestic violence has been one of the most commonly reported influences in domestic violence in adulthood. Research conducted on the intergenerational transmission of domestic violence has framed much of its inquiry in the context of social learning theory. These mechanisms of the intergenerational transmission of violence are often described in terms of modeling in the acquisition of aggressive behavior. Accordingly, this inquiry has focused attention on the residual learned effects of family of origin violence, with less attention paid to other possible avenues of family of origin influence. Social learning theory (Bandura, 1969, 1977, 1986) posits that observing the behavior of significant or influential others generates ideas of how new behaviors are performed. These ideas and observations are organized as guides for further actions. Modeled behavior is more likely to be adopted if the behavior is perceived as resulting in desirable outcomes. Observing violence in one's family of origin, then, creates ideas and norms about how, when, and towards whom aggression is

appropriate. Violent behavior is seen as being mediated by cognitive and self-reflective functions. Early studies found a high frequency of violence in the families of origin of domestically violent men (Gayford, 1975; Rosenbaum & O'Leary, 1981; Roy, 1977; Straus *et al.*, 1980). Other studies (Carrol, 1980; Gelles, 1974) found associations between child abuse in the family of origin and domestic violence in the current relationship for both men and women (as victims). Kalmus (1984), in a reanalysis of the Straus *et al.* (1980) national sample, found that both exposure to child abuse and observation of interparental spousal violence were identified as contributing to the probability of marital aggression for men and women.

Although consistently significant, the effect size of social learning-derived intergenerational transmission variables is often small. Holtzworth-Munroe *et al.* (1997) observed, in their review of the research, that the correlations found between family of origin violence and current partner violence were not strong and may be mediated by other variables. Studies of domestic violence based on social learning theory have most often examined how specific violent behaviors in the family of origin (parental spousal violence and child abuse) may be related to the enactment of violence in contemporary relationships. In spite of its many contributions, this theoretical focus has

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constrained inquiry into a broader range of psychosocial variables. The companion literature on the intergenerational transmission of child abuse and youth violence has explored a much wider range of family of origin variables (Corvo, 1997; Sheridan, 1995). Prominent among these possible family of origin influences are variables which are focal in attachment theory (e.g., neglect, erratic caregiving, separation from caregivers). It is clear that the variables derivable from social learning theory can account for only a portion of the intergenerational transmission effects and that the companion literature on child abuse and youth violence suggest strongly the need for additional theoretical scope. Zeanah and Zeanah (1989) suggested that attachment theory provided a redefinition of intergenerational patterns of child maltreatment beyond the specific transmission of abuse per se to a broader theme of parent–child relationships. It is proposed that the same potential to broaden our understanding of domestic violence is available through exploring variables derived from attachment theory as they may relate to intergenerational transmission of clusters of risk.

Although attachment theory has been used to study male violence toward female intimates (Kessner *et al.*, 1997; Kessner & McKenry, 1998), it has received comparatively little attention in the development of a broader model of intergenerational transmission of domestic violence.

John Bowlby's trilogy Attachment and Loss (1969, 1973, 1980) describes the development of attachment theory. The framework of attachment theory addresses those classes of behavior, relationships, and cognitive schemes that correspond to the emergence of (or distortion of) a distinct competent self through bonding and other primary relational processes. Attachment behavior refers to the seeking, attaining, or retaining of proximity to a preferred and differentiated caregiver. Attachment in humans is seen as being similar to that of nonhuman mammals and that the preference infants display for particular caregivers is similar to imprinting responses in subhumans. The function of attachment behavior is rooted in an evolutionarily-rewarded means of protecting the young from predators. This behavior is expressive of an instinctual, evolutionarily-shaped capacity which is mediated by experience, most importantly, early in individual development. Healthy development involves the creation of positive emotional bonds, initially between the child and parents and eventually between adults. Attachment processes are homeostatic. That is, attachment behavior becomes modified in response to success or failure in reaching goals (proximity to, and responsiveness of, the caregiver).

Individuals develop internal representations of self-competency in proximity-seeking and careseeking behav-iors as well as representations of the attachment figure(s). Attachment behavior is activated by real or threatened separation or loss, or by the unresponsiveness of the attachment figure. The attachment bond, once established, is relatively enduring. Threats to the bond arouse extreme anxiety and anger. The loss of the bond gives rise to anger, sorrow, and grief. The emotional development of the individual and their ability to successfully establish relational bonds is powerfully impacted by the context of their attachment processes in early development. Being raised by unavailable or erratic caregivers creates a pattern of attachment in intimate relationships that is characterized by hypersensitivity to separation; insecure, anxious emotional postures; and difficulty in differentiating and responding to care seeking and caregiving behavior. The emotional consequences of disturbed attachment in the family of origin, then, create a deficit in the individual's ability to respond appropriately and flexibly to the demands and tasks required in their contemporary intimate relationships.

Bowlby (1984) also outlined an interpretive protocol of family violence derived from attachment theory, which moves toward a conceptualization of child abuse and spousal violence as an expression of similar processes. The relationships where family violence is most intense (parent-to-child and spouse-to-spouse) are also the central relationships in attachment theory. Those relationships are concerned with reproduction and survival of the young, and therefore, it is hypothesized, are powerfully influenced by evolutionary and genetic forces. Family violence is proposed to be the distorted and exaggerated version of behavior that may have been evolutionarily adaptive. These disordered attachment patterns, which arise between parents and children can continue to the next generation. Violence between spouses is seen to arise from similar disordered patterns of attachment.

This study was undertaken as part of an effort to broaden the theoretical basis of intergenerational transmission models of family violence. Variables measuring separation and loss and violence in the family of origin were obtained from a sample of men in treatment for family violence. Since intergenerational transmission models of family violence are primarily applied to analyses of probability of occurrence, an analysis of perpetrator samples (where the probability of occurrence is, by definition, 100%) requires a correlational analysis. This study had two specific analytical purposes (1) preliminarily, to assess if the intergenerational transmission process has validity for determining correlations of degree of exposure to severity of current behavior in a perpetrator sample and (2) primarily, to assess if incorporating variables derived from attachment theory with exposure to violence in

family of origin would increase predictive power of a multiple regression model of intergenerational transmission.

METHODS

Subjects

Subjects were men seeking or referred for treatment at a domestic violence treatment program in a large midwestern city. Data collection took place over a three-month period, coinciding with scheduled days of intake. All clients who were not screened on the agency's established criteria of psychopathology (e.g., schizophrenia) and, therefore, not eligible for treatment, and who agreed to participate, were included in the study. Only two clients declined to participate. About two-thirds of the clients were referred to the treatment program (often mandated as a condition of probation) by municipal courts in the region, most from the large central city court. The remainder were referred by other agencies or were self-referred. Power analysis to determine sample size for the study generated a minimum requirement of 70 cases. Seventy-four were interviewed.

Data Collection

The data collection instrument was a questionnaire developed by the author and consisted of items identifying early life experiences of separation and loss, erratic caregiving, violence in the family of origin, and violence in the subjects' current spousal or cohabiting relationship (copies are available by writing to the author). Measures of violence (both contemporary and in the family of origin) were obtained from the Conflict Tactics Scale (Straus, 1979).

A potential threat to internal validity in this study is that posed by retrospective reporting of violence in the family of origin being biased by the context of current circumstances. It is difficult to predict the direction of that bias in any individual case: justifying current behavior by attribution to early life experience or reluctance to report early life events. Della Femina *et al*. (1990) found adults reluctant and unwilling to report their own documented victimization as children. Their study of adult former delinquents, whose old records indicated severe abuse in childhood, showed that over 25% of the subjects denied any experience of abuse. They concluded, ". . . that among former delinquents there is tendency in adulthood to minimize or totally deny having experienced serious physical abuse in childhood . . . It would appear that even in populations in which one might expect the opposite

to occur (i.e., an exaggeration of past abuse in order to elicit sympathy), this does not seem to happen." (230). Herzberger and Tennen (1983) identified the psychological mechanisms of "interpretive control" and "selective inattention" as factors in the minimizing or denial of the experience of child abuse. By reconceptualizing abuse experiences and/or by repressing emotional awareness, victims may more easily manage the experience of abuse. An unwillingness to remember, acknowledge, or express past abuse appears to be the more likely direction of bias in reporting. One might expect, then, that findings of the effects of violence, and other painful events, in the family of origin for this study's sample would be conservative.

Measures of family violence and separation and loss used in this study are, as much as possible, behaviorally defined or defined by specific events. Interpretation of early life events is kept to a minimum in an effort to reduce retrospective distortion. Specific life events (e.g., death of a parent) are less subject to distortion than interpretation of events (e.g., respondent's assessment of parental attitudes toward the respondent). The emotional and psychological consequences which may occur as a result of early life events or experiences are assumed conceptually as intervening variables, though not measured.

Measures

The Conflict Tactics Scale (CTS)

The CTS (Straus, 1979) has been the most commonly used instrument in family violence research. The behaviors, which are contained in its constituent items, are described as methods of resolving disputes between any pair of family members. The CTS contains three sub-scales "reasoning," "verbal aggression," and "violence" (physical aggression). In light of recent revisions in the CTS (Straus *et al*., 1996) the version used in this study has become known as "CTS1."

The CTS was used in this study to obtain measures for current physical violence as well as for physical violence in the family of origin.

The internal consistency reliability of the CTS sub-scales, as used in this study, showed alpha coefficients ranging from .77 to .92 for various subscales and applications. These alphas compare favorably with those found in other studies (Straus, 1979; Straus *et al*., 1996).

CTS scores for current violence in this treatment sample demonstrated adequate range (0–33) and correlational "robustness" with other variables. In light of Straus's (1979) original caution against the use of the CTS in correlational statistics, because of skewed distributions of violence scores in normal populations (although acts

of aggression are more common in a treatment sample), procedures for data transformation were performed. An index of skewness of 1.6 was computed for the sample. The generally acceptable range of skewness for correlational analysis is −.5 to +.5. The multiple regression analysis of skewed data is possible when the data are mathematically transformed into a more normal distribution. Methods of transforming data that are skewed beyond normalcy include squaring the values, taking the square root of the values, and logarithmically transforming the values (Norusis, 1990, 1997). Data transformations were performed and compared to assess which might better satisfy the requirements for a normal distribution of scores. A logarithmic transformation, although producing the lowest skewness index, exaggerated both tails of the distribution. Taking the square root of the scores produced an index of skewness of .59 and produced a histogram which most conformed with the normal distribution; this transformation of current violence CTS scores was used in all subsequent correlational analysis. Comparisons of transformed and untransformed correlations did not reveal substantial changes in power. No correlations changed direction. In sum, the assumption of normality required for regression analysis was met without distorting the data.

Level of Spousal Family Violence in Currently Violent Relationships

These measures were obtained from the subjects' reported scores on the violence subscale of the CTS for spousal violence and indicate the number of acts of violence perpetrated in the past year.

Level of Parental Spousal Violence

Subjects' retrospective responses to CTS are used for both mother to father and father to mother violence. Response categories used are never, rarely, sometimes, often, and very often. This is a different metric than the enumerative categories for current violence.

Level of Child Abuse Experienced by the Subject in the Family of Origin

Client retrospective responses to CTS for abuse by father and abuse by mother. Response categories are the same as for retrospective reporting of level of parental spousal violence.

Separation and Loss Events

This is operationally defined by a series of questions about death of family members, divorce of parents, parental absence, and respondent's removal or absence from the home. Each item was initially considered a separate independent variable. Dichotomous variables were coded "0" or "1" and entered into the model as point biserial correlations.

RESULTS

Characteristics of the Sample

Data were collected on respondent's age, race, income, years of education, marital status, city/suburb residence, and Michigan Alcohol Screening Test (MAST) score.

Age: The youngest client in the sample was 20 and the oldest was 57 years old. The mean age was 32.6 years.

Race: A total of 36 (48.6%) respondents described themselves as White; 35 (47.3%) as Black; and 3 (4.1%) as Hispanic.

Years of education: The range of years of education was between 8 and 18, with a mean of 12.2. Almost 25% of the sample had additional years of education beyond high school.

Marital status: A total of 34 (45.9%) respondents were married; 4 (5.4%) were divorced; 6 (8.1%) were married, but separated; 14 (18.9%) were living together; and 16 (21.6%) were classified as "other." This last category captures an array of marital and relational arrangements which include multiple partners, cohabitation with divorced partners, etc.

City/suburb residence: A total of 51.4% (38) of the respondents lived in the large central city of the region; 48.6% (36) lived in the suburbs. Suburban residence was most often in older, inner-ring suburbs.

Michigan Alcohol Screening Test (MAST): The interpretation of MAST scores can be variable. Cutting scores for possible alcoholism may be as low as 4 or 5 or as high as 10 (Keyser and Sweetland, 1985). In this sample, the concurrence of alcohol abuse and family violence was evident. Over 60% of the sample had MAST scores of 5 or greater; 38% had scores in excess of 10. The mean score was 11.8 with a standard deviation of 12.7.

Data Analysis

Important to this analysis is the correlation between the independent variables to the severity of current levels

of spousal family violence. The underlying principle of intergenerational transmission has largely been applied to studies of incidence (likelihood of being violent) not to degree of effect (correlations between degrees of severity). In its simplest form, the intergenerational transmission model provides that growing up in a violent home increases the probability that one will be violent in one's subsequent family of procreation or other intimate relationships. The broader model suggested here assumes, in part, that the intergenerational transmission effect can predict levels of violent behavior when levels of violence in the family of origin are known. Following a series of bivariate correlations to determine which variables to include in the model, multiple regression analysis was used to test several combinations of predictor variables.

Descriptive Statistics

Family Violence

Levels of current violence measured by the CTS, as used here, can range from raw scores of 0 to 48. Two measures of the degree of abuse respondents experienced early in their lives were used: one for abuse by fathers and one for abuse by mothers. CTS scores were used for these measures, but they are not on the same metric as those for current violence. That is, retrospective responses are based on respondents' recall of frequency of types of violent acts ("never" to "very often") during childhood. Respondents also reported violence between their parents in two sets of CTS scores. As with reports of child abuse, a five-point metric of "never" to "very often" was used. Table I shows the array of CTS scores for the sample.

The score for violence in the current relationship indicates a mean of a minimum of 7.5 acts of violence perpetrated by respondents toward their partners in the prior 12 months. Retrospective reports of parental abusive and violent behavior, although more difficult to interpret numerically, indicate that such observing or experiencing such parental behavior was a more than "rare" experience.

Table I. Conflict Tactics Scale Scores

	Range	Mean	SD
Current relationship	0–33	7.5	7.2
Abuse by father	0–29	3.9	5.1
Abuse by mother	0–18	3.9	3.9
Paternal spousal violence	0–27	4.3	6.6
Maternal spousal violence	0–17	2.8	4.4

Table II. Separation and Loss in the Family of Origin

	N(%)*		
	Yes	No	MSG/NA
Father ever live away from family	12 (16)	64 (76)	6(.8)
Mother ever live away from family	8 (11)	64 (87)	2(2)
Respondent ever live away from family	24 (32)	50 (68)	
Parental divorce	26 (35)	45 (61)	3(4)
Respondent placed in institution	6 (8)	68 (92)	
Respondent placed in foster family	3 (4)	71 (96)	
Serious paternal illness	10 (14)	60 (81)	4(5)
Serious maternal illness	8 (11)	65 (88)	1(1)
Deaths in nuclear family	12 (16)	62 (84)	
Death of other close relatives	37 (50)	37 (50)	
Respondent hospitalized	29 (39)	45 (61)	
	MEAN	SD	
# of months respondent lived away	13.4	28.1	
# of weeks respondent was hospitalized	1.8	6.6	
Total # of separation and loss events	3.7	3	

*percentages rounded.

Separation and Loss in the Family of Origin

Variables measuring separation and loss are, prior to age 18: (1) number of times respondent's father lived away from the family; (2) number of times respondent's mother lived away from the family; (3) number of times respondent lived away from the family; (4) number of months respondent lived away from the family; (5) parental divorce; (6) was the respondent ever placed in an institution or foster home; (7) number of times respondent's father was seriously ill; (8) number of times respondent's mother was seriously ill; (9) deaths in the family; and (10) number of times respondent was hospitalized. Table II summarizes separation and loss events.

Eight respondents (11%) reported that their mothers had lived away from the family at least once; two respondents (3%) reported their mothers had lived away four times. Twenty-four (32%) respondents reported living away from their families at least once and nine (14%) lived away two or more times. The mean number of months that the respondents were away from their families was 13.4 with a standard deviation of 28.1. Six (8%) respondents lived in an institution at some point during their childhood. Ten (14%) respondents reported at least one incident of serious or life-threatening paternal illness. The number of times respondents were hospitalized ranged from 1 to 8. Twenty-nine (39%) reported at least one hospitalization during their childhood. Twenty-six (35%) respondents reported parental divorce; another thirteen (17%) reported subsequent divorces after their mothers and fathers had formed other, new marriages. Twelve (16%) respondents

reported that their fathers had lived away from home at least once. Three (4%) respondents had been placed with a foster family during their childhood. Twelve (16%) respondents indicated that they had an immediate family member die. These were deaths of mother, father, or sibling. Thirty-seven (50%) respondents reported that other close (nonnuclear) family members had died. Serious or life-threatening maternal illness was reported by eight (11%) respondents. Of those respondents who were hospitalized as children, the mean length of time hospitalized was 5 weeks.

A composite variable of separation and loss was constructed from unweighted constituent variables and subsequently tabulated by total number of events. The constituent variables are parental divorce; number of times respondent lived away from the home; number of times a parent lived away from the home; number of deaths in the family; number of events of serious parental illness; and number of times respondent was hospitalized. Scores ranged from 0 to 12 events, with a mean number of events of 3.7 and a standard deviation of 3.

Bivariate Correlations

Those variables which do not demonstrate statistical significance of at least $p = .05$ in their correlations with current levels of domestic violence are excluded from further analysis. The correlation coefficients for the remaining variables are shown in Tables III and IV.

The range of statistically significant correlations for separation and loss events is from a rather weak .20 (number of times mother lived away) to a stronger .46 (total separation and loss events). Correlations with individual separation and loss event variables lend some support to the hypothesized intergenerational framework. However, the stronger correlation of an aggregate measure of separation and loss (in fact demonstrating a stronger correlation than do child abuse or parental spousal violence in the family of origin) provides not only adequate support to the hypothesis, but also begins to suggest how cumulative effects of separation and loss may impact violent behavior. In part, the basis for constructing this

Table III. Correlation Coefficients for Violence in the Family of Origin

Current levels of domestic violence		
Abuse of respondent by father	.39	$p = .000$
Abuse of respondent by mother	.39	$p = .001$
Father to mother spousal violence	.39	$p = .001$
Mother to father spousal violence	.23	$p = .03$

Table IV. Correlation Coefficients for Separation and Loss Events in the Family of Origin

Current levels of domestic violence		
# Times mother lived away	.20	$p = .05$
# Times respondent lived away	.32	$p = .003$
# Months respondent lived away	.24	$p = .02$
Institutional placement	.22	$p = .03$
Serious paternal illness	.28	$p = .01$
# Times respondent hospitalized	.28	$p = .008$
Total separation and loss events	.46	$p = .000$

composite measure lies in the theoretical specifications of "attachment" as an underlying process and "separation and loss" as disruptions of that process. Disruptions in attachment through separation and loss events are seen as promoting many similar effects whatever the circumstances of the particular disruptive event.

In general, the correlations of family of origin violence and separation and loss events with levels of current violence are moderate. Although moderate, these correlations are adequate to support a hypothesized positive relationship between degree of exposure to certain conditions in the family of origin and severity of current spousal violence. Taken as separate measures each variable is only modestly associated with current levels of spousal family violence. This is consistent with a need for broadening the intergenerational model in order to include additional explanatory variables.

Multiple Regression Analysis

A simultaneous entry of all remaining variables was performed. A histogram of the standardized residuals was produced and no outliers were identified. The distribution of standardized residuals appeared to closely conform to a normal curve. Scatterplots for the standardized residuals were plotted for predicted values of current levels of violence and for each remaining independent variable. The distribution of standardized residuals for predicted values of current levels of violence demonstrated no systematic pattern, indicating overall equality of variance at each level of the dependent variable. The plots of residuals for family of origin violence and the aggregate separation and loss variable also demonstrated equality of variance. The other separation and loss variables showed a scatter of standardized residual values for the dependent variable indicative of skewed distributions which made the assessment of heteroscedasticity difficult. It appeared that error in predicting the dependent variable did not vary with increased values of the independent variables, but

Table V. Regression of Current Violence on Family of Origin Violence (Child Abuse and Parental Spousal Violence)

	R	R2	R2 change	Significant change	BETA
Abuse of respondent by mother	.39	.16	.16	.001	.31
Abuse of respondent by father	.53	.28	.12	.002	.30
Father to mother spousal violence	.58	.34	.06	.03	.25

Table VII. Regression of Current Violence on Family of Origin Violence and Separation and Loss Interaction

	R	R2	R2 change	Significant change	B	Beta
Family of origin violence	.52	.27	.27	.000	.074	.83
Separation and loss events	.58	.33	.06	.000	.226	.65
Interaction term	.67	.45	.12	.000	−.009	−.77

that the larger values of the independent variables, being skewed, produced fewer residuals to be examined. In effect, although skewed, the data correlate in roughly linear fashion and the equality of variance assumption does not suffer greatly. The following regression analyses were performed: 1) regression (stepwise) of current violence on family of origin violence (child abuse and parental spousal violence); 2) construction (stepwise) of best predictor model including both family of origin violence and separation and loss variables; 3) exploration of interactive effects between family of origin violence and separation and loss on current violence.

The first regression analysis was performed to assess the relative contributions of different forms of exposure to violence in the family of origin (see Table V).

The regression analysis excluded mother to father spousal violence. The child abuse variables are slightly more strongly correlated with current levels of violence than is paternal spousal violence (Betas = .31 and .30 vs. .25), though paternal spousal violence does increases the degree of explained variance by .06. This suggests a small additive relationship between child abuse and paternal spousal violence on current levels of spousal family violence.

Next, a number of regression models were developed and tested using various combinations of family of origin violence and separation and loss variables. When entering family of origin violence and separation and loss variables, the regression model that best predicted current levels of spousal family violence (see Table VI) included a

Table VI. Regression of Current Violence on all Family of Origin Variables with Composite Variables Substituted

	R	R2	R2 change	Significant change	Beta
Parental physical abuse*	.52	.27	.27	.000	.33
Separation and loss events	.58	.34	.07	.02	.25

*Abuse by father and mother

composite variable of abuse of respondent by both mother and father.

Entering "separation and loss events" into the model does not increase the overall predictive power of the model beyond the violence only model. This leaves the question of how separation and loss may interact with exposure to family of origin violence in predicting adult domestic violence. The method used to assess interactive effects first required computing a composite family of origin family violence variable. This composite variable contained family of origin child abuse CTS scores and parental spousal violence CTS scores. The test for interactive effects, then, involved computing an interaction term for family of origin violence (child abuse + parental spousal violence) x separation and loss events. Variables were entered hierarchically into the equations. Table VII shows the results.

The inclusion of the interaction term in the model produced a significant R2 change of .12, suggesting the presence of an interaction effect. The unstandardized regression coefficient (B) for the interaction term is −.009 indicating that as the number of separation and loss events increase, the slope of family of origin violence on current violence goes down. This suggests that the effects of family of origin violence on current spousal family violence vary with the number of separation and loss events, the effects being greater as the number of separation and loss events decrease. Separation and loss events, then, may contribute most to current levels of violence where family of origin violence is lowest. The size of the Beta (−.77) could be indicative of multicolinearity effects, however, the interaction term is tolerated at >.20 in the diagnostics for the equation.

DISCUSSION

In the regression analyses of the data, the effects of maternal spousal violence are excluded from the model by paternal spousal violence. Subsequent analyses of family of origin violence, in various permutations of predictor models, demonstrated, however, greater effects for

parental child abuse upon current levels of violence than did paternal spousal violence. It would seem that child abuse, regardless of the gender of the parent, exerts a greater effect upon severity of current violence than does parental spousal violence.

The interpretation of the effects of discrete separation and loss events upon current levels of violence is less clear. Fewer than 14% of respondents reported no separation and loss events; 52% reported 3 or more; the mean number was 3.7. Most strongly associated with current levels of violence were number of times respondent lived away from home ($r = .32$); number of times respondent was hospitalized ($r = .28$); and serious paternal illness ($r = .28$). As discrete variables, parental divorce, number of caregiver changes, death of family members, institutional or foster placement, and number of times father lived away did not demonstrate significant correlations with current levels of violence. The composite variable of total separation and loss events was used in subsequent regression analyses to reduce multicolinearity. Whether the type of separation and loss event is significant as compared to the net result (disturbed attachment) is not clear. What is important here is that the correlations between early life separation and loss events and current levels of spousal family violence provide an empirical basis for expanding the intergenerational transmission model.

What does the interpretation of these findings suggest? First, the individual correlations between family of origin variables and current violence indicate comparable effects for child abuse by either parent and observation of father to mother violence. Second, regression analysis of family of origin violence indicates child abuse to be a stronger predictor of severity of current violence than is the observation of father to mother violence. Third, a best predictor regression model using composite variables "parental physical abuse" (abuse by mother + abuse by father) and "separation and loss events" explained as much variance (.34) as did the family of origin violence alone model. The assessment of interaction between family of origin violence and separation and loss events indicated that separation and loss may best predict current violence where family of origin violence is lowest. This suggests, perhaps, dual (at least) pathways into violence in adulthood: violence in contemporary relationships may arise from experiencing disruptions in attachment, as well as from child abuse victimization.

Social learning theory generates variables that guide us toward discrete patterns of observed, learned, and enacted behaviors. Findings presented here point toward an intergenerational transmission model where the enactment of domestic violence in adulthood may not emerge entirely from social learning processes, but from a complex of family of origin conditions, specifically disruptions in attachment. This multitheoretical model encourages a broader understanding of psychosocial processes in the etiology of domestic violence.

What is the significance of this for domestic violence policy and interventions? Laws, regulations, and treatment/education programs for batterers, which are predicated on simplistic models of causality, limit the range of potentially effective responses to address violent behavior. For example, if some aspects of domestic violence may be attributable to the emotional aftermath of disrupted attachment in childhood, not to learned models of behavior, standard psycho-educational interventions may not be adequate. Clinical approaches addressing these issues may include a more thorough assessment of associated emotional problems; more individualized treatment plans; and longer-term, supportive, behavioral change strategies. The National Institute of Justice (2001) reported recently that standard batterer treatment coupled with probation had no greater effects on violent or reoffending behavior than did probation alone. As findings accumulate which indicate the perpetration of domestic violence to be multicausal, and existing interventions to be of limited effectiveness, policies and programs will be called upon to better incorporate those findings into standards of treatment.

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