

VB35C1

VERBAL AGGRESSION BY PARENTS AND PSYCHOSOCIAL PROBLEMS OF CHILDREN

YVONNE M. VISSING AND MURRAY A. STRAUS

Family Research Laboratory, University of New Hampshire, Durham, NH

RICHARD J. GELLES

University of Rhode Island, Kingston, RI

JOHN W. HARROP

Brown University Medical School

Abstract—Analyses of data on a nationally representative sample of 3,346 American parents with a child under 18 living at home found that 63% reported one or more instances of verbal aggression, such as swearing and insulting the child. Children who experienced frequent verbal aggression from parents (as measured by the Conflict Tactic Scales) exhibited higher rates of physical aggression, delinquency, and interpersonal problems than other children. This relationship is robust since it applies to preschool-, elementary school-, and high school-age children, to both boys and girls, and to children who were also physically punished as well as those who were not. Children who experienced both verbal aggression and severe physical violence exhibited the highest rates of aggression, delinquency, and interpersonal problems.

Key Words—Verbal aggression, Psychosocial problems, Aggression, Delinquency.

INTRODUCTION

VERBAL AGGRESSION by parents, like physical aggression, has long been assumed to be injurious to children. The professional literature, and books and articles advising parents, warn of the potential damage from "verbal abuse." However, although the injuries resulting from physical assaults by parents have been well documented since the classic paper by Kempe and colleagues (1962), the assumption that injuries can result from verbal assaults by

The data of this paper are from the National Family Violence Resurvey, funded by the National Institute of Mental Health Grant R01MH40027 (Richard J. Gelles and Murray A. Straus, co-investigators). Dr. Vissing's work was supported by a Post-Doctoral Research Fellowship funded under a grant for "Family Violence Research Training" from the National Institute of Mental Health (Grant T32 MH15161).

This paper is based on two independently written papers that were combined when the authors of each became aware of the other paper addressing the same issues with the same data set. A paper by Vissing and Straus was presented at the August 1989 meeting of the Society for the Study of Social Problems. A paper by Gelles and Harrop was presented at the Eighth National Conference on Child Abuse and Neglect in October 1989.

Received for publication September 21; final revision received April 3, 1990; accepted April 20, 1990.

Reprint requests may be addressed to Murray A. Straus, Family Research Laboratory, University of New Hampshire, Durham, NH 03824.

parents has not been adequately demonstrated by empirical research. Nevertheless, it seems reasonable to assume that large numbers of children in the general population have been victims of severe verbal aggression by parents, and that this experience often results in damage to the psychosocial functioning of the child. It is important to know if these assumptions are correct. Therefore, the first objective of this research was to provide information on how many American children experience verbal aggression at the hands of their parents, and how often such attacks occur. The second objective was to test the hypothesis that the more verbal aggression experienced by children, the higher the rate of childhood psychological and social problems.

Definition and Meaning of Verbal Aggression

There does not seem to be a standard definition of verbal aggression or of related concepts such as psychological abuse or maltreatment (Hart, Germain, & Brassard, 1987). In the literature on child abuse and spouse abuse, terms such as psychological abuse (Hoffman, 1984; Hornung, McCullough, & Sugimoto, 1981; Murphy & O'Leary, 1989), verbal abuse (Mulcahy, 1979; Warner, Parker, & Calhoun, 1984), emotional abuse (Silbert & Pines, 1982), emotional maltreatment, and psychological abuse tend to predominate. Still others use coercive response (Patterson, 1982), mental abuse, (Garbarino, 1986), and emotional maltreatment (Baily & Baily, 1986), and psychological maltreatment (McGee & Wolfe, 1989).

Each of these concepts overlaps with the others, but there are also differences. Since the commonalities and differences have not been theoretically explicated, it is difficult to know which of these terms to use. Some authors respond to this confusion by lamenting the absence of clear definitions and measures, but then proceed without providing the definition that guided the work (e.g., Paulson, 1983; Strickland & Campbell, 1982). Garbarino, Guttman, and Seeley (1986) reviewed the definitions of psychological maltreatment and attempted to capture its many facets by defining psychological abuse as a concerted attack by an adult on a child's development of self and social competence, a pattern of psychiatrically destructive behavior that takes five forms: (1) rejecting, (2) isolation, (3) terrorizing, (4) ignoring, and (5) corrupting.

Given the lack of consensus, we cannot expect to provide a definition that will elicit agreement on the part of all readers. However, we can at least present the definition that guided this research.

Verbal/symbolic aggression is a communication intended to cause psychological pain to another person, or a communication perceived as having that intent. The communicative act may be active or passive, and verbal or nonverbal. Examples include name calling or nasty remarks (active, verbal), slamming a door or smashing something (active, nonverbal), and stony silence or sulking (passive, nonverbal).

We use the compound term, verbal/symbolic, because we believe that nonverbal communication is extremely important for all human interaction, including aggressive communications. Strictly speaking, the compound term, verbal/symbolic aggression, would not be necessary because symbolic aggression subsumes both the verbal and the nonverbal acts identified in the definition just given. However, that would ignore the well-established use of the term, verbal aggression, in communication research and in research on the social psychology of aggression (Bandura, 1973; Berkowitz, 1962; Infante, Chandler, & Rudd, 1989). The compound term, verbal/symbolic aggression, combines the inclusiveness with existing terminology. Because this is a somewhat cumbersome term, for the convenience of exposition we will often abridge it to verbal aggression.

Verbal aggression as just defined may be inflicted as a means to some other end, e.g., a parent who attempts to end some objectionable behavior by exclaiming, "Stop it, you

dummy." This is what Gelles and Straus (1979) identify as "instrumental" aggression. Or the verbal/symbolic aggression may be an end in itself, e.g., a parent is angry with a child and expresses the anger by a deprecating remark such as "You're stupid." Gelles and Straus label this "expressive" aggression.

Social Norms and Verbal Aggression by Parents

Both physical aggression and verbal aggression by parents are governed by a somewhat contradictory set of normative prescriptions. Contradictory norms and values are characteristic of many other aspects of social structure (Ryan & Straus, 1954). The seeming contradictions between norms concerning intrafamily verbal and physical aggression might also be described as "normative ambiguity." Such normative ambiguity exists towards all criminal acts in which the victim and aggressor are members of the same family (Kaufman Kantor & Straus, 1989; Straus & Lincoln, 1985). This is part of the reason for the difficulty in distinguishing child abuse from normal verbal and physical discipline of children (Giovannoni & Becerra, 1979). On the one hand, parents should avoid hitting children, but at the same time physical punishment is almost universally regarded as "sometimes necessary," and over 90% of parents of 3- and 4-year-olds in the present sample report use of physical punishment (Wauchope & Straus, 1990). The situation is similar with respect to verbal/symbolic aggression. On the one hand, parents are enjoined to avoid verbal aggression toward children. However verbal aggression toward children in the form of remarks such as "You're a bad boy" or swearing at a child seems to be widely accepted as sometimes necessary and, as will be shown below, widely practiced.

Concern with avoiding verbal aggression against children is clear in parent education programs such as STEP (Dinkmeyer, 1983), Parent Effectiveness Training (Gordon, 1970), or Loving Your Child is not Enough (Samalin, 1988). These programs assume that verbal aggression against a child is undesirable, since it may lower the child's self-esteem and result in problematic behavior. Each of them recommends replacing verbally aggressive statements such as "You're stupid to have done x," with nondepreciatory statements such as, "I get angry when you do x." The aim of these programs is to help parents separate the deed from the do-er by focusing on the inappropriate behavior rather than on the child's global characteristics. The existence of and the need for these programs, however, suggests that large numbers of parents use verbal aggression to direct a child's behavior. In many families, when dealing with a conflict situation, reasoning and discussing will come first. If that does not work, yelling, scolding, or some other form of verbal/symbolic aggression comes next, and finally as a last resort, physical aggression in the form of slapping and spanking.

Physical and Symbolic Wounds

The children's rhyme, "Sticks and stones may break my bones, but names will never hurt me," illustrates the view that verbal aggression is a less serious form of punishment than physical aggression. Parents may believe they are better parents if they *only* use their voice and not their hand. However, the opposite may be the case. The delinquency and other behavior problems of children who are physically abused may be a reflection of the symbolic meaning of the attack rather than physical wounds. Less than 10% of cases serious enough to be officially labeled as child abuse involve injuries that require medical attention (Garbarino, 1986; Runyon, 1986). The more severe and permanent injury may be to their psychosocial development. Thus, contrary to the rhyme we quoted, names (i.e., verbal aggression) may hurt more than sticks and stones. We can test this hypothesis because we also have data on the extent to which the children in our sample were physically punished as well as how severe the act of physical punishment was.

PREVIOUS RESEARCH ON VERBAL AGGRESSION

The Extent of Verbal Aggression

There has been comparatively little research on the extent of verbal aggression. Most of what are called incidence or prevalence studies only provide information on the extent to which there is verbal aggression that has come to the attention of human services of various types. These studies therefore drastically underestimate the extent of psychological and other types of maltreatment (Hart, Germain, & Brassard, 1987; Straus & Gelles, 1986). The resulting underestimate is clearest in the case of the annual analysis of cases of child abuse and neglect reported to child protective service for each state by the American Association for Protecting Children (AAPC). Based on these data for 1986, the AAPC (1988) estimated a rate of only 0.54 per 1,000 children. Analysis of the characteristics associated with emotional maltreatment indicated that the children and perpetrators were most likely to be white. The average age of an emotionally maltreated child was 7.87 years, compared to 5.54 years for those children who were reported for major physical abuse. Emotionally abused children were more likely than children reported for major physical abuse to come from single parent families, and have parents with health problems and economic/living problems.

The National Center on Child Abuse and Neglect (NCCAN) has sponsored two studies labeled as national incidence and prevalence studies, but in both cases their scope was restricted to cases known to human service professionals. Hence, even though not restricted to officially reported cases, the measurement of incidence and prevalence was confounded with whatever brought these cases to the attention of those service providers (Burgdorf, 1980; National Center on Child Abuse and Neglect, 1988). The two so-called "National Incidence Surveys" used the definition of psychological maltreatment in the *Interdisciplinary Glossary on Child Abuse and Neglect* (National Center on Child Abuse and Neglect, 1978). Emotional abuse was defined as including verbal or emotional assault, close confinement, and threatened harm. Emotional neglect included inadequate nurturance/affection, knowingly permitting maladaptive behaviors (delinquency), and other refusals to provide essential care.

Of the projected 652,000 countable cases of child maltreatment in the first survey, 138,400 were classified as emotional abuse, or a rate of 2.2 per 1,000 of children under 18 years in the United States in 1980. An additional 59,400 cases were classified as emotional neglect, or a rate of 1.0 per 1,000 children (Burgdorf, 1980).

Of the 1,025,900 total countable cases of recognized and reported child maltreatment in the second survey, 174,400 cases were emotional abuse. This translates into a rate of 2.8 per 1,000 children in the population. The largest category of emotional abuse was verbal or emotional abuse, which had a rate of 1.9 per 1,000 children (National Center on Child Abuse and Neglect, 1988).

The Effects of Verbal Aggression

Research on the effects of verbal aggression on children tends to support the hypothesis that social and psychological problems are associated with the use of verbal aggression (Bousha & Twentyman, 1984; Ney, Moore, McPhee, & Trought, 1986; Ney, 1987); however the results are inconclusive. The most important impediment to concluding anything about the effects of verbal aggression is that most of the research confounds verbal aggression with other types of maltreatment. Egeland, Sroufe, and Erickson (1983) tried to make the distinction, but could not because ". . . when mothers who were also physically abusive were removed from the hostile/verbal abuse group, only four remained. . . . This group was too small to allow for adequate statistical analysis." Other studies did not even attempt to control for the presence of physical aggression when investigating the effects of verbal aggression (Bousha & Twentyman,

1984; Brown, 1984; Ney, 1987). In some cases the instrument to measure verbal aggression included indicators of other problematic behavior by the parent in addition to verbal aggression (e.g., Gilmartin, 1985). Finally, there were instruments that were labeled as measuring verbal/symbolic aggression that we suspected might have confounded other forms of maltreatment, but were not described in sufficient detail to rule out that possibility.

We were able to locate only one study (Briere & Runtz, 1988) where the instrument was described sufficiently to be sure that the authors did not follow the frequent practice of measuring maltreatment in general rather than the specific aspect we have identified as verbal aggression and which also controlled statistically for other problematic behavior by the parent. Finally, there are questionable aspects about the few studies that, on the surface, do look at verbal aggression separately, including a long recall period when adults are asked to provide data on verbal aggression they experienced as a child (Briere & Runtz, 1988; Downs, Miller, & Gondoli, 1987) and use of either very small samples or volunteer samples that may not be representative of a defined clinical or community population (Bousha & Twentyman, 1984; Downs et al., 1987; Gilmartin, 1985; Ney et al., 1986). The study described in the balance of this paper, although it has its own limitations, avoids some of the problems just noted by being based on the current behavior of a large and nationally representative sample of American parents, and by using a distinct measure of verbal aggression.

METHOD

Sample and Administration

The data to be reported are from interviews with respondents in the Second National Family Violence Survey (Straus & Gelles, 1986, 1990) who had a child 17 or younger living at home ($N = 3,346$). The interviews were conducted by telephone in the summer of 1985 (for information regarding the validity of telephone interviews in this survey see Gelles, 1990; Smith, 1989; Straus & Gelles, 1986).

To be eligible for inclusion in the sample, a household had to include adults 18 years of age or older who were (1) currently coupled (married or unmarried cohabiting opposite sex couples); or (2) previously coupled (previously married or unmarried cohabiting opposite sex couples separated for less than two years), or (3) a single parent with a child 17 years of age or younger living in the same household. When more than one eligible adult was in the household, a random procedure was used to select the gender and marital status of the respondent. Of the 3,346 parents, 37% were fathers and 63% mothers. When more than one child under the age of 18 was in the home, a "referent child" was randomly selected.

The interviews were conducted by trained interviewers employed by Louis Harris and Associates. When telephones were busy or there was no answer, three call backs were made prior to substituting a new household. If contact was made and subjects refused to be screened or to participate, trained "refusal conversion" interviewers were assigned to the household.

The response rate, calculated as "completes as a proportion of eligibles" was 84%. Interviews lasted an average of 35 minutes. Further information on the sampling design and the characteristics of the sample is given in Straus and Gelles (1986; 1990).

Verbal/Symbolic Aggression Measure

The Conflict Tactics Scale or CTS (Straus, 1979, 1988, 1990) was used to measure verbal/symbolic aggression. The CTS measures three tactics used in interpersonal conflict within the family: reasoning, verbal aggression, and physical aggression. The CTS begins with the following introduction:

Parents and children use many different ways of trying to settle differences between them. I'm going to read a list of some things that you (and your spouse) might have done WHEN YOU HAD A PROBLEM WITH THIS CHILD. I would like you to tell me how often you did it with (him/her) in the last year.

The verbal/symbolic aggression items uses in the CTS are:

- Insulted or swore at the child.
- Sulked and/or refused to talk about it.
- Stomped out of the room or house or yard.
- Did or said something to spite him/her.
- Threatened to hit or throw something at him/her.
- Threw or smashed or hit or kicked something.

The response categories were None, Once, Twice, 3–5 times, 6–10 times, 11–20 times, and 20 or more times. These were coded 0, 1, 2, 4, 8, 15, and 25; and the coded responses to the six items were summed to obtain the Verbal/Symbolic Aggression Index.

Other Independent Variables

In addition to parental use of verbal aggression, the analysis took into account four other variables that might be confounded with verbal aggression and psychosocial problems.

Physical aggression. The most important of the potentially confounded variables is physical punishment and physical abuse of the child. Even though physical aggression and verbal aggression are distinct behaviors, children who experience one are believed to be at greater risk for the other types (Briere & Runtz, 1988; Brown, 1984). Rarely is a child hit without also telling the child how bad he/she is. Thus if a relationship exists between verbal/symbolic aggression and psychosocial problems, it might be a reflection of the level of physical aggression with which it is associated.

Moreover, it is important to distinguish the level of physical aggression, and particularly to differentiate between physical punishment and physical abuse. This was done using the parent-to-child violence items of the Conflict Tactics Scales to classify parents into the following categories: 0 = no violence (parents who reported no use of physical punishment during the year of the survey); 1 = minor violence (parents who reported using ordinary physical punishment, e.g., threw something at the child; pushed, grabbed or shoved the child; and/or spanked the child); 2 = severe violence (kicked, bit, or hit the child with a fist; hit or tried to hit the child with something; beat up the child; burned or scalded the child; threatened the child with a knife or gun; used a knife or fired a gun). We regard severe violence as physical abuse because of the greater risk of injury. However, this contradicts the wide acceptance of hitting a child with certain traditional objects such as a hair brush or a belt. Consequently, in order to identify a group of clearly abusive parents, the CTS includes a measure that we believe is universally regarded as acts of physical abuse that we label "very severe violence" and coded as 3. This measure includes all the items in the severe violence measure with the exception of hitting or trying to hit with an object.

The four categories (no violence, minor violence, severe violence, and very severe violence) enabled us to examine the separate effects of verbal aggression and various levels of physical aggression as well as the combined effects of verbal and physical aggression.

Age and gender of child. The age and gender of the child are believed to affect both the level of verbal aggression by parents and the incidence of psychosocial problems. Boys, for example, engage in many more delinquent acts than girls. We used logistic regression to control for such

confounding of variables and to examine interactions. For example, the relationship between verbal aggression and psychosocial problems might be different for girls as compared to boys, or for young children as compared to adolescents. We therefore included the age of the child as an independent variable using three categories: preschool = ages 0 to 6, primary school = ages 7 to 11, and adolescent = ages 12 to 17. Gender of the child was coded female = 1; male = 0.

Socioeconomic Status

Socioeconomic status (SES) was measured using an index that combined five indicators: Trieman occupational prestige score of husband and wife, education of husband and wife, and family income. A principle components analysis was computed using SPSS-X. The analysis revealed a single component, which accounted for 58% of the variance of these items. The FACSCORE procedure of SPSS was then used to output a standardized factor weighted sum of these items.

Psychosocial Problems of Children

The dependent variables for this study were measured by asking parents if, during the preceding 12 months, the child had experienced each of the items on a list of psychosocial behavior problems. These items were used to compute a physical aggression index, a delinquency index, and an interpersonal problems index.

The four items in the physical aggression index are physical fights with another child at home, with nonfamily children, with adults in the family, and with nonfamily adults. The five items in the delinquency index are vandalism, stealing, drinking, using drugs, or getting arrested. The five items in the interpersonal problems index are trouble making friends, having temper tantrums, failing grades in school, having misbehavior or discipline problems either at home or at school.

Hypothesis and Mode of Analysis

We used logistic regression (Aldrich & Nelson, 1984; Hamilton, 1989) to test the hypothesis that the more verbal/symbolic aggression used by parents, the greater the probability that children would manifest psychosocial problems. This design is based on the assumption that verbal aggression by parents has adverse effects on children. However, since the data are cross-sectional, the results can only establish whether there is a relationship between verbal aggression and the child's behavior problems. The data cannot provide evidence that the child's problems are a consequence of verbal aggression by the parents. Indeed, given the cultural legitimation for parental use of physical and verbal aggression for misbehavior, it is plausible to interpret the process underlying the relationship as reflecting parental *response* to the child's behavior. Obviously, research using prospective data is needed. However given the shortcomings of the previous research, at least some increment in knowledge on this important issue can be gained, even with cross-sectional data, by examining the issue using adequate controls and a large nationally representative sample of American parents and children.

RESULTS

Incidence, Chronicity, and Abuse

Incidence rates. The first row of Table 1 shows that verbal/symbolic aggression against children is extremely common. Taking all children through age 17, almost two-thirds experi-

Table 1. Verbal Aggression by Age and Gender of Child

Measure	Total Sample	Gender of Child		Age of Child		
		Male	Female	0-6	7-11	12-17
<i>A. Incidence of Verbal Aggression</i>						
Percent Reporting Use in past year	63.4%	65.8%	60.9%	57.0	69.9	66.3
<i>N</i>	3,346	1,680	1,666	1,364	838	1,144
<i>B. Chronicity of Verbal Aggression*</i>						
Mean Number of times/year	12.6	13.3	11.9	13.9	12.6	11.4
<i>Percent Using</i>						
Once	9.9%	8.3	11.7	9.5	8.2	11.7
Twice	12.0	11.2	12.9	11.3	10.8	13.7
3-5	19.5	9.8	9.2	18.9	20.0	19.8
6-10	21.1	21.8	20.4	19.2	24.4	20.6
11-20	16.7	16.2	17.3	15.3	18.6	16.8
20+	20.7	22.7	18.4	25.7	18.1	17.1
Chi-Square		192.5, $p < .001$		29.65, $p < .01$		

* Number of times in the past year by parents who reported one or more incidents.

enced at least one instance in which they were victims of verbally aggressive acts during the year covered by this study. Slightly more boys than girls were victims of verbal aggression, and more children age 7 and over as compared to children 6 and under. Since the statistics in Table 1 are based on reports by the parents, they are lower bound estimates because we can assume that some parents will not reveal instances in which they verbally attacked the child, and because other parents will have forgotten some or all such instances.

Chronicity. When considering the chronicity or frequency of use data in Part B of Table 1, it may be even more important to keep in mind that these are lower bound estimates because of the difficulty for parents to remember the number of times they carried out verbally aggressive acts. With this in mind, the first mean in Part B of Table 1 indicates that children who were victims of verbal aggression experienced an average of at least 12.6 such attacks during the 12-month referent period of this study. In addition, the percentage distribution shows that more than a third of these children experienced 11 or more such attacks.

The results on gender of child in Part B of Table 1 show that the number of verbal assaults was somewhat greater for boys than for girls, and somewhat greater for children under 12.

Verbal abuse. As in the case of physical aggression, we believe that contemporary social norms tolerate a certain amount of verbal aggression by parents. If this is correct, then just as an occasional spanking does not constitute physical abuse, occasional verbal aggression does not constitute verbal abuse. That leaves open the question of how frequent verbal aggression needs to be before it is considered abuse. In the absence of established standards, we computed three thresholds to produce three estimates of the rate and number of verbally abused children (See Table 2).

If the criterion is set at 10 or more, the rate is 267 per 1,000 children. This rate is 117 times greater than the rate of 2.2 per 1,000 children estimated from the 1988 survey conducted for the National Center on Child Abuse and Neglect (NCCAN, 1988) ($257/2.2 = 116.8$). Even using 25 or more instances of verbal aggression as the criterion produces a rate of verbal abuse

Table 2. Verbal Abuse: Estimates of Rate and Number of Verbally Abused Children

Threshold	Rate/1,000	Estimated Number
10 or more	257	1,619,000
20 or more	138	870,000
25 or more	113	712,000

that is 51 times greater ($113/2.2 = 51.4$) than the NCCAN rate. The main reason for these huge differences is that the NCCAN rate is restricted to cases known to human service professionals. Moreover, since as noted earlier our data are lower bound estimates, the number of children who are victims of verbal abuse by parents is even greater than the already huge numbers shown under estimated number.

Main Effects of Verbal Aggression and Other Independent Variables

Three logistic regressions were computed, one for each of the three measures of the psychosocial problems. The results are given in Table 3. The *t* tests and probabilities in first row of Parts A, B, and C show that verbal aggression by parents is significantly related to child problems with aggression, delinquency, and interpersonal relationships. Moreover, since the equation included four other independent variables (parental use of physical aggression, age of child, gender of child, and family socioeconomic status), the results in Table 3 also indicate that this relationship persists after partialing out the effects of these potentially confounded variables. This is not to say that the other four independent variables are unimportant. Rather, what the regression analyses show is that their relationship to the child's problems are separate effects. Three out of the four are significantly related to all three of the child psychosocial problems measures. Specifically, the *t* tests show that the probability of the child being aggressive, delinquent, or having interpersonal problems is significantly related to physical aggression by parents, older age of the child, male children, and low socioeconomic status.

Interrelation of Physical and Verbal Aggression by Parents

Space does not permit a discussion of the many important relationships in Table 3. However in the context of this paper, a close examination is needed of the findings on the interrelation of physical abuse and verbal abuse.

Independent effects of verbal and physical aggression. One important group of issues concerns whether extreme physical aggression, i.e., physical abuse, affects the way verbal aggression is related to the child's psychosocial problems. The results in Table 3 cannot directly answer this question because they refer to the overall effect of physical aggression by parents, most of which is ordinary physical punishment rather than the more extreme acts we classified as physical abuse. However, using the graphing techniques for logit in Hamilton (1989), it is possible to examine the effect of verbal aggression within each level of physical aggression. The results are displayed in Figure 1.

Similarities between Graphs A, B, and C. All three graphs in Figure 1 are similar in certain ways. First, each shows that as the amount of verbal aggression by parents increases (horizontal axis), the probability of the problem behavior (vertical axis) increases. The strongest relationship is for children's aggression. Graph A indicates that the probability of aggressiveness increases four-fold: from an average of about .2 for children whose parents did not use verbal aggression to an average of about .8 for children subjected to the greatest amount of verbal

Table 3. Logistic Regression Analyses of Three Measures of Child Psycho-Social Problems ($N = 2882$)*

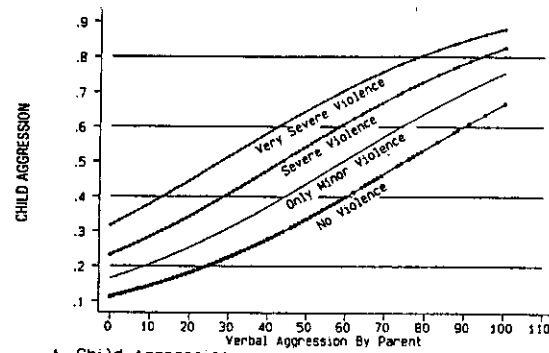
Independent Variable	Logit Coeff.	Std. Error	<i>t</i>	<i>p</i>
A. CHILD AGGRESSION				
Verbal Aggr.	.0344	.0040	8.576	.000
Physical Aggr.	.0233	.0051	4.571	.000
Age of Child	.0141	.0102	1.374	.169
Sex of Child	-.2949	.1009	-2.920	.004
Family SES	-.0095	.0027	-3.444	.001
Constant	-1.4613	.1930	-7.568	.000
$\chi^2(5) = 232.26$, Prob $\chi^2 < .0001$ Log Likelihood = -1287.83				
B. DELINQUENCY				
Verbal Aggr.	.0383	.0067	5.683	.000
Physical Aggr.	.0311	.0099	3.141	.002
Age of Child	.1755	.0276	6.354	.000
Sex of Child	-.9752	.2514	-3.878	.000
Family SES	-.0030	.0060	-0.500	.617
Constant	-5.4439	.5090	-10.694	.000
$\chi^2(5) = 135.89$, Prob $\chi^2 < .0001$ Log Likelihood = -341.35				
C. INTERPERSONAL PROBLEMS				
Verbal Aggr.	.0305	.0050	5.996	.000
Physical Aggr.	.0098	.0079	1.251	.211
Age of Child	.1823	.0165	10.999	.000
Sex of Child	-.3257	.1355	-2.404	.016
Family SES	-.0059	.0036	-1.655	.098
Constant	-4.0473	.3028	-13.366	.000
$\chi^2(5) = 227.32$, Prob $\chi^2 < .0001$ Log Likelihood = -792.80				

* The N in this table is smaller than the N in Table 1 because "listwise" deletion removes any case for which there is missing data on any one of the six variables in the analysis.

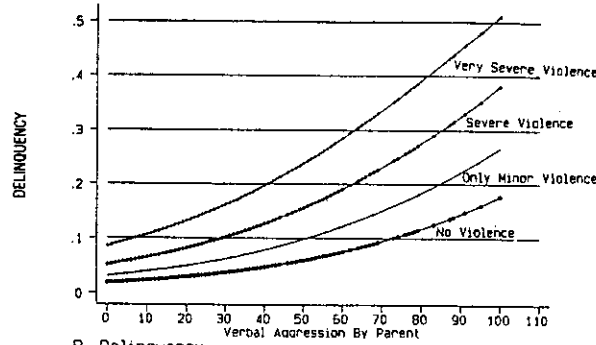
aggression. The fact that the strongest relationship is for children's aggression makes theoretical sense because it is a behavior that can be directly modeled, whereas the relationship between parents' verbal aggression and delinquency or interpersonal problems depends on indirect processes, such as undermining of self-esteem.

Second, each graph shows that the effect of verbal aggression is independent of physical aggression. The lowest of the four lines in each graph is for children who were not physically punished. The next higher line is for children whose parents used ordinary physical punishment. The third line is for children who experienced the less severe of the two levels of physical abuse, and the upper line is for children who were subjected to severe physical abuse. The upward slope of all four lines shows that, regardless of whether the parents were also physically violent, verbal aggression by parents is associated with psychosocial problems of children.

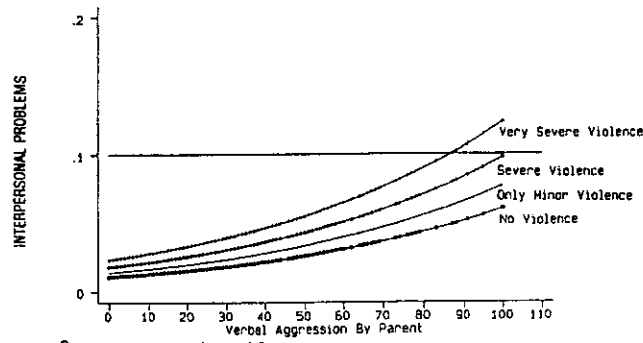
Third, all three graphs show that increasing amounts of physical aggression by parents is also associated with an increased probability of psychosocial problems.



A. Child Aggression



B. Delinquency



C. Interpersonal Problems

Figure 1. Probability of psychosocial problems by amount of parent-to-child verbal and physical aggression.

Differences between Graphs A, B, and C. At the same time, Figure 1 also shows that the effect of physical and verbal aggression by parents depends on the type of psychosocial problem behavior.

First, as noted above, verbal aggression by parents is more closely associated with aggression by children than it is with delinquency or interpersonal problems. Moreover, this relationship is not affected by the level of physical aggression used by parents, as shown by the similar slopes of the four plot lines in Graph A. Thus, verbally aggressive parents tend to have aggressive children, regardless of whether the parents are also physically aggressive. By contrast, the effect of verbal aggression on delinquency (Graph B) is slight for parents who do not also use physical aggression.

Second, the relationship between physical aggression and delinquency or interpersonal

problems is minimal unless the parents are also verbally aggressive to the child. This is shown by the increasing distance between the plot lines as one moves from left to right in Graphs B and C. This suggests that the psychological damage associated with physical abuse may occur because of the verbal abuse that typically accompanies physical abuse.

Third, the relationship between verbal aggression and delinquency and interpersonal problems accelerates with increasing amounts of verbal aggression, as shown by the convex curves in Graphs B and C. Thus, an increase of one unit of verbal aggression has a greater impact at the upper end than the same unit increase at low levels of verbal aggression. However, this does not apply to the relationships between verbal aggression by parents and child's aggressiveness. That effect is close to linear.

Relative and Combined Effect of Verbal and Physical Aggression

Relative effect of verbal and physical aggression. Another important issue is whether "sticks and stones" (physical aggression) hurt more than "names" (verbal aggression). Ney (1987) concluded that verbal abuse has a greater negative impact on children than physical abuse. However, he relied on zero order correlations that do not control for confounding of verbal and physical abuse. Comparisons of the *t* tests in Table 3 for verbal and physical aggression by parents (which do control for confounding) shows that verbal aggression by parents is more strongly related to child's aggression and interpersonal problems than is physical aggression. In fact, for interpersonal problems (Part C of Table 3), physical aggression is not significant when the overlap with verbal aggression is partialled out.

Combined effect of verbal and physical aggression. Finally, the graphs for all three child problem indexes show that children who were subjected to both verbal and physical abuse are at the highest risk of manifesting aggression, delinquency, and interpersonal problems. This can be illustrated by examining the plot for child aggression (Figure 1, Part A). There is a high probability of aggression among all the children at the right side of the graph. The lower of the four lines shows a .65 probability of being highly aggressive for children whose parents engaged in verbal aggression 100 or more times during the year, even though they did not hit the child. The top line of this graph shows that, if in addition the parents also used very severe forms of physical violence, the risk of the child being very aggressive is .85, which is a 31% increase. In the case of delinquency, Part B of Figure 1 shows that probability of delinquency increases from about .18 to .52, i.e., an 88.9% greater chance of delinquency than when the abuse was restricted to an extremely high level of verbal aggression.

Robustness of Findings

The findings just presented are complex and depend on the interrelation of a number of variables. They also have important implications for parent education. Consequently, additional studies are needed, especially prospective studies, to be confident of results. However, with the presently available data it is possible to use alternative methods of statistical analysis to guard against the possibility that the results are an artifact of the logistic regression technique on which the findings are based. We therefore replicated the analysis using the well-proven technique of analysis of variance.

Because of the need to restrict the number of cells in the design, we used a four-factor design: 6 levels of verbal aggression by 4 levels of physical aggression by 2 child genders by 3 child age groups. The results of the analysis of variance lead to the same conclusions as do the results of the logistic regression analyses. To take the most crucial of the issues, the ANOVA found main effects for verbal and physical aggression and no significant verbal by physical aggression interaction effect. Thus it confirmed that the effect of verbal aggression is not

confounded with or otherwise dependent on physical aggression. In addition, the F ratios show that the effect of verbal aggression is greater than the effect of physical aggression. This degree of concurrence between two such different modes of statistical analysis suggests that the findings reported are robust.

We have chosen to present the results using logit rather than ANOVA because the ANOVA design required partitioning the cases into 144 cells. The large number of cells coupled with nonorthogonal independent variables results in many small n cells. Second, since logistic regression does not depend on partitioning the cases into cells, it enabled us to test a more adequately specified model by including an additional independent variable, socioeconomic status. Third, logit permitted us to analyze each independent variable as a continuous variable rather than having to use the restricted number of categories needed to perform an analysis of variance. This, in turn, permitted us to examine the specific nature of the relationships (see Figure 1). Despite these reasons for presenting the findings based on logistical regressions rather than ANOVAS, some readers may prefer the latter, and copies of the ANOVA results will be sent on request to Straus.

SUMMARY AND CONCLUSIONS

This study of a nationally representative sample of 3,346 children found that use of verbal/symbolic aggression by parents is extremely common:

1. About two out of three American children are victims of verbal/symbolic aggression by parents.
2. Parents who used verbal aggression did so an average of 12.6 times during the year of this study, and more than a third reported 11 or more instances.
3. Boys were subjected to somewhat more verbal aggression than girls.
4. Children over age 6 were more likely to have been the victims of verbal aggression. However, when children age 6 and under were the victims of verbal aggression, it occurred more frequently than was the case with children over 6.

With respect to the relationship between parental verbal aggression and behavior problems of the child, we found that:

1. The more verbal aggression used by the parent, the greater the probability of the child being physically aggressive, delinquent, or having interpersonal problems.
2. Even children who are raised in homes where they are never hit experience behavior problems associated with verbal aggression.
3. The strong relationship between verbal aggression and psychosocial problems applies for all age groups, and for both boys and girls, in both low and high socioeconomic status families.
4. Verbal aggression by parents is somewhat more closely related to psychosocial problems of the child than is physical aggression by parents.
5. The combination of verbal aggression and abusive violence was found to be more strongly related to psychosocial behavior problems of the child than experiencing either by themselves.

Although we found highly significant relationships between parents' use of verbal/symbolic aggression and psychosocial problems of the child, one cannot tell from these findings which is the cause and which is the effect. The causal ordering of verbal aggression and child psychosocial problems remains to be established by future research using longitudinal and experimental methods. Nevertheless, the findings presented in this paper indicate that the associa-

tion between verbal aggression and psychosocial problems is not an artifact of confounding with parents' use of physical punishment or physical abuse, age, gender, sibling group size, or family socioeconomic status.

We believe that there is a reciprocal relationship between verbal/symbolic aggression by parents and children's behavior problems. Research by Nagaraja (1984), Patterson (1982), and Patterson and Bank (1987) found an escalating feedback loop that can be triggered by either the deviant behavior of the child or by verbally aggressive behavior of the parent. Let us imagine a scenario that starts with misbehavior by the child, to which the parent responds by verbal aggression such as swearing at the child. The child may respond by correcting or promising to correct the misbehavior, but also with anger, resentment, and a self-image as a "damn brat." This combination can sew the seeds of additional antisocial behavior, or what Lemert (1972) calls "secondary deviance." The parents may then intensify their verbal assaults on the child, which tends to further increase the risk of antisocial behavior by the child. Thus, the long run effect using verbal aggression as a control tactic may be to exacerbate rather than extinguish the problematic behavior.

Verbal aggression by parents also poses other risks. First, it can teach the child that verbal aggression against other members of one's family is acceptable. Sooner or later, parents who use verbal aggression are themselves likely to be victims; and when these children are adults, they may be more likely to engage verbal aggression against their spouses and children (Jorgenson, 1985; Steinmetz, 1977). Second, we believe that verbal aggression by parents tends to undermine the parent-child bond. To the extent that this happens, parents will find it more difficult to use nonpunitive modes of influencing behavior since these depend heavily on the closeness of the attachment between parent and child (Hirschi, 1969; Lytton, 1979). Finally, there may be a labeling effect because some children will internalize the identification of themselves as "stupid," "no-good" or whatever term the parent tends to favor. This results in a "deviance amplifying" process in which the child gradually comes to act out the role implied by the label (Scheff, 1984; Straus, 1973). Like physical punishment, verbal aggression may produce short-term results; over the longer run it probably also creates or exacerbates problems.

A survey of American adults found that 70% believed that psychological problems can result from repeated yelling and swearing at children (Daro, Abrahams, & Robson, 1988). That survey, like ours, also found that most American parents insulted or swore at their children in the previous year. Our findings, and those of Daro et al., reveal an important inconsistency between the beliefs and the behavior of American parents because large numbers of parents engage in the very behavior that most believe will harm children.

Acknowledgement—Vissing and Straus acknowledge the valuable comments and suggestions by the members of the University of New Hampshire Family Research Laboratory Seminar for 1988–1989.

REFERENCES

- Aldrich, J., & Nelson, F. (1984). *Linear probability, logit, and probit models*. Beverly Hills: Sage.
- American Association for Protecting Children. (1988). *Highlights of official child neglect and abuse reporting, 1986*. Denver: American Humane Association.
- Baily, T. H., & Baily, W. H. (1986). *Operational definitions of child emotional maltreatment*. Augusta, ME: Bureau of Social Services, Maine Department of Human Services.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Berkowitz, L. (1962). *Aggression: A social psychological analysis*. New York: McGraw-Hill.
- Bousha, D., & Twentyman, C. (1984). Mother-child interactional style in abuse, neglect, and control groups: Naturalistic observations in the home. *Journal of Abnormal Psychology, 93*, 106–114.

- Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse & Neglect*, *12*, 331-341.
- Brown, S. (1984). Social class, child maltreatment, and delinquent behavior. *Criminology*, *22*, 259-278.
- Burgdorf, K. (1980). *Recognition and reporting of child maltreatment*. Rockville, MD: Westat.
- Burgess, R. L., & Conger, R. D. (1977). Family interaction patterns related to child abuse and neglect: Some preliminary findings. *Child Abuse & Neglect*, *1*, 269-277.
- Daro, D., Abrahams, N., & Robson, K. (1988, May). *Reducing child abuse 20% by 1990: 1985-1986 baseline data*. Chicago: National Center on Child Abuse Prevention Research.
- Dinkmeyer, D. (1983). *Systematic training for effective parenting of teens*. Circle Pines, MN: American Guidance Service.
- Downs, W., Miller, B., & Gondoli, D. (1987). Childhood experience of parental physical violence for alcoholic women as compared with a randomly selected household sample of women. *Violence and Victims*, *2*(4), 225-240.
- Egeland, B., Sroufe, L. A., & Erickson, M. (1983). The developmental consequence of different patterns of maltreatment. *Child Abuse & Neglect*, *7*, 459-569.
- Garbarino, J. (1986). Can we measure success in preventing child abuse? Issues in policy, programming, and research. *Child Abuse & Neglect*, *10*(2), 143-156.
- Garbarino, J., Guttman, E., & Seeley, J. W. (1986). *The psychologically battered child*. San Francisco: Jossey Bass.
- Gelles, R. J. (1990). Methodological issues in the study of family violence. In G. R. Patterson (Ed.), *Depression and aggression in family interaction*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gelles, R., & Straus, M. A. (1979). Determinants of violence in the family: Toward a theoretical integration. In W. R. Burr, R. Hill, F. I. Nye, & I. L. Reiss (Eds.), *Contemporary theories about the family*. New York: Free Press.
- Gilmartin, B. (1985). Some family antecedents of severe shyness. *Family Relations*, *34*, 429-438.
- Giovannoni, J., & Becerra, R. M. (1979). *Defining child abuse*. New York: Free Press.
- Gordon, T. (1970). *Parent effectiveness training*. New York: Wyden.
- Hamilton, L. (1989). *Statistics with stata*. Pacific Grove, CA: Brooks-Cole.
- Hart, S. M., Germain, R. B., & Brassard, M. B. (1987). The challenge to better understand and combat psychological maltreatment of children and youth. In M. R. Brassard, R. B. Germain, & S. N. Hart, *Psychological maltreatment of children and youth* (Chap. 1). New York: Pergamon.
- Hirshi, T. (1969). *Causes of delinquency*. Berkeley, CA: University of California Press.
- Hoffman, P. (1984). Psychological abuse of women by spouses and live-in lovers. *Women & Therapy*, *3*, 37-46.
- Hornung, C., McCullough, C., & Sugimoto, T. (1981). Status relationships in marriage: Risk factors in spouse abuse. *Journal of Marriage and the Family*, *43*, 675-692.
- Infante, D. A., Chandler, T. A., & Rudd, J. E. (1989). Test of an argumentative skill deficiency model of Interspousal violence. Communications Monograph.
- Jorgenson, D. (1985). Transmitting methods of conflict resolution from parents to children: A replication and comparison of blacks and white, males and females. *Social Behavior and Personality*, *13*, 109-117.
- Kantor, G. K., & Straus, M. A. (1990). Response of victims and the police to assaults on wives. In M. Straus, & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. New Brunswick, NJ: Transaction Books.
- Kaufman Kantor G. G., & Straus, M. (1989). Substance abuse as a precipitant of wife abuse victimization. *American Journal of Drug and Alcohol Abuse*, *15*, 173-189.
- Kempe, C. H., Silverman, F. N., Steele, B. F., Droegemueller, W., & Silver, H. K. (1962). The battered-child syndrome. *Journal of the American Medical Association*, *181*, 17-24.
- Lemert, E. M. (1972). *Human deviance, social problems, and social control*. Prentice-Hall: Englewood Cliffs.
- Lytton, H. (1979). Disciplinary encounters between young boys and their mothers and fathers: Is there a contingency system? *Developmental Psychology*, *15*(3), 256-268.
- McGee, R. A., & Wolfe, D. A. (1989). *Psychological maltreatment: Towards an operational definition*. London, Ontario: University of Western Ontario and Institute for Prevention of Child Abuse.
- Mulcahy, D. (1979). Studies in Gitano social ecology: Conflict and verbal abuse. *Maledicta*, *3*, 87-100.
- Murphy, C., & O'Leary, D. K. (1989). Psychological aggression predicts physical aggression in early marriage. *Journal of Consulting and Clinical Psychology*, *57*(5), 579-582.
- Nagaraja, J. (1984). Noncompliance: A behavior disorder. *Child Psychiatry Quarterly*, *17*(4), 127-132.
- National Center on Child Abuse and Neglect. (1978). *Interdisciplinary glossary on child abuse and neglect*. Washington, DC: U.S. Department of Health and Human Services.
- National Center on Child Abuse and Neglect (1988). *Study findings: Study of national incidence and prevalence of child abuse and neglect: 1988*. Washington, DC: U.S. Department of Health and Human Services.
- Ney, P. G. (1987). Does verbal abuse leave deeper scars: A study of children and parents. *Canadian Journal of Psychiatry*, *32*, 371-378.
- Ney, P., Moore, C., McPhee, J., & Trought, P. (1986). Child abuse: A study of the child's perspective. *Child Abuse & Neglect*, *10*, 511-518.
- Patterson, G. R. (1982). *A social learning approach to family intervention: III. Coercive family process*. Eugene, OR: Castalia.
- Patterson, G. R. (1987). *Some amplifying mechanisms for pathologic processes in families*. Paper presented at the Minnesota Symposium on Child Psychology, "Systems and Development," Minneapolis, MN.
- Paulson, J. (1983). Covert and overt forms of maltreatment in the preschools. *Child Abuse & Neglect*, *7*, 45-54.

- Runyan, D. (1986). *Computer output provided in personal communication*. Chapel Hill, NC: University of North Carolina.
- Ryan, B., & Straus, M. (1954). *A report from the Center for Comparative Studies in Technological Development and Social Change: The integrating of SINHALESE society*. Minneapolis, MN: Office of International Programs, University of Minnesota.
- Samalin, N. (1988). *Loving your child is not enough*. New York: Penguin.
- Scheff, T. (1984). *Being mentally ill: A sociological theory* (2nd ed.). Hawthorne, NY: Aldine de Gruyter.
- Silbert, M. H., & Pines, A. M. (1982). Victimization of street prostitutes. *Victimology*, 7, 122-133.
- Smith, D. (1989). Women abuse: The case for surveys by telephone. *Journal of Interpersonal Violence*, 4(3), 308-324.
- Steinmetz, S. (1977). *The cycle of violence: Assertive, aggressive and abusive family interaction*. New York: Praeger.
- Straus, M. A. (1973). A general systems theory approach to a theory of violence between family members. *Social Science Information*, 12(3), 105-125.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics (CT) scales. *Journal of Marriage and the Family*, 21, 75-88.
- Straus, M. A. (1988). *Measuring psychological and physical abuse of children with the conflict tactics scales*. Durham, NH: Family Research Laboratory, University of New Hampshire.
- Straus, M. A. (1990). The conflict tactics scales and its critics: An evaluation and new data on validity and reliability. In M. Straus & R. J. Gelles, *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families*. New Brunswick, NJ: Transaction.
- Straus, M. A., & Gelles, R. (1986, August). Societal change and change in family violence from 1975-1985 as revealed by two national surveys. *Journal of Marriage and the Family*, 48, 465-479.
- Straus, M. A., & Gelles, R. (1990). *Physical violence in American families: Risk factors and Adaptations to Violence in 8,145 families*. New Brunswick, NJ: Transaction.
- Straus, M. A., & Lincoln, A. J. (1985). A conceptual framework for understanding crime and the family. In A. J. Lincoln & M. A. Straus, *Crime and the Family*. Springfield, IL: C. C. Thomas.
- Strickland, E., & Campbell, K. (1982, September-October). End the other abuse: Damaged self-concept. *Childhood Education*, pp. 9-12.
- Warner, M., Parker, J. B., & Calhoun, J. F. (1984). Inducing person-perception change in a spouse abuse situation. *Family Therapy*, 11, 123-138.
- Wauchope, B., & Straus, M. A. (1990). Physical punishment and physical abuse of American children: Incidence rates by age, gender, and occupational class. In M. Straus & R. Gelles (Eds.), *Physical violence in American families*. New Brunswick, NJ: Transaction Books.

Résumé—L'analyse de données d'un échantillon représentatif à l'échelon national de 3,346 parents américains, élevant à la maison un enfant de moins de 18 ans, montre que 63% d'entre eux rapportent un ou plusieurs épisodes d'agression verbale, telle que l'utilisation de jurons ou d'insultes à l'égard de l'enfant. Les enfants ayant vécu fréquemment des attaques verbales de la part de leurs parents (mesurées par le "Conflict-Tactic Scale") présentaient une plus grande fréquence de violence physique, de délinquance et de problèmes interpersonnels que les autres enfants. Cette corrélation est forte puisqu'elle s'applique tant aux enfants en âge préscolaire qu'à l'école primaire ou secondaire, et tout autant chez les garçons que chez les filles et ce chez les enfants subissant des punitions corporelles ou chez ceux n'en subissant pas. Les plus hauts taux d'agressions, de délinquance et de problèmes interpersonnels ont été retrouvés chez les enfants ayant vécu à la fois une agression verbale et des violences physiques sévères.

Resumen—Análisis de los datos de una muestra nacional representativa de 3346 padres norteamericanos, con un niño de menos de 18 años de edad viviendo en la casa, demostraron que 63% comunicaron una o más situaciones de agresión verbal, tales como maldecir e insultar al niño. Los niños que experimentaron agresión verbal frecuente por parte de los padres (medida con la "Conflict Tactics Scale," Escala de Tácticas de Conflicto) exhibieron una tasa mayor de agresión física, delincuencia, y problemas interpersonales que los otros niños. Esta relación es fuerte puesto que se aplica a niños pre-escolares, de escuela primaria y de escuela secundaria, a niños y a niñas, a los niños que fueron físicamente castigados y a aquellos que no lo fueron. Aquellos niños que experimentaron tanto agresión verbal como violencia física severa exhibieron las tasas más altas de agresión, delincuencia y problemas interpersonales.