

# 11

## Differences among States in Child Abuse Rates and Programs

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The purpose of this chapter is to outline a broad program of research on child abuse using state-by-state data and to present the design of one of the projects that might be part of such a research program.

The policies and funding provided by each of the states constitute the main efforts to treat and prevent child abuse in the United States. Although systematic data are not available, it is likely that there are large differences among states in the kinds of programs implemented and in the funding provided for them. Assuming that such differences exist, it is extremely important to know what each state is doing and to have some means of investigating whether the differences in programs and funding make a difference in the rate of child abuse. Studies using this kind of data can provide information that is needed to formulate and implement policies to treat or prevent child abuse. For example, it may be helpful to know how the number of child protective services (CPS) workers per 100,000 children in a state compares with the number in other somewhat similar states. Such information, however, is not now available.

Also not available are any studies that analyze whether differences among states in programs and funding are related to rates of child abuse or to the rate at which child abuse is reported to CPS. The two rates are different because the CPS data constitute an *intervention* rate rather than an *incidence* rate. Under some circumstances, as when

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extensive intervention reduces the incidence of a problem, there is a negative correlation between intervention and incidence.

This essay is intended to start the process of filling in this major gap in research on child abuse. We suggest a program of research that includes obtaining state-by-state data on the rate of child abuse and comparative state research to investigate both theoretical and policy aspects of state-to-state differences in the rate.

### Possible Contributions of State Research on Child Abuse

In designing the research program we made certain assumptions; some of these can be tested by the research, and others will remain assumptions. Perhaps the most important assumption is that there are large differences among states in the incidence of child abuse, just as there are large differences in practically every other sociocultural variable.<sup>1</sup> If this assumption is correct, it will permit research on factors that might account for the differences. These factors include differences in the sociocultural characteristics of the states, such as the level of urbanization and the extent to which other kinds of violence are prevalent, and differences in child abuse programs and funding.

The issues that might ultimately be investigated include the following:

- *Differences in incidence.* How do the states differ in the incidence of physical and psychological abuse of children? If the large differences among states assumed to be present are found, the variation will provide the basis for research to determine factors that could account for the differences.

- *Reported differences and their antecedents.* The number of cases reported to CPS is the one aspect of state-to-state differences in child abuse that is well documented. Such data are available for each year since 1976. Factors associated with the differences in reported rates do not seem to have been investigated, however, not even such simple questions as whether the number of reported cases is a function of the number of caseworkers available to receive and investigate such reports.

- *Differences in program and funding.* How much do the states differ in respect to the kinds of programs and their funding (that is, their "program effort")? These data would provide valuable descriptive information and might provide a framework for states to evaluate their own program efforts.

- *Relation between program effort and incidence.* Is there a relation between program effort and the incidence of child abuse as measured

by epidemiological surveys of a random sample of parents? The findings will provide information on whether the amount of money spent on child abuse programs is related to a reduction in the incidence of child abuse and whether certain kinds of programs are more effective than others in reducing the incidence.

- *Relation between program effort and reported rates.* Are state-to-state differences in program effort related to the rate of cases reported to and confirmed by CPS? Since data on reported cases of child abuse are a measure of the extent of intervention in child abuse cases, the findings will provide information on the extent to which programmatic effort is translated into intervention.

- *Relation between sociocultural characteristics of states and program effort.* Are differences in program effort a function of sociocultural and economic characteristics of the states, such as urbanization, region, income, and racial composition, and such political characteristics as the degree of party competition and the nature and extent of interest group activities? This information can be helpful in understanding why some states adopt certain policies and others do not.

- *Change in incidence.* Murray Straus and Richard Gelles report a decrease in the national rate of child abuse for the period 1975 to 1985.<sup>2</sup> Some important questions need to be addressed: (1) Has this decrease continued since 1985? (2) Is this decrease found in all states? (3) What characteristics of the states are related to a greater or lesser change in the incidence of child abuse?

- *Relation of changes in program and funding to changes in incidence and reported rates.* To what extent does program effort change over time, and are the changes related to change in the rates of reported child abuse and to the incidence of child abuse? These data will measure the amount and kind of investment in child abuse prevention and treatment and provide information on the results of that investment.

- *Relation between incidence and reported rate.* What is the relation between the rate of child abuse as reported to or confirmed by state CPS and the incidence as measured by the proposed state surveys? Straus and Gelles argue that there is a negative correlation over time, that is, the higher the reported rate, the lower the incidence, because the former is a measure of intervention to control child abuse.

- *Theoretical questions.* In addition to these immediately practical questions, state-by-state comparative research can be used to investigate many important theoretical questions concerning the causes and consequences of child abuse, such as whether the incidence is related to urbanization, the frequency of other kinds of violence such as homicide, the infant mortality rate, the percentage of parents who endorse physical punishment, the extent of interest group participa-

tion in the political process, or the relative influence of the Democratic and Republican parties and the degree of party competition.

### Availability of State Data

Investigations designed to provide information on the issues listed require a variety of state-by-state data. Some of the needed data are available, but most are not.

**Official Child Abuse and Neglect Reported Rate.** State-by-state data on the number of child abuse cases known to the CPS in each state have been gathered since 1976, but these statistics show the rate of intervention rather than incidence. The difference can be illustrated by the fact that the rate of sexually abused children known to CPS doubled from 1976 to 1977 and by 1985 was twenty-one times as great as in 1976.<sup>3</sup> It is extremely unlikely that American children suddenly became so much more vulnerable to sexual abuse. The underlying incidence may even have decreased.<sup>4</sup> Why then has the CPS rate increased? It is not unreasonable to suggest that it reflects a dramatic change in the willingness of the public and human services professionals to intervene and report sexual abuse. Thus, when the annual reported rates of child abuse are published each year and show yet another increase, it should be taken as an indication of progress in the fight to protect American children.

Recent increases in the rate of sexual abuse reported to the CPS have been much larger than increases in the rate of physical abuse because national consciousness and concern about physical abuse have been growing for many years whereas the concern with sexual abuse is more recent and hence has a more dramatic impact on the statistics. In neither case, however, can the increase in the reported rate be taken as evidence that the underlying incidence of physical or sexual abuse has been increasing.

The CPS reported rate is nonetheless an important indicator of efforts to deal with child abuse. Consequently, it has an equally important place in the research program outlined in this chapter.

**National Data on the Incidence of Physical Abuse.** In 1975 Straus, Gelles, and Steinmetz conducted a survey of a nationally representative sample of 2,143 American families to measure the incidence of physical abuse of children by parents and of spouses by each other.<sup>5</sup> In 1985 Gelles and Straus replicated the study on a sample of 6,002 families.<sup>6</sup> Comparison of the 1985 rate with the rate a decade earlier found a large and statistically significant *decrease*.

After examining many alternative explanations for the findings, Straus and Gelles conclude that the decrease was brought about by a combination of fewer serious assaults on children and fewer parents willing to tell an interviewer that they had been that violent toward one of their children. How much of the change was due to a change in behavior and how much to a change in willingness to report is not known. Straus and Gelles argue, however, that even if all the decrease from 1975 to 1985 was the result of greater reluctance to report because of the wide publicity given to child abuse during the decade, that is still an important change because it reflects a change in attitudes and awareness that is part of the process of changing behavior.

How can we explain the difference between the year-by-year increase in the CPS rate of physical abuse and the equally strong decrease in the rate found by Gelles and Straus? Straus and Gelles suggest that, rather than the rates being inconsistent, one is a function of the other.<sup>7</sup> They argue that the incidence declined (as measured in their two surveys) partly because of the vast increase in the extent to which intervention has occurred in cases of child abuse (as measured by the CPS rate).

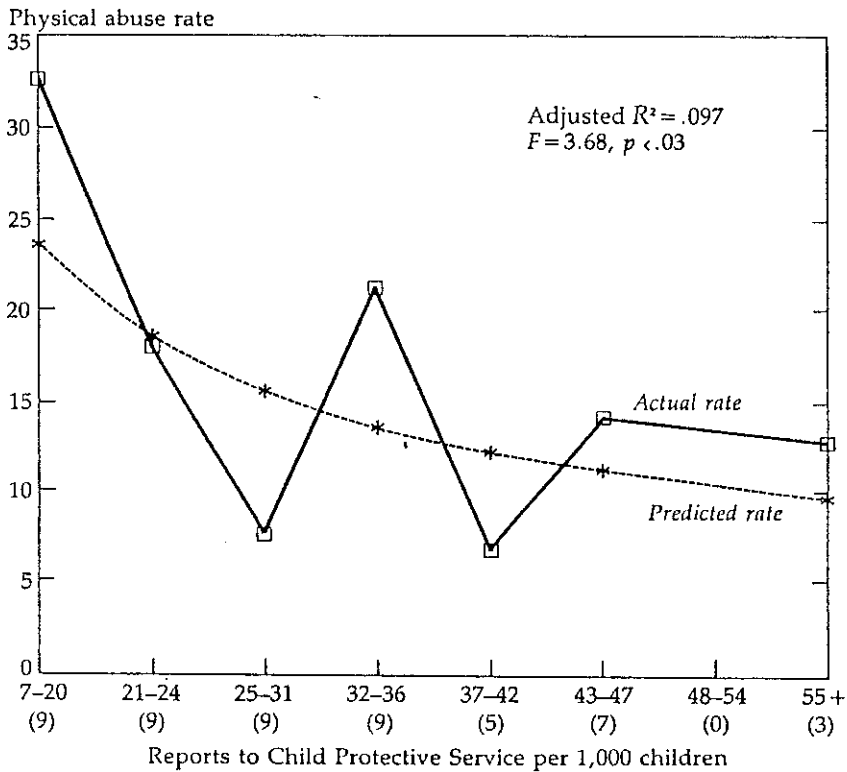
The Straus-Gelles theory that the huge increase in the child abuse cases reported is an indicator of an increase in public and professional efforts to reduce child abuse and should therefore result in a lowered incidence, though plausible, has not been investigated. This chapter outlines how such research can be done. In the meantime we used what data were already available to conduct a preliminary analysis. We tested the hypothesis that states with the highest rate of reported child abuse tend to have the lowest incidence of abuse. The reporting data are for 1985 because 1985 was the most recent year with data for all fifty states.<sup>8</sup> The data on the incidence of child abuse are from the 1985 National Family Violence Resurvey (the measure is described in the next section).<sup>9</sup>

As hypothesized, we found a low negative correlation between reported rates and incidence ( $-.30, p < .05$ ). A plot of the data showed two problems. First, two of the nine states in the low reported rate group (7-20) had such extremely high abuse rates that they might account for the observed correlation. We therefore reset the values of these two outliers from 20 to 10 (9.1 was the next highest value). This reduced the correlation to .26, just below the .27 needed to be statistically significant. Second, the plot suggested a decelerating rate of decrease, which is plausible if we assume that reported rates will come closer to the actual rates as reporting becomes more and more widespread. We therefore computed a polynomial regression (using the outlier adjusted data) and found a significant nonlinear rela-

tionship, as shown in figure 11-1.

Although the findings in the figure support the Straus-Gelles theory, other methodological and theoretical problems call for great caution. One methodological problem is that the theory refers to changes over time, whereas the figure shows differences among states. Second, the abuse rate for some states in the National Family Violence Survey is based on a precariously low number of households with children: an average of only 59 and a range of 3 to 285. Still another ground for caution is that the same analysis using 1984 and

FIGURE 11-1  
 PHYSICAL ABUSE RATE BY REPORTED ABUSE RATE,  
 FIFTY STATES AND THE DISTRICT OF COLUMBIA, 1985



NOTE: In 1/2 S.D. (standard deviation) groups (mean = 31.1). Number of states in parentheses.

SOURCE: American Association for Protecting Children, *Highlights of Official Child Neglect and Abuse Reporting* (Denver: AAPC, 1985).

1983 reported data produced linear correlations that are lower and nonsignificant ( $-.22$  and  $-.25$ ), though in the same direction.

Some theoretical issues are also not resolved by these data. Even if the results shown in the figure are correct, the findings by no means prove the Straus-Gelles theory. The theory asserts that the child abuse rate decreases as a result of beneficial intervention by CPS. The correlations, however, could be real but spurious. For example, they might reflect a concern with and sensitivity to child maltreatment in the cultural climate of certain states that leads people in those states both to a low level of child abuse and to a high level of reporting of those incidents that do occur. It is extremely important to resolve the theoretical and methodological questions we have raised about the results in the figure, and we hope that the research outlined in the rest of this paper can contribute to that goal.

**State-by-State Data on the Incidence of Child Abuse.** Although national surveys such as the Gelles and Straus study are an advantage for some purposes, they do not provide information on specific states. Consequently we suggest that surveys using the same methods to measure child abuse as were used in the National Family Violence Survey be carried out in a number of states.

*The Conflict Tactics Scales (CTS).* The technique used to measure physical child abuse in the National Family Violence Survey is known as the Conflict Tactics Scales (CTS). The CTS is a brief instrument designed to measure three aspects of parent-to-child behavior: reasoning, psychological aggression, and physical aggression.<sup>10</sup> The psychological aggression and physical aggression indexes are intended to measure the incidence and the severity of emotional and physical maltreatment of a child.

The CTS begins with the statement: "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 (name of child) 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 list begins with the items from the reasoning scale, such as "discussed an issue calmly"; goes on to the items in the psychological aggression or emotional abuse scale, such as "insulted or swore at him/her"; and ends with the physical aggression or violence items, such as "slapped or spanked him/her" or "kicked, bit, or hit with fist." The acts of physical aggression that go beyond ordinary physical punishment and risk causing an injury that requires medical attention are used to form the measure of physical abuse.

Since the development of the CTS in the early 1970s, it has been

used in two national surveys and in more than forty studies of spouse abuse by other investigators.<sup>11</sup> It has also been used by others to measure child abuse.<sup>12</sup> Studies using the CTS have made important contributions to knowledge of child abuse, including unique information on the incidence of physical abuse, on risk factors associated with abuse, on the effects of physical abuse on the child, and on changes in the incidence of physical abuse.<sup>13</sup>

There is not sufficient space in this paper to describe the CTS adequately, but a paper is available that provides detailed information on the use of the CTS to measure physical and psychological abuse of children, along with information on validity and reliability and norms.<sup>14</sup> We do not suggest that the CTS is a fully satisfactory instrument. It was originally developed to measure abuse between spouses. It was then modified for use in measuring child abuse, but additional refinement is needed, some of which is in process.<sup>15</sup>

**Child Abuse Programs and Funding.** Several of the research questions mentioned above, especially the questions of most direct policy relevance, require state-by-state data on kinds of programs, personnel, and funding of child abuse work. None of these data seem to be currently available. Consequently, a major part of the program of state research will need to be on developing a system for obtaining these data from each of the states. The following kinds of data need to be collected:

- number of staff assigned to CPS work
- training required for employment in CPS work and training provided to staff
- organization of CPS work, such as whether the staff are employees of the state or of local government
- program characteristics, such as whether there is a toll-free reporting line and whether child abuse cases must be reported to the criminal justice system
- number and size of voluntary groups, such as a state child abuse prevention committee or Parents Anonymous chapters
- presence or absence of prevention programs
- level of funding of CPS work and prevention work

This list is only illustrative and will need to be refined and expanded in conjunction with persons involved in state child abuse programs.

**Sociocultural Characteristics of the States.** All the sociocultural variables mentioned in this paper are available in the State and Regional Indicators Archive (SRIA) at the University of New Hampshire. The

SRIA contains a vast amount of other information on each of the states (approximately 15,000 variables), and the staff is experienced in obtaining such data and putting it into usable form.

The utility of the SRIA for work of this kind is illustrated by the fact that SRIA data have been the basis for a number of important studies, including *Social Stress in the United States* and *Four Theories of Rape in the United States*, as well as numerous journal articles on medical resources and their correlates, alcoholism, and homicide.<sup>16</sup>

### Research Design

The ideal research design would include all fifty states. This is not a practical objective in the immediate future, however, and thus the research outlined in this chapter involves only eight states. If this research turns out to be as productive as we hope, the cost of including all fifty states can be weighed against the potential benefits. For now we suggest gathering the data on program effort for all fifty states and doing surveys to establish the incidence of child abuse in just eight states. Each of the surveys would interview a random sample of parents using the methods described below to estimate the incidence of physical and psychological abuse of children in those eight states.

**The New Hampshire Pilot Study.** The feasibility of the kind of survey we propose has been demonstrated by a pilot study conducted in April 1987.<sup>17</sup> This survey, carried out in collaboration with the New Hampshire Task Force on Child Abuse (a private voluntary group), interviewed 958 parents. The data used to compute the incidence of physical abuse were obtained using a modification of the Conflict Tactics Scales.

*Objectives and findings.* The immediate purpose of the New Hampshire survey was to provide data on the number and rate of children who were physically abused in 1986-1987 and to serve as a benchmark for similar studies in subsequent years for purposes of measuring progress in reducing child abuse.

The survey provided valuable data on how the rate of child abuse in New Hampshire compares with the rate for the rest of the United States, as measured in a recent national survey.<sup>18</sup> We found that the rate for New Hampshire is about one quarter of the U.S. rate. Our interpretation of this finding is that it reflects the low rate of other kinds of violence in New Hampshire. The New Hampshire homicide rate, for example, is about one quarter of the median state homicide rate.<sup>19</sup> The survey also provided information on the characteristics of

families and parents where physical abuse occurred and documented and supported the view of the New Hampshire task force and the state CPS that there are many more cases than come to the attention of CPS.

Another purpose of the New Hampshire survey was to test certain revisions of the Conflict Tactics Scales and to conduct methodological analyses of the effects of question order on the response rate.<sup>20</sup> These analyses are being used to develop and refine the CTS further as a measure of child abuse.

Finally, the New Hampshire study was intended to bring child abuse to public attention. Surveys have a way of doing that, especially when they are locally relevant. This objective was highly successful. Each of the three television stations carried the story on the evening news. Public television did an entire large segment of its weekly magazine on the survey. Probably every newspaper in the state carried stories; some did a feature story in addition to the news story. The *Boston Globe* also covered the survey. In short, aside from the scientific contribution of the survey, it served to bring child abuse to public awareness.

**Alternative Sources of Incidence Data.** Several federal agencies conduct periodic epidemiological surveys. It might be possible to arrange to supplement one of these surveys to measure the incidence of child abuse. One example is the National Health Interview Survey. Another is the Behavioral Risk Factors Survey carried out each year by the Centers for Disease Control in cooperation with about thirty states. The Behavioral Risk Factors Survey has provided extremely valuable data on the progress being made (or not made) in primary prevention of heart disease, automobile injury, lung cancer, and alcoholism. Child abuse questions (modified from the Conflict Tactics Scales) could be added to that survey.

Because the thirty states participating in the Behavioral Risk Factors Survey include New Hampshire (under contract to the University of New Hampshire poll, David W. Moore, principal investigator), our estimate of the feasibility of adding data on child abuse is based on direct experience. It may be impossible, however, to develop a cooperative arrangement with either of the two surveys mentioned, and the delay would be a minimum of two years.

**Sample of States.** For the surveys on child abuse, we suggest using a three-factor, two-by-two-by-two design to select eight states, each of which would include a sample of 1,000 parents. Although eight states is not a large number, the total number of families in the surveys

TABLE 11-1  
CLASSIFICATION OF STATES BY THREE DICHOTOMIZED FACTORS

Factor	Classification Scheme							
	High				Low			
Program and funding level	High				Low			
Urbanization	High		Low		High		Low	
Legitimate violence	High	Low	High	Low	High	Low	High	Low
State type number	1	2	3	4	5	6	7	8

would be about 8,000. In addition, the two-by-two-by-two design means that comparisons among states on any of the three factors will always involve four states that are low on that factor and four states that are high.

*Selection factor 1: program and funding level.* The intensity of state services and prevention programs for child abuse can be used to select four states that rank high in relation to other states and four that rank low. This will permit us to determine whether the four states with more intensive programs have a lower rate of child abuse and whether they show a greater decrease in child abuse than the four states with a less intensive program effort.

*Selection factor 2: urbanization.* Four states with a high proportion of the population living in standard metropolitan statistical areas and four states with a low proportion of the population living in such areas should be selected. Urbanization is an important basis for choice because previous research shows that the rate of physical abuse is much higher in large urban centers and because the degree of urbanization is an indirect measure of many other important characteristics of the states.

*Selection factor 3: other violence.* Four states with a high score on a measure of "legitimate violence" should be selected to compare with four states having low scores.<sup>21</sup> Scores on the legitimate violence index are suggested as a basis for selection because both theory and empirical evidence suggest that the use of violence for socially permissible purposes tends to encourage its use for criminal and other illegitimate purposes.<sup>22</sup> Alternatively, a combination of scores on the

legitimate violence index and rates of assault and homicide can be used as the basis for selecting states that are low and high in propensity to violence.

*Factorial design.* This selection of states will lead to the eight categories of states shown in table 11-1.

**The Need for Longitudinal Surveys.** Earlier we discussed the need to investigate the changes in the incidence of child abuse in the states and to relate those changes to changes in program effort and to sociocultural characteristics of the states. To accomplish these goals, epidemiological surveys must be conducted in the states at two or more times. For the initial research effort we propose that the epidemiological surveys be conducted in the first year of the project and again in the fourth year, allowing a three-year period for measuring change.

### Summary and Conclusions

This chapter outlines policy-relevant research based on studying child abuse on a comparative, state-by-state basis. The only child abuse data now available on that basis are the officially reported numbers of cases. They provide an excellent measure of the degree to which the public and state agencies have intervened in cases of child abuse. This chapter argues for the importance of also collecting state data on the incidence of child abuse and on the programs and funding directed toward child abuse.

Fundamental to the approach outlined in this chapter is the assumption that the incidence of child abuse varies substantially among the states and that some states have responded with more vigor than others to the problem. Information on the varying rates of abuse, the sociocultural characteristics associated with high rates, and various levels of response to the problem can identify state characteristics that correlate most highly with child abuse and can suggest how states with the higher rates may lower them. The combination of data on specific families and data on the characteristics of the states in which the families live can be used to discover how individual factors associated with child abuse are either exacerbated or muted by the sociocultural environments within the various states.

The research requires two major data collection efforts: data on the incidence of child abuse and data on state sociocultural and political characteristics. Each of the two data collection efforts will

need to be replicated three years after the first data are collected to permit a cross-lagged panel analysis or other kinds of longitudinal analysis.

*Incidence of child abuse.* The data on the incidence of child abuse would be obtained by epidemiological surveys of parents in eight states. The first survey would be conducted in year 1 of the project, the second in year 4. In each survey approximately 1,000 parents from each of the eight states would be interviewed, and the incidence of child abuse would be measured with the Conflict Tactics Scales. The purpose of the two surveys is to measure the change in both the incidence of child abuse within each state and the relationship between the incidence and the sociocultural factors associated with it.

The eight states would be chosen according to three criteria:

- the extent of state programs and funding to deal with the problem of child abuse
- the degree of urbanization
- the degree of nonfamily violence, including both "legitimate" violence, such as corporal punishment in schools and the death penalty for certain crimes, and criminal violence

From each of the eight types of states, we would select one state for inclusion in the survey. Although it would be ideal to survey 1,000 parents in all fifty states, an effort of that magnitude seems too ambitious at this time. Instead, by carefully selecting the states according to the scheme outlined, it would be possible to control for three of the most likely influences on the incidence of child abuse. We would also be able to analyze the relationship between the incidence of abuse and other sociocultural factors. Our theoretical model suggests that these relationships will differ greatly among the eight categories of states.

*Characteristics of states.* In addition to the epidemiological surveys, data need to be collected from all fifty states on the amount of funding for child abuse programs. These data are, of course, essential to the identification of the eight state categories, but they can also be analyzed to determine their relationship to sociocultural and political characteristics of the states. The sociocultural data are already available in the State and Regional Indicators Archive. This information can be used to develop and test a model that explains why some states are more likely than others to respond to the problem of child abuse.<sup>23</sup>

Awareness of the problem of child abuse has grown dramatically in the past two decades, but we still have no reliable longitudinal

measures of the problem within states—the entities that are primarily responsible for dealing with it. States need incidence data, not just reporting (that is, intervention) data. In the long run many states in addition to the eight in the proposed research may want to develop data collection efforts to provide continuous monitoring of the incidence of child abuse among their citizens.

The research described in this chapter would be expensive but far from prohibitively so. It would be a first and very substantial effort to examine the problem of child abuse from the perspective of the governmental units that have primary responsibility for dealing with it. This approach is a crucial next step in formulating policies that will contribute more effectively to the prevention and treatment of child abuse.