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**CORPORAL PUNISHMENT BY PARENTS AND ECONOMIC ACHIEVEMENT;
A THEORETICAL MODEL AND SOME PRELIMINARY EMPIRICAL DATA*¹**

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Almost all parents and almost all advice books for parents assume that corporal punishment is not harmful to children if it is done in moderation by parents who explain the reason for the punishment.*² A 1986 NORC survey, for example, found that 84% of the US population agreed or strongly agreed that "It is sometimes necessary to discipline a child with a good, hard spanking" (emphasis added) (NORC 1986). The National Family Violence Surveys found that over 90% of parents of toddlers used corporal punishment during the year of the survey (Wauchope and Straus, 1990). These beliefs are only slightly less widely held by sociologists and psychologists. Analysis of ten leading child development texts found that they devoted an average of only half a page to this almost universal aspect of the socialization experience of American children. In the light of these statistics, it is not surprising that the assumption underlying this study -- that ordinary corporal punishment by parents increases the probability of serious problems later in life -- tends to be regarded as far fetched by most sociologists as well as by lay persons. There are deeply embedded cultural and psychological reasons for this skepticism, described by Greven (1991) and Straus (forthcoming).

Despite the skepticism about the harmful effects of corporal punishment, a growing body of research suggests that corporal punishment, even when done "in moderation" by loving parents, is a risk factor for several psycho-social problems. The most extensive evidence is on the increased probability of aggression (Becker, 1964, Kandel, 1991; Lefkowitz et al. 1977; McCord, 1988; Steinmetz, 1979; Straus, 1991b). However, there is also evidence that corporal punishment is associated with increased risk of a variety of other problems, including delinquency and interpersonal problems in childhood; and as an adult, depression, assaults on spouses, and problem-level drinking (Straus, 1991b, 1992a; Straus and Kaufman Kantor 1991; Vissing et al., 1991).

The purpose of this paper is to stimulate further theoretical analysis and empirical research on the effects of corporal punishment by presenting a theoretical model and some preliminary findings.

A PRELIMINARY MODEL

The present study was suggested by Hyman's study of the effects of sexual abuse in a national sample of lesbian women (1991). Hyman found that those who had been sexually abused as a child had lower occupational achievement and lower incomes, net of other variables that also affect occupational/economic attainment such as years of education completed. The theoretical derivation leading to the theoretical model in this paper started with the proposition that sexual abuse is a traumatic experience which sets in motion processes that impair occupational and economic achievement. The next step was to assume that corporal punishment is also a traumatic experience, even though neither parents nor social scientists recognize it as such. This led to the hypothesis that the more physical punishment experienced by a child, the lower the level of later occupational and economic achievement.

(insert Figure 1 about here)

In order to move from this simple hypothesis to a middle range theory, a first step is to specify some of the possible intervening processes that might interfere with occupational and economic achievement and Figure 1 identifies some of those processes. For example, alienation is included in the model because we think that correcting misbehavior by use of corporal punishment carries a high risk of also giving the child a sense of powerlessness and alienation and that alienation interferes with performance in high level occupations. If these assumptions are correct, alienation is one of the intervening variables accounting for the relationship between physical punishment and occupational/economic achievement. Similar reasoning applies to the other intervening variables in the model

The model in Figure 1 is preliminary and undoubtedly needs further specification. It was formulated to encourage theoretical development and to guide to empirical research, including this paper. There are probably other intervening processes and contingencies that need to be added to the model and tested empirically. In addition to the preliminary nature of the model, to prevent the model from being too complicated to read easily, it deliberately omits important but standard specifications, such as a control for the socioeconomic class of origin, and other potentially confounding variables.

METHODS

An adequate test of the causal model presented above requires longitudinal data; or with cross sectional data, the use of path analysis. Unfortunately, even the cross sectional data available for this research did not permit use of path analysis because it consists of three data sets, one containing measures of physical punishment and occupational/economic achievement, another data set containing measures of physical punishment and alienation, and a third containing data on physical punishment, depression, and violence. Consequently, none of the available data sets contains data on all the variables necessary to test the hypothesized model by means of path analysis. Instead, different parts of the model will be examined using data from two different studies.

Samples

Sample For Hypothesis 1. The test of Hypothesis 1, that corporal punishment is associated with decreased occupational/economic achievement, was done using data from the 1975 National Family Violence Survey. This is a nationally representative sample of persons 18 years of age or older who were married or cohabiting with a person of the opposite sex, and included 1,337 men for whom all the necessary data was available. Information on the sampling design and characteristics of the sample is given in Straus, Gelles, and Steinmetz (1980) and Straus and Gelles (1990a).

Sample For Hypothesis 2. Hypothesis 2, that corporal punishment is associated with an increased probability of alienation was tested using data from the survey of 238 students in two New England Colleges, as described in Straus (1974). Questionnaires were distributed and completed in introductory

sociology and anthropology classes. Of the questionnaires distributed, 95% were completed. The sample is almost evenly divided between men (47%) and women (53%).

Sample For Hypotheses 3 And 4. The tests of Hypotheses 3 and 4, that corporal punishment is associated with an increased risk of depression and violence were carried out using the 4,513 respondents in the second National Family Violence Survey conducted in 1985. Information on the sampling design and characteristics of the sample is given in Straus and Gelles (1986; 1990a).

Measures Of Corporal Punishment

National Family Violence Surveys. Respondents in both surveys were asked "Thinking about when you yourself were a teenager, about how often would you say your mother or stepmother used corporal punishment, like slapping or hitting you? Think about the year in which this happened the most. Never, Once, Twice, 3-5 times, 6-10 times, 11-20 times, More than 20 times." This was followed by a parallel question asking about the corporal punishment the respondent experienced at the hands of his or her father.

This is far from an ideal measure because the validity and reliability of recall data on events that took place many years earlier is questionable. Despite this, the prevalence rates presented below correspond closely to the rates based on administering the Conflict Tactics Scales (Straus, 1979, 1990) to the parents of teen age children in this sample. Both the recall data and the contemporaneous data show that about half of all parents use physical punishment on children in their early teens. While that correspondence is not necessarily evidence of validity, it does somewhat alleviate concern about two threats to validity. First, it reduces the possibility that, if the hypothesis is supported, it is because depressed adults remember more bad things about their childhood, such as having been hit as a teenager, even though more such events did not happen. In this case, we know that the percentage recalling the "bad thing" is almost identical to the percentage of parents who reported doing it to an adolescent during the year of the survey. Second, the 50% rate shows that the respondents who reported having been physically punished during their teen years are not a small and highly deviant subset of all teenagers.

Student Survey. The college students studied to test the hypothesis that corporal punishment is associated with an increased probability of high alienation completed Form A of the Conflict Tactics Scales or CTS (Straus, 1979, 1990). The CTS asks the respondent to indicate what happened when there were conflicts or arguments between family members. The data used for this paper refers to the parts of the CTS which asked them to indicate how many times during their last year in high school, each parent had engaged in each of the items in the CTS. These begin with the items in the Reasoning scale, proceed on to items measuring Verbal Aggression, and end with the items that refer to Physical Aggression. Of the physical aggression items we took the following four as indicative of physical punishment: Threw something, Pushed, grabbed, or shoved, Hit or tried to hit, but not with an object, Hit or tried to hit with something hard. The response categories were the same as those

listed above. The data on fathers and mothers were each factor analyzed and each resulted in a single principle component which accounted for 73 and 74% of the variance.

Measurement Of Dependent And Control Variables

The measurement procedures used for the dependent variables will be presented at the beginning of the sections describing the findings on each dependent variable so that readers will have these procedures in mind when it is most important to take that into consideration. The procedures used to measure the control variables in addition to age, education, and gender were:

Occupation. The occupation of the respondeat and of the respondent's father were coded using the Standard International Occupational Prestige Scale (Treiman, 1977).

SES Index. The socioeconomic status measures are factor score indexes constructed using the Principal Components option of the SPSS/PC factor analysis program. For the National Family Violence Survey, five indicators were analyzed: education of the wife and the husband, their occupational prestige scores, and the combined income of the couple. The analysis yielded a single factor which explained 43% of the variance. For the student survey, an index of the father's socioeconomic status was computed by a principal components analysis of the father's education and income, and whether the father's occupation was manual or non-manual work. The analysis yielded a single factor which explained 68% of the variance of these three indicators.

Violence Between Parents Of The Respondent. Respondents were asked if, when they were a teenager, their father had hit their mother, and if so, how often that occurred. The same questions were repeated for whether the mother had hit the father. If either parent was reported as having hit the other, it was considered a case of marital violence between the parents of the subject.

Violence In Marriage Of The Respondent. Form R of the Conflict Tactics Scales (Straus, 1979, 1990) was part of the 1985 National Family Violence Survey. Marital violence was considered to be present if either spouse used one or more of the violence items in this instrument: Threw something, Pushed, grabbed, or shoved, Hit or tried to hit, but not with an object, Hit or tried to hit with something hard, Beat him/her up, Choked, Threatened with a knife or gun, Used a knife or fired a gun at the spouse.

Reasoning And Nurturance. Parental use of reasoning with the child was measured by the Reasoning Index of the Conflict Tactics Scales (Straus, 1979, 1990) and parental nurturance was measured by four items from the Cornell Parent Behavior Inventory (Siegelman, 1965). These asked "During your last year in high school, how often did your parents do each of the following: Comforted me and helped me when I had trouble. I could talk with him (her) about everything. Taught me things which I wanted to learn, Helped me with schoolwork when I didn't understand something. A principle components factor

analysis found that all four loaded on one factor which accounted for 64% of the variance.

Statistical Analysis

Dichotomization of Dependent Variables. The theoretical and practical issue of this paper is whether corporal punishment interferes with high level occupational and economic achievement. Therefore, to identify high achievers, we created a dummy variable to classify those at the 80th percentile or higher as 1.

For similar theoretical reasons we also wanted to focus on the presence or absence of a high level of the hypothesized intervening variables. A certain level of alienation and depressive symptoms is widespread and, as noted by Jacobson and Revanstorf (1988), the important issue both theoretically and practically, is the occurrence of a high or chronic level of alienation or depressive symptoms. The alienation measure was therefore dichotomized at the 80th percentile. Since some estimates of severe depression have found a prevalence rate of about 10%, we dichotomized the Depressive Symptoms Index at the 90th percentile. For Husband-to-Wife violence, the 12 percent of the men who assaulted their partner one or more times during the year were coded as 1.

Logistic Regression. Logistic regression or logit (Aldrich and Nelson, 1984; Hamilton, 1992) was used to test the hypotheses because logit permits use of dichotomous dependent variables. Since there are four dependent variables, four logit models were tested.

(Table 1 about here)

Model Specification. Each logit model included a number of independent variables in addition to corporal punishment, as listed in Table 1. All models included a specification for socioeconomic status, gender, and whether there was violence between the parents of the subject because these characteristics are confounded with both corporal punishment and the dependent variables. In addition to these three specifications, the available data permitted certain other theoretically important variables to be specified in some of the analyses. These are identified in Table 1 and will be discussed in the relevant sections of the paper.

Graphs. The conditional plotting technique described in Hamilton (1992) was used to plot the relation of corporal punishment in adolescence to the probability of being in the high category of each of the dependent variables. Each graph plots one of the logistic regression coefficients for Corporal Punishment (given in the first row of each panel of Table 1. It should be noted that the graphs show the regression line (in the form of the predicted probability of the dependent variable), not the observations. In addition, each graph plots these predicted probabilities contingent on another of the independent variables in the model, such as separate plots for men and women, while controlling for all other variables in the model.

CORPORAL PUNISHMENT AND OCCUPATIONAL/ECONOMIC ACHIEVEMENT

To test Hypothesis 1 (the more corporal punishment experienced by a child, the lower the level of occupational and economic achievement) we computed a factor score index using the SPSS/PC principle components program. The two variables in this Occupational/Economic Achievement Index are the Standard International Occupational Prestige Score (Treiman, 1977) and income during the survey year. The factor score accounts for 67% of the variance of these two indicators. To identify men with high occupational/economic achievement, we created a dummy variable by coding those who scored at the 80th percentile or above as 1 and those with lower scores as 0.

(Insert Table 1 and Figure 2 about here)

The logit coefficient in the first row in Part A of Table 1 shows that corporal punishment is associated with a lower probability of high occupational/economic achievement, and the t and p values show that the results are statistically significant. Since logit coefficients are logs and cannot be directly interpreted, the coefficient is plotted in Figure 2 with a specification for educational attainment. Figure 2 reveals an interaction with educational attainment. Specifically, the effect of corporal punishment is contingent on the level of education completed. For men with less than high school education, there is almost no relationship between corporal punishment and occupational/economic achievement. For men with a high school diploma, there is a slight downward slope, indicating that the more corporal punishment, the lower the occupational/economic achievement. Corporal punishment is most closely related to lowered occupational/economic achievement for men who completed four or more years of higher education.

One can interpret this interaction as resulting from differences in occupational and economic opportunities available to men with different levels of education, or more specifically, to a ceiling effect that limits the chance of high occupational/economic attainment for men with low education no matter what their personal characteristics. Men who have not completed high school have very limited opportunities to attain a high prestige and high income position regardless of the effects of corporal punishment. High school graduates have somewhat greater opportunities, but those who suffer from the effects of corporal punishment are less able to take advantage of those opportunities. College educated men have the greatest opportunities and therefore the greatest possibility that a maladaptive personal or social characteristic can interfere with occupational and economic attainment.

Only brief comments will be made on the other variables in the model because they are in the model as controls for spuriousness. The row labeled Gender of Respondent in Part A of Table 1 shows that the gender of the partner interviewed to obtain information on the husband's occupation and income did not significantly affect the occupational/economic achievement index score. The row for Father's Occupation, not surprisingly, shows that the higher the level of the father's occupation, the higher the occupational/economic achievement of the son. The row for Marital Violence, however, does present a surprise because it shows that marital violence is associated with a greater the probability of high achievement. We have not as yet formulated an

explanation for this finding. The last two rows show, again not surprisingly, that occupational/economic achievement increase with age and education.

INTERVENING PROCESSES

The "ceiling effect" interpretation mentioned in the previous section is based on the assumption that the experience of corporal punishment tends to result in personal characteristics that interfere with maximizing occupational and economic opportunities. Figure 1 identified a number of possible such characteristics. Data was available on four of those variables.

Alienation

The theoretical model asserts that the lower occupational/economic achievement of those who experienced corporal punishment up through their teen years occurs because being assaulted by the very persons on whom a child's life depends is an alienating experience and alienated people may suffer a disadvantage in high level occupational attainment.

One of the data sets available to us -- a study college students (Straus, 1974) -- included measures of alienation and corporal punishment. Thus, we could test the first step in the theoretical model, i. e., that corporal punishment increases the probability of being highly alienated. However, since that data set did not include a measure of occupational/economic achievement, it was not possible to carry out a path analysis to test both steps in the model.

Alienation was measured by an abbreviated version of the Alienation scale developed by Dean (Dean, 1961; Zeller et al., 1980). It consists of three items from the Powerlessness sub-scale and three from the Normlessness sub-scale. Since almost identical results were found using these sub-scales separately, we report only the data on the overall Alienation scale because that is the most reliable measure.

(insert Figure 3 about here)

The regression results for the overall alienation scale are given in Part B of Table 1 and plotted in Figure 3 with a specification for gender. They show that the more corporal punishment the greater the probability of being highly alienated. Although use of corporal punishment tends to teach conformity to rules (norms), it does so at the cost of also giving the child a sense of powerlessness. As Kohn suggested in Class and Conformity (1969), it tends to produce adults who are adapted to low level occupations in which obedience rather than initiative and creativity are the key requirements, but poorly adapted to high level occupations which demand initiative and creativity.

One important feature of the analysis is that it includes data that permits testing the widely held belief that if corporal

punishment is done by loving parents who explain what they are doing, there will be no adverse side effects. The rows for Nurturance and Reasoning in Part B of Table 1 show that neither is significantly related to alienation. More important, including these specifications in the logit model permits one to conclude that the association of corporal punishment with alienation occurs regardless of whether the father was loving and reasoning. The model shown in Part B was also tested using nurturance and reasoning by the mother and the findings were similar.

The only variable besides corporal punishment that was found to be significantly related to alienation was gender. As shown in Figure 3, male students have a higher probability of alienation, but the relationship between corporal punishment and alienation is almost identical for men and women.

Depression

The theoretical model posits depression as an intervening variable, but as in the case of alienation, the available data permits only a test of the hypothesis that corporal punishment is associated with an increased risk of depression later in life. The findings in this section are given in more detail in a paper presenting a theoretical model as well as an empirical test of the hypothesis that corporal punishment is associated with an increased risk of depression (Straus, 1991b).

Identifying who is depressed in a large survey with limited time available for any one variable is a difficult and controversial task. The method used in the 1985 National Family Violence Survey is based on the Psychiatric Epidemiological Research Instrument or PERI (Dohrenwend, 1976). The PERI provides data on a number of different psychiatric problems and is much longer than could be included in the half hour interviews we conducted. The measure of depression that we used consists of the following four PERI items that Newmann (1984) found to be most indicative of depression:

- Been bothered by feelings of sadness or depression
- Felt very bad and worthless
- Have you had times when you couldn't help wondering if anything was worthwhile anymore
- Felt completely hopeless about everything

Respondents were asked to indicate how often in the past year each of these things occurred using the following categories: 0=Never, 1=Almost Never, 2=Sometimes, 3=Fairly Often, 4=Very Often. These items were factor analyzed using the SPSS Principle Components program. The analysis found a single factor which accounted for 66% of the variance. The Depressive Symptoms Index used for this study is the factor weighted sum of these four items and has an Alpha coefficient of reliability of .82.

(insert Figure 4 about here)

In Figure 4 the regression line for women is higher than for men, which is consistent with a large number of studies showing higher depressive symptoms for women (Charney and Weissman, 1983). The critical point for the theory being tested in this study is that Part C of Table 1 (which is graphed in Figure 4) shows, that regardless of gender, the more corporal punishment experienced as a teenager, the higher the probability of depression.

Part C of Table 1 also shows other variables that are significantly related to depression. The row in Part C labeled SES shows that the higher the SES, the lower the probability of depression (which is consistent with many studies (Dohrenwhend et al., 1992)). The rows labeled Parent's Marital Violence and Wife-Assault show that, regardless of whether marital violence was observed as a child or experienced as an adult, it is associated with a significantly increased risk of depression.

Violence

The last of the intervening variables posited in the theoretical model for which we have data is physical violence. The results given below are summarized from a paper devoted to the issue of the links between corporal punishment and physical violence (Straus, 1991a).

The aspect of physical assault used to test the hypothesis that an increase in the amount of corporal punishment is associated with an increase in the probability of physical violence as an adult is the Husband-to-Wife Violence Index of the Conflict Tactics Scales measure of violence against a spouse (Straus, 1979; 1990).

(insert Figure 5 about here)

Part C of Table 1 shows that the more corporal punishment experienced as a teenager, the greater the probability as an adult of physically assaulting a wife. This relationship is plotted in Figure 5, with a specification for whether there was also violence between the parents who used corporal punishment on our subjects. The fact that the upper of the two lines is for "Violence between Parents of Respondent" indicates that those who observed violence between their parents were more likely to be violent to their spouse during the 12 months immediately preceding the interview. The fact that both lines go up as the frequency of corporal punishment goes up shows that, regardless of whether there was violence between the parents, the more corporal punishment experienced, the greater the probability of wife-assault, and therefore supports Hypothesis 4.

CONCLUSIONS

The results of the analyses reported in this paper are all consistent with the hypothesized model and therefore support the theory that corporal punishment tends to have a dampening effect on occupational and economic achievement and with the hypotheses that this relationship occurs because

corporal punishment increases the probability that the child will become alienated, depressed, or violent.

Although the logistic regression analyses controlled for a number possible confounding variables, there is an important difference between providing support for a theory and proving a theory. In the present case, numerous methodological limitations make a causal inference unwarranted. First, the theoretical model needs to be tested by path analysis, and that could not be done because none of the data sets we analyzed included all of the key variables. Second, the measurement of corporal punishment is based on recall data and selective recall might be confounded with the dependent variables. This could happen if alienated students are more likely to remember and report corporal punishment. These limitations can be overcome by a longitudinal or experimental study, but such studies are difficult and expensive and, as indicated in the introduction to this paper, most people doubt the value of making such an investment because almost everyone regards corporal punishment as "sometimes necessary" and harmless when done in moderation. Consequently, the fact that the current research found that corporal punishment is associated with an increased probability of powerlessness and a decreased probability of high occupational/economic achievement, supports the case for allocating scarce resources to such a longitudinal or experimental study.

If subsequent research confirms the findings of this study, the implications are profound because the side effects of corporal punishment are wide ranging and not trivial. Moreover, the particular side effects described in this paper are likely to become even more serious as the transformation to a post-industrial society proceeds. The demand for workers who can adapt to the normative tyranny of unskilled factory work is disappearing. Jobs which demand a strong back and obedience to authority are becoming so rare that men who, in a previous historic era, could have a stable place in society may find no place whatsoever in the post-industrial labor market. Corporal punishment, which helped socialize the next generation of factory workers may now be helping to socialize the next generation of the chronically unemployed.

Appendix A

VALIDITY OF THE CORPORAL PUNISHMENT DATA

The analysis of corporal punishment in this paper is based on ask adult subjects to think about when they were teenagers and to say how often each parent "used physical punishment, like slapping or hitting you?" This appendix discusses some of the methodological problems associated with that measure.

Correspondence With Parent Interview Data

Despite the length of time which typically intervened between the time of interview and when these adult respondents were adolescents, the last column of Table A1 shows that half the sample reported having been corporally punished one or more times during their teen years. Among boys, they are the majority (58%) and among girls almost a majority (44%). Moreover, since these data are based on recall over long time periods, they are probably minimum estimates.

(Table A1 about here)

A 50% prevalence rate seems astonishingly high for adolescents, but comparison with the first column of Table A1 shows that they correspond closely to the rates based on contemporaneous data obtained by interviewing parents. They are also consistent with previous research (Straus, 1971, 1983, Straus et al., 1980). While this correspondence is not necessarily evidence of validity, it does somewhat alleviate concern about two threats to validity.

Not Statistically Deviant

The prevalence rates just presented show that the respondents who reported having been corporally punished during their teen years are not a small and highly deviant subset of all teenagers. They are at least half of all American children and therefore represent the modal situation.

Actually, the rates based on the parent interviews shown in Table A1 are not really comparable because we interviewed only one parent and asked only about his/her use of corporal punishment, whereas the rates in the Adult column of Table A1 are based on whether the respondent recalled having been hit by either or both parents. The rates for "either or both" in the column headed Adult are 32% higher than the rates for just one of the parents for hitting boys, and 47% higher for hitting teen age girls. If these same ratios apply to the parent interview data, then the rates for hitting 13 and 14 year old boys may be as high as 67% and the rates for hitting girls in their early teens may be as high as 63%. Even those figures may be minimum estimate because not every parent we interviewed can be assumed to have been willing to tell an interviewer about such events, and many others are forgotten.

Chronicity of Hitting

At some point, even attacks such as spanking and slapping a child, that come well within the legal and morally correct level of severity, can be done with such frequency that, although they are legal, most contemporary Americans would consider it to be "abuse." But that was not always the case (Straus, forthcoming). Since there are no legal limits, and since there is no consensus among the public or social service professionals on when that point is reached, it is best to examine several division points.

The first row of section B of Table A1 shows that the parents who used corporal punishment with teenage children did so an average of six times for children ages 13 and 14 as reported by the parents, and an average of 8 times as reported by adults recalling their adolescence. These figures are so high because the distribution is skewed, but even the medians of 4 are high, especially considering that these are minimum estimates and the true figures are probably much higher.

The percentages in the part of section B under Chronicity Categories show that when parents hit a teen, they almost always did it more than once during the 12 months preceding the interview, and more than half did it three or more times, more than a third did it six or more times, etc. Moreover, the data on chronicity are even more likely to be underestimates than the prevalence data because they require the respondent to not only remember if there was an instance of hitting, but also how many instances occurred of events that few if any parents keep track of.

Selective Recall

The hypothesis that corporal punishment is related to later aggression and psychological problems might be erroneously supported if abusing and psychologically troubled subjects tend to remember more bad things about their childhood, such as having been hit as a teen, even though more such events did not happen. However, that possibility is less likely because the percentage recalling the "bad thing" (i.e. having been hit by a parent when an adolescent) is almost identical to the percentage of parents who reported doing it to an adolescent during the year of the survey.

Confounding With SES and Other Social Characteristics

On most characteristics, such as race and SES, there is little difference between those who reported having been hit as adolescents and those who did not. However, use of corporal punishment was found to be associated with having come from a violent family (parents hit each other and/or used corporal punishment on the respondent) and with the violence between the respondent and his or her spouse. These possible sources of spurious findings were controlled by using analysis of covariance and partially out the effect of these variables by specifying them as covariates.

Deviance in the Normative Sense

Many surveys show that over 80% of the population approves of corporal punishment, and many show approval rates in the 90% range (see chart in Straus, forthcoming). Unfortunately, the age of the child is not specified in those surveys and the approval rates are likely to be lower for hitting a 13 or 14 year old. However, the NH child abuse survey (Moore and Straus, 1987) asked a representative sample of 914 New Hampshire parents if they agreed or disagreed with the statement "Sometimes it's a good idea for parents to slap their teenage child who talks back to them." Thirty one percent agreed, 23% were neutral or "mildly disagreed" and only 46% strongly disagreed. I suggest that almost all of the 54% who did not "strongly disagree" really agreed, and if this is the case, they are the majority of this representative sample of parents from a state which has an extremely low level of violence, including a child physical abuse rate that is substantially below the national average. To the extent that this is correct, hitting a teen age child is far from a normatively deviant type of behavior.

Two Other Problems

There are two methodological problems that cannot be addressed with the data available on the experiences of the adults who recalled having been hit in their teens.

First, the subjects who reported corporal punishment may also have suffered from abusive parenting, and the findings on the adverse effects of corporal punishment could be driven entirely by that small part of the group who experienced corporal punishment in their teens.

Second, the findings refer to corporal punishment during adolescence and they may not apply to corporal punishment experienced as a toddler or young child or they might be due to the cumulative effect of having been corporally punished since early childhood. The findings might not apply to corporal punishment experienced by toddlers and younger children whose parents stopped by the time of adolescence.

These two problems need careful investigation. However, concern over these two potential source of error is somewhat mitigated by the results of analyses which excluded children who were also physically abused, and which controlled for the age of the child. The findings indicate that corporal punishment of even very young children whose parents did not engage in either physical or verbal abuse, is associated with increased rates of such problematic behavior as interpersonal problems with other children, delinquency, and aggression (Straus, forthcoming; Straus, 1991b; Vissing et al., 1991).

Are The N's For Chronic Cases
Large Enough to be Dependable

The percent of subjects recalling corporal punishment drops off sharply as the frequency increases. This could mean that the data points at the high chronicity end of the distribution are not reliable. The following table gives the number of cases in each of the frequency of use categories used in this study. The table is based on the number of cases available for the logistic regression used to examine the relation of corporal punishment to occupational/economic achievement. This example was chosen because it had the most missing data of any of the logistic regressions using National Family Violence Survey data. Consequently, the N's given below are the minimum number of cases. It can be seen that because of the overall N of over 2,000 cases, even the high chronicity categories have more than just a few cases.

FOOTNOTES

1. Paper presented at the 1992 meeting of the American Sociological Society. The impetus for this paper is a paper by Batya Hyman on "Economic Consequences Of Child Sexual Abuse In A Select Group of Women" written for the Family Research Laboratory Seminar. It is a pleasure to acknowledge my indebtedness to her, and also the helpful critiques and suggestions of the other participants in that seminar, and of Richard J. Gelles.

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2. There is no standard usage or definition for "corporal punishment" and "physical punishment." For this paper, corporal punishment is defined as the use of physical force with the intention of causing a child to experience pain but not injury, for purposes of correction or control of the child's behavior. The most frequent forms are spanking, slapping, grabbing or shoving a child "roughly" (i.e. with more force than is needed to move the child), and hitting with certain traditionally acceptable objects such as a hair brush, belt, or paddle. Similar ambiguity applies to "spanking." To some it means slapping a child repeatedly on the buttocks, and traditionally, the bare buttocks. But for most contemporary Americans, I believe it means any slapping or hitting, probably the most frequent form of which is to slap a child's hand for touching something. We use the terms "corporal punishment," "physical punishment" and "hitting" and "spanking," as synonyms.

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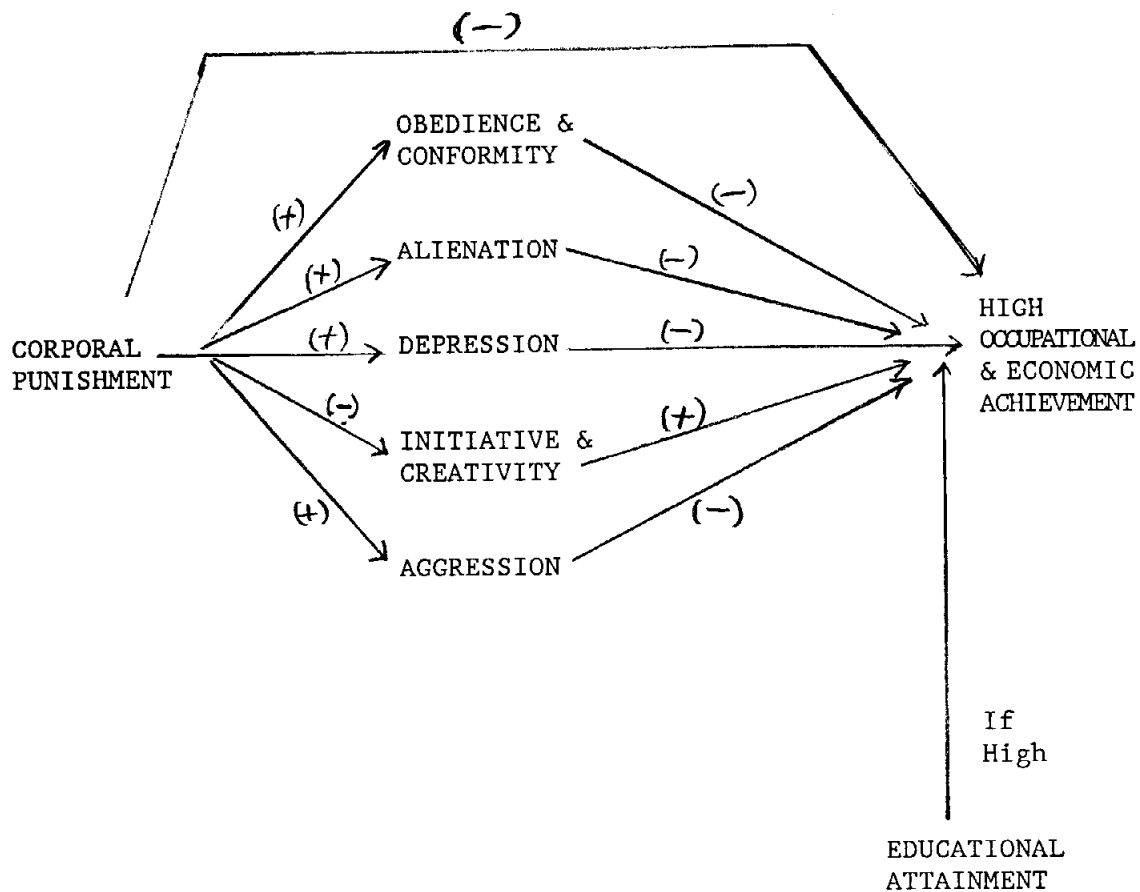
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Figure 1

THEORETICAL MODEL OF RELATIONSHIP BETWEEN CORPORAL PUNISHMENT AND OCCUPATIONAL/ECONOMIC ACHIEVEMENT



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Figure 2

OCCUPATIONAL/ECONOMIC ACHIEVEMENT OF HUSBAND BY PHYSICAL PUNISHMENT DURING TEEN YEARS

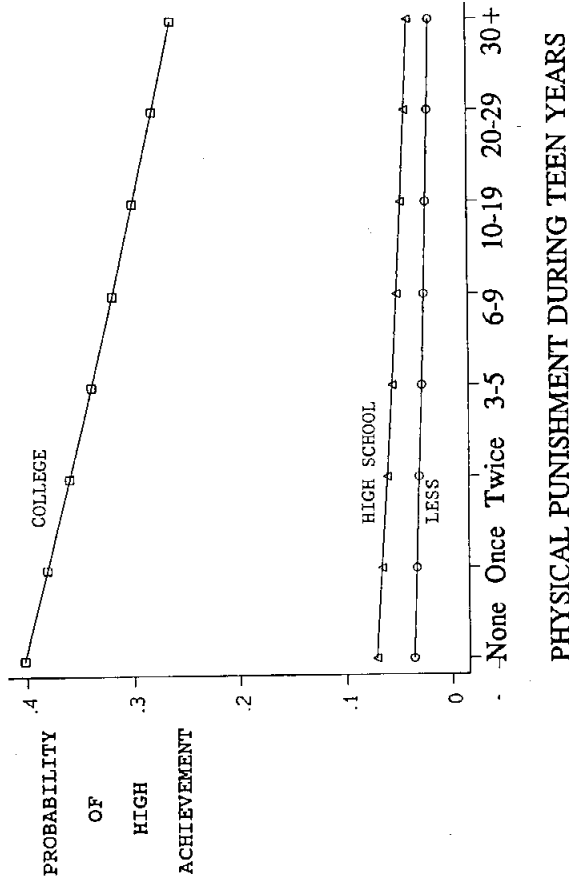


FIGURE 3. ALIENATION BY PHYSICAL PUNISHMENT DURING TEEN YEARS

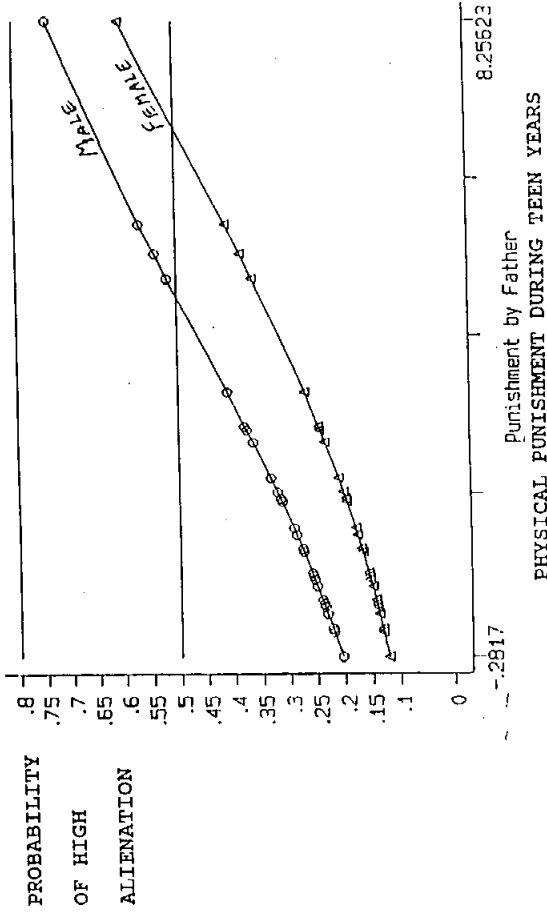


FIG 4. DEPRESSIVE SYMPTOMS BY CORPORAL PUNISHMENT DURING TEEN YEARS

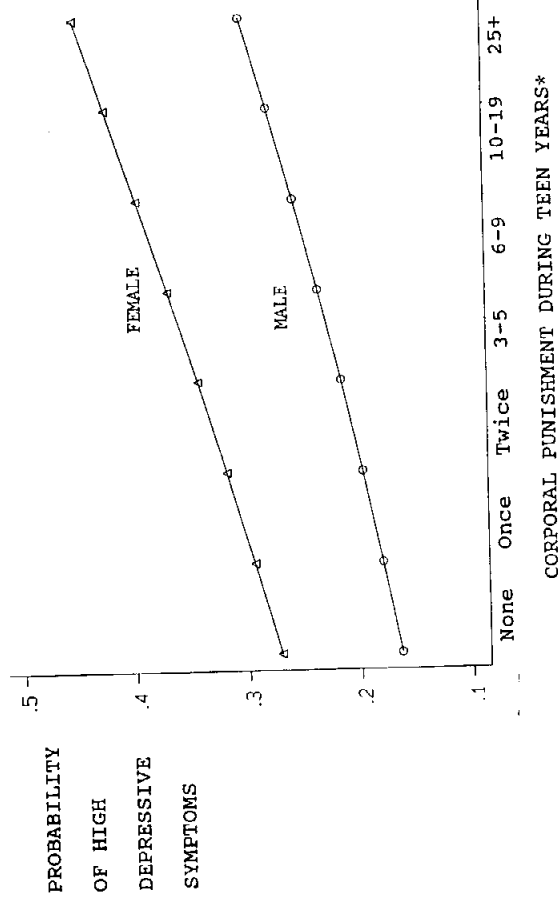


FIGURE 5. ASSAULTS ON WIVES BY PHYSICAL PUNISHMENT EXPERIENCED BY HUSBANDS DURING TEEN YEARS AND VIOLENCE BETWEEN HUSBAND'S PARENTS

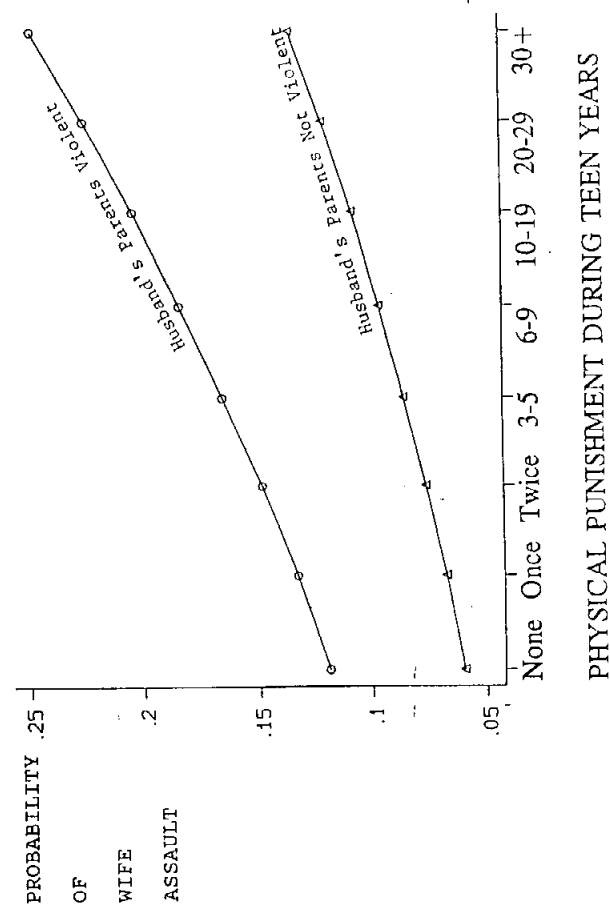


Table 1. Logistic Regression Analyses

Independent Variable	Logit Coeff	Stnd Error	t	p<
A. Occupational/Economic Achievement (1975 National Sample of 1,337 Men)				
Corporal Punishment	-.0955	.0613	-1.56	.060
Gender of Respondent	-7.8201	.7959	-9.83	.001
Father's Occupation	.4976	.2667	1.87	.032
Marital Violence	.6303	.3721	1.69	.046
Age of Respondent	.0231	.0101	2.28	.012
Education of Respondent	.8595	.0773	11.11	.001
B. Alienation (1972 Sample of 238 College Students)				
Corporal Punishment by Father	.2797	.1597	1.751	.040
Gender of Student	-.6310	.3556	-1.776	.039
SES of Parents	-.0074	.0090	-0.797	.213
Violence between Parents	.1051	.4793	0.219	.037
Nurturance by Father	-.0519	.1943	-0.267	.395
Reasoning by Father	.0150	.1875	0.084	.467
C. Depressive Symptons (1985 National Sample of 4,513 Men and Women)				
Corporal Punishment	.0977	.0221	4.42	.001
SES	-.0190	.0023	-8.09	.001
Gender	.5760	.0963	5.98	.001
Age	.0023	.0031	.73	.231
Parent's Marital Violence	.4284	.1191	3.59	.001
Wife Assault	1.0925	.1092	10.00	.001
Drinking	.1321	.1568	.84	.200
Constant	-1.6896	.2151	-7.85	.001
D. Assaulted Wife (1985 National Sample of 4,529 Men and Women)				
Corporal Punishment	.1418	.0231	6.14	.001
SES	-.0093	.0026	-3.56	.001
Gender	.1592	.1013	1.57	.058
Age	-.0467	.0042	-11.09	.001
Parent's Marital Violence	.7316	.1183	6.18	.001
Drinking	.3800	.1487	2.55	.006
Constant	-.2384	.2293	-1.04	.149

Appendix Table 1. Rates and Number of Cases For Part of Sample Used For Anova and Logistic Regressions

Frequency	Number of Cases			
	By Mother		By Father	
	Women	Men	Women	Men
Total N	2693	2106	2664	2081
<u>Hit once or more</u>				
This Sample	35%	44%	26%	45%
Total Sample (From Fig. 1)	36%	44%	36%	45%
<u>Chronicity</u>				
Once	29.3 (273)	20.7 (190)	43.5 (302)	30.9 (290)
Twice	24.0 (223)	18.6 (171)	22.2 (154)	19.9 (186)
3-5	22.2 (207)	29.7 (273)	17.1 (119)	24.0 (225)
6-10	10.0 (93)	12.6 (116)	7.3 (51)	11.0 (103)
11-20	7.3 (68)	9.5 (87)	4.8 (33)	6.8 (64)
20+	7.1 (66)	8.7 (80)	5.2 (36)	7.4 (69)