



March 1984

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Recommended Citation

Belyea, Michael J. and Zingraff, Matthew T. (1984) "Child Abuse and Mental Health: An Examination of Some Long Term Effects for Prison Inmates," *The Journal of Sociology & Social Welfare*: Vol. 11 : Iss. 1 , Article 11.
Available at: <https://scholarworks.wmich.edu/jssw/vol11/iss1/11>

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CHILD ABUSE AND MENTAL HEALTH:
AN EXAMINATION OF SOME LONG TERM EFFECTS
FOR PRISON INMATES

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Abstract

This study examines the effects of childhood abuse on future adult mental health. A statistically significant relationship was found between abuse and mental health problems. This relationship remained even after controlling for parental characteristics and the effects of an abusive environment. These findings suggest that one way to deal with the consequences of abuse would be to develop long term intervention strategies.

Since the early work of Kempe and his associates (Kempe et al., 1962) child abuse and neglect have become major foci for research in the fields of social welfare, pediatrics, child development, psychiatry, and behavioral science. Quite an extensive and informative body of literature has resulted from this relatively recent interest (see Martin et al., 1974 and Taylor and Newberger, 1979 for good reviews of the current literature). The majority of this research provides insight into the social background and present circumstances of the abusive adult (Baldwin & Oliver, 1975; Garbarino, 1976; Gil, 1970; Lynch and Roberts, 1977; Milner and Wimberley, 1979).

A less extensive body of literature focuses on the victims of abuse. The earliest studies (Elmer and Gregg, 1967; McHenry et al., 1963; Schloesser,

1964) Focused almost exclusively on the immediate short term physical effects (i.e., lacerations, broken bones, brain damage, death). More recent empirical research has expanded this focus to include the psychological, social, and intellectual development of the abused child. Several of these studies report that abused children exhibit more aggressive behavior than control groups, have a poor self-concept, and have difficulty in developing meaningful interpersonal relationships (Berkeley Planning Associates, 1978; Elmer, 1967; Green, 1978; Kent, 1976; Kinard, 1980; Martin and Beezley, 1976; Martin and Rodeheffer, 1976; Muir, 1976; Sandgrund et al., 1974). These studies, along with the earlier research on the physical problems of abused children, suggest that the neurological, psychological, and social development of these children may be delayed and/or distorted.

Still less developed, however, is theory and research focusing on the long term effects of abuse. A relationship between childhood abuse and future problems as functioning adults is implied in much of the literature. Early theoretical statements (Curtis, 1963; Easson and Steinhilber, 1961; Silver et al., 1969) suggest that abused children are more likely to be aggressive and engage in behavior that is antisocial -- both resulting in conflict with authority and the law. Studies of juvenile delinquents, when commenting on the disproportionate number of children that have been abused or come from a violent family background, tend to reinforce these earlier statements (Button, 1973; Lewis et al., 1979). While this line of research suggests that "violence breeds violence," there is no general consensus on the relationship between abuse and future personal aggression (Muir, 1976).

Research also suggests that abusive adults fail to develop normal parent-child relationships because they themselves were abused as children (Helfer, 1973; Solomon, 1973; Steele and Pollock, 1968). Whether this relationship is due to psychopathological characteristics of the adult resulting from abuse, psychopathological characteristics of the adult independent of abuse, or to the learning of values, attitudes, and behaviors conducive to the use of violence is still debated

(Gelles, 1973). On balance, however, this research seems to provide at least tentative support for the argument that the effects of abuse are likely to go well beyond childhood and adolescence.

Baldwin and Oliver (1975) present findings which further suggest an enduring relationship between child abuse and long term effects on mental health. Their study focused on the family characteristics of abused children. It was found that fifty-eight percent of the abusive parents experienced prolonged mental abuse, forty-two percent experienced severe or moderate physical abuse, and forty-two percent experienced neglect as children. This is consistent with other studies. What is of even greater interest is their finding that significant proportions of the abusive parents had histories of suicidal attempts (30%), psychiatric inpatient treatment (34%), psychiatric outpatient treatment (58%), and various personality and neurotic disorders (76%).

Clearly, the implication of the theoretical work and the findings of empirical research suggest that childhood abuse has long term effects for its victims. The present study examines the mental health of adults who report having been abused and/or neglected as children.

Data and Description of Variables

The data for this study were obtained from the Division of Prisons, North Carolina Department of Correction. After being sentenced to an active prison term each new inmate is sent to one of the Department's Reception and Diagnostic Centers. During the first two weeks of admission, data concerning the inmate's background (such as occupation, education, family life during formative years, etc.) are collected. In 1979 there were 10,233 new admissions to North Carolina prisons. Of the new admissions background information was collected on over 5,000 inmates -- the remaining inmates were serving sentences of one year or less and background information is not routinely obtained from them.

The mean age of those individuals admitted during 1979 was 27.5 years. Approximately 94 percent of the new inmates were males and 47% were non-white. The mean education for this group was 9.65 years of

schooling. Over twenty percent were incarcerated for larceny followed by burglary (18.2%), assault (10.5%), robbery (8.7%), and other offenses (42.6%). For those individuals who said that they were abused as children the mean age was 23.7 years, about 84 percent were males and 38% nonwhite. The mean education for this group was essentially the same as the total inmate population--9.67 years of schooling. The most typical crimes for which the abused individuals were incarcerated were also similar (larceny 25%, burglary 23.7%, assault 8.1%, robbery 8.7%), and other offenses 34.5%).

Childhood abuse was constructed from a social history question concerning the inmate's relationship with his/her parents: 1) the inmate felt the relationship was good, 2) felt the relationship was unsatisfactory due to physical abuse, 3) it was unsatisfactory due to mental abuse, 4) it was unsatisfactory due to both physical and mental abuse, and 5) it was unsatisfactory due to negligence. In order to ensure enough cases for analysis categories 2-5 were collapsed into a single category of (being) abused.¹ The dependent variable, mental health problems, was coded as either 1) history of mental problems, or 2) no history of mental problems.

Most research on child abuse utilizes medical, social service, and other official records. By their own admission only the most overt and manifest cases of abuse reach these agencies. Consequently the data are selective and underestimate the extent of child abuse. To gain greater insight into the problems of

¹This procedure did not significantly alter the results. Separate analyses were run for those who were physically abused, those who were mentally abused, those who were both physically and mentally abused, and for those who were neglected. The overall relationship between abuse and mental health problems remained significant and controlling for parental characteristics or for the abusive environment, when there were enough cases, did not change the basic relationship. These analyses are available upon request from the authors.

child abuse we feel it is necessary to explore and utilize other sources of information that have been neglected previously. Because of the recurring theme of the relationship between child abuse and other antisocial behavior we feel that incarcerated offenders are a critical population in need of study.

We recognize that there might be some limitation to these data. Prison inmates are unique in that they have been formally judged to have violated a criminal law to such extent that they are incarcerated. This certainly stands in sharp contrast to the vast majority of the American public. However, we know of no empirical research that would suggest that criminal offenders are significantly different from others concerning a relationship between childhood abuse and later mental health problems. Additionally, because abuse and mental health were self reported there is no way to determine how severe they were or whether or not the individual was telling the truth. There is ample evidence, however, that self-report data about deviant behavior are both reliable and valid (Elliott and Ageton, 1980; Farrington, 1973; Hardt and Hardt, 1977; Hindelang et al., 1981).

Findings

Thirteen percent of the inmates reported childhood abuse. While reliable data on which to determine the true incidence rates for child abuse do not exist (Cohen and Sussman, 1975; Gelles, 1978) the percentage of individuals having been abused is most likely underreported. Incidence rates naturally vary depending upon the operationalization of abuse. But in addition, even if there was complete agreement as to what constitutes abuse our estimates would probably not be much improved. Certainly this is not unrelated to the secrecy of the behavior and our general inability to monitor such behavior prior to cases making their way to physicians, social service agencies, and eventually the official records. As a result of these difficulties many authors contend that cases go unrecognized, undiagnosed, and hence, unreported (Helfer, 1973).

Approximately twelve percent of the individuals reported a history of mental health problems. (At the time of admission 7 percent of the inmates

reported some current mental health problems). Although there is a paucity of empirical studies on the occurrence of mental health problems in prisons there is reason to believe that this percentage is also an understatement. Research investigating prison populations have found, depending upon the definition of mental illness and the methodology used, that the percentage of inmates with mental problems ranges from a low of nine percent (Washbrook, 1977) to a high of seventy-six percent (Yarvis, 1972).

The principal question of our research concerns the relationship between early childhood abuse and later adult mental health problems. Do individuals who have been abused as a child have more mental health problems than others? Table 1 presents the cross-tabulation of childhood abuse with mental health problems. As can be seen, twenty-six percent of the individuals who were abused as a child have mental health problems. Those individuals who were abused have more than twice the rate of mental health problems as those who were not abused. The difference is statistically significant.

Clearly, besides the possible long term physical effects of abuse, such as mental retardation, brain damage, learning disorders, and sensory deficits, the victim may suffer from serious psychological scars. One prevalent view is that abuse is not an isolated event but rather a manifestation of a dangerous and hostile environment to which the child must adapt in order to survive. Unfortunately the defense mechanisms created by the child in order to adapt cause later problems in developing and maintaining interpersonal relationships. Steele (1976) argues that under such conditions a child is unable to develop basic trust. This inability negatively affects the child's perception of personal safety in this world and his/her belief in the general helpfulness and goodness of other people.

TABLE 1
Childhood Abuse and Mental Health Problems

Mental Health Problems	Abused	Not Abused
Mental Problems	26.8%	11.0%
No Mental Problems	73.2	89.0
	<u>100.0%</u>	<u>100.0%</u>
	(653)	(4474)

$p < .0001$

At this stage of the analysis it appears that there is a strong relationship between childhood abuse and a late effect of mental problems. A harsh critic, however, would argue that this relationship is not necessarily the true state of affairs. For example, there are numerous studies pointing to a relationship between childhood abuse and poverty (see Pelton (1978) for a discussion of this literature) and also a relationship between mental health and poverty (Dohrenwend and Dohrenwend, 1969). It is possible that the finding reported here is due to an underlying factor of poverty rather than any real association between abuse and mental health problems.

One way to guard against this possible contaminating effect is to introduce a third variable as a test factor into the analysis (Rosenberg, 1968). To test for whether or not the relationship between childhood abuse and mental problems is really due to poverty one needs to control for or eliminate its influence by comparing abused individuals and those with mental problems after the effect of socioeconomic status has been taken out of the relationship. If the original relationship is in fact due to poverty, when one controls for the third variable the relationship between childhood abuse and mental problems should disappear. From a review of the literature on childhood abuse two general sets of test factors were identified: parental characteristics and the abusive environment.

TABLE 2
 Relationship between Childhood Abuse and Mental
 Health Controlling for Parental Characteristics
 and Abusive Environment

Variables	First-Order Gamma
Childhood Abuse and Mental Health Problems	.495*
A. Controlling for Parental Characteristics:	
1. Parental Situation	.519
2. Compatibility of Parent's Marriage	.434
3. Father's Characteristics:	
a. Education	.474
b. Occupation	.496
c. Employment Record	.513
d. General Health	.481
e. Mental Health	.492
f. Adequacy of Parental Care Provided	.520
g. Disciplinary Procedures Employed	.544
h. Modes of Punishment Employed	.530
4. Mother's Characteristics	
a. Education	.494
b. Occupation	.511
c. Employment Record	.478
d. General Health	.464
e. Mental Health	.449
f. Adequacy of Parental Care Provided	.460
g. Disciplinary Procedures Employed	.418
h. Modes of Punishment Employed	.516
B. Abusive Environment:	
1. Socio-Economic Level	.482
2. Source of Family Income	.517
3. Residence	.516
4. Residence-Degree of Delinquency	.506
5. Mobility	.492

* Zero-Order Gamma

Controlling for Parental Characteristics

As noted previously there is a large body of information on the background and present circumstances of the abusive parent. Several tentative characteristics have been identified which

can be roughly grouped into demographic characteristics, abnormal psychological traits, early parental history, and parental attitudes toward child rearing (Spinetta and Rigler, 1980). While early parental history and parental attitudes are certainly involved in the etiology of child abuse we are more interested in the first two groups of characteristics because of their possible connection to adult mental health problems irrespective of whether or not one was abused as a child.

Kempe et al. (1962) reported that abusive parents exhibited a high incidence of divorce and separation, unstable marriages, and a history of minor criminal offenses. Other authors have also reported the importance of these demographic characteristics and have extended the list to include such variables as social and economic stress, lack of family roots, social isolation, unemployment, low occupational status, low education, and though disputed, low intelligence (Baldwin and Oliver, 1975; Cameron et al., 1966; Elmer, 1967; Elmer and Gregg, 1967; Gregg and Elmer, 1969; Helfer, 1973; Johnson and Morse, 1968; Pelton, 1978; Schloesser, 1964; Steele, 1976).

The set of characteristics which deals with the presence of abnormal psychological traits among abusive parents has been less clear. Early investigators boldly stated that abusive parents were mentally ill, psychopathic, or displayed neurotic or psychotic behavior (Coles, 1964; Gladston, 1965; Kempe et al., 1962; McHenry et al., 1963; Steele and Pollock, 1968; Wasserman, 1976). More recent studies suggest that the number of abusive parents with severe mental disturbances may be quite small. Kempe and Helfer (1972) for example, found that only 10 percent are psychotic or seriously disturbed. The relationship between less severe mental problems and abuse is no clearer. Gelles (1973) searched the abuse literature for abnormal psychological traits and tabulated 19 different traits. After reviewing the evidence he concluded that the efforts at identifying peculiar psychological characteristics were inconsistent and contradictory. While the severity of the symptoms is still debated it is clear that abnormal psychological traits play a part in the etiology of child abuse.

Section A of Table 2 presents the results of controlling for parental characteristics on the relationship between childhood abuse and adult mental health.² As can be seen from the table, none of the control variables significantly change the original relationship. When parental situation is controlled for the relationship actually becomes stronger (a gamma³ of .519 vers .495). In contrast, when the compatibility of the parent's marriage is controlled for the relationship decreases (.434 vers .495) but not significantly. (One would expect the relationship to vanish if the original relationship

²The following parental characteristics were controlled for: compatibility of parent's marriage was coded as 1) for compatible and 2) for not compatible; father and mother's education were coded as 1) for dropped out of school, 2) high school, 3) some college training; father and mother's occupation were coded as 1) for professional, 2) skilled, 3) semi-skilled, 4) unskilled, and 5) no legally defined occupation; father and mother's employment record, mental health, adequacy of parental care, and disciplinary procedures, employed were all dichotomies: stable-unstable, mentally healthy-mental problems, adequate-not adequate parental care, and just-unjust disciplinary procedures, respectively; modes of punishment employed by the parents were coded as 1) punished mostly by physical methods, 2) punished mostly by non-physical methods, 3) punished by a combination of physical and non-physical methods.

³Gamma, a measure of association for ordinal scales, will have a value of +1 for a perfect positive relationship between two variables and a value of -1 for a perfect negative relationship. It can be viewed in a "proportional-reduction-in error" fashion and interpreted in a manner similar to Pearsonian correlation and other correlation measures. That is, knowledge that one has been abused reduces our error in predicting that he/she also has had a history of mental health problems.

was in fact due to the test factor). Neither the father's nor mother's characteristics of education, occupation, employment record, general health, mental health, adequacy of parental care, disciplinary procedures employed, or modes of punishment employed change the original relationship between childhood abuse and later adult mental problems. These findings indicate a strong and direct relationship between abuse and one's mental health even after controlling for parental characteristics.

Controlling for the Abusive Environment

Like parental characteristics there is a large body of literature on the environment within which abuse arises. A recurrent theme throughout this literature is that a predominant proportion of the reported cases of abuse occur within low socioeconomic families. Gil (1970), for example, found that almost 60 percent of the abusive parents were on welfare. Numerous other studies have had similar results (Baldwin and Oliver, 1975; Bennie and Silare, 1969; Kempe, 1962; Lynch and Roberts, 1977; McHenry et al., 1963; Schloesser, 1964). Critics of such an approach to child abuse argue that the poor are under greater scrutiny by social and law enforcement agencies and thus are disproportionately represented in reported cases of child abuse. Pelton (1978), however, in a review of the evidence on the relationship between socioeconomic class and child abuse counters the critics with three strong points: 1) "undiscovered evidence is no evidence at all," 2) critics cannot explain why abuse is related to degrees of poverty within the same lower class, and 3) they cannot explain why the most severe injuries occur within the poorest families.

Several authors have attempted to refine the global notion of socioeconomic class by looking at parental environmental stresses and abuse. A frequent stressor often found is severe financial problems or unemployment (Gladston, 1965; Gil, 1970). The contention here is that the deprivations brought on by unemployment lead to frustrations which are released on the child in the form of a physical attack. Another stress factor often found is isolation or high mobility (Baldwin and Oliver, 1975; Schloesser, 1964). Here the notion is that

frustrations break out into violence because the individual or family lacks the protection of social support systems. Though the effect of the abusive environment on child abuse has not been closely scrutinized it is quite likely profound and as important as parental characteristics.

The results of controlling for the abusive environment⁴ on the relationship between childhood abuse and later adult mental health problems are presented in section B of Table 2. Similar to parental characteristics, none of the abusive environment variables changed the original relationship. Three of the abusive environment variables (source of family income, residence, degree of delinquency) slightly increased the basic relationship between childhood abuse and mental health problems, while the remaining two slightly decreased it.

Discussion

Undeniably, abuse leads to severe neurological and physical handicaps in children. Evidence for this has been found in numerous studies which suggest that the development of abused children is often distorted. There is a more insidious and unseen handicap, however, that is less well documented and understood. This invisible handicap is the psychological scar left by the early life experience of abuse. Our study indicates that abused children experience detrimental effects well beyond the initial abuse. In our population, after more than 15

⁴The following variables which deal with the individual's environment during formative years were controlled for: socioeconomic level of the family was coded as 1) poverty level, 2) subsistence level, and 3) middle and upper income level; source of family income was coded as 1) gainful, 2) social security, and 3) social welfare; residence was coded as 1) city, 2) town, and 3) rural; the degree of delinquency of the residence was coded as either high or low; mobility during the individual's formative years was coded as either no move or one or more moves.

years past the experience, those individuals who were abused had more than twice the rate of mental health problems as those who were not.

Some will argue that the abusive environment, apart from the damage of abuse itself, will account for these findings. Our research, however, indicates that the degree of deprivation within the environment did not influence one's chances of avoiding mental health problems if one had been abused as a child. Obviously, the mental health problems of abused children are chronic in nature and require some type of ongoing support and treatment. Merely removing the child from the abusive environment is inadequate. It also seems that short term treatment and/or interventions are inadequate for dealing with the long term consequences of abuse. A more adequate approach would be extended monitoring and treatment of abuse victims. Without intervention and prolonged treatment the prognosis will remain poor for the unfortunate victims of abuse.

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ACKNOWLEDGEMENTS

We would like to express our thanks to the North Carolina Department of Correction, Office of Planning and Research for their cooperation in making these data available to us. This research was supported in part by grant MH151131-03 from the National Institute of Mental Health, Center for Epidemiological Studies and North Carolina State University Faculty Research Grant #00792. The order in which our names appear alternates with each research paper.