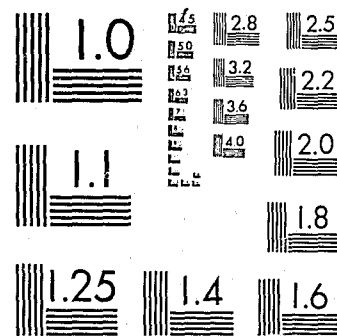


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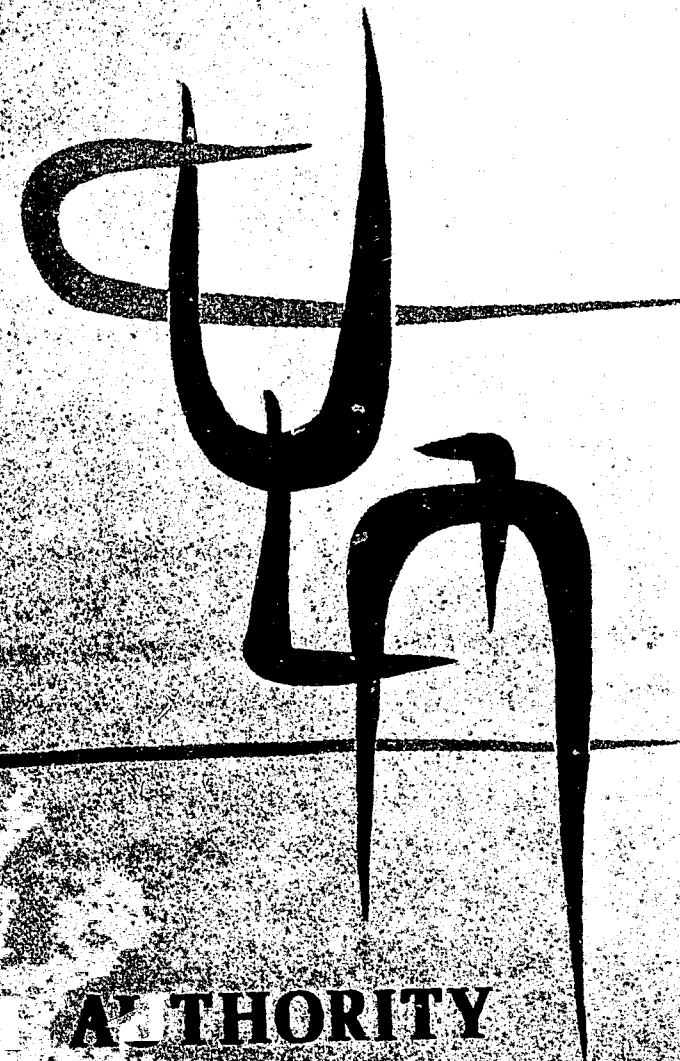
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A REVIEW OF THE LITERATURE ON THE ANTECEDENTS OF ADOLESCENT AGGRESSION AND DELINQUENCY



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Highlights

Selected Findings

- From 1969 to 1974, crimes against persons increased nationwide by 43%. In the same time period, assaultive offenses committed by juveniles increased 114%.
- Social learning theory best explains the causes of aggression, especially the theoretical concepts of reinforcement.
- The social learning theory concept of imitation has been the basis of an hypothesis that viewing televised violence leads to increased aggressive behavior. While most research tends to support this position, conflicting findings leave some doubt regarding the kinds of effects that may be attributed to viewing television.
- Research has reliably established that aggressive behavior can be caused or increased through both reinforcement and punishment.
- Severe parental punishment is related to development of aggressive behavior among adolescents, especially when directed toward aggressive behavior.
- Parental permissiveness toward aggressiveness has been found to be a potent reinforcer of aggressive behavior among children.
- It has been found that aggressive behavior may be learned by children in nursery school situations. It may be reasonable to assume that the same may be true of other group living situations for adolescents, such as group homes, institutional living units, etc.
- Punishment has been found to have little permanent effect on reducing or removing behavior, especially aggressive behavior.
- Corporal punishment in schools is hypothesized to have the negative effect of intimidating students (even those not receiving the punishment), creating anxiety, and supplying a model for aggressive behavior.
- At least 1,300 cases of physical child abuse occur each year in California. Including all forms of abuse, it has been predicted that as high as 55,000 cases occur annually.
- The relationship between being abused as a child and being delinquent as an adolescent has not been firmly established.

- Abuse has been found to occur at all levels of society, discounting the importance of socioeconomic factors as a cause of abuse.

- Findings on the effects of abuse on children are conflicting. In some cases abuse has led to subsequent aggressive behavior; in others, it has led to withdrawal and dependency.

- In several studies, severe parental punishment has been found as one of the common factors in the backgrounds of delinquents.

Recommendations

- Aggressive behavior needs to be precisely defined to enable more reliable and meaningful research into the causes of aggression.

- Research should be designed for implementation in Youth Authority living units or county juvenile halls to determine the effects of viewing televised violence on the aggressive behavior of the viewers.

- Training methods should be developed that would teach children how to respond to aggressive behavior in a non-reinforcing manner.

- Research should be conducted in a variety of group living situations, including YA living units, to determine the degree to which aggressive behaviors are tolerated by staff or reinforced by peers.

- Children should receive training in how they as future parents might control the behavior of their children without resorting to physical punishment.

- Reliability and validity of self-report data need to be determined since such data are often the primary source of information in research projects.

- Research should determine the effect on recidivism of the certainty and severity of correctional punishment.

- Funding agencies should support or implement intervention programs in the public schools that would also provide research information regarding parental punishment and subsequent aggressive/delinquent behavior.

- A study should be made of the effects of corporal punishment and other disciplinary methods used in public schools.

- A system should be established in which schools would be notified by social agencies of those families known to have abused children. The schools would then watch for any further signs of abuse to any child in these families and report it to the proper authorities.

- Family planning should become a policy advocated by government and welfare agencies since abuse has been found to occur more often among families with four or more children.

- Youth Service Bureaus should include child protective services dealing with the detection, prevention, and treatment of child abuse.

*A Review of Literature on the Antecedents of Adolescent
Aggression and Delinquency*

Delinquent behaviors include an alarming degree of acts of aggression. For confirmation, one need only review recent statistics on the frequency of violent crime, or simply refer to the local newspaper, which with startling regularity contains articles reporting aggressive and violent behavior.

In order to modify, reduce, or prevent aggressive behavior, it becomes important to gain an understanding of its development. Over a period of several decades various theories have been constructed that attempt to explain the causes of aggressive behavior. This paper presents brief descriptions of these theories. Our purpose, however, has been to identify those antecedents of aggressive behavior identified through research that are amenable to modification. Some of these antecedents are related to the role of parental influences in child-rearing; others are found more generally in certain facets of society, such as the emphasizing and condoning of violence through its portrayal in the media.

Evidence is presented bearing on the relevance of presumed antecedents of aggression to the study of the causes and prevention of delinquency. A summary section contains a description of some of the areas where empirical research data are limited or lacking. Also presented are conclusions and recommendations for action and further research.

The method of gathering information for this paper involved a survey of the literature. Written material covering the subject comprises a massive body of literature, and the author does not claim to have covered all of it. The items listed in the references represent only a sampling of the available literature, although an attempt was made to include the works of major contributors. Initially, the review process was directed toward the subject of child abuse. A special section has been included on child abuse as a result of an article reporting a high incidence of delinquency among physically abused children (Maurer, 1974). Recent studies have indicated a very high correlation between the amount and severity of physical punishment endured by young children and antisocial aggressiveness displayed during adolescence (Button, 1973; Welsh, 1974).

Aggression

Definition of Aggression

Two aspects of aggression have been identified (Sears, Maccoby, & Levin, 1957): 1) the fundamental quality of rage or anger, and 2) the desire to hurt or inflict pain. The former is said to be instinctive and, as such, is characteristic of infants in response to certain kinds of restraint, discomfort, and frustration. The desire to hurt or inflict pain seems to be a learned behavior.

Goldstein (1975) offered this definition of aggression: "behavior whose intent is the physical or psychological injury of another person." May (1972) described aggression as a strong reaction in response to the blockage of an individual's self-assertion. The dictionary definitions include "any offensive action or procedure; an inroad or encroachment; the practice of making assaults or attacks; offensive action in general."

It can be seen that there is no consistent, concise definition of aggression. "The diversity of behaviors which are classified as 'aggression' is one reason why progress in this area [research on aggression] has been relatively slow. Hitting another child, striking an inflated doll figure, bursting a balloon, making a critical comment, are only a small sample of behaviors which have been labeled as aggressive. Unless one can demonstrate that these behaviors share common properties and functions, research using these varied instances of aggression is likely to yield conflicting findings" (Feshbach & Feshbach, 1971).

Violence is the extreme form of aggression. However, one encounters the same semantic difficulty with this concept. The dictionary defines violence as "physical force used so as to injure, damage, or destroy." In a paper on the origins of violence, Youth Authority researcher C. F. Roberts (1976) attempted to define criminal violence for purposes of analysis and discussion. Roberts stated, "as both the degree of potential violence and the degree of illegality of an act increase, then public concern over that activity increases concomitantly, defining an area of criminal violence." Criminal violence was then defined as "legally proscribed acts whose primary object is the deliberate use of force to inflict injury on persons or objects... (Miller, 1969)." With such lack of clarity on the definition

of aggression (or violence) it is no wonder that there is little definitive knowledge about the etiology of aggression. The result is the concurrency and viability of several theories, each with a large body of proponents.

Prevalence of Aggressive Behavior

From 1969 to 1974 crimes against persons increased nationwide 42.9%, while property crimes increased 31.0%. This statistic and those immediately following were taken from "Crime and Delinquency in California, 1974," published by the Bureau of Criminal Statistics.

Increase in Aggressive Crimes Against Persons

Crime	1969-1974	
	Adults	Juveniles
Homicide	46%	60%
Forcible Rape	11%	49%
Robbery	10%	77%
Assault	39%	114%

While there seems to have been a general increase in the crime rate, the increase is more marked for violent crime. Considering data for juveniles alone, from 1969 to 1974 assaultive offenses increased 114%, robbery 77%, and homicide 60%. Burglary increased only 35%, and auto theft actually decreased 15%. On the other hand, the property crime of grand theft showed the greatest increase alone of 157%.

The proportion of juveniles among all violent offenders also seems to be increasing. The proportion of total arrests that were juveniles in 1969 and 1974 were, for homicide 13.3 and 14.4; forcible rape 17.3 and 21.9; robbery 24.1 and 33.8; and assault 15.1 and 21.5.

The following data appeared in the report on violent crime by Roberts (1976). "More murders are committed yearly in Manhattan than in the entire United Kingdom. Aggravated assaults are expected to total over 140,000 in 1976 as compared to only 58,000 ten years ago. The death rate for ages 15 to 24 years, from all causes, was 19% higher in 1973-74 than it had been in 1960-61. The rise was entirely due to deaths by violence."

In a study of the behavior of nursery school children (Patterson, Littman, and Bricker, 1967), the authors recorded an average of 93.7 emotional

disturbances per day. While the authors did not hypothesize about the relationship of these data to subsequent behavior, such "emotional disturbances" may well be precursors of more violent forms of behavior yet to appear during adolescence and adulthood.

Theories of Aggression

There are a number of theories relating to the causes of aggressive behavior. Each theory has its following of believers, although each tends to be supported by members of particular academic disciplines. Following are brief summaries of current and past aggression theories.

Instinctual Theory. The instinctual theory stems from the work of Freud, who attributed aggressive behavior to biological instincts or libidinal urges. This aggressive drive was assumed to be inborn and the principal function of human experience was to shape the manner in which these aggressive impulses were expressed, i.e., how and towards whom to express innate aggressive urges.

The theory has fallen into some disrepute but the belief that man is innately endowed with an aggressive drive still enjoys a large following. Perhaps the theory evokes a negative reaction from many because it leaves little hope for the possible extinction of aggressive behavior.

Ethological Theory. Of more recent vintage, ethological theory is also based on an instinctual premise. The theory comes mainly from ethologist Lorenz, anthropologist Leaky, and others such as Robert Ardrey. This theory states that aggressive reactions are innate responses to particular stimuli, such as encroachments made upon one's territory (the territorial imperative) or sudden movement or threatening gesture. Aggressive man supposedly evolved through natural selection (survival of the fittest).

Physiological Theory. Biologists have recently focused on biochemical factors that supposedly affect an organism's readiness to respond aggressively. One such theory is centered on the existence of the "XYY Syndrome." The XYY syndrome is said to be present when there is an extra Y chromosome in the pair that determines sex. The presence of the extra Y chromosome is believed to enhance aggressiveness by producing hypermasculinity.

Studies have reported that among persons institutionalized for violent behavior, the incidence of the XYY chromosome far exceeds the proportion

in the total population, which is estimated to be one in every 3,000 (Goldstein, 1975). In a study of the XYY syndrome, it was estimated that 3% of the men in maximum security prisons and hospitals for the "criminally insane" in Edinburgh at the time of the study were considered to be "XYYs" (Jacobs, Brunton & Melville, 1965). Based on Goldstein's estimate of one XYY per 3,000 population (0.03%), Jacobs found XYYs present at 100 times the expected rate. Another supporter of the theory, Shah, has said "on the basis of our present knowledge they [infants with the XYY chromosome] would appear to have an increased risk of developing socially maladaptive and deviant patterns of behavior" (1970, p. 15).

According to Bandura (1973), however, the effects of genetics are not clear. He faulted the findings, and claimed that those studying the XYY chromosome have used improper sampling techniques that have produced misleading results.

Another physiological theory has been put forth by endocrinologists who would explain aggressiveness as being a result of glandular processes. Brain damage and neurological disorders have also been offered as explanations of aggressive behavior. Yet, Bandura reported a study by Ostrow and Ostrow published in 1946 in which abnormal electro-encephalograms (EEGs) were found to be just as prevalent among conscientious objectors who eschew violence and other inmates jailed for non-aggressive offenses as among assaultive prisoners.

Goldstein (1975), in his review of literature on aggression, reported a consensus that brain damage is not highly associated with aggressive persons. He concluded that since all causation theories contain inconsistencies and cannot be relied upon to predict aggressive behavior, scientists often resort to the biological theory--that aggression is genetically inherited.

Frustration-Aggression Theory. In 1939, Dollard and his associates at Yale put forth the following theory: "The proposition is that the occurrence of aggressive behavior always presupposes the existence of frustration and, contrariwise, that the existence of frustration always leads to some form of aggression."

Feshbach & Feshbach (1973) described how child-rearing practices constantly subject the growing child to various forms of frustration. However, they believed aggression to be only one of several possible responses to

frustration. They presented as an hypothetical example a group of adolescents who suffered a severe loss in competition. Some might respond quite aggressively and angrily; others might redouble their efforts to overcome the frustration; others might react with apathy and resignation.

Eron, Walder, and Lefkowitz (1971), in questioning the inevitability of aggression as a sole response to frustration, have said that aggression is more likely to occur if it has, in the past, served to get what is wanted, eliminated an annoyance, or fended off an attack.

Bandura (1973) offered several criticisms of the frustration theory: 1) not all cultures contain aggressive response to frustration, 2) only some kinds of frustration produce aggression, 3) frustration has not been systematically defined, and 4) in most experiments supporting the theory, frustration usually exerts an influence only in conjunction with prior training in aggression or exposure to aggressive modeling influences.

In response to much warranted criticism of the original frustration theory, Berkowitz (1969) summed up a more current stance: "Basically, I believe a frustrating event increases the probability that the thwarted organism will act aggressively soon afterward."

In Roberts' 1976 paper, Wiederanders quoted numerous studies that refute the frustration-aggression theory. Much inconsistent data have been reported. For instance, Sears, Maccoby & Levin (1957) found little relation between a child's aggression and the severity with which he was weaned (a form of frustration). On the other hand, Feshbach (1970) found profound frustration, such as that resulting from parental rejection, to be generally associated with a high degree of aggression.

One of the reasons for the diversity of results regarding frustration as a cause of aggression may be in the varying types and degrees of frustration used as independent variables. Laboratory work has generally dealt with rather mild forms of frustration such as performing a repetitive or difficult task, or not "getting a marble with each response."

Several factors have been suggested that may effect the relationship between frustration and aggression. These include the extent to which frustration is intentional or accidental, the comparison of physical pain with milder forms of frustration such as criticism or blocking a subject's response, the role of ego threat and humiliation, and the type of children

who respond to frustration with aggression. On this latter point, "there are systematic relations between the type of response made to frustration and personality variables such as self-control and dominance" (Feshbach & Feshbach, 1971).

Powerlessness. Closely related to the frustration-aggression theory is an hypothesis that anger, frustration, and aggressiveness stem from a sense of powerlessness, helplessness, or weakness (May, 1972). Powerlessness is described as a "social emotion" caused by certain structures of society such as "majority rule" and bureaucracies that make mechanical decisions without regard to humans.

May claimed that the powerlessness sensed by individuals is at the root of such social ills as the alienation felt by youths toward their fathers and the increase of violence. According to his theory, a sense of powerlessness among young persons causes them to feel isolated and filled with despair, a situation that engenders animosity towards technology and "law and order."

"No human being can exist for long without some sense of his own significance. Whether he gets it by shooting a haphazard victim on the street, or by constructive work, or by rebellion, or by psychotic demands in a hospital" he must be able to live out that significance. By sense of significance, May means a belief that a person counts for something, that he has an effect on others, that he can get recognition.

Other authors, such as Goldstein (1975), disagree with May's supposition on the basis that most people who are poor and powerless are not aggressive, even though most aggressive acts may be committed by people in these circumstances. Goldstein does agree that violence may be caused by characteristics inherent in American society, as evidenced by the fact that violent crimes occur at a much higher rate in the USA than in most other countries.

May, along with Gil (1970), considered the source of man's aggression to be in the inability of our society to provide for its individuals. Following the recommendations for change suggested by Gil and May would require a massive restructuring of every societal element. While not impossible, such an approach is unrealistic and provides little hope as a means of reducing aggressive, violent behavior.

Sensory-Deprivation Theory. Yet one other theory deals with a form of frustration. A neuropsychologist (Prescott, 1975) has postulated that the

principle cause of human violence is a lack of bodily pleasure during the formative period of life.* Laboratory experiments and cross-cultural surveys, according to Prescott, have demonstrated that individuals and societies that experience and promote physical pleasure are also peaceful. He asserted that we can reduce crime and violence by providing more pleasure for children from birth onward.

Following are a few excerpts from his article which provide some idea of his conceptualization.

"I am convinced that various abnormal social and emotional behaviors resulting from what psychologists call 'maternal-social' deprivation, that is, a lack of tender, loving care, are caused by a unique type of sensory deprivation, somatosensory deprivation."

"Numerous studies of juvenile delinquents and adult criminals have shown a family background of broken homes and/or physically abusive parents. These studies have rarely mentioned, let alone measured, the degree of deprivation of physical affection, although this is often inferred from the degree of neglect and abuse."

His solutions paralleled those of Gil and May in that they called for societal changes. He suggested that women's liberation and sexual equality in child raising are needed to enhance the parent-child relationship and improve family stability. Our present corporate structure which tends to separate a parent from the family by travel, extended meetings, or overtime must be revised. Family planning services should be easily available to allow proper spacing of children so that each could receive optimal affection and care.

*An interesting sidelight somewhat related to this concept was reported in Behavior Today (Vol. 7, No. 46). Positive behavioral outcomes have been found for babies delivered following obstetric practices advocated by French physician Frederick Leboyer. These include a warm, quiet, dimly-lighted delivery room, easy birth (no forceps), postnatal massage, and warm water bathing. Such pleasurable initial experiences have purportedly produced babies that scored higher than average on psychomotor functioning tests and, in 112 of 120 cases studied, mothers reported a complete absence of problems in toilet-training and self-feeding. The babies were free of colic and were found to cry much less often than babies who had been delivered via modern obstetric practices.

Prescott's theory may not have achieved recognition in scientific fields, but it is nevertheless interesting and worth considering by investigators in search of the causes and cures of human violence. If this theory contains any validity, it would lend support to recent delinquency prevention programs that seem to be geared toward providing young "pre-delinquents" with pleasure and recreation, such as the Young Mens' Christian Association's (YMCA) program involving mini-bikes and outdoor programs such as Outward Bound. Physical affection is not necessarily a part of these programs, but the youths are provided with opportunities for pleasure and meaningful companionship.

Social Learning Theory. One of the early formulations of social learning theory, based on crude experiments with newborns in the 1920s by psychologist John B. Watson and others, was based on the assumption that man begins life essentially as a blank slate and is programmed almost entirely by his social environment (Corning & Corning, 1972).

A foremost researcher in the area of social learning has been Albert Bandura, who has succinctly described the theory's relation to aggression: "Human aggression is a learned conduct that, like other forms of social behavior, is under stimulus, reinforcement, and cognitive control" (1973).

Social learning theory assumes all behavior to be learned. There are several ways in which behavior may be learned, such as modeling, described by Bandura as "one of the fundamental means by which new behavior is acquired." Other methods of learning include learning through practice, reinforcement* (selective, vicarious, and accidental), identification, and aversive stimulus control (including punishment).

While Bandura conceded that little has in fact been done to determine how aggressive behavior is acquired, he concluded that social learning theory has primacy over other theories because it allows for modification techniques for control of aggressive behavior. The concept of considering violence to be largely a socially learned behavior which is quite modifiable may indeed be responsible for the theory's popularity and acceptability.

However, controversy and unanswered questions also surround social learning theory. For instance, with regard to the modeling or imitation process,

*According to Feshbach & Feshbach (1971) "selective reinforcement of aggressive behaviors is a significant determinant of aggression, perhaps the most important single process influencing the acquisition and performance of aggressive responses."

Patterson, Littman & Bricker (1967) raised several questions. Starting with the premise that not all children imitate all models all the time, they wondered under what conditions would a child copy aggressive behavior. If modeling is a substantive theory, then "is it not reasonable to assume that a passive child has never observed aggressive behavior, or that all families in which the adults are aggressive produce aggressive children." The authors concluded that perhaps the behavior of a model is nothing more than a discriminative stimulus for behaviors (or predispositions) already existing in the repertoire of the child.

Goldstein (1975) also found fault with social learning theory, stating that anthropological studies have identified aggressive societies where individuals were not aggressive.

Even Bandura became circumspect on the issue of whether one single theory best explains the causes of aggression. He agreed in concept with at least part of the physiological theory, stating "man is endowed with neurophysiological mechanisms that enable him to behave aggressively, but the activation of these mechanisms depends upon appropriate stimulation and is subject to cortical control" (1973).

Evolutionary-Adaptive Theory. Some researchers have professed that none of the aforementioned theories has proven to be, in itself, sufficient in explaining the causes of aggression. There are those who have sought a general theory of violent aggression--a theory capable of embracing all forms of violence, all of the contexts in which violence occurs, and all of the specific mechanisms involved: in other words, a composite theory.

Corning and Corning (1972) have been convinced that the evidence points to the likelihood that aggressive behaviors are stimulus-bound. According to their theory, "the neuro-physiological and biochemical mechanisms associated with each kind of aggression are inborn and the product of evolution, even if they are partially programmed by the individual's interaction with his social and ecological environment." (Bandura was quoted earlier saying essentially the same thing.)

The Cornings tied several theories together by stating "Natural selection can and does select for behaviors that are elicited only under appropriate stimulus conditions (whether preprogrammed, or learned, or both) and which can be modified in their expression by the individual's life experience.

It must be kept in mind, after all, that both the propensity to respond aggressively to frustrations (in accordance with the frustration-aggression hypotheses) and the ability to learn aggressive behaviors (as behaviorists contend) must be genetically based--thus being subject also to the workings of natural selection."

The authors contended that this composite theory prepares us to look at violent behavior holistically, rather than looking for a single causal variable, and to examine 1) genetics, 2) physiology, 3) stimulus configurations which evoke aggression, 4) influence of prior experience, 5) response topography, and 6) relationship of these behaviors to the total repertoire and ecological context of the organism.

Antecedents of Aggressive Behavior

Criticism. Reinforcement of aggressive behavior has been the basis of innumerable research studies over the past two decades. The vast majority of these studies have been laboratory experiments and, as such, are subject to some criticisms. A primary criticism has been the nature of the measure of aggressive behavior. The most familiar has been the striking, during children's free play time, of a rubber "Bobo Doll" clown. Some critics have considered this to be a poor measure of aggression, since such a behavior may have already existed in most children's repertoire. In addition, there has been little evidence showing that hitting a rubber toy will be generalized into other social settings.

A second criticism has centered on the unnatural laboratory setting. Some asserted that lab experiments have simply shown that aggressive behaviors can be brought under control of reinforcers (adult approval, marbles, etc.). It has been considered unlikely that society is programmed to dispense similar reinforcers at the same ratio (usually fixed or continuous) as used in the labs.

Nursery School Studies

Findings have been reported on two studies conducted in the more naturalistic setting of a nursery school. Brown and Elliot (1965) instructed nursery school teachers to ignore aggressive acts and pay more attention to nonaggressive, cooperative behaviors. The procedure was followed for two two-week

periods separated by a three-week interval. Changes in behavior of the children reflected a significant decline in both physical and verbal aggression during the second week of each treatment period.

In another study (Patterson, Littman, & Bricker, 1967), observations were recorded on 2,583 aggressive responses made by 36 children in two nursery schools in 1963. During 60 separate observation sessions, observers recorded the type of aggressive event and type of consequence or counter-response.

At the heart of their study was the contention that "child" reinforcers for assertive behaviors* "are a ubiquitous facet of the interaction of 'normal,' healthy children. If the child interacts with other children, the probabilities are extremely high that he will be exposed to these contingencies and thus receive training in aggression. It is also postulated that the discriminative stimuli that set up the initial occurrence of these reinforcers are primarily interpersonal-social rather than stimuli associated with emotional states, such as frustration, anger, or anxiety. Because they are not accompanied by distinctive emotional states, most of the assertive-aggressive behaviors observed in the young child will be of low amplitude and short duration."

Data from each nursery school showed increases in aggressive behavior during the initial 8 weeks and, 9 months later, a return to earlier recorded levels. Aggressive behavior was noted to increase in both passive and moderately aggressive children. Positive reinforcement (generally, a "successful" aggressive act) increased the probability that an aggressor would repeat an aggressive act and direct it toward the same victim. Another finding was that a child who interacted at a high rate within his social culture was more likely to be conditioned in a variety of social behaviors (including aggression).

Patterson, et al., asserted that while there is no single set of reinforcers for aggression that apply to all children, the peer group provides substantial and immediate social reinforcers for most forms of deviant behavior, including aggression.

*The authors defined assertiveness as a broad general class of behavior, of which aggressiveness is considered as a relatively rare, high-amplitude response.

These authors felt the most striking aspects of their data were the high frequency with which aggressive responses were reinforced in the nursery school setting. They concluded that, for children with existing aggressive behavior, nursery schools are unlikely to provide a basis for the extinction of aggressive behavior. The contingencies present in nursery school are likely to significantly increase the frequency of aggressive behaviors for some passive and moderately passive children.

To modify aggressive behavior, these authors recommended providing models who are reinforced for non-aggressive behavior, "time-out" procedures, and counter-conditioning for the development of socially adaptive behaviors.

Observation and Imitation: The Television Controversy

Social learning theory postulates that children also learn behaviors through imitation. Since children tend to view considerable amounts of television, there has been great concern over the aggressive content of television programs. One of the earliest indictments of the effects of televised violence on children was put forth by the Kefauver Subcommittee to Investigate Juvenile Delinquency in 1954. There have been hundreds of subsequent studies on the effect of viewing televised violence, predominantly indicting television as providing a model for violent behavior. In the resulting controversy, defenders of television have been accused of being lackies of a threatened television industry. However, those who attribute the prominence of violent behavior to television and movies may be guilty of looking for a panacea or a scapegoat.

A similar situation occurred in the early 1950s, when Dr. Frederick Wertham published data purportedly showing that comic books were at the root of violence and delinquency. He campaigned against comics and was joined by mothers with good intentions but who may have been looking for a cause for their children's problem behavior other than their own parental influence. Wertham's "crusade to save the children" was successful in that the objectionable comics were removed from the market and those that remained were of innocuous funny animals. Several years passed and the rate of delinquency continued to climb, but the comic industry was never to recover from the financial disaster Wertham had visited upon them.

It is extremely difficult to determine whether violence in comics and on television has conditioned our culture in violent tendencies, or whether

the violent tendencies existing in our culture, produced by other factors, have dictated the content of comics and television. There are those who believe that literature and drama are nothing more than a reflection of society.

However, much of the literature supports the hypothesis that viewing filmed aggression tends to increase the likelihood that the viewer will behave aggressively. Some of the research has been biased and poorly done. The Feshbachs have claimed that "In all of the studies demonstrating increased aggression, however, rather brief film sequences were employed. Two studies employing lengthy motion pictures provided little evidence of either aggression enhancement or aggression reduction (Albert, 1975; Emery, 1959)." However, the evidence might be said to gain credibility due to sheer number of studies that point to the same conclusion.

Catharsis. Among those who do not see apparent evils in television, some defend its content by saying that viewing violence may have a cathartic effect. Catharsis, or tension-releasing properties of emotional expression, has been attributed to the potential aggression-reducing properties of exposure to aggression on television and films (Feshbach & Feshbach, 1971).* Goldstein (1975), who was quoted earlier in criticism of several of the aggression theories, also criticized the belief that viewing filmed violence is cathartic. It was his opinion that viewing violence causes a general dulling of emotions. He suggested that any study of the cathartic effect on aggression should include measurement of effect on at least one non-aggressive response. In general, the catharsis hypothesis has little support in the literature.

Naturalistic Studies

Boys' Homes and Private Schools. Feshbach & Singer (1970) carried out a study in which TV exposure was experimentally varied over a six-week period. Groups of boys 10-17 from private schools and boys' homes were randomly assigned to one of two viewing conditions: aggressive programs or non-aggressive programs. Pre- and posttest measures of aggression and daily behavior ratings were collected. "The differences in television exposure

*Seymour Feshbach, UCLA psychologist, has since revised his theory and no longer fully supports a cathartic effect of viewing violence on television.

had little effect upon the children attending private schools. However, children in boys' homes who had observed the predominantly aggressive programs displayed significantly less verbal and physical aggression toward peers and toward authority than the group who had observed predominantly non-aggressive television content."

Comment. The reviewer finds that most lab studies have included viewing short films of aggressive content in "sterile" or unnatural surroundings. The above study involved viewing "real" TV (as broadcast by networks) in a semi-natural setting--in boys' homes and private schools where the subjects were at least partly accustomed to viewing TV. Therefore, since the findings of this study, conducted under more natural conditions, contradict the television-aggression theory, some doubts are raised about the validity of lab studies that have found televised violence to increase aggressive behavior. For instance, "in one study, kids were shown various kinds of dramatized material, were then subjected to the frustration of being given toys and having them taken away and, finally, were invited to smack a 'Bobo the Clown' doll. It turned out that those who had watched violence appeared to assault the doll most aggressively." One interpretation of this lab experiment stated that it did nothing to prove there was an increased urge to assault other children. As one critical scientist quipped, "Bobo dolls were meant to be hit. Maybe what was proved was that we should outlaw Bobo dolls" (Gunther, 1976).

Longitudinal Study. Another study also criticized manipulative lab experiments, such as those reported by Bandura, Berkowitz, and others, that have purportedly demonstrated immediate effects on the extent of aggressive behavior of subjects who have witnessed aggression on film (Eron, Huesman, Lefkowitz, & Walder, 1972). Their criticism was also based on the fact that such studies have not duplicated real-life viewing situations and possibly account for nothing more than a transient effect on the viewer.

Data for this longitudinal study were first collected in 1969 on 875 third graders aged 8 and 9. Measures included peer ratings of aggression, potential predictors (such as socioeconomic status, ethnicity, parent-child relationship variables, etc.), hours of TV viewing, and preference for violent TV programs.

Ten years later posttest data were gathered on 427 of the original subjects who could be located. There were 211 males and 216 females, predominantly middle class, mean IQ of 109, and modal age 19. For convenience, this group was labelled "13th grade." Posttest measures included peer-rated aggression, self-report of anti-social behavior, hours of viewing, and TV preferences. The authors stated that attrition was for some reason higher among those 3rd graders who had scored high on aggression.

Using sophisticated statistical techniques* they found a significant relationship between 3rd grade preference for violent TV and both 3rd grade and 13th grade aggression scores for boys (same direction but non-significant for girls). Their analysis led them to believe that preference for violent TV in the 3rd grade led to aggressive behavior in the 13th.

The study results led the authors to formulate the following hypothesis explaining why viewing violent TV leads to later aggressive behavior:

It is common for TV characters to obtain desirable goals by violent tactics. They are rarely punished for those violent behaviors, or if so, it is much delayed. As Bandura has demonstrated, when a model does not get punished for aggressive behavior, it lowers the inhibitions of the viewer against the self-expression of similar behaviors. When the model is rewarded (e.g., obtains his goal) it reinforces the tendency to copy the aggressive behavior.

The reason the findings were less significant for girls may be due to the fact that the young female viewer is less likely to encounter an aggressive model to imitate. However, this may no longer be true due to the recent trend for programming to equalize the role of women; e.g., "Wonder Woman" and "Bionic Woman."

Surgeon General's Report. The Surgeon General's report on TV violence has been a hotbed of controversy ever since it was issued in 1972. It was at best inconclusive, filled with tepid statements such as "viewing filmed violence has an observable effect on some children" and "most of the

*Correlation, analysis of variance, multiple regression, and path analysis utilizing coefficients of covariance.

relationships observed were positive, but most were also low magnitude" and "we can tentatively conclude that there is a modest relationship between exposure to television violence and aggressive behavior."

Among the many who took the Surgeon General's report to task were Liebert and Neale (1972). They believed that the report committee often misconstrued the data when, in fact, the data overwhelmingly supported the hypothesis that TV violence contributes to aggressive behavior. They agreed it was not the only contributing factor but wondered just how much influence did any one factor have to show in order to be of social concern and practical importance. However, Liebert, psychiatry professor at State University of New York, has more recently stated that additional research needs to be done on the home environment in which children watch TV. He now speculates that the effects of TV may be muted in homes where the influence of the family is positive and amplified in other kinds (quoted in Gunther, 1976). For example, television may be used in the same way audio-visual aids are used in education. The tendency to emulate televised aggression might be slight or non-existent in homes where parents provided critical commentary on the observed violence. On the other hand, if parents made positive verbal responses regarding the observed violence, this might tend to reinforce the imitation of such behavior among their children.

Further Studies. Gunther reported a study by Milgram and Shotland, psychologists at the City University at New York. In this experiment, men were invited to view one of four films containing varying degrees of aggressive behavior: (1) man, jobless and in debt, smashes collection boxes and escapes to Mexico with the money; (2) man smashes boxes but goes to jail; (3) thinks about smashing boxes, but doesn't; and (4) a neutral program depicting no aggressive behavior. The volunteers were told that after the show they would be asked for their opinions and receive a free transistor radio for their trouble. However, when they went to collect their free radio, an administrative "foul-up" was staged and it was some time before the men received the promised gifts. During the waiting period, when the men must have felt a considerable degree of anger and/or frustration, each singly was left alone in a room with a glass-fronted collection box full of money. The common sense hypothesis was that the men most likely to break into the collection box were those who had witnessed the same aggressive

act on film. However, the results showed no significant differences; in each group some men stole the money. Viewing an aggressive act, even one of exactly similar characteristics, showed no greater relationship to performing the aggressive act.

Gunther also reported a study by psychologists Melvin Heller and Samuel Polsky, who studied 100 young men in prison for violent crimes. The investigators were unable to establish any relationship between viewing violent television and the violent behavior of the young men.

Feshbach and Feshbach (1973) conducted a study which qualifies the significance of the impact of TV violence on aggressive behavior. They showed a videotape of a campus riot to two groups of 20 children 9 to 11 years old. Those in group one were told they were watching a newsreel of an actual event. Those in group two were told they were watching a Hollywood movie with actors and actresses. Ten of the 20 children in the first group reported that they were upset or frightened by the "newsreel." Yet 16 of 20 in the "Hollywood" group enjoyed the film. Following the film each child was given the impression that he could, if he chose, deliver pain to another person as a consequence of that person giving incorrect answers to a simple test. The children who believed the campus riot had been real were significantly more aggressive than a control group who had not seen the film. The children who believed the film was a make-believe Hollywood story were significantly less aggressive than the control group. The authors concluded that "Television does not simply brainwash children... the nature of the television violence--whether it was considered real or unreal--had an effect on later aggressive behavior. One form generated aggression, the other acted as a safety valve." This study is also subject to criticism; e.g., were the children randomly assigned and were pre-measures of aggression taken? Yet the study is interesting in that it raises the question of the effect of kinds of violence on the viewer.

A final word on the effect of violence on TV concerns a counter-theory that viewing violence has an effect other than increasing the violent tendencies of viewers. Professor George Gerbner has long studied violence on TV and has developed a "violence profile" used to rate TV programs. Dr. Gerbner has rejected any cathartic effect associated with viewing violence and has claimed that it may make people passive and fearful (from Gunther, 1976).

In a comparison of "light" viewers (two hours per day or less) with those who viewed four or more hours of television, he found heavy viewers were much more likely to exaggerate the amount of violence in the real world, to distrust others, and to fear personal assault. Another result of too much violence on TV may be the desensitizing of people to violence (see Goldstein, 1975). People are less shocked by violence that doesn't involve them personally. Witness, for example, the famous case of the murder of Kitty Genovese on a New York street corner while dozens of people looked on "as though it was on television."

Punishment

Punishment is comprised of two aspects, one being the presentation of an aversive stimulus, the other being the withdrawal of a positive reinforcer. We are concerned here primarily with the former: physical punishment, or the infliction of pain in the attempt to remove or modify behavior.

In 1964 Solomon identified four wide-spread beliefs about punishment: 1) it does not really weaken habits, 2) it is a poor controller of behavior, 3) it is cruel and unnecessary, and 4) it leads to neurosis and worse. He rejected these beliefs, categorizing them as "legends without empirical basis." More recent studies of punishment have shown Solomon to be not entirely correct in rejecting these possibilities.

The possible side effects attendant upon punishment remain a cause of concern. Although Solomon challenged the concept of the inevitability of a neurotic outcome following punishment, others have not been so convinced. Allison (1972), for instance, wrote that punishment "has been shown to elicit disruptive emotional activity (e.g., fear, anger, etc.) which in turn may set the state for undesirable avoidance responses (e.g., social isolation, running away, lying)."

The literature generally supports the position that punishment will reduce the future probability of the reoccurrence of the punished response (Bandura, 1969; Allison, 1972; Parke, 1972). However, the effectiveness of punishment is considered to be contingent upon a number of variables:

1. intensity and type of punishment,
2. frequency or consistency of punishment,
3. immediacy, or temporal arrangement of punishment to response,

4. strength and nature of response being punished,
5. degree to which the punished response is concurrently reinforced,
6. the presence or availability of alternative or incompatible modes of behavior
7. age of the subject
8. the affectional or status relationship between the punishing agent and the recipient,
9. the kind of cognitive structuring accompanying the punishment; e.g., fully informing the subject of the reasons he is being punished.

Parke (1972), in his review of experiments with the effects of punishment, concluded that there is "little doubt that punishment can be an effective means of controlling children's behavior. The operation of punishment, however, is a complex process and its effects are quite varied." He asserted that "socialization programs" based solely on punishment are ineffective unless they also include the teaching of new appropriate responses or socially acceptable incompatible responses. The degree to which non-aggressive behaviors are rewarded is important. When non-aggressive responses lead to reward, these responses compete with (are incompatible with) aggressive responses.

Church (1963) listed two alternatives to punishment: 1) extinction of the undesired response, and 2) counterconditioning (extinction plus reinforcement of incompatible response). He reported animal studies that have shown that the addition of punishment will increase the speed of elimination of the response only where the source of the reinforcement for that response can be identified and eliminated. Punishment suppresses behavior only as long as it is applied; when punishment stops, the behavior is likely to return.

One reason punishment may be ineffective in modifying negative behavior is that "children rarely are able to remember or report what behavior or lack of performance preceded a particular punishment although the punishment itself is clearly imprinted on the memory [and] may be a function of the mixed prescriptive or proscriptive description given to the child concerning his actions" (Maurer, 1974).

The use of physical punishment is not totally proscribed, however. The consensus is that occasional spanking will probably not traumatize a child, nor destroy his spirit or make him anxious or hostile. "However, the use of corporal punishment, by schools and by parents, as a prescribed mode of discipline for certain infractions, is objectionable. It sets a poor example for the child. It teaches the child that physical punishment is the appropriate response to use in conflict situations" (Feshbach, 1973).

More germane to the theme of this paper, however, is the possible relationship of punishment to subsequent aggressive behavior on the part of the punished child. Again, Allison is quoted: "...when dispensing punishment one often finds himself in the unfortunate position of modeling, or teaching the responses he wishes to eliminate. This is particularly true when we use physical punishment to control childrens' aggressive behavior; even though the child may refrain from aggressing in the presence of the punitive agent for fear of additional punishment, he may show increased aggression in situations when the probability of punishment is reduced."

Eron, et al. (1971) asserted that "Physical punishment, perhaps because of its modeling effect or because of its instigating effect, is one of the antecedents of aggressive behavior, whereas nonphysical punishment may not be such an antecedent."

Data regarding the shaping of aggressive behavior through use of reinforcement and punishment are plentiful. There is little doubt that a child whose aggressive behaviors have been rewarded by his parents will continue to aggress. The data are a little less clear regarding punishment as a deterrent to aggression. Bandura and Walters (1959) and Glueck and Glueck (1950) failed to find a relationship between increased punishment and lowered aggression. Sears, et al. (1957) concluded that punishment is "ineffectual over the long term as a technique for eliminating the kind of behavior toward which it is directed." Such conclusions are direct refutations of those of earlier researchers such as Miller (1941), for instance, who said "the strength of inhibition of any act of aggression varies positively with the amount of punishment anticipated to be a consequence of that act."

As Solomon has said, "Our laboratory knowledge of the effects of punishment on instrumental and emotional behavior is still rudimentary."

Parental Punishment and the Development of Aggression

Research programs have generally obtained information on parents and the effects of parental punishment from the children. The reliability of such self-report data needs to be determined. Feshbach & Feshbach (1971) have listed some other difficulties encountered in studying parental influences:

1. inability to manipulate and control child rearing practices,
2. parental behaviors such as maternal rejection or severe punishment do not operate in isolation, but interact with other variables in the home environment,
3. children's behavior characteristics may affect parents' reactions and make it difficult to determine if parental behavior is a cause or result of child behavior.

"Learning of Aggression in Children"

One of the more interesting and informative studies on parental influences was that of Eron, et al. (1971), presented in their book "Learning of Aggression in Children." Their objective was to isolate the antecedents of aggression in children. Aggression was defined as "an act which injures or irritates another person." They were particularly interested in four kinds of parent variables as predictors of aggressive behavior of children in school: reinforcers, instigators to aggressive behavior in the home environment, identification, and socio-cultural factors.

In their opinion, the literature on punishment has been inconsistent, and they postulated the following alternative hypotheses:

- H₀ Punishment for an aggressive act can increase anxiety about aggression, thereby inhibiting aggression.
- H₁ Punishment, on the other hand, may facilitate aggression by:
 - a. producing frustration leading to aggression
 - b. serving as an aggressive model

Their sample consisted of 875 third grade children in 38 classrooms in a semi-rural area of Hudson Valley. They interviewed 713 of the mothers

and 570 fathers. There were 726 families included, and both parents were interviewed in 557 families. The bulk of their findings were based on 206 girls and 245 boys on whom complete data were available. The data were collected in 1960. Their measurements included sociometric peer ratings*, measures of popularity, activity level, success in aggression, intelligence, and identification (masculine-feminine, Draw-a-Person, Expressive Behavior Profile, occupational aspirations). Data from parents were obtained through a specially developed child-rearing questionnaire. Information was also obtained from school and clinic records. In measuring aggression, they determined type (physical, verbal, acquisitive, or indirect), object (adult, peer, nonhuman), and provocation (justified or not). Instigation, or "conditions in the home that are likely to instigate aggression or at least heighten the drive level as postulated in the frustration-aggression hypothesis," was measured by determining the degree to which rejection, lack of nurturance, and parental disharmony existed in the home.

Findings of the Study. The authors reported a considerable number of findings but only a few of the more relevant or interesting can be presented here.

The number of hours children watched TV per week and the violence rating of their three favorite shows were highly related to peer-rated aggression scores.

The more the child was punished for aggressiveness by his parents, the higher was his peer-rated aggressiveness score. This was felt to contradict the hypothesis that punishment for aggressive behavior tends to instill anxiety about expressing aggression and therefore inhibits its expression when in situations similar to the one in which the anxiety was learned (as per Child, 1954). Their findings refuted another contradictory theory. "So long as punishment is administered after an aggressive response, the tendency to make the response is suppressed" (Buss, 1961).

They measured the intensity of reward and punishment at home for aggressive acts. They found that intense punishment of this nature by fathers was related to high aggressiveness for boys (same direction, but

*Peer ratings were found more valid than self-ratings in that peer ratings were more highly correlated with teacher and parent ratings than were self-ratings.

not significant for girls, and same relationship, but not significant for intense punishment by mothers). The findings were not conclusive, however. A curvilinear relationship was found showing that girls of both high and low punitive mothers showed less school aggressiveness than girls of moderately punitive mothers. In general, however, severe punishment was considered to be related to school aggression.

In terms of predicting aggression, they found instigation a better predictor if by fathers, and punishment a better predictor if by mothers. In their study of five instigators they found rejection to have the highest correlation with aggression; parental disharmony and lack of nurturance had a moderate correlation; and restrictiveness and mobility had little or no correlation.

Another finding of the Eron study was that when identification with the father was maximal, punishment for aggression acted as an inhibitor of this behavior.

They presented the possibility that parents of aggressive children have a concept of child care as "correcting the child rather than 'catching the child being good'," and that the child's present level of responding is below the parent's threshold for emitting rewards.

The authors postulated that highly aggressive subjects might actually seek out punishment. In this belief they have been supported by Ulrich, Hutchinson, and Azrin, (1965), who said: "Since physical punishment is by definition the delivery of aversive stimulation following a response, it may be expected that social aggression will occur as an elicited reaction to such punishment. Thus, our main objective of eliminating a response by punishment may have the completely unexpected effect of producing aggression by the punished organism."

In other words, a child who receives little incoming stimuli from parents (reinforcement, nurturance, even attention) will resort to those negative behaviors (including aggression) which elicit responses from the parents, even though those responses are aversive (punishment).

In another study by the same authors, it was found that boys with low aggressive scores responded just as aggressively as high aggressive boys when there was no apparent possibility of punishment. When there was likelihood of punishment their aggressive behavior was inhibited (aggression anxiety).

High aggression boys were unaffected by such aggression anxiety supposedly produced by threat of punishment, and it may have facilitated aggression in some by acting as a conditioned positive reinforcer. One conclusion to be drawn from these seemingly anomalous findings is that threat of punishment inhibits aggressiveness only in children classed as low aggressives, while it may increase aggressiveness in children already classified as highly aggressive.

In their study of the effect of social class, it was found that children of upper class fathers (as measured by occupational status) were more aggressive ($p < .05$ for boys). Anova using social class and fathers' punishment as dependent variables resulted in a significant finding that with boys of upper status, severe paternal punishment leads to severe aggression. Social class, however, did not interact with mothers' punishment, since severe punishment by mothers was found to correlate with high aggression at all class levels. They found that upper class mothers tend to use more physical punishment for their children's aggression against other children, and lower class fathers tend to use psychological punishment for daughters' aggression against parents and other children. The lack of differences may be due to the narrowing of the gap between social classes: middle class parents becoming more permissive and lower class parents more conforming and restrictive. It became apparent that the frequency of use of psychological or physical punishment was not related to social class, a finding contradictory to those of many other studies.

A final word of warning was offered to those who would modify aggressive behavior. The authors asked "What are the ramifications for a human being's development if his behavior is shaped to minimize aggressiveness? In a chiefly capitalistic, competitive economy such as the United States, low aggressiveness may seriously handicap an individual in coping with the socioeconomic environment." Patterson, et al., (1967) expressed a similar concern, believing that assertiveness is a necessary ingredient in the complex of healthy human behavior and in any effort to extinguish negative forms of aggression, care should be taken not to remove the positive aspects of assertive behavior.

Severity in Child Training Methods

Another productive study on the antecedents of aggression was that by Sears, Maccoby, & Levin (1957). This study looked within the family at disciplinary techniques, permissiveness, severity, temperamental qualities,

and positive inculcation of more mature behavior. Data were collected through interviews conducted with mothers of 379 five-year-old kindergarteners.

The findings indicated a "prevalence" of severity in child training methods. The authors cited, for example, that 19% of the mothers admitted that in toilet training their children they used fairly or very severe techniques (scolding frequently, angry, emotional). To measure permissiveness toward dependency, they looked for parental tolerance of attention-seeking behavior and found 11% not at all permissive and 26% demonstrating low permissiveness. Actual punitiveness toward dependency in the form of irritation and/or punishment was found at a "considerable" level for 13%, and "often" for 23%.

With data such as these as potential antecedent variables, the authors set out to discover their relationship to the development of child aggression. They postulated that aggressive acts may serve to gratify needs. Acts of aggression in the home are usually accompanied by some form of punishment. So, aggressive impulses are accompanied by fear of consequences, resulting in conflict and mounting tension. When the impulse is acted out, the tension is relieved. This may be compared with an adult feeling better after "letting off steam," even though the act may have done nothing to improve the situation.

They concluded that "the average child in our sample received more actual punishment (as distinguished from non-reward) for aggressive behavior than for any other kind of change-worthy action" (socializing act).

Sears, et al. formulated a relationship between punishment, anxiety, and aggression. If punishment produces anxiety, situations that provoke aggressive feelings gradually come to arouse anxiety, too--anxiety over the danger of being punished for the aggressive act. The aggression-anxiety may provoke feelings of shame, guilt, self-depreciation, or fear of retaliation. In addition, children may learn techniques of avoiding punishment (such as suppressing behavior when it is likely to be punished). It is important to note that the impulse to be aggressive is not reduced--only the overt act--and then only when punishment is imminent or probable. The resultant frustration may serve to strengthen the impulse to be aggressive. This may result in displaced aggression--aggression towards an object not likely to retaliate with or cause punishment.

Permissiveness Toward Aggression. The degree to which parents tolerate aggressive child behavior was considered of primary importance. They obtained the following findings from the interview data:

Permissiveness re Aggression	
Toward parents	38% - not at all 24% - slightly permissive
Toward siblings	4% - not at all 21% - slightly permissive
Toward other children	5% - not at all 26% - slightly permissive

Aggression towards parents was least tolerable and elicited the most punishment from parents: 35% used "considerable or severe" punishment, 51% used moderate punishment (scolded, isolated, parents irritated).

They found permissiveness toward aggression related to high aggression by child, and "the more severe the punishment, the more aggression the child showed." (Small but significant correlations.)

When punishment occurs after the child's aggression, he may have already enjoyed some form of reinforcement for the aggressive action. If he is then punished, this may cause frustration which may lead to further aggression.

Children of mothers who were non-permissive toward aggression but non-punitive in their response had the least aggressive boys (3.7%).

n	Parent Attitude	% of Children Who Were Aggressive	
		Boys	Girls
57	Low permissive/low punitive	3.7	13.3
98	Low permissive/high punitive	20.4	19.1
144	High permissive/low punitive	25.3	20.6
58	High permissive/high punitive	41.7	38.1

Physical Punishment. Physical punishment was related to high aggression in the child only when it was used to punish aggression. Physical punishment for other behaviors was not related to higher aggression. A related finding

was the lack of affectional warmth among mothers who used severe physical punishment. A partial correlation on these factors showed that permissiveness contributed the most toward high aggression, punishment for aggression next, followed by the generalized use of physical punishment and lack of warmth.

The following table presents findings on the proportion of mothers who reported using various degrees of physical punishment with their five-year-old children:

Use of Physical Punishment
1% - never
47% - rarely spansks or occasionally slaps
29% - fairly often slaps, occasionally spansks
15% - fairly often spansks, some severe
7% - frequent & severe spankings

"Punitiveness, in contrast with rewardingness, was a quite ineffectual quality for a mother to inject into her child training. The evidence for this conclusion is overwhelming. The unhappy effects of punishment have run like a dismal thread through our findings. Mothers who punished toilet accidents ended up with bed-wetting children. Mothers who punished dependency to get rid of it had more dependent children than mothers who did not punish. Mothers who punished aggressive behavior severely had more aggressive children than mothers who punished lightly. They also had more dependent children. Harsh physical punishment was associated with high childhood aggressiveness and with the development of feeding problems."

Physical punishment and severe punishment of aggression toward parents were associated with feeding problems, aggression in the home, flight, and deviant behavior (what the authors termed "slow development of conscience").

Strictness. Does strictness in household rules lead to aggression? High restrictiveness was related to non-permissiveness which was in turn related to low aggression. Therefore, it was concluded that degree of restrictiveness contributed little toward child's aggression in the home.

Socio-economic Status. Socio-economic status was measured using occupation and income. Middle class mothers were more permissive of dependency than those of the lower class, 42% to 29% ($p < .01$). Other comparisons of middle class mothers to lower class mothers included:

punishment for dependency, 44% to 56% ($p < .01$); severity of punishment for aggression toward parents, 36% to 51% ($p < .01$); use of physical punishment, 17% to 33% ($p < .01$); mother's warmth toward child, 51% to 37% ($p < .01$); and "some" rejection of child, 24% to 40% ($p < .01$). Data from this study showed that mothers at the lower class level tended to use physical punishment more often than middle class mothers, a finding in opposition to the conclusions made by Eron, et al. (1971), who found no relationship between social class and use of physical punishment. Eron, whose study came 14 years after Sears, explained the lack of a relationship between social class and punishment as a result of lower and middle classes becoming less dissimilar in recent years.

Age of Mothers. "Younger" mothers (not defined) showed more negative traits than "older" mothers. Younger mothers were more permissive towards aggression, more likely to use physical punishment, more likely to use ridicule, and to display less warmth.

Effects of Inconsistency

Throughout the literature there is agreement that two primary antecedents of adolescent aggression are physical punishment and parental permissiveness toward the expression of aggression in children. There are those who believe that inconsistent punishment of a child's aggression is most effective in conditioning children to develop aggressive behaviors that will be highly resistant to extinction.

Deur and Parke (1970) conducted a laboratory experiment testing hypotheses about punishment and aggression. Subjects were 120 white primary school children assigned to one of six groups in a factorial design based on type of reward or punishment to be received for the aggressive behavior of punching a Bobo Doll clown. They found that training of an aggressive response with intermittent reward and punishment resulted in greater persistence during extinction than did training with consistent reward, and greater persistence during continuous punishment than continuous reward! The authors stated "The data indicate that children who have experienced a history of inconsistent reward and punishment for their aggressive responding will be more resistant to the use of consistently administered punishment, and also will be more resistant to extinction," and "inconsistent discipline may result in strongly established patterns of behavior which are highly resistant to the use of punitive control. This is not to imply that

such scheduling is a necessary, or even a sufficient, cause of anti-social aggression, but the present findings suggest that it is a possible antecedent."

Studies such as this one, comprised as it was of a "Bobo Doll and marbles," lack credence with some investigators who feel lab experiments are often out of touch with the real world. On the other hand, hypotheses tested in lab experiments can provide the bases for further research in "the real world."

Further Reviews

Bandura & Walters. A study of the influence of child training practices and family interrelationships was reported by Bandura and Walters (1959). Their study sample included 26 adolescents and parents with a history of aggressive behavior, and 26 sets of non-aggressive controls.

An attempt was made to match the two groups on socio-economic status, intelligence, age, area of residence, family size, and ordinal position of the child in the family. Interviews were conducted with the family and rating scales were developed on parental variables such as permissiveness, punitiveness, affection, etc.

They found that the children in the aggressive group showed less emotional dependency on their parents and spent less time with them. Parents of the aggressives were rated as being more permissive towards aggressive behavior in their children. Fathers did not tolerate aggression toward themselves but encouraged aggressiveness outside the home (e.g., "Don't run from anybody. Stand up for your rights. Don't back down."). Mothers were more permissive about aggression toward themselves in addition to encouraging outside aggression. Aggressives showed more aggression toward teachers, but felt less guilt about it.

Fathers of aggressives more often used physical punishment. No difference was found between mothers in the two groups. Fathers of aggressives reported that they had experienced corporal punishment as children. Punishing fathers also scored low in warmth toward their children and discouraged or rejected dependency needs of their children. Both parents had low expectations for their children in school and less often placed responsibility on them.

Parents of controls tended to discontinue physical punishment once children had developed verbal skills. Reasoning and verbal cues associated with punishment became the preferred mode of behavior control.

The authors disputed the claim that sociological factors (e.g., poor housing, low income, etc.) are causes of anti-social behaviors. Instead, these factors "provide conditions under which the psychological factors conducive to the development of anti-social behavior may more readily operate." While such environments probably provide many aggressive models for youth, sociological theory does not explain why only a minority of children who live in deteriorating neighborhoods have police records, or why one sibling is delinquent and others are not. Mental retardation may be a factor since a "mentally retarded child may not fully understand legal restrictions and is less likely to foresee all the consequences of his actions."*

Winder and Rau. Winder & Rau (1962) studied 710 4th, 5th, and 6th graders. The children were administered a sociometric questionnaire on which they were asked to nominate members of the class on 64 items of specific behaviors considered socially deviant. The questionnaire yielded 5 factors: Aggression, Dependency, Withdrawal, Depression, and Likeability. Parents of these children completed the Stanford Parent Attitude Questionnaires. Actually 55% responded to mailed questionnaires. This sample was not statistically different from the non-respondents. Children of respondents did not differ on peer-rated sociometric scores from children of non-respondents, except on likeability.

Their findings included a relationship between social deviance scores for children and measures of ambivalence and punitiveness on the part of their parents. Ambivalence was highly predictive of social deviance. Ambivalence is the sum of two scales: rejection and demonstration of affection. Parents of children who scored high on social deviance tended to have scores above the median on both scales--thus indicating ambivalent parental behavior towards the children. The authors interpreted their findings "as indicating that children who experience relatively intense frustration in their interactions with their parents will come to exhibit with considerable intensity a diverse set of maladaptive behaviors." Such behaviors were said to include hostile aggression, overdemanding

*A Correlation of $-.31$ was found between verbal IQ and an aggression score (Sullivan, Clark, & Tiegs, 1957).

and inappropriate bids for attention, and withdrawal from friendly interaction with peers. Fathers of boys who scored high on aggression reported more affection and manipulation of rewards, and more stereotyped sex role expectations.

Feshbach and Feshbach. Feshbach & Feshbach (1971) hypothesized that greater control of aggression can be expected among children who are empathic and have positive social feelings toward others. The ability to experience empathy is considered related to control of aggression since "When one perceives another person as similar to oneself, one finds it more difficult to injure that person."

These authors also recognized a difference in aggressive tendencies among males and females. They asserted that the evidence points to the conclusion that boys are more physically aggressive than girls. While boys are more likely than girls to hit, they are not more likely to scold or insult another child (verbal aggression). They cited school experiences as one cause of sex differences in aggression. They claimed that teachers generally contribute to this circumstance by being less tolerant of direct, assertive responses by girls and it is therefore not surprising that "girls develop more indirect means for self-expression than boys do."

With regard to parental punishment, Feshbach (1970) found "surprisingly little evidence of inhibitory effects even when the punishment has been specifically directed toward aggressive infractions. Rather, the predominant finding has been a positive relationship between physical punishment and aggression."

Feshbach recommended further assessment of the possible incidental consequences of punishment such as anxiety and hostility. "If we combine the experimental research on punishment with the data on the effects of physical pain, it would appear that physical punishment has limited utility as a response suppressor and may well produce incidental effects with negative consequences for the child's adjustment that can be more undesirable than the response being punished."

In support of the preceding concern, it has been found that "under permissive conditions, subjects with a high degree of anxiety over aggression will actually respond more aggressively than subjects with a low degree of aggression-anxiety" (Feshbach and Jaffe, 1969).

The evidence presented in the preceding studies clearly points to the fact that punitive parents produce poorly adjusted children. Quotations from two further studies are presented in support:

"The child will do what the punitive parent demands only as long as he thinks that they will find out about his actions; he may not follow their prescriptions at all if he thinks he can 'get away with it'," (Berkowitz, 1964).

"Increased aggression was routinely found to be associated with increased punishment for this behavior" (Eron, et al., 1971).

Child Abuse

The most extreme form of parental punishment is that which results in physical or severe emotional harm to the child. This section presents material on child abuse, its incidence, the characteristics of abusing parents and abused children, and its effect on children.

Perhaps the earliest formal recognition of child abuse as a serious problem deserving study and corrective measures was in 1962, when Kempe and his associates coined the term "battered child." Kempe's article was precursor to a large volume of literature on the medical and legal aspects of child abuse.

Definition of Child Abuse

As is true of the concepts of aggression and violence, there is difficulty in reaching consensus as to what should be considered as an act of child abuse. Generally, causing emotional or physical harm to befall a child is considered child abuse. This definition is too general, for too large a variety of acts could be included, from spanking (corporal punishment) to improperly feeding a child (neglect).

Gil (1970) expressed the view that part of the confusion in defining child abuse was related to the tendency for investigators to construct definitions of abuse in terms of observed effects on a child (i.e., physical injuries) rather than in terms of motivation and behavior of the attacking person. He felt that the outcome of abusive acts depends not only on the

perpetrator's behavior, but also on the victim's reactions to the perpetrator's behavior, and on environmental and chance circumstances. Gil defined child abuse as "the intentional, non-accidental use of physical force, or intentional, non-accidental acts of omission, on the part of a parent or other caretaker interacting with a child in his care, aimed at hurting, injuring, or destroying that child."

Spinetta and Rigler (1972) provided the following definition: child abuse is ordinarily defined as instances where physical injury is willfully inflicted on a child by a parent or parent substitute. Other forms of abuse have been recognized: emotional, social, psychological, and sexual. However, because of the difficulty in pinpointing the nature of forms of abuse other than physical, most studies have limited the definition to physical injury to the child, willfully inflicted.

Incidence of Child Abuse

Estimates of the incidence of child abuse vary because of the differing definitions. A recent attempt to gather statistics on abuse in California by surveying welfare and probation departments and large hospitals was unproductive due to inaccuracy or unavailability of such data, and the tendency among those surveyed to group neglect cases with abuse (Davoren, 1973).

The California Attorney General's office in 1976 reported that there are 55,000 cases of child abuse being reported annually in California. In this report, child abuse included cases of physical assault, corporal punishment, emotional assault, emotional deprivation, physical neglect, and sexual exploitation.

Gil (1968) conducted a survey study of abuse in California and calculated that there were 1,174 cases in 1967. This is much different from the Attorney General's estimate of 55,000 because of the difference in definition. While the Attorney General's definition was quite broad, Gil was dealing with physical abuse only. There were even difficulties using Gil's narrow concept due to variations in reporting, erroneous reporting, etc. In a sample of 421 reports, 29% were actual physical abuse cases, 59% were some form of neglect or sexual abuse. Sex abuse is not usually classified with child abuse since the motivations of the perpetrators are different. Gil eventually established predicted rates of 59/1,000,000 for the State of California (higher in metropolitan Los Angeles: 112/1,000,000). Gil

calculated 1968 rates of abuse for each state, ranging from a low of zero in Rhode Island and South Dakota to highs of 235/1,000,000 children under 18 in Maryland and 312/1,000,000 in Texas.

Polier and McDonald (1972) presented data on the number of child abuse cases reported in New York City: 1966-210, 1967-369, 1968-730, 1969-1,829, 1970-2,800. These figures included cases of "neglect" as well as abuse.

Even though the number of reported cases of abuse has grown in recent years, there is much doubt that the incidence of child abuse is on the increase: rather it is believed that the reporting of abuse is increasing. Hospital personnel, teachers, and police are more aware of the presence of abuse and are more inclined to make reports under the heading of child abuse. Recent legislation will make it possible to file reports on suspected child abuse without fear of legal ramifications.

One of the most recent attempts to document incidence of child abuse was reported by Adams (1976). While he felt that objective estimates were impossible due to conflicting definitions, he used data from other research to extrapolate to the national population and concluded that over 3.6 million cases of physical abuse occurred in one recent year. Adams considered this to be a low estimate and reports other estimates which say that abuse occurs in 10% of all families with children under 18.

Characteristics of Abused Children

Kempe, et al. (1962) found abused children to be quite young--often under one year--born in close succession, and often the result of unwanted pregnancy. Adams (1976) found that the vast majority of abused children were under 3 years and tended to be the oldest or youngest child. Elmer (1967) found that abuse begins in infancy; at nine months the rate climbs abruptly, and peaks between 2 and 3; after 3 years the rate levels off. The Massachusetts Society for the Prevention of Cruelty to Children published findings in 1962 based on 180 cases of abuse and found the median age to be 7. In the same year, the Children's Division of the American Humane Association collected reports on 662 cases and found the majority of children to be under 4.

While most researchers have found abuse victims to be very young, Gil (1968) found 29.6% to be 6 to 11, and 16.9% to be 12 and older. Gil claims

other reports contained biased data, based usually on physically injured children admitted to hospitals. The more severely injured children tend to be the younger ones.

Gil has perhaps conducted the most comprehensive survey dealing with child abuse. He collected reports on 5,993 cases of abuse in 1967 and 6,617 in 1968. He obtained further data on a "study sample" of 1,380 of the cases in the 1967 study cohort.

In the full 1967 study cohort of 5,993 cases, he found 52.6% of the abuse cases involved boys. Boys outnumbered girls in every age group below 12, but among teenage victims girls comprised 63.3%. Gil explained this by saying younger girls are more conforming but as they enter sexual maturity, parental restrictions result in intensified conflict and increasing use of physical force. The decreasing proportion that boys represent among abused older children is explained simply by the fact as the physical strength of boys approaches or surpasses that of parents, parental physical discipline decreases!

He found non-whites over-represented in the sample: about two-thirds compared to 18% in the national population. In the study sample of 1,380 cases, 38.8% were white, 45.7% Negro, and other minorities combined, 15.5%. Gil explained the high figure for non-whites as partly due to possible prejudices in reporting practices (abuse in a black family is more likely to be reported than abuse in a white family) and partly to the reality of high incidence among minorities. He does not attribute abuse as a characteristic of non-whites, but that since abuse is associated with socioeconomic deprivation, fatherless homes, and large families, factors also prevalent among minorities, it is not unexpected to find a higher rate of abuse among non-whites.*

Over 29% of the cases were from fatherless homes (which in part explains why some researchers have found most abusers to be mothers), and in nearly 20% of the homes, a step-father was present. Once again, these conditions were more often found in non-white homes.

Children Who "Invite" Abuse. There has been speculation that abused children have characteristics "which invite abuse," such as physical or

*Welsh (1976a) reported that, in his study sample, more minority children had suffered severe parental punishment than had non-minority children, regardless of social class.

mental disorders. Court (1969) identified several types of babies that are likely to be potential victims of abuse: premature babies, and those that are hypersensitive, "colicky," or unresponsive. The latter were included because it is "probable that if for any reason the infant is 'unrewarding' to the battering parent, he (the infant) will be in more danger." Lowrie and Malow (1964), in a study of corporal punishment in schools, found that abused children seem to have personality characteristics that invite others to hurt. Older students who had been abused at home were described as troublesome, selfish, boisterous, hyperactive, depressed, and chronically dissatisfied. Many neglected and abused children were unappealing to teachers because they were often tardy, haphazardly dressed, aggressive, messy with schoolwork, antisocial, and unmotivated.

In a followup study of 42 abused children, only 3% were rated as difficult to raise from birth due to physical disorders (Martin, 1972). While conditions existing prior to the incidents of abuse were impossible to measure, Martin found that among his sample 43% showed abnormality on followup neurological examination; 33% were considered retarded (IQ below 80); 36% showed little or no improvement in their development; 35% showed under-nutrition (height or weight below 3rd centile); 38% showed developmental delays in use of language. Martin stated that under-nutrition may be considered a passive form of abuse coincident with active abuse, and may have contributed to the retardation in the sample.

In a study of 67 abused children, 70% were found to have had physical or developmental deviations prior to the abuse incident (Johnson & Morse, 1974). It was hypothesized that pre-abuse characteristics such as temper tantrums, delayed speech development, mental retardation, toilet training problems, physical handicaps, etc., may place additional stress on parents and serve as partial precipitators of abuse.

Characteristics of Abusing Parents

The most consistently found characteristic of abusing parents was a background of being abused as a child. Abuse within families has often been found to go back three generations, leading to the term "violence breeds violence." Intensive study has been conducted on the characteristics of parents who abuse children. Some of these findings are summarized below.

Gil (1968) reported that the proportion of child abuse families with four or more children was nearly twice as high as for all families in the national population. Educational level for parents was fairly low, as was occupational status: only 52.5% of the fathers were employed throughout the year. Income was lower than average; nearly 40% of the families received some form of public assistance. Of the abuse perpetrators, 56.8% had shown deviations in social behavioral functioning during the preceding year, 12.3% had suffered physical illness, 11% showed deviation in intellectual functioning, 7.1% had been in mental hospitals, 8.4% had been to court as juveniles, and 7.9% had been at some time in foster homes. Surprisingly, Gil only found 11% to have been victims of abuse as children. This does not support the findings of other researchers who, it should be remembered, were often dealing with very small samples. Gil reported data on a large variety of other characteristics of the abusers and the abuse incidents. Interested readers are referred to Gil's book.

One review of literature on child abuse (Spinetta & Rigler, 1972) reported that abusing families are generally characterized by a high incidence of divorce, separation, unstable marriage, minor criminal offenses, and social and economic stress. However, most writers agree that socioeconomic factors have been overstressed because the great majority of deprived families do not abuse their children, and abuse has been found in both middle and upper class families. Others (Court, 1969; Steele & Pollock, 1968; Elmer, 1967) also found abuse occurring in all classes of society. Steele and Pollock were unable to detect an incident of child abuse among Mexican-American migrant workers, even upon investigation. Adams (1976) found no relationship between abuse and social class, and concluded that "abuse families tend to have some sociologic/psychologic stress such as divorce, separation, economic problems, social isolation (having little extended family available), or paternal unemployment (especially among lower class parents)."

While Gil (1968) found fathers to more often be the abusers, Steele & Pollock (1968) found that in 50 of a sample of 60 cases, the mothers were the abusers. Corbett (1964) attempted to explain why fathers or mothers may become abusers. He found that abusing fathers tended to identify with their own brutal and abusing fathers and to displace poorly controlled anger

and hatred of their father to their own children. The abusing mothers were considered jealous of male children, expressed hostility towards men through attacking their children, and frequently identified with their own mothers, who also hated men.

Elmer (1967) studied 31 families whose children had been admitted to the Children's Hospital in Pittsburgh with multiple bone injuries. Families were interviewed and the children were examined and tested at the hospital. Comparisons were made with families of children who had been admitted with injuries but were rated as non-abusing, i.e., the injuries were adjudged to be accidental. Some of the characteristics of the abusing families were 1) excessive drinking by fathers, 2) use of a wide variety of punishments (as though desperately trying to find some way to manage their children), 3) abusive mothers isolated from outside sources of companionship and help, and 4) few close friends. Tragically, 26% of the children at time of followup several years later were either dead or in institutions.

Several researchers have concluded that abusing parents do not fall into a recognized psychopathic category (Steele & Pollock, 1968; Adams, 1976; Court, 1969), but they have identified personality and behavioral variables that correlate with abuse.

Steele and Pollock (1968) contended that abusing parents misunderstand the nature of child-rearing; make inordinate performance demands of their children; deal with them as if they were older than they really are; feel insecure about being loved; and look to their children as sources of reassurance, comfort, and loving response. They expect exemplary behavior, respect, and submission.

Court (1969) described battering parents as having lack of basic trust in themselves, feelings of worthlessness, fear of rejection, inability to be emotionally nurturing and protective, a belief that they cannot influence the course of events (powerlessness--a concept propounded by May, 1972), inadequate impulse control, and jealousy of any attention paid to their children. Court presented the following compilation of characteristics of the battering family. Parents are likely to be young, emotionally immature, with a history of premarital pregnancy. The battering parent is usually tied down in a hostile/dependent relationship to his/her own parents. The family may be plagued with social problems, and a specific crisis such as

desertion, illness, or unwanted pregnancy may precipitate abuse. The family is isolated and without friends. Somewhat unexpectedly, the home is usually well-kept and the children are well cared for physically.

There have been attempts to develop typologies or objective methods of identifying potential abusing parents. Merrill (1962) identified four clusters of traits shared by abusing parents: 1) hostility and aggressiveness which triggers easily in the face of normal events, 2) rigidity and compulsivity, lack of warmth, 3) passivity, dependency, moodiness, and immaturity, and 4) among fathers, unemployment, feeling vocationally thwarted when the wife is employed.

Schneider, Helfer, & Pollock (1972) developed a self-administered questionnaire to serve as a screening device, based on the responses of 30 abusers and 30 non-abusers. The result was four clusters of items: 1) loneliness and isolation, 2) expectations of children, 3) problems with own mother, and 4) anxious and upset with children. Deviations on these clusters predicted potential for child abuse. Continued work is being done on this scale.

Treatment for Abusing Parents

Treatment recommendations include training parents to recognize their children as individuals with age-specific needs and behaviors, and to learn alternative methods of punishment. Paulson and Blake (1967) promoted family planning as a preventive measure, since abused children are generally either unwanted, unplanned, or the result of premarital pregnancy.

Martin (1972) stated that since parents of battered children were probably abused by their parents, the placement of a battered child with grandparents as a practice is "dubious if not patently ridiculous." He also claimed that simply removing the child from the home is only a partial answer; the child needs rehabilitation treatment. The untreated battered child may be retarded, brain damaged, undernourished, emotionally crippled, and potentially a violence-prone adult.

Davoren (1973), in her survey of welfare and probation departments, listed a consensus on needs to treat child abuse:

1. public information regarding child abuse
2. in-service training for professionals on how to recognize and handle cases of abuse

3. make physicians and others aware of legal mandate to report child abuse; make it easier for them to do so (e.g., reduce police contact, etc.)
4. change laws to focus on treatment rather than punishment of abusing parents
5. provide non-punitive personnel to work with child abuse cases
6. provide treatment
 - a. family counseling
 - b. day care centers (for temporary placement, rather than legal removal from home)
 - c. 24-hour "crisis nurseries"
 - d. telephone hot-lines
 - e. aggressive mental health services for prevention as well as treatment

Child Abuse Begets Child Abuse

A preponderance of evidence makes it clear that child abuse is a self-perpetuating symptom. In nearly every article reviewed, it was found that child abusers had suffered child abuse as children, and in several instances it was possible to determine that the parents of child abusing parents had in turn been abused by their parents. The culmination of child abuse is the great likelihood of abuse continued from generation to generation.

Steele and Pollock (1968) and Adams (1976) found "most" abusing parents had been abused as children, and suffered a lack of basic mothering. They documented histories of abuse going back at least three generations. If the abusing parents had not been physically abused, they had been emotionally abused, made to feel that they, as children, were unloved and nothing more than a burden to their parents. They tended to project their self-image of a "bad baby" on their own children.

Gibbons and Walker (1956) concluded that it was rejection, indifference, and hostility in childhood that produced cruel parents. Court (1969) said that abusing parents tended to identify with their own "sadistic" parents, and would inflict on their offspring the hurts they experienced as children.

Societal Causes of Child Abuse

Rather than place the blame for violent behavior among children on parents who have been guilty of severe punishment or abuse, Gil (1970) tended to put the responsibility on the very fabric of our society. He wondered whether the widespread phenomenon of adult violence in American society may be indirectly related to the exposure to physical violence of a large segment of the population during childhood. Gil wrote that society, in making an uproar over child abuse, blames it on "sick" parents to "cover up society's destructive inaction" toward children who suffer from poverty, discrimination, and deprivation. He called for the removal of the three foregoing elements from our society in order to remove the causes of child abuse.

Gil recommended the elimination of violence from American child-rearing philosophy by making "changes in our system of values and in the entire societal fabric," such as moving toward "less competition and more human cooperativeness, mutual caring, and responsibility." By reducing the violence inflicted on children we may "reduce the amount of violence in interpersonal and intergroup relations among adults in this country and perhaps even in international relations on a global scale."

Effects of Abuse on Children

"Physical abuse may result in a number of biological consequences, including death, brain damage, mental retardation, cerebral palsy, learning disorders, and sensory deficits. It is estimated that between 25% and 30% of abused children who survive the attack have brain damage or neurological dysfunction resulting directly from physical trauma to the head" (Martin & Rodeheffer, 1976). Helfer and Pollock (1968) have estimated that, in the absence of intervention, the chance that an abused child will eventually be killed or permanently injured is between 25% and 50%. These same investigators stated that abused children adapt to their circumstances by practicing inhibition, denial of their own drives and impulses, and withdrawal and avoidance.

Kempe & Helfer (1972) asserted that abused children who have been denied normal developmental experiences have greater difficulty in their ability to make decisions, use others prosocially, develop trust, and more easily

become dependent on others. These are factors often used by educators to determine readiness for school. "In school, abused children behave fearfully, are clinging, and aloof with peers. With the teacher, they oppose control, are manipulators, unresponsive to praise, and apathetic towards things most children their age enjoy" (Martin, 1972).

In their study of 34 abuse cases at the Children's Hospital in the District of Columbia, Silver, Dublin, & Lourie (1969) determined that abuse is not a one-time occurring incident, nor is it limited to one child in a family, as some other researchers have hypothesized. In 20 of the 34 cases the child had been previously abused, and in 19 cases siblings had been abused. The followup study does not provide optimism regarding treatment of abusers. The families had been referred to community services and at the end of four years abuse had reoccurred in 12 families (35%). Seven of the children (21%) had gone to court for delinquency.

According to the authors, "The longitudinal study of abused children and discussions with physicians and hospital staff suggest that some abused children cope with the emotional stress by choosing 'identification with the aggressor' as their major defensive pattern." On the other hand, it is felt that "...there are probably many abused children who 'identify with the victim'...these children seem to have learned that love equals being hurt, and they establish a pattern of inviting the role of harm and of playing the victim" (e.g., wife-beater's wife, the person attacked and beaten).

Abused Children Become Violent Persons

While some researchers have indicated passive withdrawal as a response to child abuse, there is also mounting evidence that a child who suffers severe and frequent abuse may grow up to be a violent adult. Martin (1972) has said "There is ample evidence that the battered child may grow up to become an adult with violence playing a prominent role in his behavior repertoire." He qualified this statement by stating he does not claim that all battered children grow up to become violent adults, because it is not known how many battered children grow up without running afoul of the law or child welfare agencies.

Curtis (1963) stated that violence breeds violence, an assertion based both on theoretical and empirical grounds. He presented the probability

that abused children may be potential murderers and perpetrators of other crimes of violence. He theorized that an abused child will harbor excessive hostility toward his parents and this hostility may be generalized to the world-at-large. The child would have no available means of channeling this hostility into socially acceptable avenues of release. In addition, the battering parents would represent identification models of aggressive, brutal behavior. Data have been presented on children and adolescents who kill (Bender & Curran, 1940). Among findings on this selected sample was the tendency to identify with aggressive parents and to pattern their behavior after that of their parents.

Duncan (1958) studied the history of six convicted adult murderers and found four had been brutalized as children. The other two were psychotic and their childhood histories were unavailable. Easson and Steinhilber (1961) did clinical studies on eight boys who had committed murderous assaults. Two had suffered habitual abuse, in three cases abuse was suspected, and one no data were available. Based on such sparse data as reported above, it is not possible to establish a direct relationship between childhood abuse and adult crimes of violence, since it is unknown how many abused children do not commit adult violence. However, Bender and Curran (1940) stated that in their experience children who suffered unanticipated violence were likely to react with blind violence as an expression of fearful insecurity. It might take years for this reaction to occur.

Child Abuse and Subsequent Violent Behavior

The most pertinent work on establishing the relationship between abusive treatment of children and the development of aggressive or anti-social tendencies has been done by a small cadre, mostly members of an organization entitled End Violence Against the Next Generation, Inc., such as Button (1973), Maurer (1974), and Welsh (1976a, 1976b).

Button has stated, "In the background of all perpetrators of violent crimes, the infamous and notorious as well as those whose crimes reach only the back pages of the newspapers, is a history of cruel, excessive,

brutalizing and dehumanizing punitive practices brought against them." He cited as examples Oswald, Sirhan, Manson, Bremer (Governor Wallace's would-be assassin), and numerous case histories of Youth Authority inmates.

Maurer, executive director of EVAN-G (above), provided this writer with some findings on the relationship between severity of punishment and subsequent antisocial behavior.* Her data showed that while the majority of a sample of professionals and college students experienced only rare or moderate physical punishment as children, about two-thirds of a sample of high school drop-outs and a sample of delinquents suffered severe or extreme punishment. Of a sample of the most violent inmates in San Quentin, 100% had suffered extreme punishment.

Welsh has said that "severe parental punishment (the use of a belt, board, extension cord, or fist in the name of discipline) is not only a significant precursor of delinquent behavior, but appears to be the only variable to be consistently found in the background of each and every recidivist male delinquent."

Unfortunately, there is a lack of hard data establishing child abuse as an antecedent to delinquent behavior. Presumably, the three authors just quoted have accumulated some statistical data, but little appears in their published work. Button's plans to analyze and publish data did not come to fruition because of lack of funding.

Even though their findings are not revelations (the Gluecks reported similar data much earlier), the supposition that harsh parental punishment leads to aggressive or delinquent behavior needs further supportive research. As a matter of fact, there have been some disclaimers of the theory. Johnson and Morse (1974) reported on the behavioral characteristics of 52 abused children. They reported finding one category of selfish, inconsiderate, overly-active, and boisterous behaviors; a second grouping of behaviors included unassertiveness, self-sacrifice, ingratiating, and depression. As a group the children seldom engaged in overt aggressive acts such as vandalism or theft but rather were seen as deceitful, immature, and overly dependent for their age.

*Personal communication from Adah Maurer containing data to be presented to the APA convention in 1976 (unpublished).

Rolston (1971) found that abused children more often reacted with passive acquiescence and withdrawal than with hostility and violence. His measure of aggression was the abused child's response to the Thematic Apperception Test (TAT). Muir (1976) reported this study and asserted that "...it points up the possible error in assuming a relationship between a history of childhood abuse and future abuse as a parent in that these children were not as aggressive in either behavior or fantasy as normal controls."

Punishment and Delinquency

The preceding sections discussed the relationship of punishment to subsequent aggressive behavior. This section contains reviews of literature bearing on the relationship of punishment to delinquency. Unfortunately, the number of works in this area is quite small compared to the number covering aggression and child abuse.

One of the early attempts to systematically present data on the causes of delinquency was in 1950 when Glueck and Glueck published "Unravelling Juvenile Delinquency." Included in their data was the finding that physical punishment was significantly related to subsequent delinquent behavior.

Data From The Gluecks' Study

Method of Behavior Control Used by Parent	Mother		Father	
	Delinq. (n=482)	Non-Del. (n=489)	Delinq. (n=441)	Non-Del. (n=447)
Physical Punishment	55.6%	34.6%	67.8%	34.7%
Reasoning	16.4%	28.2%	11.3%	24.4%
	(p<.01)		(p<.01)	

Andry (1971) also found physical punishment in the background of delinquents. He felt there was plentiful available research specifying maternal deprivation as being of primary etiological importance as a cause of delinquency. However, he desired to investigate the role of both parents. He studied 80 delinquents (recidivists in a London boys' home) and 80 matched non-delinquents. Both parents of 30 boys in each sample were also studied.

He obtained measures of parental affection, communication, and home climate. Significance of differences were determined by chi-square analysis.

Selected findings (all significant) are presented below:

1. parents of delinquents do not quarrel more often (measure of parental disharmony)
2. delinquents more often responded that "being hit" was the punishment that worked best with them, 49% to 32%; being "talked to" was chosen by 5% of the delinquents and 38% of the non-delinquents
3. only 21% of the delinquents felt neither of his parents should be stricter, compared to 87% of non-delinquents
4. sixty-five percent of delinquents resented parental punishment compared to 16% of non-delinquents
5. twenty-six percent of the delinquents felt their father was too strict (6% non-delinquents)
6. when asked which parent was too quick tempered, delinquents picked the father--

	Delinq.	Non-Del.
Mother	26%	36%
Father	58%	41%

7. the boys were asked how they react when they dislike a situation--

	Delinq.	Non-Del.
Get Angry	56%	6%
Sulky	14%	6%
Not Angry	30%	88%

Based on these and other findings, Andry concluded that "a child who perceives his father in a negative way over a period of years may gradually not only develop hostility towards the father but may also at a given time start to project such hostility beyond the family scene onto the world at large. Some delinquent acts would seem to be meaningful if interpreted in this light."

In another study, a followup was made on 890 children who had been abused by their parents (Young, 1964). It was found that 8% had been

adjudged delinquents and 41% of the school age children were truants. Young did not present detailed information on the characteristics of his sample, so the reviewer is unaware of the age of the children. However, assuming the majority of these abused children under study to be 10 or less, the 8% figure on delinquency may have increased as the children grew older.

Maurer (1976) presented the following data on the relationship between physical punishment and subsequent violent behavior:

Group	Degree of Physical Punishment Ages 1 to 10				
	Never	Rare	Moderate	Severe	Extreme
Most Violent Inmates, San Quentin	0	0	0	0	100%
Juvenile Delinquents	0	2%	3%	31%	64%
High School Drop-outs	0	7%	23%	69%	0
College Freshmen	2%	23%	40%	33%	0
Professionals	5%	40%	36%	17%	0

Note.-numbers of subjects in each group not provided.

In the above continuum of punishment, "moderate" includes slapping and spanking, "severe" means the use of a belt, paddle, etc., and "extreme" means needing medical attention or hospitalization.

Button (1973) theorized that punishment may lead to delinquent behavior because in punishing a child, severely and repeatedly, the parent is communicating to the child a message that the child is "bad, unworthy, unlovable."

Welsh (1976a) investigated the relationship between severe parental punishment (SPP) and delinquency. He reported that laboratory experiments have shown that "severe pain will predictably elicit a vicious aggressive attack in practically every animal species." Therefore, he concluded that the parent who uses SPP is clearly attempting to inflict pain on his child in hopes of suppressing unwanted behavior, but may be fostering aggressive tendencies in the child as a result.

Welsh stated that studies have shown that "cultures with a high crime rate invariably use corporal punishment as their chief socialization

technique, but in cultures with a low crime rate, corporal punishment is de-emphasized." (See also Prescott, 1975, for a study of the relationship of cultural variables and aggression.)

Welsh attempted to determine the significance of cultural and socio-economic factors related to parental punishment practices. In a survey of 132 randomly selected laundromat patrons, Welsh asked what kind of discipline they would use on a seriously misbehaving 8-year-old. The results indicated 54% of lower class* ethnic minority persons were willing to use a strap on the child. This compared with 33% of the middle class minority persons, and 15% of lower class whites. "This [sic] data, showing a higher use of SPP by educated minority Ss than uneducated whites, strikingly parallels the puzzling delinquency statistics reported earlier by Wolfgang who found higher crime rates among higher SES non-whites than among lower SES whites."

Welsh gathered data on a sample of 77 consecutive juvenile court referrals. Of the 58 male subjects, 56 were found to have been subjected to severe physical punishment (SPP), e.g., the use of a belt, board, fist, etc. The other two males were inappropriate referrals and could not really be called delinquents. The subjects were classified according to severity of parental punishment and level of aggressive behavior (determined from offense history). A highly significant relationship ($p < .001$) was found between the level of aggressive behavior and severity of corporal punishment among male delinquents. The relationship was in the same direction for females but did not quite approach significance ($p < .10$).

Looking again at ethnic groups separately, Welsh found that as children more of the minority persons had been exposed to SPP than had whites. The comparison between blue collar and professional groups on SPP was not significant, leading Welsh to postulate that SPP was related to minority group status, but not to social class. According to Welsh "minority group subjects are more aggressive because more of their parents use SPP than do the parents of whites."

He graphically suggested how SPP may lead to aggression and/or delinquency. The punitive parent resorts to the use of a belt (or other

*Welsh actually divided his group into "non-college" and "some college" subgroups, but it is assumed these were his indicators of socioeconomic status.

implement) because it produces enough pain or fear to terminate the unwanted behavior, at least temporarily. As the fear dissipates, aggressive feelings remain. The process, if repeated frequently enough, gradually habituates the youngster to the punishment and he begins to exhibit the poor conditionability to aversive stimuli, a phenomenon that has been associated with psychopathy. The aggression continues to build up, the fear habituates, and the youngster becomes increasingly uncontrollable.

The following excerpts are from another recent article by Welsh (1976b) based on approximately "1800 delinquent evaluations."

"The attempt to link crime with parental overpermissiveness is totally insupportable."

"Parental overpunishment could very well be the major factor in producing the distractability, the impulsivity, the social incompetence, and above all, the angry anti-authority attitudes so commonly seen in delinquent misconduct."

"Corporal punishment, per se, may not be the issue, but its severity."

"The pediatric psychologist should prepare himself to suspect parental overpunishment in any child who exhibits defiant, cruel, aggressive, or stubborn behavior."

Summary and Conclusions

This paper has presented a review of literature pertaining to the antecedents of adolescent aggression. The prior section contained a discussion of the potential relationship between antecedents of aggression and delinquent behavior. This section summarizes pertinent findings and conclusions, and offers several recommendations.

Theories of Aggression. Those theories claiming that aggression stems from libidinal or innate biological urges are too abstract to test through experimental research. The theory receiving the most empirical support has been social learning theory--in particular, the concepts of modeling and reinforcement. Some support was found for the physiological theory known as the XY Syndrome, but the data have been too limited and tenuous to allow full acceptance of this theory. Nor have studies of the frustration-aggression theory been totally successful in establishing a reliable relationship between frustration and aggression. However, some kinds of frustration may precipitate aggression in some kinds of subjects, under some kinds of conditions.

- Establishing the validity of the frustration-aggression theory would require further research. Research on frustration as a causal factor of aggression should include such variables as emotional deprivation, lack of "mothering," the concept of powerlessness, and the types of children who may respond aggressively to various forms of frustration.

Social Learning Theory. This theory seems to contain concepts that most satisfactorily explain how children learn to act aggressively. Two primary components of social learning theory have been identified as modeling, or imitating the behavior of others, and reinforcement.

The hypothesis that children are likely to learn behaviors by imitating the actions of others has caused much concern regarding violence displayed on television. A large body of researchers have claimed that televised violence causes or contributes to subsequent aggressive behavior on the part of young viewers. However, some researchers have conducted studies that showed televised violence to have little consistent effect on the degree of aggressive behavior exhibited among viewers. Their results suggested that the type and intensity of reaction to viewing violence may depend on

the aggressive predispositions of the viewer and the viewer's concept of the material being real or "make-believe."

Two researchers recently reviewed 120 studies of television violence and concluded that the accumulated research does not provide sufficient proof of a direct connection between television violence and aggressive behavior.* They criticized most studies, faulting their poor methodology and design. They agreed, however, that televised violence may negatively effect "disturbed" viewers, although no research has been conducted to support this conclusion.

- Further well-defined research is required before television can conclusively be considered as a cause of violence in our society. An excellent opportunity to conduct further study on the effects of televised violence is available within the Youth Authority. A television set is omnipresent in institutional living units and is heavily used by wards for recreation during free time. It might be said that some living unit staff have come to rely on the presence of television to occupy wards and to facilitate group management. A study similar to that of Feshbach & Singer (1970) could be implemented where wards in some units viewed programs rated high in violence content and in other units only low violence programs were watched. Another option would include a control unit, where the television set would be removed entirely. Carefully documented measures of ward behavior and attitude could produce important data bearing on the effect that television has on young people. If the results showed that viewing televised violence increased the aggressive behavior or attitude of wards, some changes would be called for in the recreational programs; at the very least, it would be necessary to strictly monitor the kinds of television programs wards were allowed to watch.

Reinforcement. Another principle of social learning theory, that of reinforcement, has much more empirical evidence to support it as a cause of aggressive behavior. The principle of reinforcement includes both the reinforcement of behavior (i.e., providing positive feedback) and punishment.

*Robert M. Kaplan of San Diego State University, and Robert D. Singer of University of California, Riverside, from an article in the Sacramento Bee, January 2, 1977.

Many research studies have shown that the frequency of aggressive behavior can be increased both by positively reinforcing and by punishing aggressive acts. The studies of Eron, et al. (1971) and Sears, et al. (1957) indicated that parents inadvertently "train" their children to behave aggressively by condoning or in some other way reinforcing aggressive behavior, or by severely punishing it. The findings of Patterson, et al. (1967) showed that victims of aggression often reinforce aggressive behavior toward themselves due to lack of an ability to respond to it in a non-reinforcing manner; e.g., victims often "give in" to the demands of the aggressor, cry, or in some other manner show fear.

- One approach to reducing aggressive behavior might be to train children how to respond to the aggressive behavior of other children without reinforcing it. The literature does not contain clues or suggestions as to how this might be achieved. Appropriate experts should be contracted to devise methods. A treatment model could be developed based on two approaches: 1) modifying the behavior of youths who have exhibited aggressive acts, and 2) general training in appropriate responses to aggression directed at self. This combined approach would be likely to achieve a greater degree of success in reducing the incidence of aggressive behavior than a program directed solely at training children to be non-aggressive.

- Data are available showing that conditions within a nursery school may reinforce aggressive behavior (Patterson, et al., 1967) and even create it in non-aggressive children. According to one theory, in group situations where the number of social interactions is high there will perforce be an increase in social behaviors, including aggression. Group homes, shelter-care and day-care centers, and other community facilities for juveniles should be investigated to determine the degree to which aggressive behavior is tolerated or reinforced.

- Within the Youth Authority, a study could be designed that would record the frequency of aggressive behavior and the degree to which it is tolerated by staff and reinforced by peers in both large and small living units. It may be that living unit size is one variable related to frequency and severity of aggressive behavior among wards. Findings would aid in resolving the controversy over the effects of living unit size.

Punishment. The review of literature on punishment produced the conclusive finding that punishment, indiscriminately used, has little permanent effect on reducing or removing the behavior being punished. Punishment is not proscribed; rather, punishment is placed on its proper context along with a series of events which must take place if modification of behavior is to be successful (see pages 19-20).

Research findings generally support the conclusion that punishment for aggressive behavior not only has little effect on reducing the frequency of aggressive acts, but has negative side effects and may serve to increase aggressiveness by eliciting frustration, anger, and hostility.

Parental punishment has been found to be related to the learning of aggression among children. However, there are some studies that have found physical punishment by parents to be related to aggression in children only when the punishment was for aggressive behavior. Physical punishment for non-aggressive misbehavior did not show a relationship to childrens' aggressive behavior.

Parke (1972) concluded that socialization programs based on punishment (i.e., confinement, loss of freedom and privileges, etc.) will be ineffective unless they also include the teaching of new appropriate responses or incompatible responses.

- Several methods of determining the effectiveness of incarceration as punishment can be recommended.

1. Measure effect on recidivism of the certainty and severity of punishment, and the temporal arrangement of offense and punishment (the dispatch with which punishment follows the crime).
2. Compare outcomes of types of offenders incarcerated under present indeterminate sentencing and those processed under the new determinate sentencing procedure (SB 42).
3. Compare outcomes of W&I 601 Code status offenders who were incarcerated (punished) prior to 1-1-77 and those processed under AB 3121 which illegalizes such confinement.
4. Identify existing programs that are primarily for incarceration of offenders, i.e., confinement primarily

for punishment, and that have little or no specific treatment programs. These could be compared with a model program following Parke's recommendation that not only is the attempt made to modify negative behavior, but added emphasis is given to teaching appropriate or incompatible responses to aggressive, anti-social behavior.

Aggression and the Schools. On November 11, 1976 the Sacramento Bee contained a front page report on "Fighting, Conflict in San Juan Schools." It was reported that twenty-five percent of the eighth graders said they were sometimes afraid to go to school because of other students, and 57% of the roughly 8,000 youngsters reported they feared some students at school. The school district considers the "pervasiveness of fear" to be a very serious problem.

The Grant School Delinquency Prevention Project is working within the Grant School District in Sacramento, where schools suffer due to large numbers of disciplinary problems. McClymond High School in Oakland at one time sought assistance from the CYA to reduce truancy and other behavior problems in school.

These are only a few examples of which the reviewer is personally aware regarding the plight of schools, where truancy, drugs, vandalism, and aggressive, anti-social behavior represent a serious problem impeding the educational process. In the reviewer's own neighborhood, many sixth graders become anxious and fearful upon graduating from grammar school and facing the prospect of attending the local junior high school, from which stories circulate (mostly factual) about how easy it is to obtain drugs, the frequency of racial conflict, school vandalism (especially locker burning), and the overly aggressive behavior of some students.

- Schools represent a primary target for intervention programs. The Youth Authority should support or implement intervention programs in schools, especially those accompanied by appropriate evaluative research. Self-report data from students on parental punishment practices, along with self-report or peer-ratings of anti-social behavior, school records of misbehavior, and law enforcement data on delinquency could provide the

substance of research which could go a long way in providing an empirical base for establishing a relationship between parental punishment and, not only aggressive behavior, but anti-social and delinquent behavior.

Corporal Punishment in Schools. An article by Bakan (1971) was addressed to the issue of corporal punishment in the schools. Following are several quotations from Bakan's article:

"The effectiveness of corporal punishment as a way of coping with student unruliness is doubtful. In a study which was done in Pittsburgh, it was found that when corporal punishment was used, the same children tended to be the recipients of corporal punishment again and again." "The worst feature of corporal punishment is that it sets an unfortunate example for the children. Every time a teacher or a principal uses or threatens to use physical force on a child, it is an indication that he considers it legitimate to attempt to influence the behavior of others through the use of physical force." "Severe discipline creates fear and hatred of the person who does the punishing. The punishment of a child in school may lead to that condition in which a child, deprived of all other avenues of communication with his teachers, becomes sullen and resistant to learning." "The presence of a threat of punishment falls on all children in a school, regardless of the correctness of their behavior. The fear that it may generate may lead to a school-wide mood among the children of apathy, irritability, inadequacy, and personal worthlessness. Available empirical data strongly indicate that the kind of anxiety which the presence of corporal punishment creates has a generally bad effect on learning. It creates agitation, panic, depression, distractability and forgetfulness."

Kvaraceus, quoted in Maurer (1974), said "Studies indicate that vandalism is the youth's attempt at retaliation for punishments and humiliations suffered in school."

- The effects of corporal punishment and other discipline used in schools should be investigated. One hypothesis might be that corporal punishment leads to underachievement, dropping out of school, aggressive behavior, and delinquency.

Child Abuse. Much research has been devoted to child abuse. Estimates of the incidence of child abuse vary widely due to differing definitions of

abuse and differential reporting procedures. Using a broad definition covering all forms of abuse, the California Attorney General's office calculated a rate of 55,000 cases per year in California. When the counting of abuse cases is limited to actual physical abuse, the rate has been predicted to be 59 per million population (perhaps 1,300 cases per year in California).

Data are available on the characteristics of abusing parents and abused children. There is an hypothesis that certain children invite abuse, such as retarded, unresponsive children, or "collicky" babies.

Although some investigators have claimed a relationship to exist between child abuse and delinquent behavior, hard data are sparse or lacking. There seems little doubt, however, that severe or continued abuse produces maladjusted children, including some who may become delinquents.

It has long been contended that socioeconomic factors serve as a precipitating cause of child abuse. Several research studies (Elmer, 1967; Steele & Pollock, 1968; Court, 1969; Eron, et al., 1971; and Welsh, 1976a) have tended to show that parental punishment and abuse occurs at all levels of society. There has been no authoritative study of lower class children who have been the recipients of severe punishment and abuse and have not yet entered the juvenile justice system. It is not known how many of these children do or do not exhibit aggressive behavior and perform delinquent acts.

Child abuse, the physical maltreatment of a child requiring medical attention, does not appear to be an appropriate area in which the Youth Authority should attempt to develop treatment programs. This conclusion is based on the relative infrequency of actual physical abuse, the special conditions under which it occurs, and the lack of data which consistently show abuse to be related to delinquency. Abuse is a problem with serious consequences, but due to its nature, is the province of social and child welfare agencies.

- For instance, the schools could play a leading role in combatting child abuse by assisting in the detection of incidents of abuse. School personnel should be notified (by hospitals, social agencies, police) when a family is

known to have abused a child. School staff could then watch for any further signs of abuse to this child or his siblings and report it to the proper authorities.

- School curricula should include classes in parent training, specializing in such areas as explanations of the normal states of child development, age-specific needs and how to respond to them, family planning*, and teaching methods for controlling (modifying, shaping) child behavior without resorting to physical punishment.

- Establishing the effectiveness of parenting classes would require a longitudinal study which would compare outcomes of students who had received parent-training and a control group who had not received the training. Outcome measures would be obtained through interviews with the subjects after they had established families. Initially, parenting classes could be established at the twelfth grade in order to shorten the length of time required before outcomes were available. If effectiveness were established, parenting courses could be implemented at lower grade levels.

- One method through which the Youth Authority could impact the problem of abuse would be to incorporate "child protective services" in Youth Service Bureaus funded by the state. Such services would include:

1. advertising availability of help to battered children or their families,
2. work cooperatively with schools, physicians, day-care centers, and police in detecting cases of abuse,
3. exploring all reports,
4. refer children to doctor for examination,
5. evaluate family for further risk to battered child or siblings remaining in the house,
6. refer for necessary remedial casework services,
7. refer to legal agencies where warranted.

*Family planning has been recommended to allow spacing of children so that each may receive proper care and mothering. This may be important in light of findings by Gil (1968) that abuse occurs at a greater rate among families with four or more children.

It may be possible to identify potential abusers among parents of referrals to youth service bureaus or other local agencies. Work has been done to develop objective methods based on questionnaire responses by parents (Merrill, 1962; Schneider, Helfer & Pollock, 1972).

Parental Punishment and Delinquency. While the data are somewhat limited, the few studies available for review tended to indicate a relationship between parental punishment (including abuse) and subsequent delinquent behavior. Maurer (1976), for example, found that among a sample of violent inmates in San Quentin Prison, 100% had suffered extreme punishment requiring medical attention or hospitalization. Beginning with the Gluecks in 1950, researchers have found that the parents of delinquents more often use physical punishment than do parents of non-delinquents. In addition to using physical punishment, parents of delinquents have been found to be more tolerant of aggressive behavior and to be less "loving" and accepting. The typical delinquent family atmosphere can be said to be characterized by coldness, hostility, lack of nurturance, and anger that often leads to brutality or at the very least rejection of the child.

Programs involving the parent-child relationship probably contain the greatest potential for productive application of the resources of the Youth Authority. If it is true that negative parental behaviors are a primary and significant antecedent to adolescent aggressive and/or delinquent behavior, some restructuring of departmental priorities would be required. For instance, institutional treatment would probably be ineffective in modifying delinquent behavior unless the parents were required to participate in the treatment programs (such as in the department's old Marshall Program at the Southern Reception Center). It might be more productive to increase the emphasis on community programs, youth service bureaus, local probation, etc., that require, or at least make possible, parent involvement.

In order to establish effective programs to deal with the parent-child complex, more substantive evidence is needed regarding the nature of the problem. Experimental research is required to identify the specific family antecedents to delinquency. Based on these findings, treatment and prevention programs could be designed and implemented. Evaluative research would then

determine the effectiveness of these initial programs and provide recommendations for modifications that would enhance program effectiveness.

There are many ways in which the Youth Authority could begin to implement a comprehensive research/treatment/prevention program centered on the family. The mandatory initial procedure would be to obtain data that clarify the nature and extent to which poor parenting leads to delinquency. Various recommendations follow:

- Intervention programs in the community could be structured so that pertinent information on family variables was routinely collected, analyzed, and fed back to program staff. Such procedures might be made requirements for grant proposals (RFPs), or selected programs could be solicited to participate. Examples of the variables to be examined would be the quality of the parent-child relationship, frequency and severity of punishment, emotional support, one or both parents in the home, tolerance of aggressive behavior, etc.
- Within youth service bureaus, a comparison could be made between youths whose parents participate in the program and those whose parents do not.
- A brief study, comprised primarily of a record search or series of structured interviews, could be conducted to document the extent of abuse and severe punishment among Youth Authority and probation populations.
- Other populations (high school, college, military, vocational groups, etc.) could be surveyed to determine the amount of parental punishment among non-delinquent families.
- To validate the hypothesis that abuse leads to violent and/or delinquent behavior, a sample of abused children should be identified and followed-up over a period of time to determine what proportion of abused children subsequently act-out aggressively or become delinquents. The methodology would consist of personal interviews, mail questionnaires, or record searches, or any combination of these methods. Included in the information gathered would be incidents of subsequent abuse, pre-delinquent or delinquent behavior, nature and degree of abuse, whether parents had been abused as children, etc.

Collecting these data on families will depend quite heavily on self-report data from children. Youth Authority research has in the past frequently relied on these kinds of data. However, the reliability and validity of

self-report data need to be determined. Eron, et al. (1971) preferred to rely on peer ratings as a measure of aggressive behavior, finding them to be more valid than self-ratings.

- A small study should be designed in which self-report data were collected in a variety of areas, such as attitudes and behavior in school, family relationships, and delinquency. Independent measures of these same areas should be collected and compared with the self-report data, allowing decisions to be made regarding how heavily such data should be used in evaluating programs and other forms of research.
- One way to facilitate the cooperation of local programs in the above research/data collection studies would be to increase or establish special subsidies to those counties with special programs designed to involve parents, those willing to implement and test treatment models, or become involved in comprehensive data collection.

Throughout this paper it has been the author's intention to provide knowledge about the causes of aggression and delinquency by gathering and summarizing a large number of germane reports, papers, and articles. Recommendations have been made for research, planning, and programs, but these are not to be considered an all-inclusive or definitive list of what can or should be done. Instead it is hoped that this paper will have served to emphasize the importance of two points: 1) that aggressive/delinquent behavior is, for the most part, a learned behavior subject to modification, and 2) that the learning environment of these negative behaviors is to a great extent within the family. Perhaps these considerations will stimulate new thinking and concepts in our efforts to treat aggression and delinquency.

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