ABSTRACT

PERSONALITY CORRELATES OF ABUSE
AND NEGLECT IN CHILDREN

By

Aileen Anne Thatcher

Child abuse is a centuries old phenomenon passed on from generation to generation. While numerous studies have focused on the abusing parent, research is lacking regarding the psychological characteristics of the child victim. Observers have reported that battering and neglect are associated with children's physical, developmental, and mental retardation, deviant speech patterns, apathy to stimulation as well as irritability and withdrawal when approached. Furthermore, since many battered children are also neglected, many researchers have concluded that battering and neglect are different expressions of the same phenomenon. This experiment compared 11 battered, 10 neglected, and 13 control group children on measures of orality, castration anxiety, pathogenesis, projective aggression, and overt aggression. The subjects were white latency age children aged 6 through 10. Five of the children in each group were female and the rest male. The abused children were obtained from several Chicago area agencies, the controls from three Paro-

chial institutions. While there were cases of pure neglect, no cases were found in which a child who had been battered had not also been neglected. However, the neglect in abused cases was usually not so severe as in the pure neglect cases.

The children were tested with several cards from the Blacky Pictures test and the Thematic Apperception Test, as well as with a modification of Drabman and Thomas' overt measure of tolerance of aggression. Prior to participation children selected a toy they would receive after testing as payment for cooperating. The toys were rated for aggressiveness. After the testing it was arranged so that the child thought another child had received his or her most desired toy. Each child then had the choice of accepting another toy or of waiting till the following week when the Experimenter promised to bring the child's first choice toy. Agreeing to wait thus measured trust or ability to delay gratification.

In the overt measures of aggression (toleration of aggression) the child was enlisted to help the Experimenter babysit. On the way into the testing room the children were shown a playroom with a camera for watching children. After giving the projective tests the Experimenter received a prearranged call supposedly asking her to use the videotape monitor to watch some children in the playroom. She

turned on the monitor, started the videorecorder, and then was again called to the phone. She asked if the child would watch the screen and listen via an earphone and notify her if the children misbehaved. On the videotape two children started off playing nicely and then began to interact in an increasingly aggressive way until first the camera was knocked over causing the screen to go blank, then the microphone was apparently knocked out of commission. The elapsed time before the child reported to the Experimenter that the children were misbehaving measured tolerance of aggression and also indicated the child's willingness to help others.

There were 3 significant effects along the abuse dimension. (1) The neglected group took longer than either the abused or the control groups to notify the Experimenter of the increasing aggression in the videotape test ($p < .01$). (2) Castration Anxiety was significantly higher for the neglected males than for either the abused or the control males ($p < .05$). (3) Among females the control group was more willing to postpone gratification than any of the other groups ($p < .025$). In addition, there were two significant sex effects: Females were higher than males on the Oral Eroticism Scale of the Blacky ($p < .01$); males picked more aggressive toys than females ($p < .01$). Neither the TAT Ag-

gression Scale nor Karon's Pathogenesis Index Distinguished one group from another. However, neither has been used on children before. Children from all groups tended to give far more responses considered pathogenic in adults. This finding probably reflects the children's stage of cognitive-emotional developments.

Findings regarding unanticipated differences between abused children were discussed in terms of the battered group's possible habituation effects to aggression and greater responsiveness to compliance demands. Suggestions for future studies were noted.

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CHAPTER I

INTRODUCTION

This investigation focused on children who have been abused or neglected and compared them to a Control group. To provide some background or the context in which the present research is embedded, we first review information regarding the history of child abuse, the symptoms of abused and neglected children, and epidemiological data. Inasmuch as the constellation of abuse and neglect is passed from one generation to the next, information is presented regarding the characteristics and family patterns of abusing and neglecting parents. Several hypotheses of this study emerge from these latter considerations. Additional hypotheses are based on past observations regarding aggressivity of abused and neglected children. The hypotheses are then summarized along with a brief resumé of their rationale.

HISTORY OF CHILD ABUSE

The mistreatment of children is not new. The further back in history one goes the lower the level of child care

one finds, and the more likely children were to have been killed, abandoned, whipped, sexually abused, or terrorized by their caregivers. However, each generation of parents, in reaction to their own abuse as children, tried to overcome their prediliction to beat their children. Thus, there tended to be a continuous lessening of the abuse and more mature levels of child-rearing emerged.

In general, there were six major evolutionary trends in child-rearing (DeMause, 1975). In antiquity there was the Infanticidal Trend. In Medieval times there was the Abandonment Trend, when being a good parent was not seen as an asset nor was being a bad parent seen as a detriment. Children were neither respected nor seen as worthy of parental sacrifices. Because parents projected their own feelings of badness and inadequacy onto their children, they allowed the children to live but neglected them. The infant was of no consequence until he or she could walk; then the child would be prematurely forced into the position both physically and sexually of functioning as an adult in an adult society (Hunt, 1970). Children did not have any reality as children. There was no education for children as it is known today. Children were often beaten prior to the age of one. They were salted and then bathed in ice water to "harden" them. They were swaddled. They

were tossed around like balls for the adults' amusement. More than half of all infants perished. Infanticide of both legitimate and illegitimate children was common, especially among poorer families (Aries, 1962; DeMause, 1975).

Hunt (1970) felt that it was doubtful that children were ever really neglected during the Middle Ages. True neglect, he stated, would have resulted in all children dying. He stated that in the age of Abandonment children were only neglected during infancy and that after infancy a strict regimen of discipline was introduced to make the children into premature adults. This severe discipline was made necessary by the adults' perturbation at the children's orality, obstinacy, and sexuality. Also, the children's Oedipul attachments threatened the family which was usually based only on family mergers rather than personal feelings. That is, the children were seen as trying to replace the parent of the same sex in a tenuous marriage.

In the sixteenth and seventeenth centuries, with religious reform and a new stress on parents as the spiritual guardians of their children's bodies and souls, came the Intrusive Mode. The family became less a unit for the transmission of a name and an estate and became more a unit

for the transmission of morales. Children were still seen as being bad but there was less parental projection. This resulted in children being less threatening to their parents and in their better care. Childhood was extended in length beyond infancy into adolescence. Rules began to be written about how children should be raised and disciplined, and colleges were formed to teach them right from wrong. Birching was reserved for actions bordering "on crime" such as blasphemy, theft, falsehood, insulting the servants, or being contemptuously disobedient (Aries, 1962). While children began to be seen as children and to be taken seriously, they were also seen as being susceptible to the devil. To ward off their innate evilness, they were terrorized with hell, were kept under constant surveillance, were rigorously raised to instill self-control, and were shielded from adult life.

The desire to provide for children caused families to draw more closely together and finally resulted in the formation of the nuclear family. With the emergence of the nuclear family in the nineteenth century came the Socializing Mode in child-rearing. It emerged first in France in the middle classes; it was not seen until much later in the Americas or in England or in the lower or upper classes (Aries, 1962; DeMause, 1975; Hunt, 1970). While Children

were not seen as much as the pawns of the devil, they were still seen as needing strong parental guidance. Covert manipulation and the instilling of guilt along with a detached parenting became the rule.

At present the Helping Mode is emerging. In the Helping Mode the child is seen as knowing what it needs and the parents are seen as the child's helpers in fulfilling the child's needs and potentials (DeMause, 1975).

Throughout history there have been three major reactions to children: the projective, when the child is seen as displaying the caregiver's feelings and actions; the substitutive, when the child is seen as a substitute for an important adult in the caregiver's own life; and the empathic, when the child's own needs are seen as important. The empathic reaction has only recently become of any import, while the substitutive and projective have always been important. Thus, while children have gradually, through the centuries, come to be seen as more worthy of consideration, at each age, there have existed parents who functioned at earlier child rearing levels. During the nineteenth century among the poorer classes young children were put to work under deplorable conditions to help support the family. And, even today, it is not uncommon to hear of babies left to die in garbage cans or otherwise deserted. However, most

brutality may well come from the belief that children are their parents' property and, as such, can be disposed of at the parents' whim. Physical punishment is often used as a means of showing who is "boss". Punishment often leads to abuse (Fontana, 1973).

Battered and neglected children probably have always existed, but it was not until the late nineteenth century that any organized reaction occurred in this country. In 1874 the Society forthe Prevention of Cruelty of Animals brought action for a child who had been beaten and starved, on the grounds that as a member of the animal kingdom she deserved the same rights as other animals. One year later the Society for the Prevention of Cruelty to Children was founded in New York. Despite changes in attitudes about children and increasing advocacy for their rights, abuse is still widespread.

SYMPTOMS OF BATTERED AND NEGLECTED CHILDREN

The Battered Child Syndrome

Physical Symptoms. In 1957 Caffey remarked on the physical conditions of battered children and noted the recurrent combination of subdural hematoma and long bone path-

ology. Other investigators have included other conditions for use in the diagnosis of child battering. Elmer (1967), and Kempe, Silverman, Steele, Droeguemueller and Silver (1962) defined the "battered child syndrome" as a clinical condition of children who have received physical abuse and who usually exhibit evidence of old and healing injuries, especially long bone fractures, subdural hematoma, failure to thrive, soft tissue swelling or skin bruising, and a history inadequate to account for the injuries seen. Battered children also frequently display gastric or intestinal perforations, intestinal obstruction, liver spleen and kidney lacerations, metaphysial lesions and hematomas in the small bowel, eye injuries, and brain damage (Friedman, 1972; Helfer, 1968; Kempe, et al., 1962). Unlike child accident victims, battered children are less likely to have received lacerations or to have ingested a toxic substance.

Guandolo (1968) found that over 90% of his sample of battered children had injuries ranging from mild concussions to brain lacerations, 50% had multiple injuries and old trauma, 10% had burns usually to the lower extremities and buttocks. At least 25% of his sample of battered children had been previously admitted to a hospital for neglect and battering.

In a post-facto study, Martin (1972) gave 42 battered children language, developmental, neurological and intelligence tests, and clinical evaluations. Though none of the children in this study had been premature, 7% had been difficult in some way since birth. Two other children were probably retarded prior to the assualt and one had had medical problems. After the assault 50% of the children had brain damage and 33% were retarded. They were apathetic, weak, fearful, and 33% also demonstrated failure to thrive as indicated by height and weight. Almost all of the children, including those with normal IQ's, displayed severe impairments in speech and language.

Gladston (1965), in his study of physically injured children mostly under 4 years, found that they had little interest in eating, playing with toys, or interacting with others. They seemed to have "shell-shock" with a blunting of all external manifestations of inner life. They were motionless, expressionless, and refused to recognize the outside world. Instead of turning toward their parents for reassurance when brought into the hospital, the children would move away from them and seemed to expect no comfort from them. They were withdrawn, irritable, and occasionally aggressive. While they cried little, when they cried their crying had a "hopeless" quality and they would

watch with interest and fear if another child cried. The battered children also seemed to be continuously asking for something from people such as food, services, and favors possibly as a means of reassuring themselves that they were safe. These reactions were stable, and any changes were usually superficial.

Neither the battered nor the neglected children were usually brought to the hospital for their actual problems. The battered children were usually brought in for failure to thrive, malnutrition, poor skin hygiene, irritability, or repressed personality.

Neglect and Failure to Thrive. Inadequate treatment and neglect often result in a child's failure to thrive -- a developmental and growth failure that usually occurs only in very disturbed families. Barbero and Shaheen (1967) identified four types, not entirely distinct, of "failure to thrive": those with systemic symptoms, those resulting from or concurrent with another disease or abnormality, those without systemic symptoms, adn those with concurrent signs of inflicted harm.

Failure to thrive children display marked physical, emotional and intellectual retardation (Elmer, 1960; Glaser, 1968). They improved in the hospital and deteriorated again when they were returned home. The criteria for diagnosing

failure to thrive include: weight below the third percentile and developmental stimulation and feeding; intellectual retardation with increases in IQ score after a fortuitous change in environment (Bulland, Glaser, Heagarty, and Pivchik, 1967). Additional clinical indications of neglect include poor body hygiene, lack of responsiveness to stimulation, and "vigilance" or "radar gaze," by which the child tries to ferret out the dangerous aspects of his environment, irritability when approached, withdrawal, and psychosocial disruption in the family.

Leonard, Rhymes and Solnit (1966) in their study of failure to thrive children from 2 to 27 months found that only four out of fourteen cases could definitely be attributed to underfeeding. Of the fourteen cases none had been premature and all had been below the third percentile for weight since they were two months old. All the children who were under four months of age were developmentally retarded, displayed the "radar gaze," rarely smiled, vocalized, or acted cuddly.

In Patton and Lytt's (1962) study of failure to thrive children under three years age all of the children came from disordered homes, and their problems seemed to be more the result of social neglect than of lack of food. Real physical abuse was rare in their sample. In Bullard's et al. (1967) study, however, 10% of the failure to thrive

children had healing fractures and contusions. Most thrived in the hospital. During follow-up, after discharge to their parents, over half of Bullard's sample showed regression to their former level.

Subsequent Development. In a follow-up study of children, most of whom had been battered when they were under ten months of age, Elmer (1967) found that 26% of them were either dead or in institutions. In this sample the incidence of prematurity was uncommonly high. If premature children tend to be more seriously injured as a result of battering, it may be because their bones break more easily and because they are more irritable than full-term babies, eat less, and must be fed more often.

Epidemiological Studies

Accurate statistics on abuse are unobtainable since only a portion of abused children are taken to physicians or hospitals and many who are seen go undiagnosed and unreported. Many physicians are unwilling to report abuse.

In a poll of 71 hospitals Kempe and Silver (1959) found that only 302 cases of battering had been recorded. Thirty-three of these children died and 85 had permanent brain damage. Only in one-third of the reported cases was

legal action taken. With increased public attention and new legislation the rate of reporting has increased. In one hospital alone 4 infants were treated for abuse in only one day; two of them died immediately and another died four weeks later of other unexplained injuries (Kempe, etal., 1962). A child once battered is likely to be battered again.

Despite the problems involved, Gil (1968, 1970) conducted a nationwide study of child abuse to determine the incidence rates and distribution patterns. He found that 5,993 cases were reported in 1967. Half of the cases reported involved neglect, one-fourth involved sexual abuse, and the remaining fourth involved battering. The distrubtion of child abuse corresponded roughly to the geographic distribution of the population. It was about equally divided between boys and girls.

Most studies have shown that abuse is likliest in the younger age groups, with most abused children being under three years of age (Fontana, 1973; Helfer, 1968; Kempe, etal., 1962). This skewing toward infancy may be because infants are more vulnerable to serious harm and are more likely to be brought to hospitals than are older children. Gil found that there was much more abuse of older children than had previously been suspected. About a quarter of the abused children fell into each of the categories: under

two years, 2 to 6 years, and 6 to 10 years.

Gil's survey found that 6.25% of all batterings were fatal and another 8.33% of the children suffered permanent damage from the one incidence of battering reported. More women than men abuse. Over 80% of the children were living in two parent homes. Gil found that abuse existed in all socio-economic strata. Other studies have shown distributions sharply skewed toward the lower socio-economic groups, city dwellers, and homes with only one parent present. This skewing may be because poor children from fatherless homes are more likely to be brought to the attention of the police and social service agencies and to be taken to large city hospitals where interest in the battering syndrome leads to reporting.

Gil's incidence rates were undoubtedly low because many cases of abuse were not reported. Helfer (1968) estimated that 10,000-15,000 children probably are severly injured each year. Fontana (1973) estimated that 10,000 children are severely battered every year, 50,000-75,000 are sexually maltreated, 100,000 are maltreated, and 100, 000 are physically morally, and educationally neglected.

CHARACTERISTICS OF ABUSIVE PARENTS

The majority of past studies have focused on the abusive parents and have reported a high incidence of instability, marital difficulties, unemployment, poverty, alcoholism, social isolation, minor criminal offenses, dishonorable discharges, previous unsuccessful marriages, promiscuity, sexual problems, many illnesses, immaturity, and impulsivity (Barbero and Shaheen, 1967; Bullard, et al, 1967; Ebbin, Gollub, Stein, and Wilson, 1969; Fontana, Donovan and Wong, 1963; Friedman, 1972; Helfer, 1968; Kempe, et al, 1962; Silver, 1968). Many of the abusive parents' marriages were formed to legitimize unplanned pregnancies (Barbero, 1967; Fontana, 1963; Schoesser, 1964; Silver, 1968). In many of the homes there was only one parent, usually the mother, who was left with all the child-rearing responsibilities. In homes in which the father was physically present, he tended to be extremely passive and unsupportive of his wife (Ebbin, et al, 1969; Elmer, 1960; Fontana, et al,1963).

Not all parents who suffer economic deprivation, marital problems, or social isolation beat or neglect their

children. Those who do maltreat their children apparently have a potential for abuse that they acquired over many years and usually through four factors: the parents had been raised in a similar fashion; the non-abusive parent typically is passive and ungiving; the parents currently are isolated, and the parents have unrealistic expectations of their children.

Abusive Parents' Childhood. Typically, abusive parents had been raised in a manner similar to that which they currently use in child-rearing. Many had been beaten, others had been given unrealistic responsibilities in taking care of their own parents, who considered them as inadequate, bad, and deserving of criticism. Frequently abusive adults' parents had also been raised in the same manner (Steele & Pollock, 1968). Steele and Pollock felt that battering parents, due to their own childhoods, were incapable of providing the basic non-mechanical caregiving functions of a mature, self-sufficient adult for a helpless, immature, dependent individual. The parents could not consistently supply the tenderness, awareness, emotional interaction, and consideration needed by infants. Often the infants were mechanically cared for, but even this mechanical caring was fraught with tensions. This

lack of nurturance in the mother or father resulted from failure to identify with a symbiotic, confidence-producing caregiver. The parents saw their own caregivers as unsympathetic, non-nurturing, and unempathetic. Despite this perception, the parents continued to look for these qualities in their own parents and in others. Thus, the abusive parent's childhood resulted in an ambivalence towards caregiving and in uncertainty about the rewards or punishments likely from people they might look to for help. As a consequence the abusive parents became afraid to trust anyone and further insulated themselves from any rewarding relationships. They carried this lack of trust into marriage usually with partners very similar to themselves. Thus, both parents in each family were unable to ask for what they needed or to give what was needed. The last person they felt they could successfully turn to was the child and when the child "failed" them, the previously inhibited aggression broke out.

Since the evidence is so strong that abused children become abusive parents, one expects that these children should display the same psychological tendencies as the parents. Melnick and Hurley (1969) found that the Pathogensis Index of the Thematic Apperception Test (Karon, 1963) distinguished between abusive and non-abusive parents.

In the same way the current study hypothesized that the abused children would score higher than non-abused children on the Pathogenesis Index.

Non-supportiveness of Abusive Parents' Spouses. Elmer's intensive study of mothers of five infants with failure to thrive documented the importance of the father in the mother's ability to care for her children (Elmer, 1960). In three cases infant neglect became critical after the father had deserted; in another family the father was emotionally unsupportive, and in the fifth family, both of the parents were too frightened by the infant's heart condition to function adequately as parents. Not only were the fathers emotionally or physically absent, but these families were also almost completely isolated from the community and any outside support. Elmer (1967a) found that in the homes of abused minors in which the impulse ridden fathers were present there was more quarrelling, excessive drinking, and mutual parental abuse than occurred in non-abusive families of the same socio-economic class.

Abusive Parents' Isolation. Fontana (1963) found that the abusive families had problems which had intensified by the time the abused child was born. These problems were intensified by isolation from outside sources of emotional help. Often abusive parents are not fully integrated into

their communities and actively resist attempts to get them to participate in outside activities (Elmer, 1967a).

Abusive Parents' Unrealistic Expectations. Abusive parents expect their children to satisfy the parents' needs and insist on a high level of adult-like performance from even the youngest children (Bender, 1940; Cohen, 1966; Fontana, 1973; Green, 1968; Helfer, 1968; Leonard, et al 1966; Morris, 1963; Morse, Sahler and Friedman, 1970; Steele & Pollock, 1968). The child's crying or sickness is seen as withdrawal of love and support and as a deliberate attempt to frustrate and humiliate the parent (Helfer, 1968; Koel, 1967; Silver, 1968). If the child does not give the gratification the parents need and expect, the parents experience intense frustration and react with rage.

Additional Factors Affecting Abusive Parents. Studying the conditions likely to lead to abuse, Elmer (1967a) found that while sex, ordinal birth position, and age of the mother did not differentiate between abusive and non-abusive matched samples, younger mothers were less capable of handling the family difficulties than older mothers and that sex and ordinal position could be of importance if they had particular significance to the abusive parent. Several factors distinguished abusive from non-abusive parents. Abusive families were more likely to have three or

more children, to have one or more children conceived out of wedlock, and the birth of a sibling was likely to occur within one year before or after the battering incident. The importance of length of time between births was confirmed by Leonard et al, (1966), who also found that battered children often had siblings born within a year of battering.

Steele and Pollock (1968) found that while the battering parents differed little from parents in most ways, they were more action oriented and tended to give in more to their impulses. All the battering parents had underlying conflicts with strong, unsatisfied oral dependent needs. Most had unresolved identity conflicts, depressive trends, or noteworthy feelings of worthlessness. They were suspicious, untrusting, and felt victimized. Their depression was usually of the anaclitic type. They still partly identified themselves with little boys and girls who had been orally deprived. Because abusive parents apparently have strong, unsatisfied oral needs (Steele & Pollock,1968), it is unlikely that they can adequately gratify their children; therefore it is hypothesized that abused and neglected children will demonstrate high oral deprivation. Evidence of oral deprivation was found among prisoners convicted of bizarre and senseless murders who had been abused as child-

ren (Satten, Menningar, Rosen and Wayman, 1960; Silver, Dublin and Lourie, 1969).

Family Patterns Among Neglecting Parents

Although less research has been done on the parents of neglected children, it appears that their family pattern is comparable to that of parents of battered children (Leonard, 1966). In families with a failure to thrive child, it is often observed that the children were born in quick succession. The interval between the birth of the failure to thrive baby and his siblings was usually 18 months or less. Six of the mothers in Leonard's study had been pregnant prior to their marriages, and only one of them had married the father of the infant. The fathers, like those in battering families, were passive and ineffectual as husbands and fathers and acted immaturely. Every failure to thrive baby was unwanted during the pregnancy. These mothers also had not had nurturing relationships with their own mothers. Not uncommonly there were complications in the birth, and the new infant taxed an already overburdened mother beyond her limited capacities.

THE DEVELOPMENT OF AGGRESSIVE TENDENCIES IN THE ABUSED CHILD

The development of aggressive tendencies, particularly as they have occurred in abusive parents, has been the subject of much concern. According to Freud (1963) aggressive tendencies and death wishes occur in the pregenital stages of development. Isaacs and Land (1968) concluded that children of two years may have death wishes against their parents as part of a normal stage of diffuse defiance with self-assertion against the world, which may start in the tenth or eleventh month due to the child's sense of helplessness and frustration against parental restrictions. Thus, the family situation becomes the scene where love, hate, and longing arise even during the first year of life.

Spitz (1968) also noted that parents' physical restrictions on the child during the first months of life create a conflict in the child between the hostile and the aggressive reactions these prohibitions arouse and the developing libidinal love attachment toward the parents. The child's ego begins to deal with the intrapsychic conflict between six and eighteen months by identifying with the aggressive aspects of the parents. Eventually the child begins to play the parent's role and applies the prohibi-

tions first towards the parents, primarily through the use of the word "no," and then, because of negative responses toward the parents, toward the self, and eventually toward others. Thus begin the super-ego.

Steele and Pollock (1968) also felt that the genesis of super-ego rudiments probably begins through an identification with early parental aggression. The identification is of great importance for the battered child who identified either with the aggressive or the passive parent and hence carries the abusive family constellation into the next generation. This is especially true because the identification process is coupled with a lack of appropriate models of impulse control. The resulting punitive super-ego leades to a strong sense of guilt which persists throughout the child-parent's life, as does a pervasive sense of inferiority. When the child disobeys, he or she appears to the parent as the embodiment of the parent's own badness and stimulates all of the guilt-laden aggression with super-ego approval. The infant's disobedience is seen as immoral and deserving of destruction. The punitive super-ego does not preclude the existence in the parents of an ego-ideal. The parents approach infant care with incongruous desires: to do right by the infant; and to have the infant respond

"appropriately". Another factor facilitates the identification of the child with the aggressive or the passive parent. The parents' need for the child's love causes the parents to prohibit the child from looking elsewhere for models.

Expression of Aggression

While it is the children who die that create public furor, it is the children who live that are not only the abusive parents of tomorrow but also the murderers, criminals, suicides, psychotics, neurotics, failures, and mental and physical retards (Bender and Curran, 1940; Duncan, Frazier, Litin and Johnson and Barran, 1958; Frank, 1963; Gladstow, 1965; Glaser, et al, 1968; Green, 1968; Satten et al, 1960; Silver, 1968; Toolan, 1962).

Elmer (1967a) found via Rorschachs, interviews, and the Draw a Man test that abused children were significantly deviant from the norm on expression of anger. And, their mothers confirmed that the children had either frequent outbursts of violent temper or complete inhibition of any temper.

Duncan (1958) found that adolescents who had committed serious crimes such as murder or sexual assault, had

a history of parental fostering of the offense. Satten (1960), in his study of bizarre, apparently senseless murders by "sane" men, found that they had been predisposed by early and now often unconscious traumatic experiences to severe lapses in ego control which made the open expression of primitive violence possible. Mostly they had been exposed to extreme parental violence which often accompanied the parents' sexual intercourse. Satten felt that the murderers had experienced early and severe oral deprivations. This oral deprivation may have been associated with the prisoners' inability to discharge their aggressive impulses verbally rather than in an aggressive "all or none" manner. Satten also hypothesized that the murderers may have been deflected suicides, and that relatively unknown and innocuous victims were seen as provocative and suitable targets for aggression because the strangers had lost their objective reality and had assumed an identity in the murderers' unconscious childhood configuration.

Bender and Curran (1940) in their study of children and adolescents who kill found that many of these children had been abused or deprived of parental love and care. Their parents had forced these children into passive roles which they reacted against later in life through brutality

and criminality in an attempt to disprove their feelings of inferiority. The aggression which they felt as a result of their upbringing became associated with guilt because it was initially directed at the parents. The aggression was then transformed into preoccupations with death which they directed against all aound them, including themselves.

Silver, Dublin and Lourie (1969) in their study of battered and neglected children found that many notorious murders had been the subject of merciless abuse as children. Their longtitudinal study of children indicated that the children used identification with the aggressor or the victim as their primary defense. They entered adulthood with unmet oral needs and primitive patterns of interaction with people and society.

Green (1968) studied school-age schizophrenic children who committed painful or destructive acts upon their own bodies. Almost invariably the children had suffered physical punishment from one or both parents. The parents alternated physical abuse and overt threats with emotional abandonment, withdrawal of love and understimulation (neglect). Green hypothesized that the schizophrenia may have been the result of the emotional deprivation. A vicious

circle seemed to occur with abuse increasing the child's aberrant behavior, which provoked parental violence and then withdrawal, which stimulated the child to seek the painful experience in order to experience the tactile and kinesthetic stimulations which it could not secure during parental withdrawal. By equating negative attention with love these children equated love with being hurt and so established a pattern of inviting harm and of playing the victim.

Abuse may also interfere with the child's self-preservative instinct (Freud, 1963). The self-preservative instinct can fail if there is a lack of adequate cathexis of the child's body, if the caregiver does not provide an adequate model for the child's self-preservative instinct, or if the child is deprived of love objects. Self-destructiveness offers several advantages to the abused child. It enables the ego to defend against the aggressive drive. It can also be a way of asking for love and comfort from the rejecting parent. If the self-destructiveness does elicit love and comfort or even attention, self-destructiveness takes on a secondary gain.

The evidence thus indicates that abused children display two conflicting tendencies in expressing aggression.

Some act out their underlying hostility, as demonstrated by the often violent behavior of formerly abused children in their adult lives. But, the severe punishment abused children receive acts as a powerful inhibitor of aggression; thus, some demonstrate no outward display of temper (Elmer and Greg, 1967b). Because it is not clear when the abused child's hypothesized punitive super-ego will break through, we expect in this study that abused children will exhibit a bimodal distribution of measures of aggression with peaks both above and below that of the control group.

THE PRESENT INVESTIGATION

As already indicated, battering and neglect occur frequently in the same children and produce similar psychological results, with the children exhibiting physical, developmental and mental retardation and deviant speech patterns; poor body hygiene; apathy to stimulation; "radar gaze;" and irritability and withdrawal when approached, especially by their parents. Thus many authors (Barbero & Shaheen, 1967; Connell, 1968; Fontana, 1973; Guandolo, 1968; Morse et al, 1970; Silver, 1968; Weston, 1968) conclude that neglect and battering are different degrees of the same

phenomenon, with battering the last phase of a continuum ranging from mild deprivation or malnourishment through general neglect, to neglect accompanied by verbal abuse and some hitting, to severe beating or even killing. Neglect can be as damaging both physically and emotionally as battering. While not all investigators agree with the continuum described above (cf., Gladston, 1965), all seem to agree that the neglected child is often later the battered child.

This study, therefore, assessed whether or not battered and neglected children differ from each other and from a control group on various measures, including orality, pathogenesis, toy choice, trust, and aggression.

SUMMARY OF HYPOTHESES

The previously reviewed research and theorizing about abused children lead to the following hypotheses about their expected behavior in an experimental situation:

1. Both abused and neglected children will demonstrate higher oral deprivation than a matched control group. (See Appendix B for specific orality hypotheses related to the measuring instrument.)

This hypothesis is based on the data reviewed regard-

ing the inadequacy of the nurturing that abused and neglected children typically receive. Anger at oral deprivation might well be expressed as an increase in "Oral Sadism" for both abused and neglected children. Also, in order to examine the possibility that the treatment the abused and neglected children have received has heightened their overall orality, they will also be tested for "Oral Eroticism". There is no available information that would suggest predictions about differences between abused and neglected children.

2. Abused children will score higher than neglected children who will in turn score higher than a matched control group on a measure of anxiety regarding physical harm. This fear of physical harm may or may not be "Castration Anxiety" in the psychoanalytic sense. (See Appendix B for specific anxiety hypothesis related to the measuring instrument.)

This hypothesis is based on the differential experience of the three groups. The abused children have actually experienced physical harm and, hence, are expected to be anxious about further potential bodily damage. While the neglected children have not actually been physically abused, the inadequate caregiving they have received should make them more concerned about bodily harm than control group children who presumably have received adequate care.

3. Abused and neglected children will both be significantly higher on a measure of pathogenesis than a matched control group, but they should not differ significantly from each other.

The lack of emotional warmth and security, the patterns of child-rearing, and the role reversal which characterize the childhood of abusive parents are repeated again with their own children. Thus, the parental models of abused children teach them that when conflicting needs exist, persons in authority tend to meet their own needs rather than those of their dependents -- a tendency which is measured by Karon's (1963) Pathogenesis Index for the TAT. As noted before, Melnick and Hurley (1969) found that the Pathogenesis Index discriminated between abusing and control mothers.

4. Both abused and neglected children will score higher than a matched control group on a TAT measure of aggression, but they should not differ significantly from each other.

5. Both abused and neglected children will select more aggressive toys than a matched control group in a toy selection procedure, but they should not differ significantly from each other.

Frustration of needs because of inadequate caregiving (and even physical harm for the abused children) should heighten the aggressivity of abused and neglected children.

Thus, aggressive toys are likely to have more appeal for them, in contrast to the control children. Similarly, one might anticipate that abused and neglected children would display more aggression in TAT stories. However, observational evidence indicates that abused and neglected children have two conflicting tendencies with regard to aggression: the severe punishment or physical deprivation inhibits aggression, and the frustration they experience and the models they see cause them to be aggressive both toward themselves and others. Thus, abused and neglected children may exhibit a bimodal distribution with peaks both above and below that of the control group. Given the small sample of available subjects, however, it is not possible to test this possible bimodality.

6. Both abused and neglected children will take longer to report to an adult the aggressive activities of other children, but they should not differ significantly from each other.

Abused children have personally experienced aggression, and neglected children frequently have witnessed aggression between their parents. Therefore, such experiences may have raised their tolerance level toward aggressive behavior above that of a matched control group. In part tolerance of aggression may reflect an inability to

empathize with others because the abused and neglected children's own needs are so strong.

7. Both abused and neglected children will be more likely than a matched control group to accept a less desired reward rather than wait for an adult to bring them their most preferred reward, but they should not differ significantly from each other.

The interactions of battered and neglected children with their parents have taught them that adults cannot be trusted and relied upon to keep their promises. Thus, in a manipulation testing willingness to delay reward, they are unlikely to trust an adult experimenter to return with a promised toy and will instead take a less preferred but certain reward.

CHAPTER II

METHOD

Subjects

Subjects were white, latency age children, aged 6 through 10. Appendix D lists the ages of the subjects in each experimental condition. The latency period was chosen because during this period the child is less driven by his impulses, is consolidating the development of his ego, but has not yet become engaged in the problems of puberty.

Three groups of experimental subjects were tested: 11 battered children, 10 physically neglected children, and 13 control children. Five of the children in each of the three groups were female and the rest male. The unequal numbers arose from the availability of subjects within the different categories, and not because of subjects dropping out.

The battered and neglected children were obtained from Bowen Center, the Illinois Department of Children and Family Services (IDCFS), the Juvenile Protective Association (JPA), and the Metropolitan Area Protective Services (MAPS).

All of the agencies were in Chicago, Illinois. The 13 white, latency age control subjects were obtained from two Chicago area Parochial Schools. Subjects were judged by their schools to be from good families, and no evidence of abuse could be found.

Within each group the subjects had the following characteristics: 1) All children were from homes where both a father or father-surrogate and a mother or mother-surrogate was present frequently for the first five years; 2) All children were from the three lower socio-economic classes as judged by the location of the family home and the school or agency reports; 3) All children had at least one sibling; 4) No child had been in placement outside the home for more than one year.

Classification in the experimental and control groups was based on the case and/or school reports the agencies had compiled. Abuse was restricted to physical abuse. A child was judged to be neglected on the basis of any of the following: being left alone or "locked up" for long periods without adequate supervision; inadequacies in clothing, nutrition, or medical care severe enough to endanger the child's health; or chronic truancy with the parents' consent. Each child included in the study met at least two of the above criteria. A child was judged to be battered

if the child regularly received beatings which were severe enough to cause injuries such as large welts or bruises which either required a doctor's care or for which a doctor should have been consulted. While there were cases of pure neglect, no cases of pure battering could be found in this socioeconomic class. That is, children judged to be battered were, also, always neglected. However, the neglect in the battering families usually differed quantitatively and qualitatively from that in the pure neglect families. The battered child usually was not as severely neglected, or the severe neglect was occasional rather than constant.

The children in foster homes were wards of IDCFS. Permission to test them was obtained from that agency's Guardianship Administrators who supervise their care and are responsible for them. The rest of the children and their families received various services from the centers or schools and the rapport established between them facilitated obtaining written parental permission.

No monetary payment was given to any child or family. However, each child was given a toy as payment for participation and also as part of an experimental manipulation.

Materials

The children were tested by three techniques: the Blacky Pictures, the Thematic Apperception Test, scored for Pathogenesis and Aggression, and a modification of Drabman's (1974) method of measuring "overt aggression".

Blacky Pictures. The Blacky Pictures were designed to assess the deep recesses of personality by means of twelve cartoons. The pictures portray a dog, Blacky, in relation to a group of other dogs: Mama, Papa, and Tippy, a sibling of unspecified age and sex.

Dog cartoons are used to compensate for the structuredness of the stimuli. Blum (1949) felt that human figures would inhibit projection while animal figures would facilitate personal expression while preserving enough reality so that the subjects could identify themselves freely with the cartoon figures.

Except for the first cartoon which functions as an introduction to the characters, each cartoon is designed to depict a stage of psychosexual development or a type of object relationship within that development. The cartoons sequentially assess oral eroticism, oral sadism, anal expulsiveness or retentiveness, oedipal intensity, masturbation guilt, castration anxiety in males or penis envy in

females, identification process, sibling rivalry, guilt feelings, ego-ideal, and narcissistic or anaclitic love object.

There have been three successive objective scoring systems (Blum, 1949, 1951, 1962) all of which have used four sources of data relevant to each dimension. First subjects are asked to give a Spontaneous Story, after which they are asked a series of multiple choice and short answer questions, Inquiry Items, pertinent to the dimension. Then a third level of response is obtained by having subjects express "Preferences" for the various cartoons. A fourth source of information consists of subjects' comments to each card which occur on other cartoons, Related Comments. Subjects get profile scores in terms of three possible degrees of disturbance on each dimension 0, +, ++. Blacky is presented to male subjects as the "son" and to female subjects as the "daughter". However, although Blum (1949) felt that any differences between male and female responses were due to chance, there have been divergent findings about whether female subjects can really view a dog as female.

Validation Studies. Factor analytic studies of Blum's original data have identified factors corresponding

to psychosexual stages for males but have produced mixed results for females (Neuman & Salvatore, 1958; Robinson & Hendrix, 1966). In an attempt to discover how females view Blacky, Rossi and Solomon (1961) had females rate words including Blacky, dog, and cat. Blacky and dog were labelled as male. Similarly, when Wolfson and Wolff (1956) had female psychiatric patients rate dog names, Blacky was classified as male and Tippy as sexually neutral.

In other validation studies focusing particularly on orality, Blum and Kaufman (1952) found that ulcer patients wrote more oral stories than normal controls. Blum and Miller (1951) found that a nine year old girl, rated extremely oral on the Blacky, ate more ice cream than most of her classmates, had extreme taste suggestibility, and was extremely desirous of praise. Kimeldorf and Geiwitz (1966), using the Blacky, found that heavy smokers were significantly higher on two of six Blacky oral factors on cards 1 and 2 than non-smokers. They were higher on "oral craving" and "playfulness".

Reliability studies. There has been controversy over the reliability of the Blacky with respect to scoring. Granick and Schefling (1958) reported excellent inter-rater reliability on the strength of disturbance. Berger and

Everstine (1962) and Palmer (1970 felt that while the reliability was not excellent it was average for projective tests. Insofar as temporal consistency is concerned, Berger (1962) found that conflict area patterns were more reliable in a test-retest study with college males then were the individual dimensions. Charen (1956a) calculated test-retest reliability after administering only the multiple-choice items to tuberculosis patients early in their illness and again four months later. He reported that the Blacky yielded conflicting results, with patients showing either no improvement or regression; whereas other personality tests he administered showed no basic personality changes. Blum (1956) refuted Charen's claims by stating that the use of only one of the four sources, especially the one easiest to distort, was an unfair test. Charen (1956b) acknowledged that the Inquiry Items are closest to consciousness and most distortable. However, he contended that since they are part of the Blacky test, they too should be reliable.

It may be that the main problem with the Blacky is not its reliability or its ability to differentiate between known groups, but the fact that there are not scoring categories worded so that they can disconfirm psychoanalytic theory. Even a neutral response can be interpreted as

a denial of a psychosexual problem. (This problem was not crucial in the present study since it was not designed to diagnose but to measure differences in psychosexual conflicts between groups.

Thematic Apperception Test. The TAT, devised by Morgan and Murray (1935) is an instrument widely used in clinical work and personality research to study the motivational and emotional condition of the subject.

The complete TAT consists of 20 cards, 19 containing ambiguous pictures and the 20th blank. The subject is instructed to make up a story to each card, to tell what is happening, what led up to what is happening, and what the people are thinking and feeling, and to give the outcome. The subject's responses are analyzed with respect to the hero with whom the subject is presumed to have identified. Both Stone's and Karon's scoring systems were used in this study.

(1) Stone's (1956) Aggression Scoring System. Interpreting aggressive and non-aggressive responses to a projective instrument is problematic. The answers may reflect either how subjects really behave, or what they believe is appropriate, or their responses may indicate inner needs and attitudes that may not be reflected in their behavior. Thus, overtly passive children may express great

hostility on a test, especially if they are likely to be punished for overt aggression. Several hostility content scales have been developed for the TAT (Hafner & Murray 1960; Mussen & Naylor, 1954; Pittluck, 1950; Stone, 1956). Most have used scoring schemes which included hostility subdivided into three types: verbal, physical,and death.

Stone's study used a fairly simple objective scheme in which each aggressive response was categorized for Death content, Physical Aggression content, or Verbal Aggression content. Stone felt that a Death response was the most indicative of strong aggression and poor control and, hence, more likely to be related to overt aggression than either Physical or Verbal Aggression. Similarly, Physical Aggressive responses are stronger and show less control than Verbal Aggressive responses. Because of this, Death responses were given a weight of 3, while Physical and Verbal Aggression were weighted 2 and 1 respectively. Responses also differ as to whether they show active or potential aggression, with active responses being considered more likely to reflect a tendency to really aggress. To take this into account potentials were given half weight. On any particular card only one score, the highest possible, was given.

Validity. The sole validity study of this scoring system was conducted on United States Army prisoners, none of whom were psychotic, feeble-minded, or suffering from organic brain damage. The remaining prisoners were classified into three groups. Group 1 consisted of soldiers who had been absent-without-leave (AWOL) only once. Group 2's soldiers had been AWOL more than once. Group 3's members had been confined for murder. Stone's scale did not distinguish between Groups 1 and 2, but it did significantly differentiate between Group 3 and each of the others. Thus, the scale did discriminate between assaultive and nonassualtive groups.

Reliability. To test reliability, Stone had three clinical psychologists independently score 120 of the randomly selected TAT stories. Rater reliability ranged between 89 and 94 percent.

(2) Karon's Pathogenesis Scoring System. Karon (1963) developed the Pathogenesis scale of the TAT. He felt that schizophrenia was the result of malevolent mothering which began in the oral stage and continued throughout childhood. The schizophrenogenic mother and the abusive mother satisfy their own needs when their needs conflict with those of their children by covertly manipulating the

the children. This manipulation and the maternal ambivalence lead to the children being unable to distinguish their own motivations from that of their mothers' and being seriously impaired in ego functioning. The children attempt throughout life to handle the resultant feelings of worthlessness by futility attempting to change themselves into what they believe their mothers want them to be. Since the child cannot accept the mother as "bad," the child's continued failure to obtain her love results in self-condemnation. Any attempts by the child to form attachments with other mothering figures are sabotaged by both the child and the mother in order to maintain her status as a good mother relative to a bad world.

Validity. The pathogenesis scale has proven successful not only at differentiating mothers of schizophrenics from mothers of normals but also less effective therapists from more effective benign therapists (Meyer & Karon, 1967; Mitchell, 1967, 1969; VandenBos & Karon, 1971). Mitchell (1969) found that fathers of schizophrenics also had higher pathogenesis scores than fathers of normals. Thus, the pathogenesis scale differentiates psychologically destructive from more constructive individuals.

Melnick and Hurley (1969) found that the pathogenesis

score differentiated between abusive and non-abusive mothers matched on age, social class, and education. Most of the subjects were lower-class Blacks. They found that the Pathogenesis Index was negatively correlated with family satisfaction, self-esteem, ability to empathize with and accept others, and a need to nurture. Melnick and Hurley concluded that battering mothers have difficulty in empathizing with and administering to the needs of their children, coping with the responsibilities of motherhood, and lack "trust" in the environment because of their own early emotional deprivation and frustrated dependency needs and because of a present lack of emotional support.

Reliability. Using Meyer and Karon's (1967) or Mitchell and Karon's (1967) criteria, the rater reliability of the pathogenesis scale, calculated using the product-moment correlations between the two judges used in each experiment, ranged from .89 to .94. Raters varied from two naive undergraduates trained in scoring to two trained clinical psychologists.

Scoring. In order to score a story as pathogenic there must be an interaction between a dominant and a dependent person in which the dominant person is concerned only with his or her own needs. If the dominant person is

concerned about and takes the dependent person's needs into account the story is scored benign. If there is no interaction between a dominant and a dependent person the story is scored neutral. Scores for each subject are then computed using the formula P/(P+B) where P is the number of pathogenic stories and B is the number of benign stories. Each story must be read in its entirety before it is scored, and only one score is given to each story.

Drabman and Thomas' Overt Measure of Aggression. In addition to the projective TAT measures of aggression a more objective measure was desired. This raised a number of ethical questions about the use of many of the traditional measures of aggression -- for example the use of shock. In a personal communication, Albert Bandura (Note I) indicated that a technique used by Drabman and Thomas (1974) could both ethically and adequately measure children's tolerance for aggression, which he considered directly related to their aggressiveness.

Drabman and Thomas investigated the impact of viewing filmed violence on children's tolerance for aggression and willingness to aid others. First each child was introduced to a play room and told that kindergarten children were usually observed there. Then some children viewed an

aggressive cowboy film; others saw no film. After this the child was taken to a room with a videotape monitor. The Experimenter told the child that he had promised to watch two children in the previously seen play room and that he also had to make an important phone call. He enlisted the child's help as a baby-sitter. The child was to come and get him in the principal's office if there was any trouble. All subjects viewed the same videotaped film of children in a playroom identical to the one they had seen earlier. The filmed children first played quietly, then became progressively more destructive, finally pushing, shoving, and supposedly knocking the camera over. During this period the Experimenter left the room and waited in the hall until the child either came to get him or until 70 seconds had elapsed. All children were reassured that everything was all right.

Drabman and Thomas' dependent measures were: the time it took each child to seek adult help after the videotaped children became disruptive and whether or not the child waited until the viewed children were abusing each other before reporting. No differences were found between the sexes. Results indicated that children who viewed the aggressive film took significantly longer to report and were likely to tolerate all but the most violent physical aggres-

sion before responding. The fact that all children did not see a film may have resulted in differential arousal and, thus, confounded the results. However, Drabman and Thomas felt that the instructions were so explicit as to make this unlikely.

A paradigm similar to that used by Drabman and Thomas was used in this experiment. Among the differences were: the children were never left alone; the children viewed no film, (their differential prior exposure to parental violence was felt to be a more than adequate substitute), and only dependent measure, latency of responses, was used.

Measures of Trust and Toy Choice as a Measure of Aggression. The children were allowed to pick a toy as their "payment" for the job of helping in the experiment. This was used to both motivate them and as a measure of aggression since the toys were ranked according to their aggressiveness by a group of psychologists. The toys were divided into three groups according to their aggressiveness with the least aggressive toys receiving a score of one and the most aggressive toys receiving a score of three. Toys which received a score of one were: a canteen, coloring books, a jacks set, a magnifying glass, a necklace and earrings set, a race car and trophy, a tic-tac-toe or numbers puzzle, and a teen phone. Toys which received a score of two were:

a jeep-tank set, a paddle ball, and a punch ball. Toys which received a score of three were: a gun and a rubber knife. All of the toys had the same relative monetary value.

At the end of the experiment it was manipulated so that the child thought another child had received his or her most desired toy. Each child then had the choice of accepting another toy or of waiting till the following week when the Experimenter promised to bring the child's first choice toy. It was felt that abused children would be less capable of delaying gratification because they had been taught by the significant adults in their lives that adults cannot be trusted to come through for them. Thus, agreeing to wait was considered to be a measure of trust. In the end the Experimenter "found" the first choice toy and gave it to the child whether or not he or she had chosen to wait.

Procedures

The children were all picked up at their homes or schools by the Experimenter or one of the agencies' case-workers. The children were brought to the Juvenile Protective Association where all children were tested. Subjects

were taken to a room in order to pick the toy they wanted for participating in the experiment. They were told that children much younger than themselves were to be tested there and that the camera, which was pointed at the toys on the floor, was used to watch the younger children in case the person who worked with them had to be out of the room. The room was set up so that it looked like what they would see later on the videotape. The children were then taken to the testing room where they were shown the "TV" on which one could see what was happening in the room they had just left.

Testing began with the Blacky Pictures since children find them enjoyable and nonthreatening. Three cartoons were used: Oral Eroticism, Oral Sadism, and Castration Anxiety (Penis Envy). While Blum interprets the third cartoon only as a measure of physical harm that would occur only in males, it was presumed that the fear of physical injury could be experienced by both sexes. Techniques similar to those outlined in Blum's (1951) scoring system for use with adults were used with the children to make scoring and interpretation more objective. The questions were modified somewhat to make them more understandable to children. (See Appendix B for a complete description of instructions and questions.) Pretesting showed that child-

ren had little or no trouble understanding the rather simple questions, and this was confirmed with the test sample. The children then sorted all the cards into two piles: those they liked and those they did not like. They then picked one card from each: the one they liked best and the one they liked least.

Next, TAT cards 2,4, 6GF, 7BM, 9GF, 12M, 18BM, and 18GF were administered. These cards were chosen for two reasons: each contained more than one person to facilitate the production of stories about interpersonal interaction, and most of these cards had been shown previously to differentiate between test and control samples. The following instructions were used:

> Since you did so well on the last story-telling game, I thought we'd play another one. I want you to make up a story for each of these pictures. Tell what has happened before and what is happening now. Say what the people are feeling and thinking and how it will come out. You can make up any kind of story you please. Do you understand? Here is the first picture. See how well you can do.

If the story was unclear, the subjects were asked, "And what happens next in your story?" After a good story the Experimenter would commend the child. If the story was too short, she would say "That was an interesting story,

but it would have been even better if it were a little longer." Occasionally, some minor prompting was necessary. Each story was written by the Experimenter as the child told it.

The overt measure of tolerance of aggression was chosen because it had been shown to cause no emotional upset in children (Drabman & Thomas, 1974). Basically, the child's help was enlisted by the Experimenter. That is, the child acted as a babysitter, via closed circuit television, for two younger children seen apparently playing in the room which the child saw enroute to the testing room. The closed circuit television was really hooked to a videotape of two child actors who interacted with steadily increasing aggressiveness. The videotape was made by the Experimenter and the voices were dubbed using two young high school girls who were majoring in drama.

It was necessary to provide a reason why the Experimenter could not monitor the TV set herself. This was done by bolting the TV set to a table and the table to a wall. The TV was oriented so that it could not be seen while using the telephone in the far corner of the room. The phone was wired to ring when the Experimenter pushed a concealed button. A similar button started the

videorecorder.

When the TAT was finished, the Experimenter would ring the telephone bell and pretend to be in conversation with someone who was about to bring two more children to be tested into the first room the children had seen. She then explained to the children that she had been asked to use the TV set to watch the children. She turned on the TV and started the videorecorder. The first part of the videotape showed the playroom the child had previously seen. She then again caused the phone to ring and asked if the child would watch the screen and listen, via an earphone, and notify the Experimenter if the children acted bad in any way. The earphone was necessary so that the Experimenter would seem to have no way of knowing what the video-taped children were doing, (See Appendix A for complete instructions).

On the tape the two children started off playing nicely. But, as the tape proceeded, the children began to exchange insults, to knock over each other's blocks, and to interact in an increasingly aggressive way until the TV camera was apparently knocked over in a chase and a struggle which caused the screen to go

blank. The vituperations and the struggles continued at an even more intense level on the sound portion until the microphone was ostensibly knocked out of commission. The point in time when the child notified the Experimenter that the children "in the other room" were misbehaving was read off the automatic dial on the videorecorder. The length of time was taken as a measure of tolerance of aggression. It also indicated the child's willingness to help others.

After administering several other tests which the agencies felt would be of benefit to them, the Experimenter again took the child into the first room. The toy which had been chosen was missing. The Experimenter said that the other lady had probably given it to one of the other children. She told the child that she would bring the toy within a week or that he or she could choose another toy. After the child decided to wait or to choose another toy, the Experimenter would "find" the first choice toy in a drawer and give it to the child.

The children then were returned home. There was no debriefing because information about adult deception could be harmful, especially to children who had already, frequently, been deceived and disappointed by adults.

CHAPTER III

RESULTS

Orality

The first hypothesis, that abused and neglected children would show higher oral deprivation than a matched control group, was tested using the Blacky Pictures Test, Cards 1 and 2. For this test five raters scored each picture independently both before and after discussing and resolving discrepant scores that resulted from either misrecordings or misunderstandings of the scoring guidelines. The correlation matrix of rater's scores is shown in Table 1, Appendix C for both before and after discussion. Before discussion, the correlations ranged from .80 to .94; after discussion, from .91 to .99.

Cards 1 and 2, which corresponded, respectively, to Oral Eroticism and Oral Sadism, were scored for both overall score and spontaneous story and four analyses of variance were performed. As indicated in Table 1 the first hypothesis was not confirmed, since none of the F ratios involving the abuse condition was significant.

TABLE 1

ANALYSIS OF VARIANCE OF ORALITY MEASURES

SCORE	*df*	*MS*	*F*
Oral Eroticism			
Spontaneous Story			
Sex (A)	1	96.87	5.97*
Abuse (B)	2	1.48	.09
AB	2	.24	.01
SS within conditions	28	16.20	
Overall Score			
Sex (A)	1	30.90	1.85
Abuse (B)	2	4.51	.27
AB	2	9.70	.58
SS within conditions	28	16.69	
Oral Sadism			
Spontaneous Story			
Sex (A)	1	13.81	.71
Abuse (B)	2	.92	.05
AB	2	21.57	1.11
SS within conditions	28	19.42	
Overall Score			
Sex (A)	1	3.60	.26
Abuse (B)	2	25.33	1.82
AB	2	.85	.06
SS within conditions	28	19.42	

*$P < .01$

As further exploration of the Orality hypothesis, a chi-square analysis was performed on inquiry items numbers 2 and 4 of Card 2, Oral Sadism using Blum's (1949) scoring method. Contrary to expectations, no significant difference was found in analyses of response vs. abuse condition summing over sex for either question (see Table 6, Appendix C). Chi-square analyses of responses by either sex alone were not attempted because partitioning the small sample would result in frequencies of less than 5 subjects in half the cells.

Anxiety Regarding Physical Harm

The second hypothesis, that the abused children would score higher than the neglected children who would in turn score higher than the matched control group on a measure of anxiety regarding physical harm, was tested via Blacky Card 6. Although Card 6 supposedly measures Penis Envy in females and Castration Anxiety in males, it was felt that it might be an adequate measure of anxiety regarding physical harm in both sexes. The same raters and scoring procedures were used for this Blacky card as for Cards 1 and 2, and the same levels of interrater correlations were obtained (see Table 1, Appendix C). Although no hypotheses were formulated regarding possible sex differences on Card 6, separate analyses by sex were performed in addition to a combined analysis. The card was scored and analyzed for both overall score and spontaneous story (Table 2 presents a summary of the findings). No significant effects were found for females only or for the the combined sample. For males, however, the neglected group was significantly higher than the control group, as hypothesized. On the other hand, the outcome for the abused group disconfirmed the hypothesis

since the mean for the abused group was lower than that for the neglected group and indistinghishable from that of the control group.

TABLE 2

ANALYSIS OF VARIANCE OF FEAR OF HARM MEASURES

SOURCE	*df*	*MS*	*F*
Castration Anxiety-Males Only			
Spontaneous Story			
Abuse	2	0.00	0.00
SS within conditions	16	0.00	
Overall Score			
Abuse	2	7.37	3.93*
SS within conditions	16	1.88	
Penis Envy-Females Only			
Spontaneous Story			
Abuse	2	.27	1.00
SS within conditions	12	.27	
Overall Score			
Abuse	2	4.07	.62
SS within conditions	12	6.57	
Combined Score for Both Sexes-Fear or Harm			
Spontaneous Story			
Sex (A)	1	.147	1.28
Abuse (B)	2	.155	1.35
AB	2	.155	1.35
SS within conditions	28	.11	
Overall Score			
Sex (A)	1	16.16	4.16
Abuse (B)	2	5.68	1.46
SS within conditions	28	3.89	

*$p < .05$

TAT Pathogenesis

The third hypothesis, that abused and neglected children would both be significantly higher on a measure of pathogenesis than a matched control group, was tested using Meyer and Karon's (1967) Scoring System for Pathogenesis. Five raters scored each card independently. A discussion session was held to resolve any misrecording or misunderstanding. The correlation matrix of rater's scores is shown in Table 2 Appendix C for both before and after discussion. Before discussion the correlations ranged from .66 to .95, and after discussion, from .84 to .98. The post-discussion scores were used for the analyses. The standard measure used was the Pathogenesis Index (PI), where PI = P/P+B and P is the number of pathogenic responses and B is the number of benign responses. Thus PI is the proportion of all pathogenic responses to all non-neutral responses. The modal score on each card was used to calculate PI for each subject. As shown in Table 3, an analysis of variance of these scores disclosed no significant findings; thus the hypothesis was not confirmed.

TABLE 3

ANALYSIS OF VARIANCE OF PATHOGENESIS SCORES

SOURCE	*df*	*MS*	*F*
All Cards - Pathogenic Index			
Sex (A)	1	0.01	0.25
Abuse (B)	2	0.01	0.18
AB	2	0.03	0.56
SS within conditions	28	1.44	
All Cards - Total Number of P's			
Sex (A)	1	7.62	2.37
Abuse (B)	2	.23	.07
AB	2	.23	.07
SS within conditions	28	89.93	
All Cards - Total Number of B's			
Sex (A)	1	0.50	0.25
Abuse (B)	2	0.35	0.17
AB	2	1.15	0.56
SS within conditions	28	125.0	

Separate Analyses of Variance were performed on the total number of benign responses scored in each cell and on the total number of pathogenic responses scored in each cell since it was conceivable that one of these might have distinguished one abuse condition from another. As shown in Table 3, which summarizes these analyses, no significant effects were found.

A card-by-card analysis of the total number of pathogenic responses and of the total number of benign responses was then performed in an effort to detect any effects that might have been diluted by the inclusion of cards not showing the effect. Since this analysis tests eight cards at the .05 level, the probability that none of them would show a significant effect by chance is $p = (.95)^8 = 0.66$. Thus, the probability is .34 that in doing such an analysis at least one result will erroneously be labeled significant at the .05 level. The findings were hardly beyond chance expectations. Only 3 of the 16 analyses showed significant differences. Because these were rather secondary, post facto analyses, they are summarized in Table 3, Appendix C.

TAT Aggression Scores

To test hypothesis 4, that abused and neglected children would be either significantly more or less aggressive than control children, four raters independently scored TAT cards for aggression. They then discussed them to eliminate recording errors and misinterpretations of the scoring criteria. The inter-rater correlations for scores on the aggression scale ranged from .82 to .88 with an

average of .85 before discussion. After discussion all correlations were .99 (see Table 4, Appendix C). The scores after discussion were used in the ANOVA. On each card, the scores of the four raters were summed to give a total card score. One ANOVA was performed on the aggregate scores over all cards. As shown in Table 4, there was no significant effect at the predesignated .05 level. Plots of the aggression scores were made for each abuse condition separately but no special distribution effects, such as bimodality were obvious (see Figure 1). Thus, the hypothesis was not confirmed.

TABLE 4

ANALYSIS OF VARIANCE OF TAT AGGRESSION SCORES

SOURCE	*df*	*MS*	*F*
Total Aggression Score (Sum of all 8 Cards)			
Sex (A)	1	31.66	1.68
Abuse (B)	2	13.53	.72
AB	2	16.23	.86
SS within conditions	266	18.81	

A card-by-card analysis was performed for the TAT aggression scores. As in the Pathogenesis card-by-card analysis, the number of significant TAT findings was not beyond chance expectations (see Table 5, Appendix C).

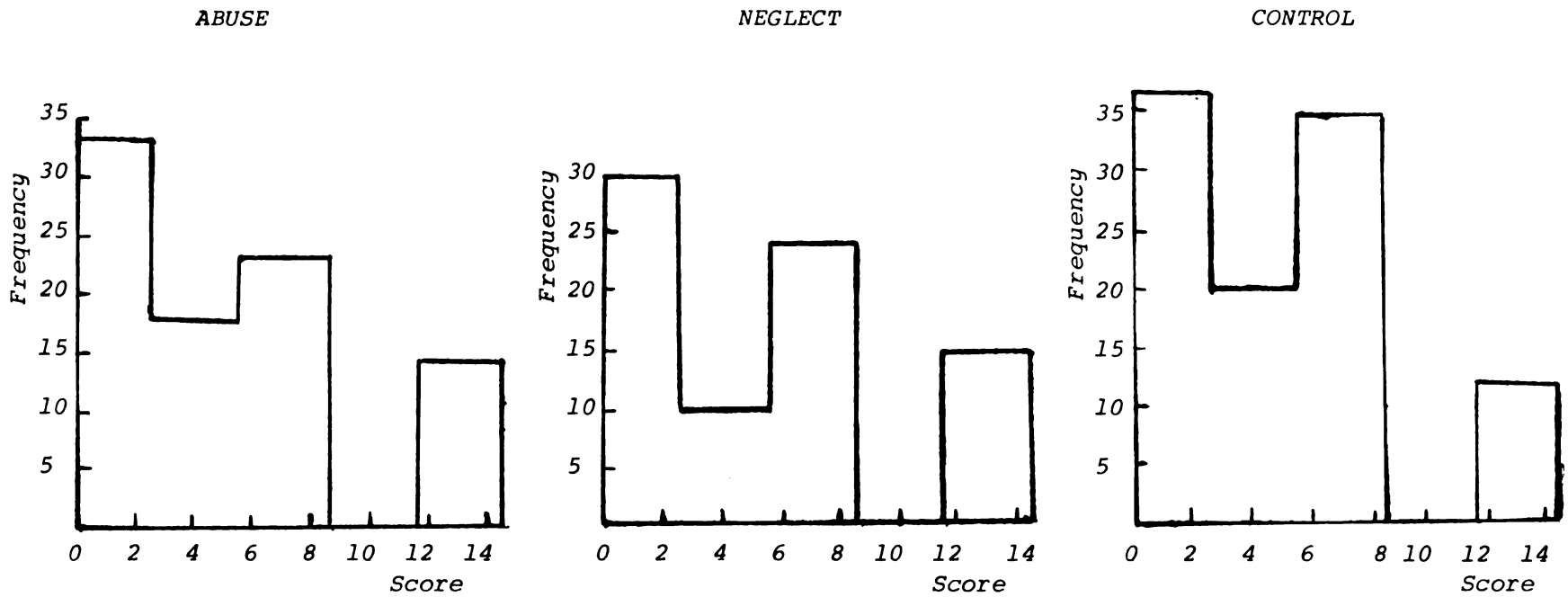

FIGURE 1. Frequency of TAT Aggression Scores (All Eight Cards)

Aggressive Toy Choice

The fifth hypothesis, that both abused and neglected children would select more aggressive toys than a matched control group in a toy selection procedure, was analyzed via chi-square. As shown in Table 5, which presents a summary of these analyses, toy choice by abuse condition summing over sex yielded no significant effect. Thus, the hypothesis was not confirmed. Since some cell frequencies did not reach the necessary minimum of 5, a more conservative test was performed by collapsing toy categories. As shown in Table 6, which summarizes these tests, this analysis also did not support the hypothesis.

TABLE 5

CHI-SQUARE ANALYSES FOR TOY CHOICE

CONDITION	X^2
Toy Choice by Abuse Summing over Sex	*.933*
Toy Choice by Abuse Males only	*2.163*
Toy Choice by Abuse Females only	*.682*
Toy Choice by Sex Summing over Abuse	*16.33**

*$*p < .01$

TABLE 6

CHI-SQUARE ANALYSES FOR TOY CHOICE

COMBINING TOY CHOICE CATEGORIES 1 AND 2

CONDITION	X^2
Toy Choice by Abuse Summing over sex	*.736*
Toy Choice by Abuse Males only	*1.663*
Toy Choice by Abuse Females only	*0.0*
Toy Choice by Sex Summing over Abuse	*14.64**

*$*p < .01$

Tolerance of Aggression

The sixth hypothesis, that both abused and neglected children would take longer to report to an adult the aggressive activities of other children, was tested by measuring the latency of response to the videotaped aggression. As summarized in Table 7, an analysis of variance of the data revealed a significant abuse effect.

TABLE 7

ANALYSIS OF LATENCY OF

RESPONSE TO VIDEOTAPED AGGRESSION

SEX BY ABUSE ANOVA

	df	MS	F
Sex	1	1.8	.01
Abuse	2	2332.6	6.35*
Interaction	2	26.2	.07
SS within condition	28	367.3	

*Significant abuse effect at $p < .01$

Newman-Kuhls Comparison

Condition	Means
Neglect (N)	116.7
Abuse (A)	99.2
Control (C)	87.3

Differences between Column Means

	A	C
N	17.5***	29.4**
A	--	11.9

Newman-Kuhls Critical Range

$$CR_{N-K} = q(r, df_{wg}) \sqrt{\frac{MS_{wg}}{2s}}$$

; q is the studentized range,
r is the separation of groups
MS_{wg} is the between-groups mean square
$2s$ is the harmonic mean of the subjects in the columns

	r = 2	r = 3
$CR_{.95}$	16.8	20.2
$CR_{.99}$	22.6	25.9

** "N" - "C" difference is significant at $p < .01$
*** "N" - "A" difference is significant at $p < .05$

As Figure 2, which portrays the distribution of reporting times, indicates the neglect group's mean is highest (116.7) followed by the abused group's mean (99.2) followed by the control group's mean (87.2).

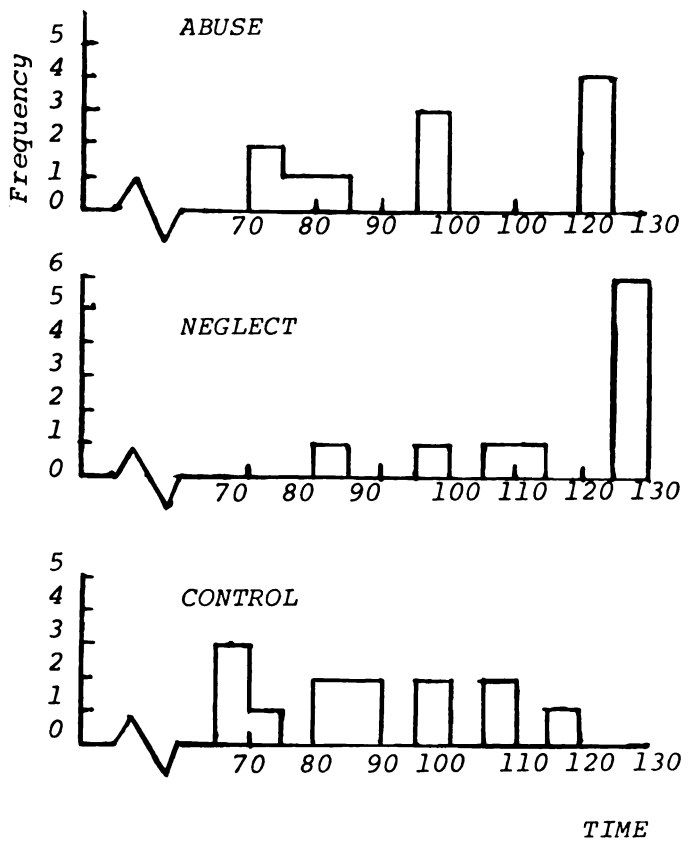

FIGURE 2. Frequency Distribution of Latency of Response to Videotaped Aggression

Part of the hypothesis was confirmed by a Newman-Kuhls comparison which indicated that the neglect group differed significantly from the control group ($p < .01$). The rest of the hypotheses were not confirmed; the abused group did not differ significantly from the control group, nor were the abused and neglected group equal in their latency of reporting.

Willingness to Delay Reward

The seventh hypothesis, that both abused and neglected children would be more likely than a matched control group to accept a less desired reward rather than wait for an adult to bring them their most preferred reward, was tested by a chi-square analysis. This analysis tested the number of children in each condition of sex and abuse who accepted or rejected the offer to receive their most preferred toy later rather than take a second choice toy immediately. Although no hypotheses were formulated regarding possible sex differences, separate analyses by sex were performed in addition to a combined analysis. Table 8 presents a summary of these analysis. It indicates that the hypothesis was confirmed only for females.

TABLE 8

ANALYSIS OF DECISIONS
REGARDING POSTPONEMENT OF GRATIFICATION

Conditions	X^2
Accept/Reject by Abuse Summing over Sex	*1.716*
Accept/Reject by Abuse Males only	*1.658*
Accept/Reject by Abuse Females only	*7.800**
Accept/Reject by Sex Summing over Abuse	*2.660*

$*p < .05$

The control females appeared more willing to accept postponement than either the control males or the abused or the neglected children of each sex. No significant effects were found for acceptance by abuse category for males, or for acceptance by abuse category summing over sex.

Additional Findings

While the Analyses of Variance for the Orality data

as shown in Table 1, did not support the hypothesized abuse effect, an unanticipated main effect for sex was found. For Oral Eroticism, spontaneous story, females scored significantly higher than males. A second unhypothesized sex effect occurred in the analysis of toy choice. Males made significantly more aggressive toy choices than did females.

Summary of Results

The analyses revealed three significant results relevant to abuse: (1) Fear of physical harm was significantly higher for the neglected males than for either the abused males or the control males; (2) among females the control group was more willing to postpone gratification than either of the other groups; (3) the neglected group took significantly longer than either the abused or the control groups to notify the Experimenter of the increasing aggression in the videotape test. In addition there were two significant sex effects: (1) females were significantly higher than males on the Oral Eroticism Scale of the Blacky; (2) males picked more aggressive toys than the females.

CHAPTER IV

DISCUSSION

This study was designed to be an experimental one with objective measures. However, an understanding of the results is aided by clues which are largely subjective, based on direct contact with and observation of abused and neglected children and their parents. Where feasible, this section is organized on to parallel that of the Results section.

Orality

The hypothesis that abused and neglected children would manifest more oral deprivation was not supported. This hypothesis was based on the assumption that abuse or neglect would first occur during the oral stage of development as reported in the majority of the literature. As it turned out, it was not possible to discover when the first incident of abuse or neglect had really occurred. In all cases the occurrence was be-

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fore the age of five, but more precise data were not available. Actually abuse can start at any age and be the result of some precipitating incident. This is especially true if the pathological psychodynamics of the abusive parent are set off by the child's reaching a particular developmental stage. For example, some abusing parents are upset by the intense care a small infant needs; others enjoy this dependence but are disturbed by a two-year old child's attempts at independence. One mother seen in one of the agencies included in this study was very nurturing to each subsequent infant until he or she was replaced by a new baby. At this point, the older child was placed in a crib and left there. There were seven children in five cribs. All of these children were severely malnourished and filthy. The new baby, however, received excellent care.

Thus, because we lack data regarding the first incident of abuse or neglect, we do not know whether the lack of support for the first hypothesis reflects theoretical or methodological inadequacies. Differences in onset of abuse and neglect might lead to very different levels of orality. Perhaps with better reporting and record keeping, future researchers will be able

to test the orality hypothesis more adequately.

Fear of Harm

In the analysis of Blacky Card 6, a significant effect was found for males only. According to Blum (1949) this card measures castration anxiety in male and penis envy in female; thus, theoretically it should evoke different reactions from boys than from girls. Observations of the subjects behavior supported this expectation. Many of the boys avoided the card by quickly putting it down. One boy threw the card down. Two boys said they "hated" the card, No such reaction was observed with the girls. Thus, the present observations lend support to Blum's contention that this card measures castration anxiety. They also reinforce questions raised in Chapter II regarding the Blacky Test's validity for females. Girls seem to have a harder time viewing Blacky as females than boys have viewing Blacky as males. It was observed that many of the girls, as contrasted with only a few of the youngest boys, vacillated about Blacky's sex. They would refer to Blacky as her one time and as him the next.

In view of such different behavior, one might expect a significant sex effect. Actually, as noted previously (See Chapter III), there was a significant effect only for neglected boys. Thus, the findings only partially support expectations regarding group differences, even considering only the nineteen males subjects included in this study.

Why did the abused boys show so little anxiety? The small sample size could have produced a relatively large sampling error. This drawback, however, could not be overcome. The sample used exhausted all the available subjects in the metropolitan Chicago area who met the experimental criteria for being abused or neglected. Possibly, in the future larger samples might become easier to obtain as the public's awareness of the child abuse problem grows and its reluctance to report cases of abuse or neglect diminishes.

Aside from sampling considerations, it is possible that abused boys displayed so little castration anxiety on the Blacky in the face of the suggestion of physical violence or mutilation because of an "emotional habituation" effect. This effect has been noted in experiments in which subjects watched a victim subjected to pain. As the length of time the subjects were exposed

to the painful scene increased, emotional arousal as measured by galvanic skin responses (GSR) progressively decreased (Berger & Everstine, 1962). Similar results were reported for males who watched a film of a primitive ritual called, "subincision" (Lazurus & Alfert, 1964; Speisman, Lazurus & Davidson, 1964). An abused child or one with abused siblings has plenty of opportunity to become habituated to violence. Of the three groups, one can expect that the abused group will have the highest frequency of habituation; and the control, the lowest since they have not been either abused or neglected. In future research the possible role of habituation could be assessed by measuring galvinic skin response. A higher mean GSR for the abused group would be evidence against the habituation effect. The plausibility of the explanation will also be discussed in connection with the videotape measure of aggression.

Another important factor is whether the subject tended to identify more with Blacky, the onlooker, or with Tippy, the victim. If the identification is with Tippy, then the card is likely to be more frightening than if it is with Blacky. In fact, if the subject is identifying with Blacky he or she may even be pleased that the sibling is the victim either because of relief that it is not

occuring to the observer or because of sibling animosity.

Pathogenesis and TAT Aggression

The failure of the TAT to turn up any significant effects either on Karon's Pathogenesis Index or the Stone Aggression Scale may indicate that these instruments need to be changed or adapted for younger ages. Neither has ever been used with children. It may also be that at the ages of the subjects used, children in general tend to score in a manner that is considered pathogenic or aggressive in adults. This is suggested by the fact that in the total sample there were 3.7 times as many pathogenic responses as there were benign ones, and the children's stories were highly aggressive. Thus, the general extremity of cildren's scores might mask possible group differences on these measures.

In scoring for the Pathogenesis Index stories are labelled benign only if the dominant person takes the interest of a dependent person into consideration. Thus, if a child is unable to take the role of the other, virtually all of his stories will be either pathogenic or nonscorable. According to Piaget (1947; 1950) this

ability first appears in the Concrete Operational Stage which starts about age seven. Prior to this the child's thinking is too egocentric for him or her to take the role of the other. However, Piaget says that egocentrism occurs not just in one period but in each of the three major periods including the last one which start about age 11.

What may be happening with the Pathogenesis Index is that the children in the sample generally are not really able to take the role of the other. It would thus seem to have little meaning to label a child in the 5 to 10 age range pathogenic on the basis of this text since almost all children would also get the same label.

It should also be noted that all the children told gory stories. They either reacted to the pictures and their stories with relish or they displayed no obvious emotion. The older children seemed to tell the least gory stories, indicating that they were more aware of what is considered socially appropriate behavior. This age trend suggests that if the subjects were older, the instruments might have distinguished between the control and the other children. As noted in the methods section, the reason an older sample was not used was to avoid the complications of adolescence.

Toy Choice as a Measure of Aggression

There was no significant abuse effect on choice of toys. The choice pattern was such that a sex effect, which was not unexpected, predominated. Males nearly all chose the most aggressive toys. The girls chose almost entirely from among the least aggressive toys. Any abuse effect was thus effectively masked. The sex effect will be discussed in a later section.

Videotape Measure of Tolerance of Aggression

Unexpectedly, the abused group did not differ significantly from the control group in latencies on the videotape measure. In discussing the abused group's scores on the physical harm measure, it was suggested that this group could have been habituated to aggression. In the present case, one would expect the habituation effect to shift a child's reaction toward longer latency in reporting the observed videotaped aggression. But this was not found. In fact, the mean time for the abused group was significantly less than that for the neglected group. This finding seemingly detracts from the credibility of the habituation explanation previously advanced for the

Blacky findings.

However, there are additional considerations regarding the abused group in the videotape situation. The children were instructed by an adult authority to report any trouble they viewed. Fear of punishment based on other experiences with authorities could induce in an abused child an excessive compliance (as well as inhibition of aggression). It was not possible to predict whether tolerance for aggression or compliance would be more likely with the abused group. Thus, the predicted times for the videotape tests for the abused group were expected to be bimodally distributed. While this hypothesis was not conclusively supported, it was not disconfirmed. In the ANOVA the cluster of times at the low end may have pulled down the mean of the abused group and prevented it from being statistically larger than that of the control group.

Elements of the "bystander effect" may also play a role in the children's latency of response to the videotape (Latane & Darley, 1969; Latane & Rodin, 1969; Levy, Lundgren, Ansel, Fell & McGrath, 1972). The "bystander effect" is the name given to the phenomenon in which an individual is less likely to help someone in need if

there are any other people around (bystanders) who could help.

Willingness to get involved enough with other people was necessary for the child to act. To interrupt the Experimenter the subject had first to decide that there was behavior warranting intervention. Such a decision would be affected by the extent to which a child was habituated to the degree of violence portrayed. Then the child had to decide whether he or she was willing to intervene. Since the Experimenter was in the room during the videotape, the child may have viewed the Experimenter as imminently about to finish the telephone call and thus to be capable of monitoring the videotaped children herself.

The Experimenter's observations suggest that habituation was not involved. One would expect that an habituated child would display little or no emotion while viewing the videotape. The neglected children showed much emotion, grinning and acting as if they were really enjoying the videotape. They tended to wait a very long time before reporting, and some did not report at all. The earphone volume had deliberately been set high so that the Experimenter could hear enough to tell what was happening on the videotape without the children's know-

ledge. It was observed that the grinning children grinned most broadly when the videotape action was the most aggressive.

The neglected children may be more extreme in their slowness to report aggression than the abused children because they have really suffered more deprivation than the abused children and are more psychologically damaged. In neglect cases not only is the physical aspect of neglect present, but also there is an emotional and sensory deprivation aspect that is generally much stronger than in abuse cases (Rabin, 1963). In many neglect cases the children almost die from lack of care and while thus ignored have very little sensory input. They also have very little chance to influence the way their parents treat them. Thus they have much less experience in learning to respond appropriately to societal expectations.

The importance of contact and physical handling in the socialization process is demonstrated even in experiments with infant monkeys (Harlow, 1962; Harlow & Zimmerman, 1959). Social deprivation in infant monkeys led to severe behavioral problems.

The abused children either grinned like the neglected children or looked apprehensive. Those who grinned like the neglected children also tended to take a long time to

report. The abused children who looked apprehensive either reported very early, possibly in an attempt to avoid feared punishment by being obedient or to stop the videotape which they found upsetting, or they sat rigidly still to the end without reporting. Those abused children who reported early may have learned that they can influence their outcomes favorably by being obedient and compliant. Abuse frequently occurs because the child fails to meet some unrealistic parental expectation. For example, one researcher reported that a two-year old child was beaten for failing to make her mother's lunch. By the age of five surviving abused children often have learned to avoid the abuse by doing what is asked of them. Thus, some older abused children have more control over their outcomes than do neglected children, who are neglected no matter what they do. Generally, the children in the abuse category receive sensory and emotional input even if it is largely negative; furthermore, in many cases the abuse is interspersed with protestations of love and/or remorse. While all of the abused children in this study had suffered neglect, those who responded like neglected children may have experienced more neglect than the rest of the abused group. Hence, they may not have found compliance effective in influencing adult response. The Experimenter noted that

some of the abusing parents were extremely inconsistent in their expectations regarding their children's performance; other had set standards and appeared satisfied when the child fulfilled their expectations. If future researchers could distinguish among these apparent subgroups in the abused population, perhaps more clear-cut findings regarding aggressivity would emerge.

Unpredicted Sex Effects

There were three significant sex effects in the current study . First, females were higher than males on the oral erotism scale of the Blacky test, scored for spontaneous story. This finding suggests that girls are more oral than boys. Actually several studies of infants and babies report that female babies manifest greater oral activity and sensitivity than male babies (Fitzgerald, 1976). Female infants display more rhythmical tongue and mouth movements, more reflexive smiling, and more thumb sucking. Moss and Robson (1968) found that mothers use oral pacifiers more with female than male infants, possibly reflecting the relatively greater effec-

tiveness of such pacifiers with females.

In the measure of delay of gratification, significantly more females in the control group were willing to wait a week in order to get their most preferred toy. Possibly these females felt a higher degree of trust for the Experimenter, who was more similar as a model to them than to the other children in the study. Willingness to postpone gratification may require more than just trust in one individual, however. It is possible to trust an individual and yet believe that unforeseen circumstances beyond his or her control might prevent the fulfillment of the promise. It is not surprising that in general neither males nor females in the abused and the neglected groups chose to wait a week for their most preferred toy. For such children the world has very likely proved to be such a chaotic and unpredictable place that they may feel they should take what they can get now since what will happen later is too uncertain. What is not such an intuitive result is that the males of the control group were indistinguishable from the children of the other groups in this test. It seems likely that girls receive more indoctrination on the virtues of delaying reward than boys and at an earlier age. And, as

already noted, the Experimenter's sex may have had an effect with this group.

Sex differences in early child rearing may also account for the toy selection findings. More males picked the aggressive toys than did females, a finding that is not surprising since typically aggressiveness in boys is tolerated if not actually encouraged by many parents (Maccoby & Jacklin, 1974). Boys are supposed to learn to defend themselves and to become men who cannot easily be pushed around. Parents often encourage girls to play nurturantly with dolls while tolerating more aggressive play in their sons. Also on television and in movies there are many more incidents in which aggressive behavior is modelled by males than by females.

Suggestions for Future Research

(1) In view of the difficulty in obtaining large samples in the study of child abuse, it would be desirable to study the personality variables of abused children on a broader scale. That is, rather than conduct an experimental study in which one accepts as subjects only those who fit tightly controlled criteria, one could undertake a survey sampling, for example, from all children treated

for suspected abuse or neglect in a particular area. Such a broad study would be useful inasmuch as so much is still unknown regarding the psychological effects of child abuse.

(2) Since no results with the TAT Aggression or Pathogenesis Index were significant in the present study it would be interesting to repeat these tests with abused and control children of ages extending on up through adulthood. This would enable one to tell whether these indices can discriminate between abused and control children and if so, at what ages.

(3) This study found at least some neglect associated with all cases of abuse. Since all children were from the lower socioeconomic class, one must not generalize its findings to other classes. Since abuse is found in all socioeconomic classes, it would be helpful to ascertain whether neglect also occurs in the middle and upper classes. However, in affluent families, one probably needs to be more sophisticated to detect neglect. In the metropolitan area of Chicago the only agency dealing with child abuse in affluent families is the Illinois Department of Children and Family Services. Their staff uniformly asserts that neglect does not occur in such families. However, their measures of neglect involve simple

counts of the quantity of food in the refrigerator and the number of clothes in the child's closet. Such an inadequate criterion totally fails to get at the possibility that a child may be too young to make use of the food and clothes present without help. Without some supervision the child may be existing on a diet too unbalanced to provide adequate nutrition. Better criteria are clearly needed. One can hope that some way can be found that would detect neglect even in more affluent families. Furthermore, indices of emotional neglect clearly are necessary to enable researchers and practitioners to identify the impact of such lack of caregiving and to work toward effective interventions.

APPENDICES

APPENDIX A

APPENDIX A

PHONE SCRIPT I

I have a problem. I promised my friend, who will be working with some younger children in that other room you saw with the toys and the camera, that I would watch the children for her for a few minutes while she's gone. See, I can turn on this TV set and watch what's happening in that room. Oh good! They haven't gotten there yet.

PHONE SCRIPT II

Could you watch the children; sort of babysit them for me while I talk to this man on the phone. Thanks. Just watch the TV and you can keep an eye on them. You can even hear them with the ear plug. I think they'll be OK but sometimes little kids can get into trouble, and an older person should be watching them. If they do get in any trouble or anything bad happens you tell me right away.

APPENDIX B

APPENDIX B

BLACKY INSTRUCTIONS

Instructions to Subject -- Examiner says:

I've got something here which I think you'll find pretty interesting. It's a bunch of cartoons, like you see in the funny papers, except that there are no words. I'm going to show them to you one at a time and the idea is for you to make up a story about each one -- tell what is happening in the picture, why it is happening, and so on. This is sort of a test of how good your imagination can be, try to tell as much as possible about how the characters feel. You can have as long as you like for each story, and to make it easier to go back over them later I'll write them down. At the end of each story I will want to ask you some questions to be sure I got everything that you had in mind. There are no right or wrong answers to these questions -- I'm just interested in what you imagine the answers to be. Before we start, here are the characters who appear in this comic strip (show frontispiece for about 20 seconds). Here (pointing) is Papa, Mama, Tippy, and the son (daughter), Blacky,

who is the main figure in the cartoons. I'll leave this over here for you to look at later if you want to (place frontispiece off to one side for subject to refer to during the test if he wishes).

INQUIRY ITEMS BLACKY CARTOON 1

MALES AND FEMALES

"All right, now for the first cartoon. Here is Blacky with Mama..."

1. How does Blacky feel here? Is she

   a. Happy.
   b. Unhappy.
   *c. Not one way of the other.

2. How does Mama feel here? Is she

   a. Happy.
   b. Unhappy.
   *c. Not one way or the other.

3. How much longer will Blacky want to stay there?

   *a. Not very long.
   b. A long time.

4. Is Blacky

   a. Always eating.
   b. Always hungry.
   *c. Sometimes she's hungry, but often she'd rather play.

5. When Blacky grows up will she

   a. Always be eating.
   *b. Sometimes eat and sometimes do other things.
   c. Always be hungry.

6. If Blacky has her way how old will Blacky be when Mamy stops giving her milk this way?

   *a. Not much older.
   b. A lot older,
   c. Mama wants to stop now.

INQUIRY ITEMS BLACKY CARTOON 2

MALES AND FEMALES

"Here is Blacky with Mama's collar..."

1. Why is Blacky doing that to Mama's collar?

2. How often does Blacky feel like doing that?

   *a. Not very often.
   b. Often.

3. Blacky does this most often when he wants

   a. Attention.
   b. Milk.
   *c. Fun.

4. What will Blacky do next with Mama's collar?

   *a. Get tired and drop it.
   b. Give it back to Mama.
   c. Angrily chew it up.

5. What will Mama do when she comes?

   a. Feed Blacky.
   b. Send him to bed without dinner.
   *c. Bark.

6. If Mama came to feed Blacky would he

   a. Chew on the collar.
   *b. Eat.
   c. Bite Mama.

INQUIRY ITEMS BLACKY CARTOON 6 -- MALES

"Here Blacky is watching Tippy..."

1. How does Blacky feel?

   a. Scared?
   *b. Not scared?

2. Why does Blacky think this is happening?

   a. Tippy was bad.
   *b. Somebody is being mean for no reason.
   c. To make Tippy better.

3. How does Blacky feel about his own tail?

   *a. Not scared.
   b. Scared.
   c. He thinks he'd look better without a tail.

4. When will Blacky want his own tail cut off?

   a. Soon.
   *b. Never.

5. Which one of Blacky's family planned for Tippy's tail to be cut off?

6. What will the neighbor dogs do when they see Tippy's tail?

   a. Be scared.
   b. Laugh.
   *c. Wonder what happened?
   d. Think it looks good.

INQUIRY ITEMS BLACKY CARTOON 6 -- FEMALES

"Here Blacky is watching Tippy..."

1. How does Blacky feel about her own tail?

   a. She knows it's going to be cut off.
   b. She wants to keep it.
   *c. She feels she'd look better if it were cut off.

2. What would upset Blacky most if she were Tippy?

   *a. Nobody loved her enough to save her tail.
   b. Not having a tail.
   c. Being bad enough to have her tail cut off.

3. Which one of Blacky's family planned for Tippy's tail to be cut off?

4. What will Tippy think about losing the tail?

   a. She'll want it back
   *b. She'll be happy

5. What will the neighbor dogs do when they see Tippy's tail?

   a. Be scared
   b. Laugh
   *c. Wonder what happened
   d. Think it looks good

6. Would Blacky trade her tail for a pretty ribbon?

TABLE 1

PREDICTIONS FOR THE BLACKY PICTURES

Cards	*Comparison*	*Prediction*
1. Oral Eroticism	*Abused vs. Neglected*	*A same as or weaker than N*
	Abused vs. Controls	*A stronger than C*
	Neglected vs. Controls	*N stronger than C*
2. Oral Sadism	*A vs. N*	*A same as or stronger than N*
	A vs. C	*A stronger than C*
	N vs. C	*N stronger than C*
3. Castration Anxiety	*A vs. N*	*A stronger than N*
	A vs. C	*A stronger than C*
	N vs. C	*N stronger than C*

APPENDIX C

TABLE 1

BLACKY PICTURES

INTER-RATER CORRELATIONS

BEFORE DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4	5
1	*	0.81	0.80	0.82	0.83
2	0.81	*	0.87	0.89	0.84
3	0.80	0.87	*	0.93	0.93
4	0.82	0.89	0.93	*	0.94
5	0.83	0.84	0.92	0.94	*

AFTER DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4	5
1	*	0.91	0.92	0.92	0.92
2	0.91	*	0.95	0.97	0.97
3	0.92	0.95	*	0.98	0.98
4	0.92	0.97	0.98	*	1.00
5	0.92	0.97	0.98	1.00	*

TABLE 2

PATHOGENESIS INTER-RATER CORRELATION

BEFORE DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4	5
1	*	0.78	0.95	0.70	0.66
2	0.78	*	0.78	0.80	0.67
3	0.95	0.78	*	0.75	0.66
4	0.79	0.80	0.75	*	0.71
5	0.66	0.67	0.66	0.71	*

AFTER DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4	5
1	*	0.92	0.98	0.95	0.87
2	0.92	*	0.90	0.94	0.88
3	0.98	0.90	*	0.93	0.84
4	0.94	0.94	0.93	*	0.84
5	0.87	0.88	0.84	0.86	*

TABLE 3

PATHOGENESIS CARD-BY-CARD ANALYSIS OF VARIANCE

Source	*df*	*MS*	*F*
Card 2-P			
Sex (A)	1	8.20	1.25
Abuse (B)	2	12.43	2.39
AB	2	0.30	0.06
SS within conditions	28	145.51	
Card 2-B			
Sex (A)	1	1.71	2.44
Abuse (B)	2	1.12	1.60
AB	2	1.12	1.60
SS within conditions	28	19.63	
Card 4-P			
Sex (A)	1	11.49	2.00
Abuse (B)	2	3.75	0.65
AB	2	4.71	0.82
SS within conditions	28	160.21	
Card 4-B			
Sex (A)	1	8.47	1.84
Abuse (B)	2	3.98	0.86
AB	2	3.89	0.84
SS within conditions	28	129.21	
Card 6-P			
Sex (A)	1	0.62	0.27
Abuse (B)	2	1.33	0.57
AB	2	6.21	2.69
SS within conditions	28	64.68	
Card 6-B			
Sex (A)	1	1.37	0.63
Abuse (B)	2	.66	0.30
AB	2	4.55	2.09
SS within conditions	28	61.08	

TABLE 3
(Continued)

Source	*df*	*MS*	*F*
Card 7-P			
Sex (A)	1	10.64	2.52
Abuse (B)	2	11.15	2.64
AB	2	14.46	3.42*
SS within conditions	28	118.21	
Card 7-B			
Sex (A)	1	2.62	0.64
Abuse (B)	2	3.90	0.95
AB	2	0.82	0.20
SS within conditions	28	114.90	
Card 9-P			
Sex (A)	1	7.10	1.21
Abuse (B)	2	7.58	1.30
AB	2	1.02	0.17
SS within conditions	28	163.63	
Card 9-B			
Sex (A)	1	0.47	0.09
Abuse (B)	2	0.70	0.14
AB	2	1.78	0.35
SS within conditions	28	141.13	
Card 12-P			
Sex (A)	1	0.32	0.07
Abuse (B)	2	22.99	4.97**
AB	2	0.95	0.21
SS within conditions	28	129.51	
Card 12-B			
Sex (A)	1	3.37	0.93
Abuse (B)	2	10.80	3.01
AB	2	5.01	1.40
SS within conditions	28	100.33	

*Significant at $P < .05$
**Significant at $P < .025$

TABLE 3
(Continued)

Source	*df*	*MS*	*F*
Card 18BM-P			
Sex (A)	1	0.53	0.16
Abuse (B)	2	0.84	0.26
AB	2	5.16	1.56
SS within conditions	28	92.51	
Card ILBM-B			
Sex (A)	1	1.32	0.61
Abuse (B)	2	0.03	0.02
AB	2	2.83	1.30
SS within conditions	28	60.80	
Card 18GF-P			
Sex (A)	1	0.00	0.00
Abuse (B)	2	7.74	1.65
AB	2	4.69	1.00
SS within conditions	28	130.80	
Card 18GF-B			
Sex (A)	1	0.00	0.00
Abuse (B)	2	4.23	0.92
AB	2	1.81	0.40
SS within conditions	28	128.33	

TABLE 4

TAT AGGRESSION INTER-RATER CORRELATIONS

BEFORE DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4
1	*	0.86	0.88	0.84
2	0.86	*	0.86	0.82
3	0.88	0.86	*	0.86
4	0.84	0.82	0.86	*

AFTER DISCUSSION

INTER-RATER CORRELATIONS

RATER	1	2	3	4
1	*	0.99	0.99	0.99
2	0.99	*	0.99	0.99
3	0.99	0.99	*	0.99
4	0.99	0.99	0.99	*

TABLE 5

ANALYSIS OF VARIANCE OF TAT AGGRESSION SCORES

Source	*df*	*MS*	*F*
All Cards-score on each card summed over-raters			
Sex (A)	1	31.66	1.68
Abuse (B)	2	13.53	0.72
AB	2	16.23	0.86
SS within conditions	266	5003.20	
Card 2			
Sex (A)	1	25.33	1.99
Abuse (B)	2	17.34	1.36
AB	2	4.12	0.32
SS within conditions	28	12.72	
Card 4			
Sex (A)	1	0.10	0.01
Abuse (B)	2	0.73	0.06
AB	2	8.08	0.67
SS within conditions	28	12.13	
Card 6			
Sex (A)	1	0.01	0.00
Abuse (B)	2	15.08	1.32
AB	2	4.81	0.42
SS within conditions	28	11.35	
Card 7			
Sex (A)	1	20.95	1.13
Abuse (B)	2	39.98	2.15
AB	2	0.19	0.01
SS within conditions	28	18.63	

TABLE 5

(Continued)

Source	*df*	*MS*	*F*
Card 9			
Sex (A)	1	5.96	0.47
Abuse (B)	2	47.97	3.78*
AB	2	0.76	0.06
SS within conditions	28	12.70	
Card 12			
Sex (A)	1	2.75	0.17
Abuse (B)	2	12.17	0.74
AB	2	10.47	0.64
SS within conditions	28	457.73	
Card 18 BM			
Sex (A)	1	0.07	0.01
Abuse (B)	2	11.46	0.96
AB	2	4.75	0.40
SS within conditions	28	333.15	
Card 18 GF			
Sex (A)	1	7.01	0.38
Abuse (B)	2	43.61	2.38
AB	2	12.42	0.68
SS within conditions	28	513.33	

*$P < .05$

TABLE 6

CHI-SQUARE ANALYSES OF BLACKY CARD 2

ORAL SADISM

SICK vs. NORMAL RESPONSES

*Inquiry Question 2 -- Summing over sex**

Response a : normal
Response b : sick
Chi-square = 5.942
df = 2
Critical value (α = .05) = 5.99

*Inquiry Question 4 -- Summing over sex**

Response a,b : normal
Response c : sick
Chi-square = 1.146
df = 2
Critical value (α = .05) = 5.99

**Note: The distribution of responses was such that to have analysed each sex separately would have required having fewer than 5 subjects in half of the cells even if one lumped abuse and neglect together.*

APPENDIX D

APPENDIX D

AGES OF SUBJECTS

	MALE				FEMALE			
	6	Years	6	Months	5	Years	5	Months
Abuse	6	"	6	"	6	"	0	"
	8	"	1	"	7	"	4	"
	8	"	9	"	7	"	11	"
	9	"	8	"	8	"	6	"
	5	"	4	"	5	"	11	"
	6	"	8	"	8	"	1	"
Neglect	8	"	2	"	8	"	5	"
	9	"	4	"	9	"	8	"
	10	"	11	"	10	"	4	"
	6	"	6	"	7	"	7	"
	6	"	10	"	7	"	11	"
	7	"	2	"	8	"	10	"
Control	7	"	4	"	9	"	2	"
	8	"	6	"	9	"	9	"
	9	"	0	"				
	9	"	10	"				
	9	"	10	"				

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