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THE RELATION OF SELF-CONCEPT AND FRUSTRATION TO AGGRESSION IN EMOTIONALLY DISTURBED AND NORMAL CHILDREN PLACED IN SPECIAL AND REGULAR PROGRAMS

by
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ABSTRACT

THE RELATION OF SELF-CONCEPT AND FRUSTRATION TO AGGRESSION IN EMOTIONALLY DISTURBED AND NORMAL CHILDREN PLACED IN SPECIAL AND REGULAR PROGRAMS

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This investigation dealt with the effects of frustration on the aggressive behaviors of emotionally disturbed and normal children with high or low self-concepts in special and regular class programs. Psychological theory had generally explained aggression in terms of reactions to environmental stimulus events independent of intra-psychic processes operating within the individual. A review of the evidence related to self-concept, however, revealed a plausible basis for postulating the importance of this characteristic as an intervening variable between the objective stimulus event (frustration) and the subjective response (aggression). Experimental evidence pertaining to the relationship between frustration, self-esteem, and aggression was unavailable.

The sample consisted of 32 emotionally disturbed and 32 normal children in special and regular classes in public school elementary programs. All children were male and 9 or 10 years of age. High and low self-esteem subsamples were formed using the Coopersmith Self-Esteem Inventory (SEI). Subjects scoring in the upper one-third and lower one-third of the SEI were correspondingly assigned to either a frustration or nonfrustration treatment. Equal numbers of equivalent score levels were assigned to each treatment condition when possible. In all, within each of the eight combinations of the three variables studied, there were eight subjects. Eight experimental groups were devised that involved frustration or nonfrustration treatments for subjects preclassified in terms of self-concept level (high or low) and adjustment status (emotionally disturbed or normal). Frustration was accomplished by deliberately and systematically preventing selected subjects from completing timed tasks for which rewards were made available.

The findings do not support the intervening variable hypothesis for self-concept as it relates to frustration and aggression. Results showed that: (1) the selected group from the disturbed children reveal a

significantly greater amount of verbal aggression than do the selected group from the normal children, but both the groups fail to differ from each other in respect to behavioral expressions of aggression; (2) frustration was not associated with higher amounts of verbal or behavioral aggression at a significant level. Surprisingly, a significant relationship was found between the expression of verbal aggression and nonfrustration conditions. The amount of behavioral or verbal aggression expressed was not significantly related to an individual's self-concept level, although the use of matched self-esteem subsamples may have reduced the possibility of obtaining significant results in this respect. In addition, a significant negative, but low order, correlation was obtained between verbal and behavioral modes of aggression. Possible explanations for these findings were discussed, including limitations in sample size, difficulties in deriving a valid measure of self-esteem, and deficiencies in the intensity and persistence of the frustration treatment procedures. Theoretical interpretations for the results were presented that lend support to the notion that low self-concept and aggression fail to operate as unitary psychological conditions.

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CHAPTER I

INTRODUCTION

The motivation for this research is an interest in the effects of frustration on the aggressive behaviors of high or low self-concept children in regular classes and classes for the emotionally disturbed. The specific psychological question at issue is the extent to which self-concept operates as an antecedent condition to the expression of aggressive and acting-out behaviors in frustrated children. Research in personality dynamics has long been regarded as vital to the understanding and resolution of many educational problems. However, self feeling states such as self-concept must be linked with specific reaction modes if they are to have instrumental value to the social scientist and teacher in predicting behavior.

Aggression Hypotheses

The psychological literature dealing with aggression has generally explained the source of aggression in terms of (1) cultural interferences with biological or instinctual urges in which aggression is seen as "a 'primordial reaction' to the thwarting of pleasure seeking

or pain avoiding responses" (Bandura and Walters, 1963, p. 110); (2) frustrating or conflicting conditions that block motivated behavior and lead to the arousal of such feelings and attitudes as anger, fear, and hostility; (3) a history of reinforcement wherein behaviors in a variety of contexts are shaped by reinforcing social consequences. In each of the foregoing explanations the occurrence of aggression appears related to an environmental stimulus that presumably acts as the catalyst or antecedent condition for the manifestation of aggressive behaviors.

The Freudian notion of the existence of instinctual drive states related to sex and aggression assumes that the former gives rise to the erotic components of mental activities while the latter gives rise to destructive components (Brenner, 1966). The expression of aggressive behaviors undergoes varying degrees of transformation and repression during the socialization process of the individual. Consequently, environmental stimuli act as triggering agents for the expression of primitive latent impulses. Similarly, the frustration-aggression hypothesis first presented aggression "as a natural and inevitable consequence of frustration"

(Dollard, Doob, Miller, Mowrer, and Sears, 1939), while in later modifications it was conceded that other reactions were also possible, viz. regression, fixation, withdrawal, and escape, etc. (Sawrey, 1969). In any case, aggression, while admitting to other possibilities, remained one of the most common reactions in frustrating circumstances. In this framework its occurrence was again related to antecedent conditions in the environment as a necessary circumstance for the arousal and expression of aggressive behavior.

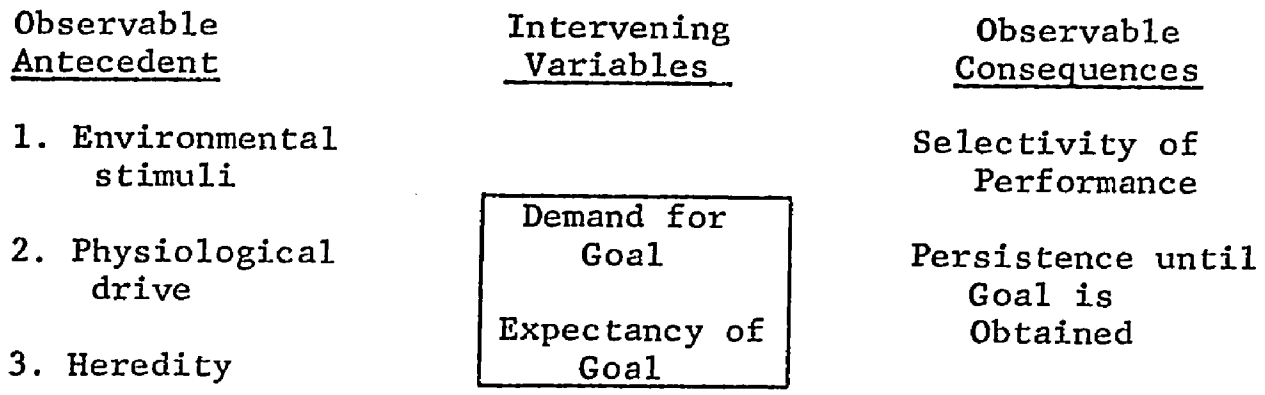
Viewing aggression as a collection of learned responses, Bandura and Walters (1964) reviewed existing research and conducted extensive investigations of their own on the subject. Essentially, they maintained that aggressive behaviors were acquired, maintained, and modified by patterns of reinforcement established in socially related contexts. Thus aggressive behaviors are knowingly or unwittingly shaped through the use of rewarding or punishing consequences during the interaction process. The dominant variable that is responsible for the acquisition of aggressive responses is operationally specified in terms of existing reinforcement contingencies. The relationship between the stimulus

and the response becomes established through differential reinforcement so that both the aggressive behaviors which have been rewarded or punished, and other types of aggressive behaviors, increase in frequency.

Intervening Variable Model

An alternative conception of the occurrence and source for aggressive behavior may be described in terms of inferred mental states of the individual. Aggression viewed in this way is related to the stability or adequacy of the perceived or actual concept of self. In some aspects the latter notion is similar to Tolman's "conception of 'mental processes' as variables which intervene between observable and measurable features of molar behavior" (Atkinson, 1964, p. 145). Tolman attempted "to account for the hidden processes within the organism which determine its behavior, but without explicit reference to the type of neurophysiological mechanisms that might be involved and without implying anything about private mental states" (Atkinson, p. 144). He proposed the following model to accomplish this:

Tolman's Model of Behavior



The empirical antecedents of behaviors are listed at the left. Behavior which is the effect or resulting consequence of these conditions is listed at the right. Processes which are inferred to be going on within the individual that mediate his behavior are represented in the rectangle. Most of Tolman's experiments were designed to determine internal motivational states in organisms and, therefore, his investigative methods have application to the present research problem. Tolman's approach was to objectively describe the antecedent conditions (independent variables) and their presumed consequent effect on behavior by holding all but one of the antecedent conditions constant. This condition was systematically varied and its observable effects were studied in

relation to the specific qualities or properties of the behavior demonstrated. The important aspect is that Tolman felt that environmental variables combined with intervening variables to determine the response that would be emitted. Therefore, whatever antecedent conditions operate to maximize the intervening variables will, from the experimenter's point of view, elicit the maximum response. This directly challenged the simpler associationistic formulation that an increase in stimulus intensity would lead to a corresponding increase in response intensity, and offered the possibility that increases in response magnitude were, instead, controlled by the intervening variable.

The above will be applied using Tolman's model as a framework for investigating the relationships among the following variables: (1) frustration; (2) self-esteem; (3) aggression. Substituting these variables in the model above we have:

Observable Antecedent	Intervening Variables	Observable Consequences
Frustrating Conditions	Self-esteem	Aggressive Behavior
1. Thwarting (Response blocking or response interference)		1. Verbal 2. Non-verbal

As is evident from the discussion to this point, the antecedent conditions in Tolman's model are replaced by frustrating circumstances (independent variable), whereas observable consequences are replaced by aggression (dependent variable).

Self-esteem as Intervening Variable

The intervening variables have been replaced by self-esteem. While this substitution appears remote from Tolman's original variables "demand for the goal object" and "expectancy of goal," it must be recalled that these are inferred states that reside within the individual and in this sense are emotional or psychological processes. Self-esteem is justified as a substitution since it represents an emotional process in the mental activity of the individual. Brown and Farber (1965) make a strong plea that a theoretical psychology be developed in which emotions are conceptualized as intervening variables. They observe that "thwarting is accompanied by or leads to rather unique kinds of responses such as aggression, which appear inappropriate to or independent of specific stimulus conditions and therefore might argue for the desirability of postulating an emotional process" (p. 135).

The present study is proposed, then, to subject

to experimental scrutiny the hypothesized relation between aggression and self-concept. Recognizing that although self-concept cannot be empirically demonstrated to be functionally related to aggression, it is clear that a demonstration of the relationship of these variables would add support to such an interpretation.

In addition, the study will attempt to uncover any relation between these variables for normal and emotionally disturbed children in regular or special class program placements.

Theoretical and Operational Definitions of Concepts

Frustration by thwarting.--is the deliberate and systematic prevention or interference with the occurrence of motivated behavior that results in the individual's inability to accomplish specified tasks within specified times for which rewards are available. Thwarting is carried out through the use of experimental procedures developed by Mallick (in press).

Verbal aggression.--is defined as the degree to which an individual, frustrated in goal accomplishment and in the attainment of reward contingencies, will negatively evaluate the person creating the frustrating

conditions. This negative evaluation is estimated from a check placed by the frustrated individual at a position along an eight inch line scale (illustrated in Appendix G).

Non-verbal aggression--is defined as the degree to which the thwarted individual exercises the opportunity to express residual hostility toward the individual who originally hindered his goal accomplishments in the attainment of reward contingencies. Measurement of non-verbal aggression is accomplished using the procedure which Mallick (in press) developed (described in Appendix H).

Self-esteem--is the perception that the individual holds of himself as measured by the Coopersmith Self-Esteem Inventory (SEI). Four dimensions are assessed: (a) self measure--how the individual perceives himself; (b) social measure--how the individual perceives himself socially; (c) home measure--how the individual perceives himself in the home; (d) school measure--how the individual perceives himself in school life. In addition, a lie scale measures how truthfully the individual has performed on the inventory. The total self-esteem score will be the total of the "Like Me" and "Unlike Me"

responses for each scale added together. Illustrations of several item samples are "my teacher makes me feel I'm not good enough"; "I'm a failure"; "I get upset easily at home" (Appendix B).

Outline of the Report

Chapter II is a review of relevant theoretical literature, empirical findings, and clinical observations. Chapter III describes the experimental design and methodology of the study. An analysis and summary of the results appears in Chapter IV. The last chapter describes the limitations of the study, presents theoretical interpretations for the findings, discusses educational implications, and proposes recommendations for further research. In addition, Chapter V contains a final summary of the study.

CHAPTER II

RELEVANT RESEARCH

Several theories have been presented to explain the basis of aggression as related to environmental determinants and an alternative framework for relating aggression to inferred intra-psychic or emotional processes in the individual, viz. self-esteem. In this chapter is a review of the theoretical, empirical, and clinical literature and evidence that provides support for a relationship between aggression and self-esteem.

Theoretical Assumptions

Despite the unique assumptions and concepts characterizing their positions, various personality and self-theorists have postulated an association between the self referent attitudes, feelings, perceptions, and thoughts held by an individual and his aggressive transactions with the environment. The role of feelings of inferiority in thwarting the child's striving for superiority and achieving an ultimate sense of completeness were emphasized in the early writings of Alfred Adler. He theorized that as a consequence of low self-esteem children displayed definite behavioral concomitants that

were frequently aggressive in nature. He stated for example that "arrogant, impertinent, fighting children . . . indicate a great feeling of inferiority" (Sahakian, 1965, p. 95). In further explicating the connection between the superiority complex and feelings of inferiority the observation was made that "we will always discover in fighting aggressive children an inferiority complex and a desire to overcome it" (Sahakian, p. 95). Theorizing that the basic human need is for preservation of and enhancement of the phenomenal self, Snygg and Combs (1959) describe the impact of threat on self-esteem in terms of narrowing the individual's perceptual field that frequently results in aggressive reactions. Reciprocal responses are then initiated on the part of the society or particular individuals thereby perpetuating a "vicious circle." The authors succinctly depict this process in operation in the following passage:

> The child who has developed a concept of himself, whether justified or not, as unwanted, unloved, and unappreciated becomes aggressive toward his parents and seeks to regain his self-esteem by punishing them or in some way demonstrating mastery over them. In this process he may utilize a very wide variety of

> techniques like temper tantrums, negativism, or any one of a thousand other fiendish devices. Parents, however, may be disgusted, shocked, or angry at such behavior and punish the child in an attempt to make him conform to the patterns of behavior they expect. From the child's point of view the threat inherent in his perception of his parents behavior does not permit him to see the situation as they do. Their punishment is likely to appear only as further proof of what he already feels. This threat to self forces him to defend his position and his concept of himself is more firmly entrenched than ever. Thus he is driven to greater efforts in his attempts to gain a feeling of self-esteem, which again may result in punishment, and so the cycle may be repeated over and over. (p. 174)

Symonds (1951) reveals the considerable interaction between psychoanalytically defined ego processes and the self. In this context he describes the role of aggression as a means by which threats to self integrity are warded off and self-esteem and integrity are preserved.

Rogers (1951), viewing behavior from a phenomenological framework, but ascribing more importance to the role of unconscious processes than Snygg and Combs, stresses the organizing role of the self-concept in behavior. He states that "most of the ways of behaving which are adopted by the organism are those consistent with the concept of self" (p. 507). Maladjustment

results when experiences which are not congruent with the person's self image are denied to consciousness and thereby lead to an increasing opposition between reality and self. Increased defensiveness leads to feelings of hostility "toward other people whose behavior in his eyes, represents his own denied feelings" (Hall, Lindzey, p. 487). Consequently, when a person feels threatened by aggressive impulses he may tend to criticize or act aggressively toward others whom he perceives as acting in aggressive ways. Hilgard (1949) addresses himself to the importance of self as a unifying concept in explaining human adjustment motives. He points out that the idea of defense mechanism described in the Freudian ego implies a self reference, and that defenses are not understandable without a concept of self. Self referent notions are particularly important to account for those cases in which threat or anxiety have become infused with guilt feelings. The element of self deception which is characteristic of defenses arises as a means of bolstering or preserving self-esteem. In this context displaced aggression contains the elements of self deception that are manifested "because of a more

fundamental need to maintain or restore self-esteem. Anything belittling to the self is to be avoided. . . . What is feared is loss of status, loss of security of the self. That is why aspects of the self which are disapproved are disguised" (p. 352).

Maslow (1954), rejecting the instinctual basis for destructiveness in children, posits instead a reactive, defensive interpretation of hostility. He claims the critical variable in determining the relative frequency of primitive, destructive behaviors lies along the dimension of security and insecurity. Insecure persons who are "basically thwarted, or threatened in /their/ needs for safety, love, belongingness, and self-esteem . . . will show more selfishness, hatred, aggression, and destructiveness" (p. 172). Lecky (1954) held to the notion that the individual is engaged in an inevitable striving for unity and self consistency so that in the face of insult or unjust treatment he was predisposed to retaliate in "a purposive effort of the organization /self/ to rid itself of inconsistency" (p. 97). Pepitone (1964) acknowledges that actual or threatened loss of status, self-esteem, and security have been cited as basic determinants of aggression. Perceiving that an

individual's self-concept is inextricably interwoven with his environment, Jersild (1952) describes the impact of the social milieu on self-concept as consisting of "reflected appraisals" from others. If the predominant attitudes of significant persons have been ones of disapproval, dissatisfaction, and hostility toward the child, then he will hold a similar view of the world. In this case the child vigilantly and alertly defends the self picture he has acquired by attributing or ascribing to others those qualities or traits he wishes not to recognize in himself. Therefore, "a person who is full of grievances and who harbors a great deal of hostility may externalize and see others as hostile and regard his own reaction only as a legitimate and necessary way of protecting himself" (p. 15).

Empirical Studies

Studies reported in this review represent various conceptual frameworks in general psychology, but their results and procedures may be interpreted to have bearing on important aspects of the present problem. Wylie (1968), in her succinct review and

analysis of the present status of self theory, has revealed the difficulties of organizing the theoretical and research efforts in this area according to any consistent frame of reference with respect to the psychological processes of motivation, cognition, and learning. Available studies will therefore be examined for their specific relevance to the major variables under investigation viz. frustration, self-esteem, and aggression.

White and Lippitt (1960) investigated the effects upon individual and group behavior of three variations in social atmosphere that were labeled as democratic, authoritatian, and laissez-faire. Their procedure was to select twenty ten year old boys who were divided into four five-member groups that were matched on such factors as interpersonal relationships, intellectual, physical, and socioeconomic status, and personality characteristics. Four adults were trained to consistently apply, in their leadership behaviors with the groups, the democratic, autocratic, and laissez-faire philosophies. Each leader met with each group in club activities for six week periods and changed his leadership style with each transition to

a new group. The behaviors of the leaders and reaction of the subjects were observed and recorded using such methods and categories as stenographic records, running interpretative accounts, social interaction accounts, group structure analyses, and intergroup running accounts.

Results of particular interest in terms of the statistical and qualitative differences between the behavior of subjects under the three leadership conditions related to the amount of hostility and aggression shown under the autocratic climate. The subjects in this condition displayed significantly greater amounts of aggressive behavior on each of the dimensions in this area--hostile, unfriendly, resistant, demands attention, hostile criticism, competitive. In analyzing these results the authors advance the thesis that aggression was most often oriented toward restoring the self-esteem. The subjects in the autocratic groups presumably were frustrated by their dictatorial adult leader, and unable to aggress against him, released their resentments upon other club members. However, the weakest and most passive boys were never chosen as targets for aggression but rather individuals who

were equal or superior to the aggressor on physical and self-assertive characteristics. In this way status and self-esteem were enhanced since to aggress against less able members in the group would only serve to establish a relative superiority already taken for granted. Such an interpretation directly challenges the cathartic basis for aggression, and aggression as related to Freudian defense processes. The investigators relate their findings to self-esteem by asserting "this way of looking at the problem brings out more clearly the difference between the blowing-off-steam hypothesis and the displaced-aggression hypothesis, on the one hand, and the ego-need hypothesis on the other. If the only requisite were to 'blow-off-steam' or to 'displace aggression,' the easiest and safest object of aggression would presumably always be the one chosen; but if the need is for a restoration of status or self-esteem, the chosen object is likely to be one who, without being actually too formidable, nevertheless has some aspect that is--or can be made to appear--strong and dangerous" (p. 166).

Several studies have reported the apparent greater predisposition to hostility and aggression

among individuals who have been experimentally confronted with an actual or threatened loss of status, socially based self-esteem, or security. Results from such investigations have shown that the individual with an unfavorable self-image in this case is more likely to hold initially negative attitudes toward strangers he encounters (Berkowitz, 1960). Rosenbaum and DeCharms (1960) measured residual hostility of college students who were preclassified as high and low self-esteem following a simulated interaction in which each was verbally attacked by using direct affronts to their self-esteem. When both high and low self-esteem subjects were denied the opportunity to reply directly to the aggressor, low self-esteem individuals showed more residual hostility. The investigators explain that the attack on the self picture of the person low in self-esteem may engender more frustration and hence more aggression.

A study by McClelland and Apicella (1945) used a procedure in which college students were required to reach a final goal and to state their own goals after each trial. False scores were reported so that subjects were unable to reach their set goals on two out of every

three trials. The frustration resulting from failure was greatly increased by the experimenter's derogatory remarks which involved calling attention to his failure, comparing him to others to his disadvantage, complaining of his ruinous effects on the experiment, and becoming verbally aggressive and abusive toward him. The results showed that severely frustrated subjects not only gave more overt reactions than those moderately frustrated in this manner, but as the experimenter's hostility increased the responses proportionately shifted toward anger and aggression. Other studies in this same laboratory tradition by Ax (1953), Feshbach (1955), and Pepitone and Reichling (1955) presumably threatened subjects with a loss of status by insulting their level of ability, motivation, physical attractiveness, maturity, and so forth. The results showed various forms of more or less strong hostility.

Clinical Literature

There are very few quantitative investigations of the effects of self-esteem and instigation to aggression. However, despite the paucity of data, or

perhaps because of it, psychiatrists, psychologists, and mental health workers generally have made numerous observations supporting the basis for a relationship between feelings of self adequacy and the proclivity for aggression. Albert Cohen (1955), for example, describes the formation of the delinquent subculture and the anti-social behaviors associated with it as arising from status deprivations. He reasons that the delinquent grows up in a culture in which middle-class attitudes and aspirations are emphasized and that ambition, hard work, self control, respect for property and postponement of gratifications lead to academic successes, financial achievement and rewards of high social status. The background of the working-class child, however, leaves him ill-equipped to meet these standards and he is unable to meet the terms for success established by middle-class institutions. He encounters serious problems of status deprivation, frustration, and a resulting decline in self-esteem.

Cohen theorizes that "nonutilitarian, malicious, and negative" values are substituted as a basic reaction formation to repudiate middle-class norms. Berkowitz (1962) essentially supports this view and adds that

"any status deprivations felt by working-class children should certainly be regarded as frustrations capable of arousing anger" (p. 310). Aichorn's (1935) proposition, as described by Coopersmith (1967), suggests "that the delinquent personality is characterized by a soft, weak center of uncertainty, which is surrounded by a tougher, masking outer layer. The external presence of toughness represents a disguise against actual weakness and an attempt to gain illicitly what could not be obtained by more direct and appropriate means" (p. 137).

Redl and Wineman (1957) describe the anti-social behaviors of extremely hyperaggressive children in a special treatment setting. The characteristic deficiencies noted in their behaviors were described as ego weaknesses related to low frustration tolerances; difficulty in coping with anxiety, fear, and insecurity; and low resistances to temptation. The writers avoid etiological interpretations as to the source of these aggressive behaviors, but implicit to their therapeutic techniques for manipulating surface behavior is a recognition of the importance of maintaining and supporting the child's self-esteem. The relevance of

their descriptions lie in the similarity between the conditions which are expected to give rise to highly aggressive behaviors and those conditions which are expected to give rise to low self-esteem.

Reise (1962) describes treatment processes for the severely deprived and cruelly neglected child as requiring an alteration in the child's material surroundings as well as a psychological alteration of the human relationships psychodynamically. The fundamentally disturbed mother-child-family relationship is emphasized as an integral part of the treatment procedure since it is basically from this relationship that mutual rejection leads to a vicious circle of madness and retaliation. A child caught up in a cycle of neglect, rejection, and adult ambivalence interprets the world in a hurt and sensitized way, but ". . . if conditions can be offered so the children feel safe, so that they can retain their however frail integral selves and be tended to with tact, insight, and regard, they will develop and will actually change. Change will now be accepted. It will be associated with an increasing sense of well being, with an awareness that one's identity can be maintained and completed rather

than mutilated" (p. 2). The child's improvement in this respect is frequently measured in later stages of the treatment process in terms of his identity in relation to objects. Objects made by children "become a means of self-esteem, of self improvement, of redeemed hostility" (p. 300).

The importance of self-esteem is frequently illustrated in relation to descriptions of children who have shown a high incidence of aggressive transactions with their environment in either regular or special education (emotionally disturbed) programs. These same children are often stated to have low frustration tolerances and are invariably described by clinical observers to have concomitant low or inadequate self concepts. Morse (1964), for example, in describing the central role which empathy plays in the teacher-pupil process in teaching emotionally disturbed children points out that "an inadequate self concept is more often at the bottom of acting-out than sociopathy" (p. 36). A sampling of special classes for emotionally disturbed children throughout the United States disclosed that not only were a significant number of teachers registering high concern

over behavior categorized as hostile, aggressive, and acting out, but the causes most commonly attributed to the production of this behavior were seen by teachers as highly related to such self evaluative dimensions as "lack of self confidence," "poor self image," "fears rejection," and so forth" (Morse, Cutler, Fink, 1964). Others have described the negative impact of the social and educational experiences in the school milieu on the individual's sense of self worth which often contributes to frustration, anger, and aggressiveness (Morse, 1964; Glasser, 1964, 1969; Holt, 1964, 1967, 1969).

The prophylatic value of self concept as an insulation against the anti-social behaviors characteristically associated with the norm violating delinquent child was suggested in a four year follow-up study by Reckless, Dinitz, and Murray (1956). These writers identified 125 "good" boys and 101 "bad" boys based on teacher nomination as to their likelihood of ever experiencing police or juvenile court contacts. Boys in each group were administered a delinquency proneness scale, social responsibility scale and a personality inventory, and an occupational preference questionnaire. Each was interviewed as to his concept

of self, family, and interpersonal relations. A major percentage of the boys in each case were re-located four years later and the entire instrument and information gathering procedure was repeated. The results revealed that new teachers tended to renominate children in each group according to their original classifications of "good" or "bad" four years earlier. Parents' and boys' responses in most cases were consistent with their earlier performances. Only four of the "good" boys had had any police contacts, whereas 27 (39%) of the "bad" boys had had any serious and frequent police and court contacts. It appeared that the "bad" boys were more vulnerable to delinquency, and on the basis of the scale scores and interview data, the investigators concluded that the quality of "self concept" was the discriminating factor. The "bad" boys perceived themselves as being in future trouble and received agreement from their mothers and teachers. The "good" boys saw themselves as unlikely to get into trouble with corresponding agreement from their mothers and teachers in this regard.

Davidson and Lang (1960) discovered, in part, that a significant relationship existed between the low

self-concepts reported by economically deprived children and the incidence of such classroom misbehaviors as hostility, defiance, and destructiveness. The purpose of their investigation was to relate children's perceptions of their teachers' feelings toward them to self-concept, academic achievement, and classroom behavior. A total of 203 boys and girls from fourth, fifth, and sixth grade advanced reading classes were selected and divided into upper, middle, and lower socioeconomic groups based on the father's and mother's occupation. Self-concept and perceived teacher feelings were obtained in response to an adjective check list on two separate administrations using the stimulus cues "I think I am" and "my teacher thinks I am." In turn, teachers rated their pupils on academic achievement with respect to a four-point scale ranging from "very well" to "very poor." Behavioral or personality characteristics of each child were rated by teachers in terms of ten traits that were weighted according to their desirability or undesirability. Results of interest showed that teachers were less favorably inclined toward deprived children despite adequate school achievement. Furthermore, low socioeconomic

children accurately perceived the teachers' rejection of them and that this negative perception was translated into a tendency for the child to lower his efforts to achieve and to increase the probability of engaging in such misbehaviors as described earlier. The investigators describe the circular and reciprocal nature of this process by stating that "his poor school achievement will aggravate the negative attitudes of his teachers toward him, which in turn will affect his self confidence, and so on" (p. 434).

Summary

The literature on aggression and self-concept indicates a functional relationship between these two variables. Personality theorists are generally agreed on the importance of self-referent feelings and attitudes in accounting for the production of hostile and aggressive behavior in individuals. Furthermore, empirical and clinical evidence provides additional support for assuming that an individual's instigation to aggression is related to his level of self regard. Others have suggested that the observed differences in aggression are attributable to biological or environmental determinants.

The present research was designed to test the extent to which self-concept was related to differences in the expression of aggression. If treatments that manipulate the arousal of aggressive behaviors are shown to be systematically related to self-concept, this would suggest that self-concept may be one antecedent condition to aggression. If, on the other hand, self-concept does not vary significantly in relation to the amount of aggression, then self-concept may not necessarily be a factor influencing aggressive behaviors and aggression may merely be a function of environmental factors.

Therefore, the present research was undertaken to investigate frustration and self-concept in relation to aggression in emotionally disturbed and normal children.

CHAPTER III

DESIGN AND PROCEDURES

A review of the literature related to frustration, aggression, and self-esteem revealed no investigation that had sought to experimentally demonstrate the relationship between these variables.

The present study was designed to subject the hypothesized relation between aggression and self-concept to experimental scrutiny. While the present work will not prove a functional relationship between self-esteem and aggression, a demonstration of the relationship of these variables could lend support to such an interpretation. In addition, the study attempted to uncover any association of these variables with emotionally disturbed or normal children in special and regular class placements.

Specifically, the following hypotheses were tested:

Theoretical Hypotheses

Hypothesis 1: Verbal and non-verbal aggression will be greater for emotionally disturbed subjects in special education classes than for normal pupils in regular classes.

Hypothesis 2: Verbal and non-verbal aggression will be greater for both groups of subjects under conditions of frustration than for both groups of subjects under conditions of no frustration.

Hypothesis 3: Verbal and non-verbal expressions of aggression will be greater for subjects with measured low self-concepts than for subjects with high measured self concepts.

Hypothesis 4: The increase in aggression between subjects in frustrated over non-frustrated conditions will be greater for emotionally disturbed children in special classes than for normal children in regular classes.

Hypothesis 5: The difference in aggression between low self concept over high self-concept subjects will be greater under frustration than non-frustration.

Hypothesis 6: The difference in aggression between high and low self-concept subjects will be greater for emotionally disturbed children in special classes than for normal children in regular classes.

Hypothesis 7: The difference in aggression between the frustrated and non-frustrated groups will be equal for high self-concept emotionally disturbed

and normal subjects from special and regular classes. The difference in aggression between the frustrated and non-frustrated groups will be greater for low self-concept emotionally disturbed subjects than for normal subjects.

Subjects

The subjects for the final sample of this study consisted of 32 special class and 32 regular class male children selected from six public school elementary programs in New Castle County of the State of Delaware. Subjects were 9 and 10 years of age.[1] Two restrictions were imposed on the selection of children from special classes within these schools: (a) children were to be enrolled in a special class program for the socially-emotionally maladjusted as administered under the State reimbursable code for such classes; (b) classroom units were to be organized and operated as self-contained programs. The former restriction was designed to introduce some degree of uniformity as to the most salient

[1]Exception to these ages was the inclusion of four 11 year old children--three of whom attained their eleventh birthday between administration of the self-esteem measures in the initial phase of the study and the final experimental treatment procedures. The fourth child, who was 11 years, 3 months of age, was included in the special class-high self-concept-frustration treatment condition owing to the lack of available younger aged subjects in this experimental classification.

debilitating factor shown in the child's functioning. The latter restriction was to avoid the possibility of selecting children who had conflicting and uncertain program loyalties and identification. In this respect the child's functional and administrative relationship was established with the special class program.

Confederates

Three children of the same sex (male) and age (10 years) were selected as confederates and assigned as "frustrators" and "helpers" to the experimental treatment phases of the study. Although the confederates were essentially the age peers of each of the subjects participating in the study, they were selected from separate elementary schools in the same school district to assure their anonymity. This provision was designed to control for the effects of variability in the facilitation or inhibition of aggression among subjects having previous acquaintance with the confederate.

Procedure

A sample of 9 and 10 year old emotionally disturbed special class male children formed the basis for selecting approximately equal numbers of equivalent normal children from regular classes randomly chosen

within the same schools.[2] A total of 103 subjects, 48 emotionally disturbed and 55 normal children, were rated by teachers using the Behavior Rating Form (shown in Appendix A). All children were tested in individual sessions with the Coopersmith Self-Esteem Inventory (shown in Appendix B) and the Projective Self-Esteem Inventory developed especially for this study.

Behavior Rating Form.--Teachers in each class type were then given a Behavior Rating Form and asked to rate children in their classes according to the following instructions:

> "I would like to have you rate each 9 and 10 year old boy in your room with respect to the characteristics described on the following page. Make every attempt to accurately determine how you think the child acts in each situation. In some cases you may feel there is not enough information on which to make a reliable judgement. In those instances rate the child according to how you think the child would or might act on the characteristic described in each item.

---

[2]However, the ultimate number and location of disturbed children was influenced by factors of geographical accessibility, the extent to which cooperation was secured from local school districts, the relative dearth of self-contained special classes, and the specific requirements imposed by the study design in relation to age and sex of subjects. This, of course, limits the extent of the generalizations that can be made from the study.

> Please put the child's full name, birth date, father's occupation (be as specific as possible--barber, diemaker, insurance agent, etc.) and educational level (years of formal schooling completed--2 years college, 9th grade, etc.).
> Your cooperation in this matter is appreciated."

This instrument provides a rating for each child on a 13-item five-point scale of behaviors presumed to be related to self-esteem. As Coopersmith (1967) described, the items in this rating schedule refer "to such behaviors as the child's reactions to failure, self confidence in a new situation, sociability with peers, and the need for encouragement and reassurance" (p. 10). Total scores ranged from 13 (low self-esteem) to 65 (high self-esteem).

Self-Esteem Inventory--Children who were rated on the BRF were then escorted individually to a small separate room within the school where the Coopersmith Self-Esteem Inventory was then administered using a modified Q-sort technique. Upon arrival to the testing room, the child was seated facing the examiner and the following instructions were read to him:

> "In front of you is a stack of cards that you can have fun sorting. If the sentence on the card tells how you usually feel, then put the card in the box in front of you that is marked "LIKE ME" (E points to box with this

marking). If the sentence does not tell how you usually feel, then put the card in the box marked "UNLIKE ME" (E points to box).

There are no right or wrong answers. Read each card out loud before you put it into either of the boxes.

O.K.? Let's try one to see how it works."

Each subject's response was recorded immediately on a predesigned score sheet that facilitated the testing process and significantly reduced the time required between subjects. In cases where a subject showed apprehension over the recording of his responses, the examiner reassuringly stated, "remember, there are no right or wrong answers and this (i.e., marking responses on score sheet) helps me to remember which box you put the cards in." In most cases, however, the subjects revealed little or no concern over the recording process. Children who had difficulty reading the cards were given minimal assistance that centered on the specific word(s) where the difficulty was experienced. In cases where more chronic reading disabilities were evident, the examiner first read the sentence but requested the subject to independently repeat the entire phrase.

The test was scored by totalling the correct

"LIKE ME" and "UNLIKE ME" responses for each of the subscales that indicate high self-esteem and then adding these together to derive a raw score total for the composite self-esteem. Thus a range of 0-26 would be possible for the self subscale, and a range of 0-8 on each of the remaining subscales (social, home, school). A subject's composite self-esteem score then may range between 0-50.

Projective Self-Esteem

Immediately following completion of the SEI the subject was administered the Projective Self-Esteem measure according to the following instructions.

> E says, "Now we are going to play another kind of game. In this game I am going to show you some pictures and see how good you are at telling me a story about how the boy you will see in each picture feels." As E presents each picture he states:
>
> 1. "Here is a picture of a boy on a playground with other children. Tell me about him--how does he feel when he thinks about playing with others?
>
>   a. How does he feel most of the time. If he feels happy and good then put this picture (E holds up silhouette figure of a boy) here (E points to extreme right of scale). If he feels unhappy and bad then put the picture here (E points to extreme left of scale). If he sometimes feels happy and good and sometimes feels unhappy and bad then put the picture here

(E points to center of scale). Or you can put the picture anywhere between the others (E explains that the immediate right and left of center represents a little more or less of each extreme)."

2. "Here is a picture of a boy going to school. Tell me about him--how does he feel when he thinks about school?"

   a. Repeat "a" above.

3. "Here is a picture of a boy with his family. Tell me about him--how does he feel when he thinks about his family?"

   a. Repeat "a" above.

4. "Here is a picture of a boy looking at himself in a mirror. Tell me about him--how does he feel about himself?"

   a. Repeat "a" above.

5. "Suppose I tell you that this boy feels bad and unhappy in all of these places--with other children; in school; with his family; with himself. (E places a silhouette figure at the left extreme of all four scales.) Which one of these (E points and scans all four pictures) makes him feel worst. Show me by picking up the picture and handing it to me. Which one makes him feel next worst, etc."

Verbatim responses were recorded following the initial instructions and presentation of each picture (Appendix C). When the subject indicated that he was finished with his story then instructions were given regarding the placement of the silhouette figure on the

scale that was inserted below each picture. A low self estimate was represented on the left extreme of the scale (numerical value = 1) and a high self estimate was represented on the right extreme of the scale (numerical value = 5). In addition, a forced ranking yielded a salience measure for each of the four dimensions of self regard presumably represented by each of the pictures.

Assignments of Subjects to Experimental Groups

Subjects were subdivided into high and low self-esteem categories on the basis of pre-testing results using the Coopersmith Self-Esteem Inventory. The distribution of scores for the total sample of individuals in special classes is shown in Table 1, and the distribution of scores for the total sample of subjects in regular classes is shown in Table 2. The two groups differed significantly ($t = 3.29$, $p < .02$). Since subjects in the regular classes scored higher as a group than subjects in the special classes, the total range of scores were more evenly matched by using only those score values between 23-47 for each group. Consequently,

TABLE 1

DISTRIBUTION OF SCORES ON
COOPERSMITH SELF-ESTEEM INVENTORY FOR
SPECIAL CLASS SUBJECTS IN TOTAL SAMPLE

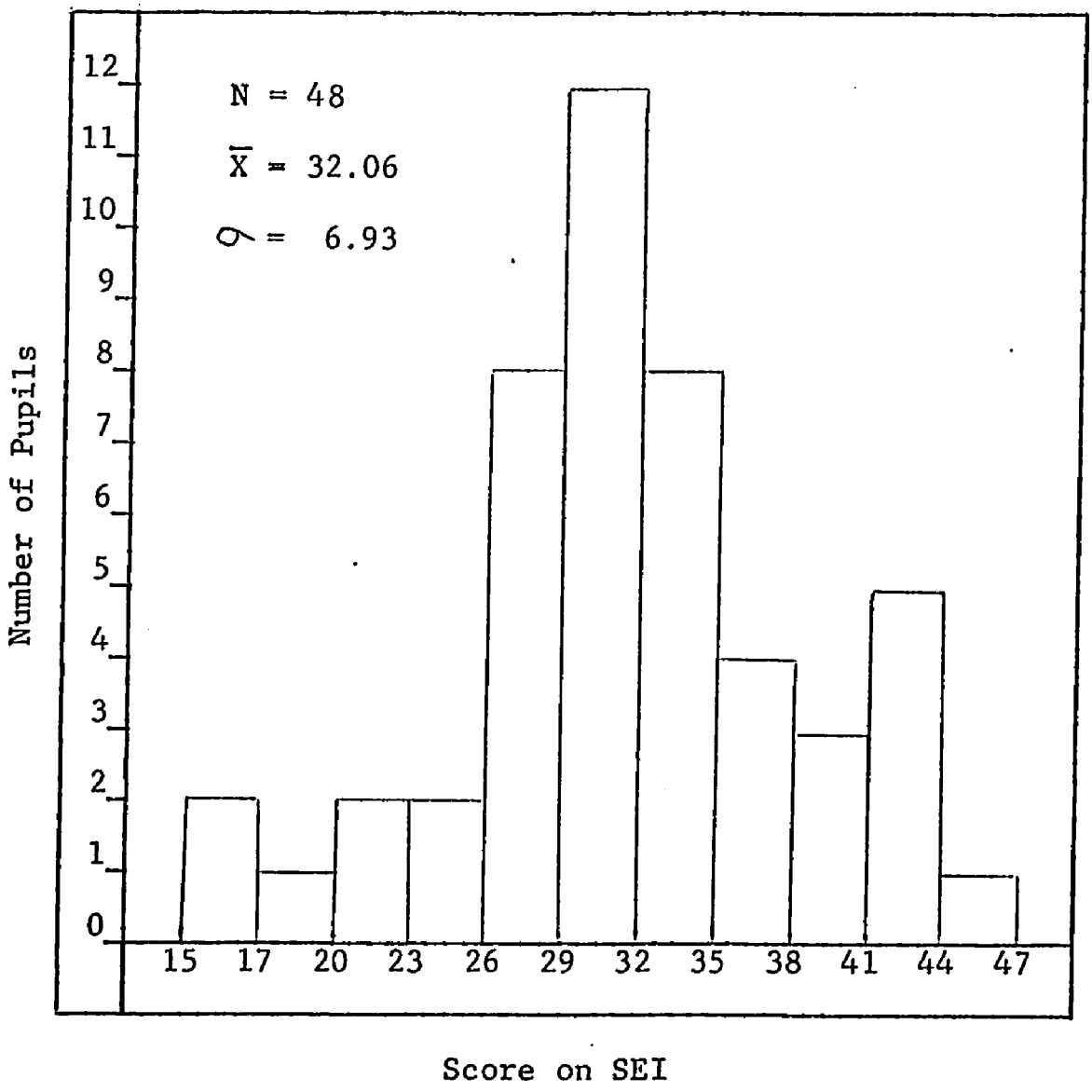
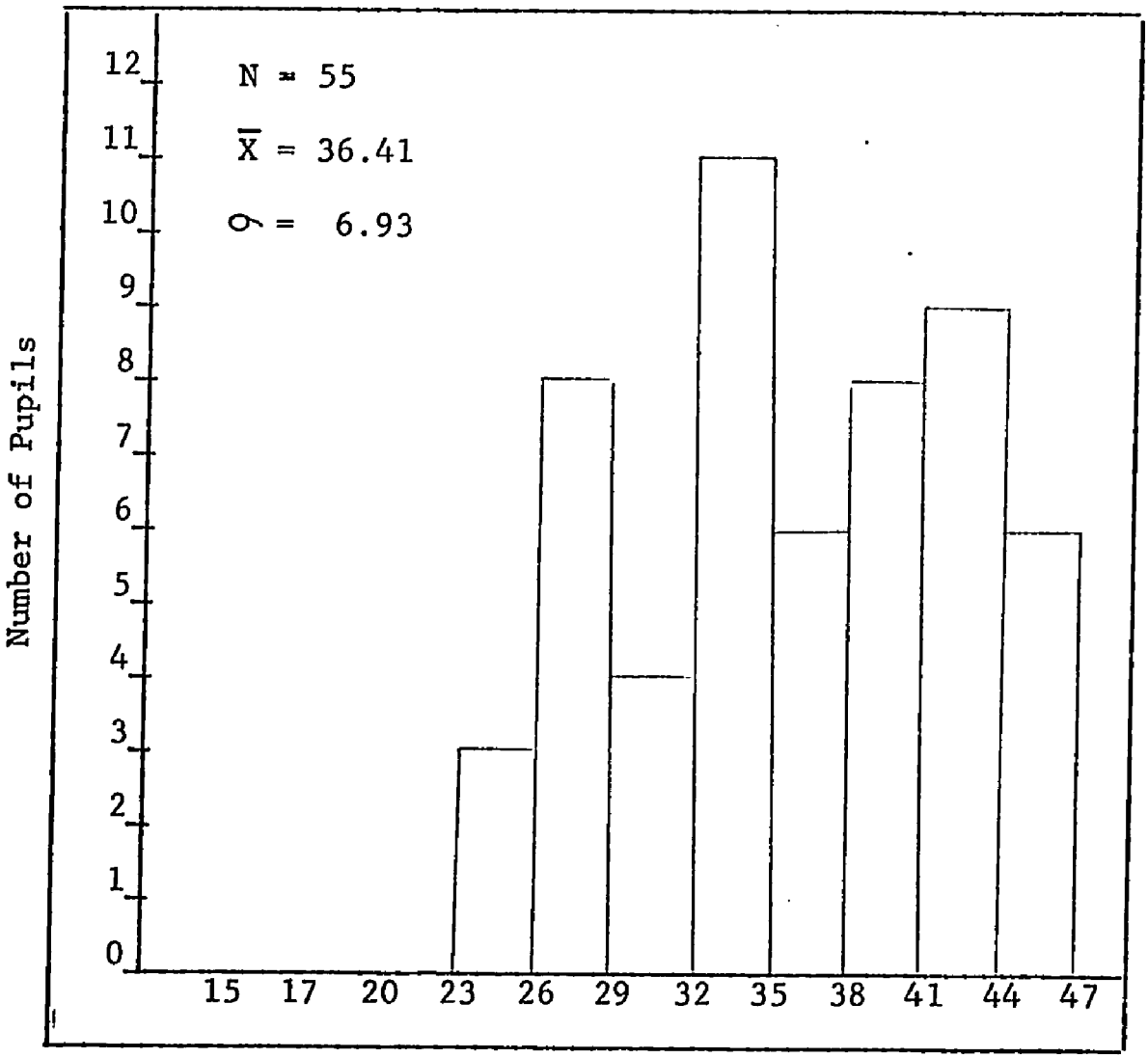


TABLE 2

DISTRIBUTION OF SCORES ON
COOPERSMITH SELF-ESTEEM INVENTORY FOR
REGULAR CLASS SUBJECTS IN TOTAL SAMPLE



special class subjects who scored between 15-22 were dropped from the study. Similarly, regular class subjects who scored beyond 45 were excluded from the study since the highest score for the special class group at this extreme of the range was 45. Having established the upper and lower limits of the range of scores in this manner, the median value of 34 was selected for dividing each distribution into high and low self-esteem categories. Subjects whose scores were in the range 24-33 were designated as low self-esteem, whereas individuals who scored between 35-45 were categorized as high self-esteem.

Score values in the special class high self-esteem group were then compared with score values in the regular class high self-esteem group and equal numbers (N = 16) of approximately equivalent score levels were selected from each group. A similar process was used in selecting the scores of the low self-esteem groups from each type of class. Score values for the two self-esteem levels and class types were then compared for mean value similarity, as illustrated in Table 3, and found to be approximately similar. Differences were not statistically significant for the subsample groups.

TABLE 3

SCORE DISTRIBUTIONS AND MEAN VALUES FOR NORMAL AND EMOTIONALLY DISTURBED SUBJECTS SELECTED FOR EQUIVALENT SELF-ESTEEM

High Self-Esteem		Low Self-Esteem	
Regular Class (Normal)	Special Class (Disturbed)	Regular Class (Normal)	Special Class (Disturbed)
45	45	33	33
45	43	33	33
44	43	32	32
43	42	32	32
42	42	31	31
42	41	30	31
41	39	29	31
40	38	29	30
39	37	28	30
38	36	27	29
37	36	27	29
36	35	27	27
36	35	27	27
35	35	26	27
35	35	26	25
35	35	24	25
N = 16	N = 16	N = 16	N = 16
$\bar{X}$ = 39.56	$\bar{X}$ = 38.56	$\bar{X}$ = 28.8	$\bar{X}$ = 29.5
σ = 3.7	σ = 3.6	σ = 2.8	σ = 2.6
t = .78, n.s.		t = .72, n.s.	

Emotionally disturbed and normal subjects from each of the high-low self-esteem groups in both special and regular classes were then randomly assigned to a frustration (experimental) or non-frustration (control) treatment condition. In all, within each of the eight combinations of the three variables under study, there were eight subjects. The treatment conditions were:

1. Emotionally disturbed--high self-concept--non-frustration.
2. Emotionally disturbed--low self-concept--non-frustration.
3. Emotionally disturbed--high self-concept--frustration.
4. Emotionally disturbed--low self-concept--frustration.
5. Normal--high self-concept--non-frustration.
6. Normal--low self-concept--non-frustration.
7. Normal--high self-concept--frustration.
8. Normal--low self-concept--frustration

Selection of Confederates

Principals and teachers of each school were asked to nominate a 10 year old boy who showed the following characteristics to a high or unusual degree:

a. trustworthy--unlikely to violate or betray adult confidences and trust.

b. intelligent, alert, and cooperative.

c. average height and weight for his age group.

d. above average in school performance.

e. dependable--able to carry out instructions with minimal confusion or difficulty as compared to others of his age and group.

Since the confederate's role was crucial to the experiment, the investigator then arranged a pre-interview with several possible candidates identified by school personnel in order to evaluate his enthusiasm and potential for carrying out the required experimental procedures. Responsibilities of the confederate were uniformly presented and explained to each child selected and individual training sessions were approximately 45 minutes in length. Sessions were terminated when it was demonstrated that a reasonable degree of familiarity and competence had been achieved by the confederates with their anticipated role and responsibilities.

The following instructions were read and explained to each of the three confederates used in the study:

Instructions to the Confederate

"I have some jobs for you to do that will be fun. You will have to be able to keep secrets very well and sometimes be able to act differently than you usually do with other children.

You will be working with other children, one at a time, building different things with these blocks (E points to the blocks on the table before him). I'm going to read you the directions that I'll be reading to each boy, show you the jobs that each will be doing, and then explain what I want you to do as your job. O.K.? (E reads the directions to be read to each S and proceeds to demonstrate each block building activity in turn.)

There are three parts to your job:

1. The first part is to help certain boys do their block building jobs as best you can. I will tell you in advance which boys you are to help as much as you can to finish their work.

2. For certain boys, instead of really helping them, you're going to be trying to make it hard for them to do their job and to finish their work. If he goes too fast in the time he has then you can slow his work by (a) putting blocks on the pile in the wrong way (E demonstrates) and (b) you must be sure to not let him finish his job by always being sure to keep the last block in your hand so he can't use it. Just before he finishes you can press the last block on the pile in a slanting way so that some or all of the pile falls down (E demonstrates). Remember: it is very important to let each boy come close to almost finishing his job before you have to make the blocks fall. I will tell you which boys to not help in their work before you see them.

> 3. After you work with each boy you see, whether you help or don't help him in his jobs, you will pick up the blocks and move into the next room and shut the door behind you. I will give some directions to the boy that you will have just worked with and tell him that you are going to be doing the same kind of job with the blocks that you both just did together. He will be told that he can 'slow' or 'help' your work with the blocks by pressing these buttons (E points to Ss control panel) which will light up the 'red' or 'green' light on this box (E points to response panel). O.K.? Any questions?"

Experimental Procedure

The experiment was conducted in two phases and followed, with few modifications, the procedures used by Mallick (in press).

Phase One.--The subjects (Ss)in the experimental group were frustrated by the like-sex confederates. The Ss of the control groups were not frustrated (instructions shown in Appendix D). Each S in the frustration condition was asked to complete five easy block-building assignments, one by one, each to be finished within 1 minute 10 seconds (Appendix E). S was promised a reward of one nickle per completed assignment. The confederate was introduced to the S as his co-worker, but neither promised nor given money. After preliminary instruction (shown in Appendix F) each S was given five

nickles with the assurance that he would earn them easily by successfully completing the assignment. None of the Ss, however, were able to complete any assignments since the previously trained confederate created hinderances in his work. As a result every S returned all the nickles given at the beginning, one by one.

At the end of the first phase every S was given a graphic rating scale to show his "like-dislike" of the confederate (Appendix H). It consisted of a line eight inches long divided equally into five parts labeled on a continuum from "I like him very much" at the left extreme to "I really don't like him at all" at the right extreme. The contents of the scale were read to the S along with the instructions for answering (instructions shown in Appendix G). The score was derived by measuring the distance in centimeters from the left extreme of the scale to the check mark made by the S. The higher the score the greater the dislike of the S for the confederate.

Phase Two--This phase was designed to obtain a non-verbal measure of residual hostility for each subject. The subject was told that the confederate,

who was sitting in another room, was doing a block-building assignment (instructions shown in Appendix I). The S could either "slow down" or "help" in speeding the confederate's work by pushing either of the two electric switches on a 6 x 10 x 3½ metal box placed before him. The S could push the buttons only up to a total of 20 times. The "slowing" and "helping" switches were connected to an electric circuit activating a red or green light respectively, in the other room. The S was assured that his response would not be shown to anybody, and he was at liberty to push any switch as he pleased. He was told to begin pushing the switches when given a light signal. The experimenter then went to the next room, gave the light signal to the S by pushing a switch there, and started recording Ss responses from a response panel located in his room. The aggression score of each S was the number of times he pushed the "slowing" switch out of the total of 20 pushes.

To counterbalance any effects of the location of switches on response tendencies the functions of the switches were alternated for one-half of the Ss in each condition. The time of day and the sequence of

the two conditions were counterbalanced systematically for all groups.

At the end of the experimental session each S was told that his performance was excellent. To maintain the secrecy he was asked not to discuss the experiment on the plea that other children might exceed his excellent (hypothetical) score. The experimenter took special care to retain the confidence of the confederates by rewarding them daily with lunch, sweets, and special favors. At the completion of the study, all the Ss in the frustration treatment groups were told about the role of the confederate and were quite pleased at receiving candy bars distributed by the latter.

Analysis of Data

A three-way analysis of variance was carried out in which the experimental data from the two levels of each factor (frustration, adjustment status, and self-esteem) was analyzed. Adjustment status and self-concept level were considered fixed factors, while the experimental condition of frustration was classified as a random factor which was included to control potential variability in the amount of aggression shown.

The various treatment combinations resulting from

the 2 x 2 x 2 factorial arrangement were analyzed for significance of main effects and interaction effects. The design of the study and number of subjects falling into each of the cells is schematically illustrated in Figure 1.

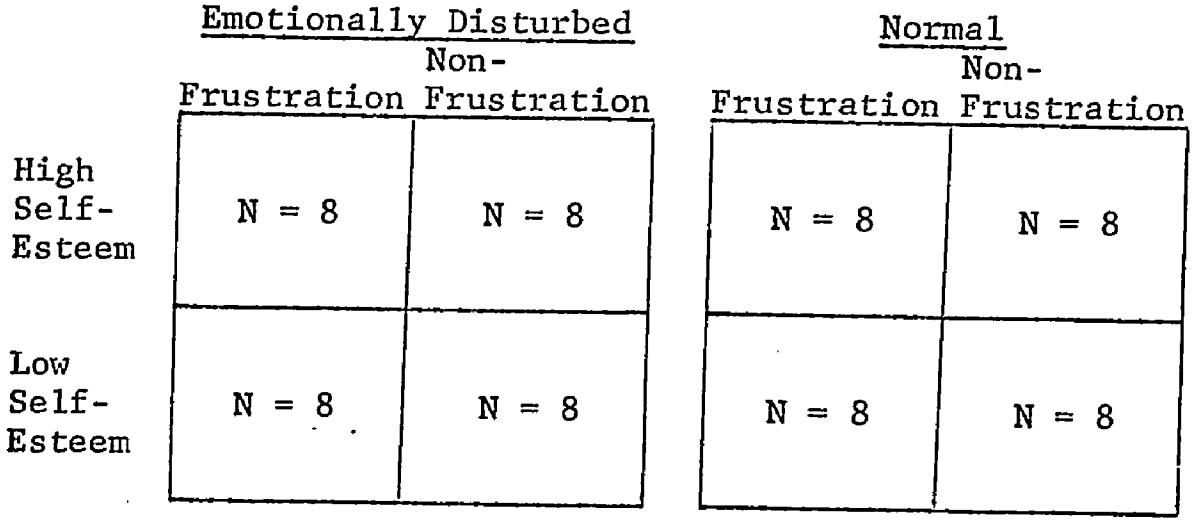


Figure 1. The basic 2 x 2 x 2 design with cell frequencies.

A correlational analysis was carried out to identify significant interrelationships between the following variables for each subject: individual item responses on the Self-Esteem Inventory, Projective Self-Esteem, and Behavior Rating Form; verbal and behavioral measures of aggression; socioeconomic class; and adjustment status.

CHAPTER IV

RESULTS

Analysis of results will proceed by consideration of each specific theoretical hypothesis proposed (Chapter III). Data to support or reject each hypothesis is presented in two forms: (1) analysis of variance of aggression scores for each of the two dependent variables are summarized for (a) verbal aggression--expressed as "like-dislike" rating, and (b) behavioral aggression--expressed as the total number of pushes of the "slowing" button; (2) multiple comparisons were made among the total mean aggression scores for each dependent variable for subjects in the different treatments using Duncan's multiple-range test.

Item scores and subscale scores of the Self-Esteem Inventory, the Projective Self-Esteem Inventory, and the Behavior Rating Form were intercorrelated for each individual along with socioeconomic class, verbal aggression, and behavioral aggression variables. However, no notably significant relationships resulted from this multivariate analysis and consequently only the specific correlational values pertaining to socioeconomic class and the dependent variables are reported in this chapter.

Hypothesis 1

Verbal and behavioral aggression will be greater for emotionally disturbed subjects in special education classes than for normal pupils in regular classes.

A. Verbal Aggression

Table 4 shows that the expression of verbal aggression is clearly associated with program status. For an α of .05, the required critical value of F for 2 and 56 degrees of freedom is approximately 3.17 so that the obtained F value of 4.21 is significant beyond the .05 level. The observed differences cannot therefore be attributed to chance factors but rather to the effect of the treatment variables. The null hypothesis of no differences is rejected in this case and leads to the interpretation that the expression of verbal aggression, following specific conditions of frustration, is dependent in part upon the adjustment status of the individual.

TABLE 4

SUMMARY OF ANALYSIS OF VARIANCE FOR VERBAL AGGRESSION

Source of Variance	df	SS	MS	F	P
Disturbed-Normal (D-N)	1	244.141	244.141	4.211	.05
Frustration-Nonfrustration (F-NF)	1	244.141	244.141	4.211	.05
Self-Esteem Level--High-Low (S-E)	1	.391	.391	.007	---
D-N x F-NF	1	47.266	47.266	.815	---
D-N x S-E	1	9.766	9.766	.168	---
F-NF x S-E	1	66.016	66.016	1.139	---
N-D x F-NF x S-E	1	19.141	19.141	.330	---
Within Group (Error)	56	3246.37	57.980		
TOTAL	63	3877.232	688.842		

Mean verbal aggression scores for the various levels of the experimental treatments are compared in Table 5. These results reveal that, when self-esteem is held equal, emotionally disturbed subjects in the special and regular class conditions did not differ significantly from each other with respect to mean aggression scores. Significantly higher mean aggression scores were shown for two of the special class groups (f, h) and one regular class group, however. These differences are significant at the .05 level.

B. Behavioral Aggression.

The F ratio of .159 reported in Table 6 is non-significant at the .05 level and this result fails to provide support for Hypothesis 1. When self-esteem is held equal, the expression of behavioral aggression following specific conditions of frustration is unrelated to adjustment category.

TABLE 5

MULTIPLE COMPARISONS OF MEAN DIFFERENCES BETWEEN GROUPS FOR VERBAL AGGRESSION

Treatments	Normal High Self Concept Frustration	Normal Low Self Concept Frustration	Normal Low Self Concept Non-frustration	Disturbed High Self Concept Frustration	Disturbed Low Self Concept Frustration	Disturbed Low Self Concept Non-frustration	Normal High Self Concept Non-frustration	Disturbed High Self Concept Non-frustration
Mean Aggression Scores	3.75	4.13	4.38	4.50	4.50	4.63	4.63	4.82
Order	a	b	c	d	e	f	g	h

Multiple Comparisons

	a	b	c	d	e	f	g	h	Shortest Significant Range
a	-	3.8	6.3	7.5	7.5	(8.8)*	(8.8)	(1.06)	R_2 = 7.61
b		-	2.5	3.7	3.7	5.0	5.0	6.8	R_3 = 8.01
c			-	1.2	1.2	2.5	2.5	4.3	R_4 = 8.27
d				-	0.0	1.3	1.3	3.1	R_5 = 8.46
e					-	1.3	1.3	3.1	R_6 = 8.61
f						-	0.0	1.8	R_7 = 8.72
g							-	1.8	R_8 = 8.82

*figures in parenthesis () - p .05.

TABLE 6

SUMMARY OF ANALYSIS OF VARIANCE FOR BEHAVIORAL AGGRESSION

Source of Variance	df	SS	MS	F	P
Disturbed-Normal (D-N)	1	2.250	2.250	.159	---
Frustration-Nonfrustration (F-NF)	1	18.062	18.062	1.274	---
High-Low Self-Esteem Level (S-E)	1	3.062	3.062	.216	---
D-N x F-NF	1	.562	.562	.040	---
D-N x S-E	1	10.563	10.563	.745	---
F-NF x S-E	1	1.000	1.000	.071	---
D-N x F-NF x S-E	1	12.250	12.250	.864	---
Within Group (Error)	56	794.000	14.179		
TOTAL	63	841.749	61.928		

Multiple comparisons of mean differences between groups for behavioral aggression are displayed in Table 7. Inasmuch as no significant differences in mean behavioral aggressions were revealed for any of the main effect or interaction effect variables under scrutiny in this study, reference to specific group mean differences will not be made when considering subsequent hypotheses related to behavioral aggression. The table is included here to complete understanding of precise group mean values and score trends.

TABLE 7

MULTIPLE COMPARISONS OF MEAN DIFFERENCES BETWEEN GROUPS FOR BEHAVIORAL AGGRESSION

Treatments	Disturbed High Self Concept Non-frustration	Disturbed Low Self Concept Non-frustration	Normal High Self Concept Frustration	Normal High Self Concept Non-frustration	Normal Low Self Concept Non-frustration	Disturbed Low Self Concept Frustration	Disturbed High Self Concept Frustration	Normal Low Self Concept Frustration
Mean Aggression Scores	5.38	5.63	5.75	6.00	6.13	6.25	7.25	8.13
Order	a	b	c	d	e	f	g	h

Multiple Comparisons

	a	b	c	d	e	f	g	h	Shortest Significant Range
a	-	.25	.37	.62	.75	.87	1.97	2.75	R_2 = 3.71
b		-	.12	.37	.50	.62	1.62	2.50	R_3 = 3.90
c			-	.25	.38	.50	1.50	2.38	R_4 = 4.03
d				-	.13	.25	1.25	2.13	R_5 = 4.12
e					-	.12	1.12	2.00	R_6 = 4.20
f						-	1.00	1.88	R_7 = 4.25
g							-	.88	R_8 = 4.30

Hypothesis 2

Verbal and behavioral aggression will be greater for both selected subgroups of subjects under conditions of frustration than for both subgroups of subjects under conditions of no frustration.

A. Verbal Aggression

The expression of verbal aggression was significantly related to the experimental treatments of frustration and non-frustration as evidenced by the F ratio of 4.211 ($p < .05$) reported for this variable in Table 4. The null hypothesis is again rejected and observed differences are attributed to the effects of the treatment conditions rather than sampling error. The verbal expression of aggression appears to be associated with the type of thwarting or non-thwarting experience encountered by subjects in the experimental treatments. Such experiences appear to elicit differential expressions of verbal aggression for subjects in either of the treatment conditions.

An examination of the mean score comparisons for verbal aggression in Table 5 shows the specific groups with which the above noted difference tends to be associated. Significantly higher mean aggression scores were recorded for special ($f = 4.63$, $h = 4.82$) and regular ($g = 4.63$) class non-frustration treatment groups. This result is in a direction opposite to that predicted by the above hypothesis for which the expression of verbal aggression is expected to be greater for subjects under conditions of frustration than non-frustration. (The interpretation of this finding is given in the following chapter.)

B. Behavioral Aggression

No significant differences were obtained with respect to the expression of behavioral aggression as it relates to the treatment conditions of frustration and non-frustration. The F ratio of 1.274 shown in Table 6 does not give support for hypothesis 2 and the null hypothesis in this case is accepted.

Hypothesis 3

Verbal and non-verbal expressions of aggression will be greater for subjects with measured low self-concepts than for subjects with high measured self-concepts.

This relationship was unsupported for both dependent variables. The F ratios of .007 (Table 4) and .216 (Table 6) for verbal and behavioral aggression, respectively, fail to establish a significant relationship of these variables with the experimental self-concept conditions.

Hypothesis 4

The increase in aggression between subjects in frustrated over non-frustrated conditions will be greater for the sample of emotionally disturbed children than for normal children.

The obtained F ratio value of .815 (Table 4) for verbal aggression and .040 (Table 5) for behavioral aggression do not provide support for this hypothesis.

Hypothesis 5

The difference in aggression between low self-concept over high self-concept subjects will be greater under frustration than non-frustration.

The results fail to support this hypothesis for

both dependent variables. The reported F ratio value of .168 (Table 4) for verbal aggression and .168 (Table 6) for behavioral aggression do not achieve statistical significance.

Hypothesis 6

The difference in aggression between high and low self-concept subjects will be greater for the sample of emotionally disturbed children than for normal children.

No support is given to this hypothesis based on the non-significant F ratio values reported for verbal aggression in Table 4 (1.139) and for behavioral aggression in Table 6 (.071).

Hypothesis 7

The difference in aggression between the frustrated and non-frustrated groups will be equal for high self-concept emotionally disturbed and normal subjects from special and regular classes.

The expected results for this hypothesis are graphically illustrated in Figure 2 in order to more clearly depict the greater amount of aggression predicted for low self-concept emotionally disturbed children over normal

children under similar treatment conditions. High self-concept children in both groups, however, are expected to be proportionate with respect to the amount of aggression shown.

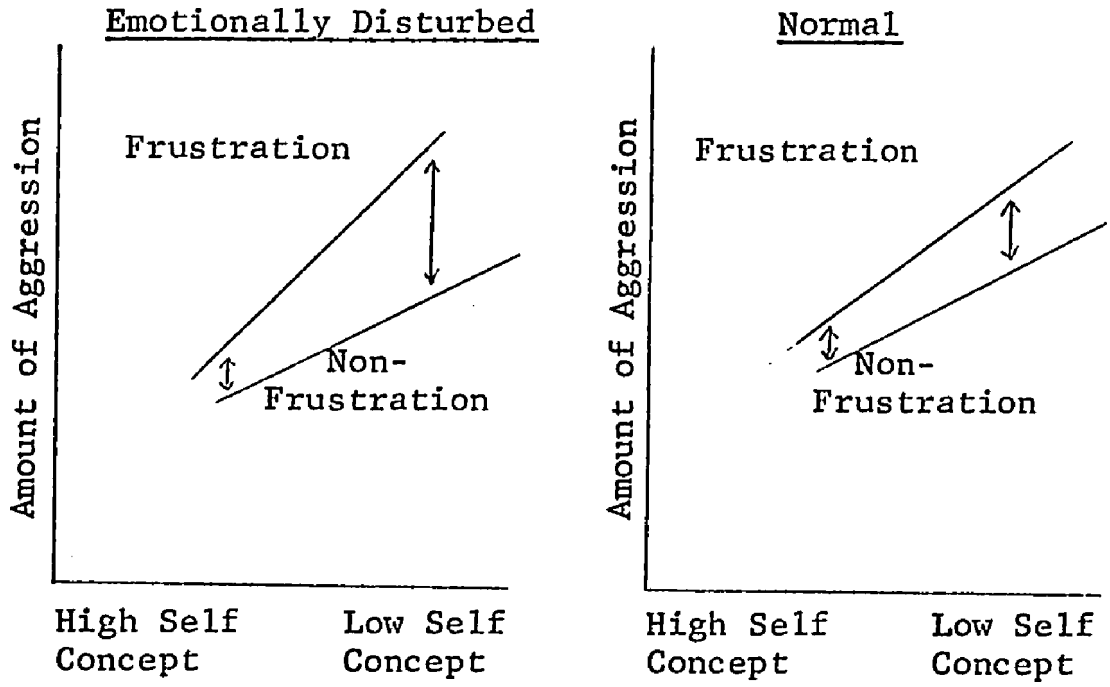


Figure 2.

The analysis of variance for the interaction of the two levels of the three factors (Frustration, adjustment status, self-concept) included in the study did not yield statistically significant differences when compared for each of the dependent variables. The F ratios of .330 (Table 4) for verbal aggression and .864 (Table 6) for behavioral aggression are non-significant.

Mean score comparisons as to the amount of verbal and behavioral aggression expressed also showed no significant differences between subjects in the different treatment conditions, although a slight tendency for reversal of this hypothesized direction is noted in the higher mean scores on verbal aggression in groups f, g, and h listed in Table 5. In these cases higher mean aggression scores were associated with high self-concept subjects in special and regular class placement.

The Pearsonian correlation between the like-dislike (verbal) measure and the behavioral measure of hostility was -.331 ($p < .01$). Although no significant correlations were obtained between these same dependent variables and socioeconomic class, the difference in trend is interesting to note. The correlation for verbal aggression was +.20 whereas the correlation for behavioral aggression was +.04

Summary of Results

The results of the experimental comparisons are summarized below and interpretations of their generality must be limited to similarly matched self-esteem groups of disturbed and normal children as used in this study.

1. (a) The expression of verbal aggression depends in part upon an individual's adjustment status. Emotionally disturbed children showed a significantly greater amount of verbal aggression than did normal children under similar circumstances.

   (b) The direct (behavioral) expression of aggression is unrelated to an individual's adjustment status for either the sample of emotionally disturbed or normal children.

2. (a) The expression of verbal aggression shows a significant but inverse association with the experimental treatment conditions of frustration and non-frustration. Subjects who were not frustrated tended to reveal more verbal aggression than those who were frustrated.

   (b) Differences with respect to the expression of behavioral aggression were unrelated to either treatment condition--frustration or non-frustration.

3. There was no significant difference in the expression of either verbal or behavioral

aggression for high or low self concept children following frustration.

4. For each of the original comparison variables--adjustment status, frustration, and self-concept level--no significant interactions were observed.
5. A significant negative, but low order, correlation was revealed between verbal and behavioral expressions of aggression. Children manifesting one type of aggressive response (i.e., verbal) tended not to use the other (i.e., behavioral).

CHAPTER V

DISCUSSION AND SUMMARY

The present study sought to determine whether a functional relationship exists between an individual's self-concept, adjustment status, and his susceptibility to frustration and aggression. The results reported offer no statistical proof or consistent support for the hypotheses proposed relative to each of the dependent variables--verbal aggression and behavioral aggression. The discussion in this chapter will focus on the limitations in the design of the study. Consideration will next be given to the theoretical interpretations of the findings. Educational implications are explored followed by recommendations for further research and a summary of the report.

Limitations of the Study

The present study was limited in several important ways. Rosenbaum and DeCharms (1962) make a useful distinction between manifestations of aggression and level of self-esteem. Their position is that to relate behavioral expressions of aggression to level of self-esteem, it is

necessary to be explicit about (a) the stimulus conditions leading to frustration and which thereby instigate aggression, and (b) the conditions that inhibit expression of aggression. In respect to the former, the experimental procedures used in this study to arouse hostility and aggression may be variously related to self-esteem depending upon the degree of personal threat perceived by the individual as it relates to his lack of success in the block-building tasks presented to him. Thus the degree of personal threat to self-esteem would presumably be equivalent to the level of aspiration set by the subject prior to and during the achievement activities. Investigations, both conducted and reviewed by Diggory (1966), lend credence to this view in that progressive lowering of the individual's probability of success leads to increasing discouragement. However, Diggory's investigations further conclude that the subject's estimate of his probability for success is not only related to his objective evaluation of his abilities in relation to each of the tasks, but to the degree of social approval and acceptance he experiences in the situation.

The manner in which social disapproval may prove frustrating and is expected to vary in relation to the individual's level of self-esteem is conceptualized by Rosenbaum and DeCharms (1962) as follows:

> For the low self-esteem individual statements of disapproval on the part of others can be seen as representing cues long associated with conditions of punishment. This should be less clearly established for persons high in self-esteem. The instigation to avoidance of disapproval should therefore be greatest for low self-esteem persons and this should be manifested in strong efforts toward gaining approbation from others. Therefore objectively identical expressions of disapproval by others from whom the attempt is made to gain approbation should lead to greater frustration for low self-esteem persons than for those high in self-esteem. (p. 294)

The discussion to this point argues for the use of an experimental procedure which conceptually allows for the possibilities of self devaluation related to a specific standard of excellence (i.e., achievement of success at demonstrated block-building activities) as well as direct social and personal disapproval of the individual within the same context. A technique developed by Mallick (1965) appears to partially fulfill these criteria. Following the original procedures used in this study, Mallick's method consists of using a set of predetermined sarcastic remarks designed to intensify the

frustrating experience. These statements would be inserted at periodic intervals during the block building activities and proceed as follows: (1) "Ha! I see! You really need money. Let's see how you get it"; (2) "I think you would like to buy candy"; (3) "/you may/ be sure you won't eat any candy bought with this money"; (4) "Well, if I am working with you /you may/ be sure you won't get any money" (p. 8). However, while these statements may arouse the subject's hostility and anger, the extent to which such feelings are related to self-esteem remains unclear. Consequently, socially disapproving statements that include accusations of incompetence, inadequacy, and lack of ability would appear to activate feelings of hostility and aggression aimed toward preserving self-esteem. Empirical studies cited earlier frequently utilized direct threats to self-esteem based motives but enjoyed wider latitude in this respect since most subjects were college students. Additional illustrations of assaults to self-esteem are: "you're not good at this at all"; "Boy! You're even more clumsy than I am"; "Don't you have any sense at all"; "Can't you learn to do even a simple thing like this"; "Boy! You sure are dumb"; and so forth.

Another limitation was that no procedure was used to determine whether or not subjects failed to show significant differences in their expression of aggression, in the directions hypothesized, as a result of lowered drive states or increased inhibitions. One method to arouse aggressive drives in the essentially non-hostile individual would be to intensify the frustrating experience in accord with the procedures outlined in the preceding paragraph. A second method would be to temporally extend the subject's encounter with the frustrating circumstances and thereby correspondingly reduce the possibilities for attenuation of his hostile attitudes and feelings of anger following the treatment sessions. In order to control in part for the possible inhibiting effects of aggression anxiety on response tendencies, procedures for measuring aggressive reactions avoided any reference to implications of a moral or ethical nature. However, as pointed out earlier, it is plausible to assume that low self-esteem subjects are more strongly motivated toward gaining social approval but in doubting their ability to obtain social rewards, they consequently experience greater anxiety over aggressive

or retaliative impulses when faced with punishing or threatening situations. High self-esteem individuals, on the other hand, tend to be more secure on social dimensions and are less influenced in their relationships by a desire for approval. Their psychological adequacy in this sense presumably affords more direct expression of feelings when confronted with punishing situations.

The results of this study may, therefore, be partly explained not on the basis that high self-esteem subjects in special or regular classes expressed greater amounts of aggression, but that low self-esteem individuals were restrained by the inhibiting factors of anxiety in expressing their aggressive tendencies to a greater extent. Premeasures on dimensions of anxiety and defensiveness would appear to have value in assessing the degree to which such factors influence verbal and behavioral expressions of aggression. The relevance and importance of personality instruments in differentiating the relationships between self-concept levels, defensiveness, and anxiety has been demonstrated by Veldman and Worchel (1961). Scales for the assessment of anxiety as a chronic or consistent reaction tendency in children have also been developed (Sarason, et al, 1960).

A third limitation of this study bears on the sampling methods used. Clearly, a more desirable procedure would have been to sample special and regular classes on a random basis from school districts throughout the state to insure that they were indeed representative of other such classes. Unique effects associated with variations in class size, composition (sex, age), teacher style, achievement levels, school administrative policies, and behavioral adjustment of the pupils, were perhaps unequally represented in the study, and undoubtedly, acted as confounding variables in their effects upon the dependent variables under investigation.

A fourth and important point which may be raised is whether the test items in the Self-Esteem Inventory (SEI) are, in fact valid samples of the psychological construct--"self-concept." Wylie's (1961) comprehensive review on self-concept measures concluded in part that "sufficient information is not at hand regarding the reliability or construct validities for inferring phenomenal self-esteem" (p. 98). However, additional studies conducted since Wylie's analysis contribute further information on the reliability along with some tentative formulations and results on the construct

validity of the SEI. Coopersmith (1967) reports high test-retest (5 week interval = +.88) reliabilities for the SEI based on a sample of upper elementary (fifth and sixth grades) aged children, along with no significant differences related to ethnic, racial, and socio-economic backgrounds.

Dyer (1963) used subjects from grades three through eleven and reported that the "home," "school," and "social" dimensions (comprised of 8 items each) showed some variability, whereas the "self" dimension maintained excellent reliability across all grades for both sexes. It is interesting to note that this dimension comprises over 50% of the total test items and 76% of the total when compared to the total number of items on any single dimension. In this connection Morse and Ketcham (1965) factor analyzed the SEI items and reported significant loadings on two major and distinct factors: "social" self-esteem and "self" and "school" esteem. Standardization procedures were carried out by the same investigators and normative data was gathered on a large sample of various age and grade levels (3-11). The total mean score for boys and girls at each grade level showed a consistent increase in

negative self image as age and grade increased. With respect to reliability of the SEI these authors observed "self report instruments are always subject to interpretations. What does the response mean? Are they really honest? Won't the pupils be defensive? Of course any self reports are subject to various limitations. Pupils may be defensive, give stereo-typed replies, or just lie. The test has previously been found to be reliable. . ." (p. 87).

Sears (1967) points out that the SEI not only has good test-retest reliability but reasonable face validity. Although the construct validity of the instrument is not unequivocably established, nevertheless, its value in this sense appears to be proportionate to the difficulties surrounding the accurate measure of any intra-psychic variable. McNeil, Morse, and Ketcham (1966) add additional emphasis to this position by observing that ". . .there are no external validating criteria /to any intra-psychic variable/ so that it becomes extremely difficult to discriminate between the phenomenal self-esteem and the reported self-esteem or self-concept" (p. 54).

However, the value of the SEI as a preclassification measure for assigning subjects to experimental treatment groups could be considerably strengthened. It was hoped that the SEI could have been used in conjunction with in situ

measures of behavior (Behavior Rating Form) and projective estimates of self-esteem (Projective Self-Esteem Inventory) for more stringent categorization of subjects into high self-esteem and low self-esteem groups. This presumably could have been accomplished by converging the score results for each individual on each of the three measures used in order to derive a composite score value. In this manner, inconsistent or defensively high self evaluations could have been detected and dropped from the study. The limited total sample used for this study, however, did not make it possible to obtain equivalent high-low score matchings in this way. Further, an examination of correlational data revealed that the three instruments were unrelated for both the total sample and subsample used in the study, and therefore discouraged any attempt to derive a composite score using this procedure.

Finally, the reliance on matched pair self-esteem groups places restrictions on the extent to which the results of the study may be generalized to other groups of normal and disturbed children whose self-esteem levels were not similarly held equivalent. Therefore, the validity of the study may be limited by the non-random selection of subjects to represent the restricted self-esteem ranges used in the subsamples of this study.

Theoretical Interpretations

The literature reviewed suggested the possibility of a relationship between the unfavorable self attitudes and feelings held by an individual and his corresponding predisposition to aggression. Theoretical interpretations of the findings will, therefore, be developed with explicit attention to the major psychological variables under investigation--adjustment status, aggression, and self-concept.

Disturbed versus Normal Children and the Expression of Aggression

The theoretical and practical observations coincide in predicting more aggression on the part of disturbed children. The findings support this position and show that the display of aggression by verbal means is significantly greater for emotionally disturbed children in special classes than for normal children in regular classes even with equal self-esteem. If this finding is taken alone it appears to be not unexpected since the comparison of an individual's adjustment status with verbal manifestations of aggression is essentially a comparison of the extent to which the normal child in the regular class is a more successfully socialized individual than his ostensibly similar, yet psychologically less adequate, peer in the special class. Presumably, individuals in regular classes have developed more effective

and successful methods of coping with frustration in their environment which have permitted their continued residence in such classes. Individuals in special classes for the emotionally disturbed, on the other hand, are more frequently viewed as "socialization failures" who have not developed the necessary adaptive skills for successfully adjusting to and coping with the environmental frustrations which confront them (Hewett, 1968). According to Hewett, the resulting symptoms, however, may cover a wide spectrum and are variously described as inattentiveness, withdrawal, aggressiveness, immaturity, and disorganized or nonconforming behavior. It is, therefore, plausible to assume that emotionally disturbed children selected from the special classes possess a greater predisposition to anti-social behaviors and that when confronted with frustrating or thwarting circumstances this predisposition may be expressed in the form of aggressive behavior varying along a dimension of indirect to more overt forms of aggressive response. This fact may, in part, explain the tendency of special class subjects to report greater feelings of dislike and hostility toward the frustrator through verbal means since less overt behavioral commitment was required under these conditions.

In this respect non-acting-out children would not be expected to show greater amounts of aggression when

frustrated since such behavior would be less characteristic of their modus operandi and consequently less established as a dispositional response mode. The extent to which disturbed and normal children in the subsamples used in the study manifested acting-out tendencies in their behavior is reflected below in the ratings of their teachers on selected items from the Behavior Rating Form.

BRF Items	Emotionally Disturbed			Normal		
	X	$\bar{X}$	SD	X	$\bar{X}$	SD
3. Does this child become upset by failures or other strong stresses as evidenced by such behaviors as pouting, whining, or withdrawing? (1 = always; 3 = sometimes; 5 = never)[1]	83	2.59	1.11	114	3.56	.93
7. When this child is scolded or criticized does he become either very aggressive or very sullen and withdrawn?	68	2.13	1.17	124	3.88	1.17
12. Does this child dominate or bully other children?	93	2.91	1.13	135	4.22	.82
13. Does this child continually seek attention as evidenced by such behaviors as speaking out of turn and making unnecessary noises?	97	3.03	1.29	121	3.78	1.02

[1]Scale description and numerical values are the same for all items.

Disturbed children were not only more consistently rated by their teachers as showing a greater evidence of the behaviors described in the above items, but in most cases they also displayed more variability in terms of their reliance on any particular expressive mode relative to normal children. This suggests that the two groups were not homogeneous with respect to their use of acting-out behaviors, although the overall differences clearly favored disturbed as opposed to normal children. This fact may, in part, explain the finding in which disturbed children showed a greater expression of aggression through verbal rather than behavioral means when compared to normal children.

The finding that these selected special class subjects do not express any significantly greater amounts of behavioral aggression toward a frustrator than do similarly selected regular class subjects is not in agreement with previous evidence for reasons already cited. Recalling that the behavioral aggression response was a less immediate and more residual measure of the hostility of the subject than the verbal aggression response, expressed under conditions of relative anonymity and solitary privacy, makes this finding even more puzzling. The fact that aggressive

responses can be heightened following an increase in the permissiveness of the social situation was demonstrated in the study by White and Lippitt (1960) reviewed previously. Their procedure is analogous to the procedure used in the present study in that both the original frustrator and experimenter were not present when the subject registered his behavioral aggression responses. Such a situation would presumably favor a greater magnitude of behavioral aggression for the special class subject who presents a less successful prior history in obtaining social rewards and who reveals a more consistent inability to effectively organize his behavior when faced with conflicting or frustrating environmental demands.

Impact of Frustration on Aggressive Expression

Although the analysis of variance showed statistically significant differences for the expression of verbal aggression, nevertheless, specific group mean comparisons fail to associate this difference with the experimental conditions of frustration. Conversely, statistically significant mean differences were obtained between experimental groups which did not experience frustration

as opposed to those groups that had experienced frustration.

This finding is unexpected and contrary to both theoretical and research evidence as is aptly reflected by Berkowitz (1962) when he states "that the instigation to aggression aroused by frustration is in direct proportion to the degree of thwarting" (p. 71). Accordingly, in this same analysis, Berkowitz points out that the strength and intensity of the emotional reaction to frustration may also vary in relation to the individual's expectation for pleasurable and satisfying experiences, as well as in relation to the number and persistence of the frustrations. The extent to which these conditions have been fulfilled in the experimental procedures used in this study were discussed in the previous section of this chapter. However, in terms of the hypothesis now under scrutiny, it will be recalled that frustration was conceptualized (p. 8) as a deliberate interference with ongoing goal directed activities. In this respect this view is in agreement with the reactive concept of aggression advanced by Dollard (1939) and his associates in which aggressive hostility is seen to stem from the thwarting of instigated goal responses.

This study was also simultaneously concerned with determining the extent to which aggression may also be the result of frustrations arising from interferences and conflicts within the self as hypothesized by Brown and Farber (1951). The two sources for aggression were felt to be functionally interrelated, the former as a reaction to specific frustrating stimuli, the latter as an antecedent condition residing in the self-esteem image retained by the individual.

The findings for the second dependent variable, non-verbal or behavioral aggression, were also non-significant, both with respect to overall differences between the two experimental treatments, and with respect to specific group mean comparisons. This finding is not only contrary to the stated hypothesis, but is inconsistent with interpretations presented in the above discussion. The implication to be derived from this finding is that aggression is not a unitary psychological condition. The manner in which this finding related to the specific limitations of the experimental procedures used in the study was pointed out in the preceding section.

Self-Concept and Aggressive Behavior

Non-significant results were obtained for this hypothesis on both dependent variables and also in terms of specific group mean differences for the various experimental treatments. However, the manner in which self-esteem may be expected to theoretically relate to aggressive behavior was already summarized in the view of Brown and Farber (1951) who held that aggression may arise from internal sources of frustration and conflict which are essentially independent of the stimulus event in the environment. The antecedents of self-esteem appear to be correlated with specific child-mother rearing patterns (Coopersmith, 1967) which suggests a dispositional quality to the self-esteem characteristic. Helper (1958) found, in addition, that parental attitudes were reflected in children's attitudes about themselves. Morse's (1964) survey of changes of school related self-esteem reported a rather consistent and enduring negative self-esteem in children that begins about grade three and reveals a slight upward trend only after grade eleven is reached. The development of self-esteem is summarized by McNeil, Morse, and Ketcham (1966) as being attributable to "a learned set of values and attitudes

which a person has toward himself. . .whether learning occurs through reinforcement or through identification, the ways in which people regard and respond to the child come to be taken over and internalized by him" (p. 47). These studies taken together appear to suggest a strong dispositional component to self-esteem that is amenable to measurement.

Clinical and research evidence support the basis for postulating a relationship between self-esteem and aggressive behavior. Berkowitz (1962) points out that the individual who views himself as incompetent and inadequate "has a stronger predisposition to hostility than does the person with higher self-esteem" (p. 278). The study by Coopersmith showed that the high self-esteem individual is basically a successful person who displays qualities of independence, creativity, high school achievement, and positive social acceptance from peers. Conversely, it may be expected that the low self-esteem person not only possesses these qualities to a lesser degree but is confronted with the necessity of coping with threats to his self image that are inspired by these same inadequacies and deficiencies. The low self-esteem person is therefore more likely to resort to defensive

postures in an attempt to preserve his self-esteem in threatening situations. The role of aggression as a means of defensively maintaining self-esteem through self deception was described earlier by Hilgard (1949). The fact that low self-concept subjects in this study did not show greater amounts of verbal or behavioral aggression may be attributable in part to the fact that low self-esteem individuals, having a stronger inclination toward hostility, frequently do not exhibit such behaviors in social situations (Berkowitz, 1962). Further, a study by Hokanson (1961) suggests that this inhibition may be due to the arousal of aggression-anxiety in such persons.

Educational Implications

Students could not be assigned randomly to a high or low "self-concept" condition as was the case for the "frustration" condition (independent variable). Hence, any relation of self-concept and aggression would have been clearly correlational rather than functional. However, for the hypothesis to be supported that susceptibility to frustration is determined in part by self-concept, a demonstrable correlation between these variables was required. For any theory of personality dynamics it

would be important to continue attempts to establish a relationship between these variables and their various levels of interaction. For example, had each of the hypotheses proved to be significant then it would seem appropriate to postulate a relationship between the expression of aggressive behaviors and an individual's sense of self adequacy. To the extent that self-concept could be shown to be a determiner of aggressive behaviors, future attempts at influencing aggression would have to deal with self-concept. Consequently, this would pave the way to a closer examination and identification of the specific dimensions and components of self-concept as determinants of specific types of aggressive responses. In this way therapeutic and educational interventions may be designed to be more precise and relevant to the personality structure of low self-concept individuals. As such diagnostic specificity develops then one may find abandonment of such clinically popular and omnibus phrases as "he has a low frustration tolerance" which offer little direction for educational planning.

More specifically, support of the hypotheses would have important implications for the educative process in the development of general human relations

training and counseling strategies in the daily school program. As adults who are responsible for the socialization of children, teachers and auxillary school personnel would be in a position to interpret to children the reasons for their own aggressive behaviors as well as the aggressive behaviors of others. In this respect, the growing responsibility of schools for the personality development of children and its increased concern for discipline problems is reflected in the writings of various educators. During their historical evolution schools have acquired a "total concern for child behavior" and they have moved from a singular interest in "stimulating the intellect. . .toward nourishing the whole child, his feelings as well as his intellect" (Morse, 1966, p. 322). Morse (1966) further points out that as the school enlarged its educational role it also assumed greater responsibilities for discipline since "it is only too obvious that many pupils come to school without a set of values sufficiently molded to govern their actions properly. . .appropriate relationships to authority, reasonable motivations for school tasks, or acceptable ways of treating peers can no longer be assumed" (pp. 322-323). Other writers add

support to this observation by claiming that the alienation and rejection of the emotionally disturbed child by his peer group results in part from his failure to have acquired basic social skills necessary for successful peer interaction and they argue for active and direct instruction in this area (Quay, et al, 1966). It is clear that schools will need to respond to the challenge of correcting such deficiencies by attending to the importance of socialization processes through appropriate activity planning and curricular developments.

In contrast, a significant and burgeoning body of research evidence is supporting the general conclusion that special classes and special provisions have not been particularly effective in remediating the academic and social deficiencies of behavior disordered children (Sparks and Blackman, 1965). In fact, some studies have shown that such classes may often produce an opposite effect which leads to problems of social stigmatization, lowered levels of expectancy, and impaired performances (Rosenthal and Jacobson, 1966). The critical proportions of this problem are evidenced by the unsocialized and frequently aggressive child who

is not only conspiciously troublesome in the ordinary public school setting, but whose behavior makes him a high probability candidate for referral to a special class. Robins and O'Neal (1958), in a 30-year follow-up study of such problem children, point out that it is this child who seems most predisposed to an entire life of maladaptive behavior.

In view of the foregoing and in light of growing incidence of problematic behaviors in both regular and special classes, it is felt that significant results from a study of this nature would contribute substantially toward the teacher's ability to derive a precise and more analytical understanding of the etiology of aggressive and disruptive classroom behavior. Children with a sense of self-inadequacy, compounded by their social failures, are not generally wholesome candidates for learning tasks and activities. Consequently, the teacher who recognizes the relationship between symptomatic aggressive behaviors and the underlying self-sentiments held by the child is in a more favorable position to develop social strategies that will tend to intervene between specific stimulus events in the classroom and the child's need to respond aggressively or in a disruptive manner to those events.

More importantly, a demonstration of the significance of the hypotheses proposed in this study would be potentially useful in identifying motivational predispositions in children with varying levels of self-esteem. Such information would be helpful in predicting responses under conditions of frustration as are frequently encountered by children in daily school experiences. A reasonable assumption would be that low self-concept children show a higher probability for instigation to aggression under stress and frustrating circumstances. In addition, this tendency to aggressive behavior is greater for children in special classes for the emotionally disturbed than for similar children in regular classes. With such information teachers and school mental health specialists would be in a more favorable position to make differential assessments of behavior, consider more pertinent and appropriate class placements and referral strategies, and, finally, to design classroom practices (curricular and social) that will circumvent rather than confront the child's low self estimate as expressed by his aggressive behaviors. Appreciation of the particular pattern of a child's self concept will enable the teacher to more appropriately

deal with "the moment by moment symptomatic behavior in the classroom" (Morse, 1964, p. 196).

Recommendations for Further Research

The results of the present study suggest several important modifications to be included in future research on the effects of frustration and self-concept in relation to aggression. The following is a list of recommendations which seem to be appropriate.

1. Inasmuch as the frustration treatment was particularly crucial for demonstrating support for each of the proposed hypotheses, subsequent replications of these procedures should include revisions that would temporally intensify this experience as well as make its relationship to the arousal of self-esteem feelings more pertinent.
2. Sample size should be increased using random selection procedures to determine if the tendency for aggression is greater under conditions of frustration or non-frustration when the subjects are more representative of normal and emotionally disturbed children from regular and special classes.

3. Additional correlates to self-esteem should be explored to reveal the influences of such characteristics as anxiety, defensiveness, and child rearing patterns as possible factors that inhibit or facilitate the expression of aggression.

Summary

This investigation dealt with the effects of frustration on the aggressive behaviors of emotionally disturbed and normal children with high or low self-concepts in special and regular class programs. Psychological theory had generally explained aggression in terms of reactions to environmental stimulus events independent of intrapsychic processes operating within the individual. A review of the evidence related to self-concept, however, revealed a plausible basis for postulating the importance of this characteristic as an intervening variable between the objective stimulus event (frustration) and the subjective response (aggression). Experimental evidence pertaining to the relationship between frustration, self-esteem, and aggression was unavailable.

The sample consisted of 32 emotionally disturbed and 32 normal children in special and regular classes in public school elementary programs. All children were male

and 9 or 10 years of age. High and low self-esteem subsamples were formed using the Coopersmith Self-Esteem Inventory (SEI). Subjects scoring in the upper one-third and lower one-third of the SEI were correspondingly assigned to either a frustration or non-frustration treatment. Equal numbers of equivalent score levels were assigned to each treatment condition when possible. In all, within each of the eight combinations of the three variables studied, there were eight subjects. Eight experimental groups were devised that involved frustration or non-frustration treatments for subjects preclassified in terms of self-concept level (high or low) and adjustment status (emotionally disturbed or normal). Frustration was accomplished by deliberately and systematically preventing selected subjects from completing timed tasks for which rewards were made available.

The findings do not support the intervening variable hypothesis for self-concept as it relates to frustration and aggression. Results showed that: (1) the selected group from the disturbed children reveal a significantly greater amount of verbal aggression than do the selected group from the normal children, but the groups fail to differ in respect to behavioral expressions of aggression; (2)

frustration was not associated with higher amounts of verbal or behavioral aggression at a significant level. Surprisingly, a significant relationship was found between the expression of verbal aggression and nonfrustration conditions. The amount of behavioral or verbal aggression expressed was not significantly related to an individual's self-concept level, although the use of matched self-esteem subsamples may have reduced the possibility of obtaining significant results in this respect. In addition, a significant negative but low order correlation was obtained between verbal and behavioral modes of aggression. Possible explanations for these findings were discussed, including limitations in sample size, difficulties in deriving a valid measure of self-esteem, and deficiencies in the intensity and persistence of the frustration treatment procedures. Theoretical interpretations for the results were presented that lend support to the notion that low self-concept and aggression fail to operate as unitary psychological conditions.

BIBLIOGRAPHY

Aichorn, A. Wayward youth. New York: Viking Press, 1925.

Atkinson, J.W. An introduction to motivation. Princeton: D. Van Nostrand Company, 1964.

Ax, A. The physiological differentiation of fear and anger. Psychosom. Med., 1953, 15, 433-442.

Bandura, A. and Walters, R. H. Social learning and personality development. New York: Holt, Rinehart & Winston, 1964.

Berkowitz, L. Aggression: a social psychological analysis. New York: McGraw-Hill, 1962.

Berkowitz. L. Manifest hostility level and hostile behavior. J. soc. Psychol., 1960, 52, 165-171.

Brenner, C. An elementary textbook of psychoanalysis. New York: International Universities Press, Inc., 1966.

Brown, J. S. and Farber, I. E. Emotions conceptualized as intervening variables--with suggestions toward a theory of frustration. Psychol. Bull., 1951, 48, 465-495.

Cohen, A. K. Delinquent boys. New York: Free Press, 1955.

Combs, A. W. and Snygg, D. Individual behavior: a perceptual approach to behavior. New York: Harper & Row, 1959.

Coopersmith, S. The antecedents of self-esteem. San Francisco: W. H. Freeman, 1967.

Davidson, H. H. and Lang, G. Children's perceptions of their teachers' feelings toward them related to self-perception, school achievement and behavior. In D. Hamachek (ed.) The self in growth, teaching, and learning. Englewood Cliffs, N.J.: Prentice-Hall, 1965.

Diggory, J. C. Self-evaluation: concepts and studies. New York: John Wiley & Sons, Inc., 1966.

Dollard, J., Doob, L. W., Miller, N.E., Mowrer, O. H. and Sears, R. R. Frustration and aggression. New Haven, Conn.: Yale University Press, 1939.

Dyer, C. O. Construct validity of self concept by a multi-trait multi-method analysis. Ph.D. thesis, University of Michigan, 1963.

Edwards, A. I. Experimental design in psychological research. New York: Holt, Rinehart & Winston, 1963.

Feshbach, S. The drive-reducing function of fantasy behavior. J. abnorm. soc. Psychol., 1955, 50, 3-11.

Glasser, W. Reality therapy. New York: Harper & Row, 1965.

Glasser, W. Schools without failure. New York: Harper & Row, 1969.

Hall, C. S. and Lindzey, G. Theories of personality. New York: John Wiley & Sons, 1957.

Helper, M. M. Parental evaluations of children and children's self evaluations. J. abnorm. soc. Psychol., 1958, 56, 190-194.

Hewett, F. The emotionally disturbed child in the classroom. Boston: Allyn and Bacon, 1968.

Hilgard, E. R. Human motives and the concept of self. In H. Brand (ed.), The study of personality. New York: John Wiley & Sons, 1954.

Hollingshead, A. B. Two factor index of social position. Unpublished document, New Haven, Conn., 1957.

Holt, J. How children fail. New York: Delta, 1964.

Holt, J. How children learn. New York: Pitman, 1967

Holt, J. The underachieving school. New York: Pitman, 1969.

Jersild, A. T. In search of self. New York: Teachers College Press, 1952.

Ketcham, W. A. and Morse, W. C. Dimensions of children's social and psychological development related to school achievement. Cooperative Research Report No. 1286, University of Michigan, 1965.

Lecky, P. The personality. In C. E. Moustakas (ed.), The self: expectations in personal growth. New York: Harper & Brothers, 1956.

Maslow, A. H. Motivation and personality. New York: Harper & Row, 1954.

Mallick, S. K. Catharsis of hostility: a new theoretical approach. Bulletin of Education and Research. I.E.R., Panjab University, Lahore, in press. (a)

Mallick, S. K. Cathartic value of interpolated aggressive activities. Bulletin of Education and Research. I.E.R., University of the Panjab, Lahore, 1965, 4, (1), 1-14. (b)

Mallick, S. K. and McCandless, B. R. A study of catharsis of aggression. J. pers. and soc. Psychol., 1966, 4 (6), 591-596.

McClelland, D. C. and Apicella, F. S. A functional classification of verbal reactions to experimentally induced failure. J. abnorm. soc. Psychol., 1945, 40, 376-390.

McNeil, E. B., Morse, W. C. and Ketcham, W. A. The impact of aggression in the classroom. Cooperative Research Report No. 04632, University of Michigan, 1966.

Morse, W. C. Self concept in the school setting. Childhood Education, 1964, 41, (4), 195-201.

Morse, W. C. Intervention techniques for the classroom teacher of the emotionally disturbed. In P. Knoblock (ed.), Educational programming for emotionally disturbed children: the decade ahead. New York: Syracuse University Press, 1964.

Morse, W. C. The schools responsibility for discipline. In N. J. Long, W. C. Morse and R. G. Newman (eds.), Conflict in the classroom. Belmont, Claif.: Wadsworth Pub. Co., 1967.

Morse, W. C., Cutler, R. L. and Fink, A. H. Public school classes for the emotionally handicapped: a research analysis. Council for Exceptional Children, NEA, Washington, D. C., 1964.

Pepitone, A. Attraction and hostility. New York: Prentice-Hall, 1964.

Pepitone, A. and Reichling, G. Group cohesiveness and the expression of hostility. Hum. Relat., 1955, 8, 327-337.

Quay, H. C., Werry, J. S., McQueen, M. and Sprague, R. L. Remediation of the conduct problem child in the special class setting. In H. Dupont (ed.), Educating emotionally disturbed children. New York: Holt, Rinehart & Winston, 1969.

Reckless, W. C., Dinitz, S. and Murray, E. Self concept as an insulator against delinquency. Amer. soc. Rev., 1956, 21, 744-746.

Redl, F. and Wineman, D. The aggressive child. New York: Free Press, 1957.

Riese, H. Heal the hurt child. Chicago: University of Chicago Press, 1962.

Robins, L. N. and O'Neal, P. Mortality, mobility and crime: problem children 30 years later. Amer. soc. Rev., 1958, 23, 162-171.

Rogers, C. R. Client-centered therapy: its current practice, implications, and theory. Boston: Houghton-Mifflin Co., 1951.

Rosenbaum, M. E. and deCharms, R. Self-esteem and overt expressions of aggression. In N. F. Washburne (ed.), Decisions, values, and groups. New York: Pergamon Press, 1962.

Rosenbaum, M. E. and deCharms, R. Direct and vicarious reduction of hostility. J. abnorm. soc. Psychol., 1960, 60, 105-111.

Sahakian, W. S. Psychology of personality: readings in theory. Chicago: Rand McNally, 1965.

Sarason, S. B., Davidson, K. S., Lighthall, F. F., and Waite, R. R. A test anxiety scale for children. Child Development, 1958, 29, 105-113.

Sawrey, J. M. Frustration and conflict. Dubuque, Iowa: W. C. Brown Pub., 1969.

Sears, R. A treatment of worth. Contemp. Psychol., 1969, 14, 146-147.

Sparks, H. L. and Blackman, L. S. What is special about special education revisited: the mentally retarded. Except. Child., 1965, 31, 242-247.

Symonds, P. M. The ego and the self. New York: Appleton-Century-Crofts, 1951.

Veldman, D. J. and Worchel, P. Defensiveness and self acceptance in the management of hostility. J. abnorm. soc. Psychol., 1960, 63, 319-325.

White, R. K. and Lippitt, R. Autocracy and democracy: an experimental inquiry. New York: Harper & Row, 1960.

Winer, B. J. Statistical principles and experimental design. New York: McGraw-Hill, 1962.

Wylie, R. C. The present status of self-theory. In E. F. Borgatta and W. W. Lambert (eds.), Handbook of personality theory and research. Chicago: Rand McNally, 1968.

APPENDIX A

BEHAVIOR RATING FORM

BEHAVIOR RATING FORM (BRF)

1. Does this child adapt easily to new situations, feel comfortable in new settings, enter easily into new activities?

   ___always ___usually ___sometimes ___seldom ___never

2. Does this child hesitate to express his opinions, as evidenced by extreme caution, failure to contribute, or a subdued manner in speaking situations?

   ___always ___usually ___sometimes ___seldom ___never

3. Does this child become upset by failures or other strong stresses as evidenced by such behaviors as pouting, whining, or withdrawing?

   ___always ___usually ___sometimes ___seldom ___never

4. How often is this child chosen for activities by his classmates? Is his companionship sought for and valued?

   ___always ___usually ___sometimes ___seldom ___never

5. Does this child become alarmed or frightened easily? Does he become very restless or jittery when procedures are changed, exams are scheduled or strange individuals are in the room?

   ___always ___usually ___sometimes ___seldom ___never

6. Does this child seek much support and reassurance from his peers or the teacher, as evidenced by seeking their nearness or frequent inquiries as to whether he is doing well?

   ___always ___usually ___sometimes ___seldom ___never

7. When this child is scolded or criticized, does he become either very aggressive or very sullen and withdrawn?

___always ___usually ___sometimes ___seldom ___never

8. Does this child deprecate his school work, grades, activities, and work products? Does he indicate he is not doing as well as expected?

___always ___usually ___sometimes ___seldom ___never

9. Does this child show confidence and assurance in his actions toward his teachers and classmates?

___always ___usually ___sometimes ___seldom ___never

10. To what extent does this child show a sense of self-esteem, self-respect, and appreciation of his own worthiness?

___very strong ___strong ___medium ___mild ___weak

11. Does this child publicly brag or boast about his exploits?

___always ___usually ___sometimes ___seldom ___never

12. Does this child attempt to dominate or bully other children?

___always ___usually ___sometimes ___seldom ___never

13. Does this child continually seek attention, as evidenced by such behaviors as speaking out of turn and making unnecessary noises?

___always ___usually ___sometimes ___seldom ___never

APPENDIX B

SELF-ESTEEM INVENTORY

SELF-ESTEEM INVENTORY

In front of you is a stack of cards that you can have fun sorting. If the sentence on the card tells how you usually feel, then put the card in the box in front of you that is marked "LIKE ME" (E points to box with this marking). If the sentence does not tell how you usually feel, then put the card in the box marked "UNLIKE ME" (E points to box).

There are no right or wrong answers. Read each card out loud before you put it into either of the boxes.

O.K.? Let's try one to see how it works.

	LIKE ME	UNLIKE ME
Example: I'm a hard worker.		
1. I spend a lot of time day-dreaming.		
2. I'm pretty sure of myself.		
3. I often wish I were someone else.		
4. I'm easy to like.		
5. My parents and I have a lot of fun together.		
6. I never worry about anything.		
7. I find it very hard to talk in front of the class.		
8. I wish I were younger.		
9. There are lots of things about myself I'd change if I could.		
10. I can make up my mind without too much trouble.		

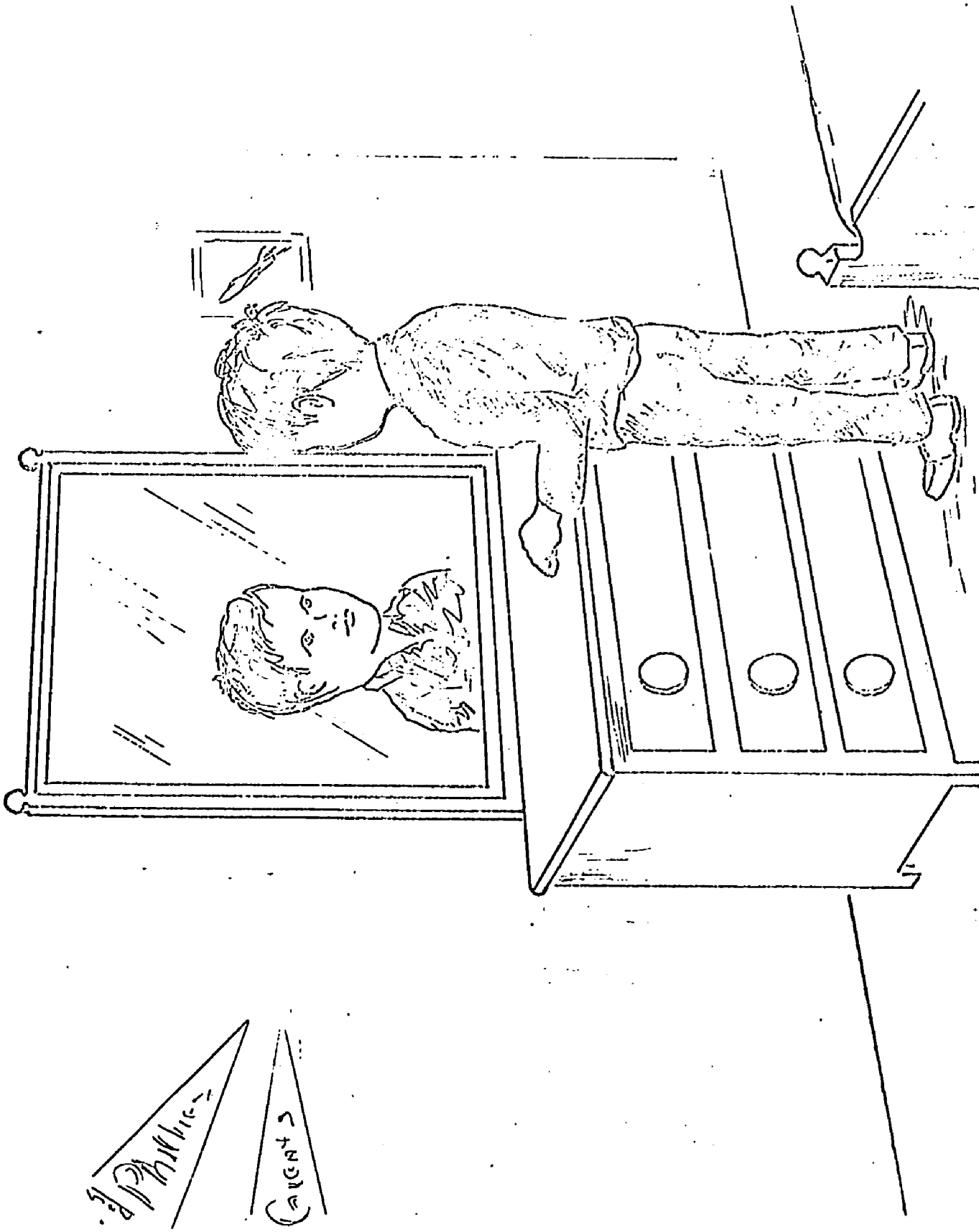
	LIKE ME	UNLIKE ME
11. I'm a lot of fun to be with.		
12. I get upset easily at home.		
13. I always do the right thing.		
14. I'm proud of my school work.		
15. Someone always has to tell me what to do.		
16. It takes me a long time to get used to anything new.		
17. I'm often sorry for the things I do.		
18. I'm popular with kids my own age.		
19. My parents usually consider my feelings.		
20. I'm never unhappy.		
21. I'm doing the best work that I can.		
22. I give in very easily.		
23. I can usually take care of myself.		
24. I'm pretty happy.		
25. I would rather play with children younger than I am.		
26. My parents expect too much of me.		
27. I like everyone I know.		
28. I like to be called on in class.		
29. I understand myself.		

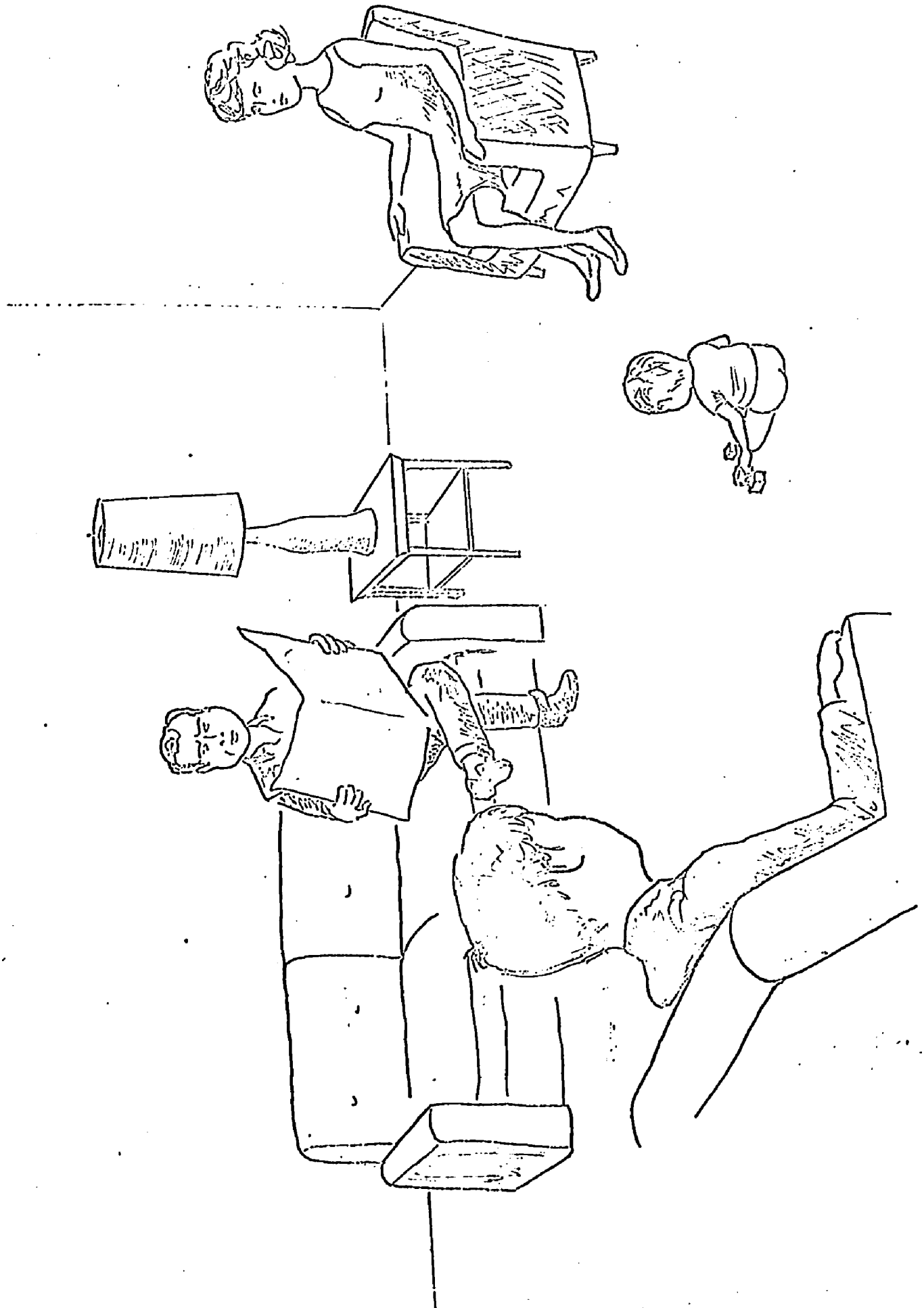
	LIKE ME	UNLIKE ME
30. It's pretty tough to be me.		
31. Things are all mixed up in my life.		
32. Kids usually follow my ideas.		
33. No one pays much attention to me at home.		
34. I never get scolded.		
35. I'm not doing as well in school as I'd like to.		
36. I can make up my mind and stick to it.		
37. I don't really like being a boy.		
38. I have a low opinion of myself.		
39. I don't like to be with other people.		
40. There are many times when I'd like to leave home.		
41. I'm never shy.		
42. I often feel upset in school.		
43. I often feel ashamed of myself.		
44. I'm not as nice looking as most people.		
45. If I have something to say, I usually say it.		
46. Kids pick on me very often.		

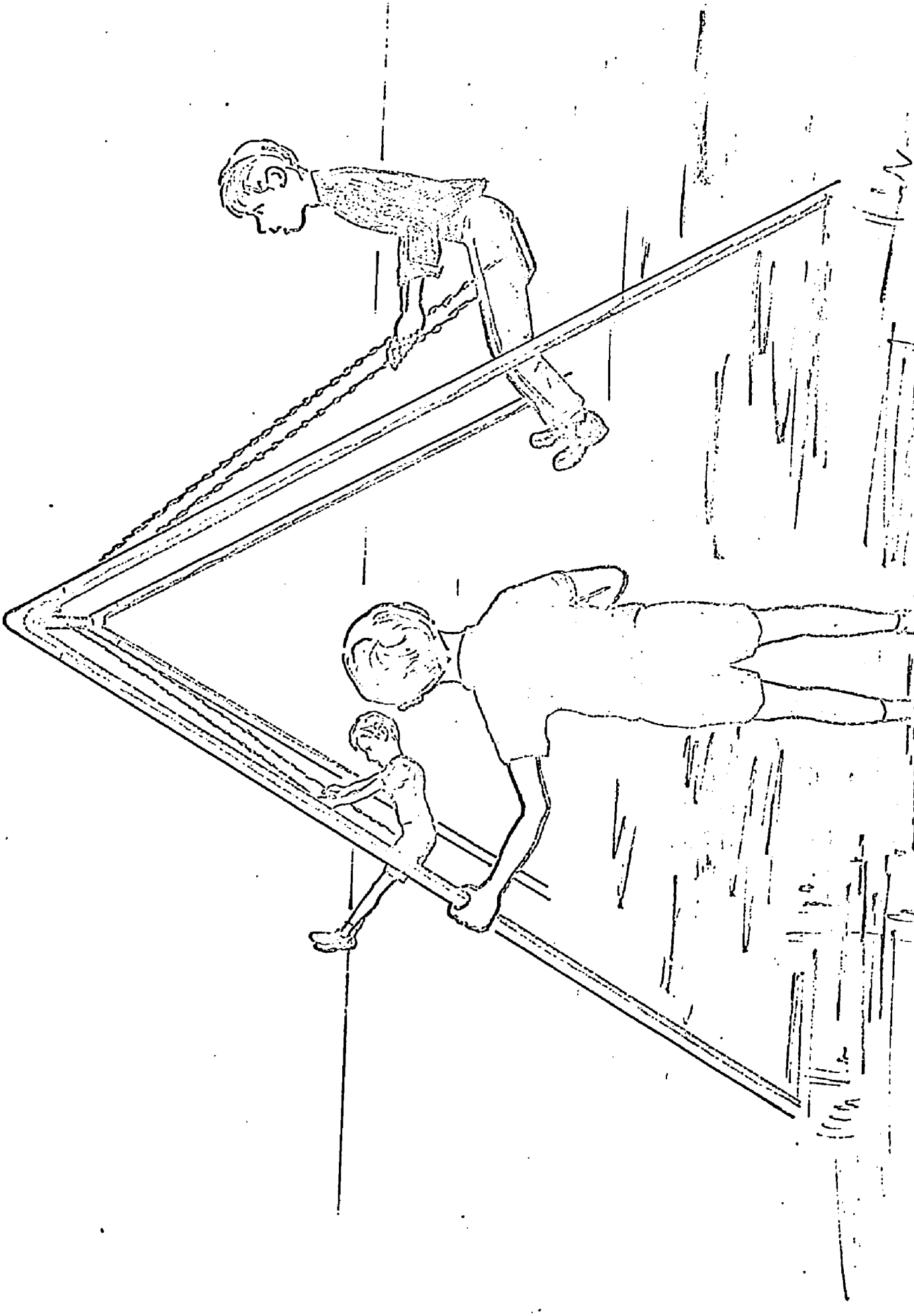
	LIKE ME	UNLIKE ME
47. My parents understand me.		
48. I always tell the truth.		
49. My teacher makes me feel I'm not good enough.		
50. I don't care what happens to me.		
51. I'm a failure.		
52. I get upset easily when I'm scolded.		
53. Most people are better liked than I am.		
54. I usually feel as though my parents are pushing me.		
55. I always know what to say to people.		
56. I often get discouraged in school.		
57. Things usually don't bother me.		
58. I can't be depended on.		

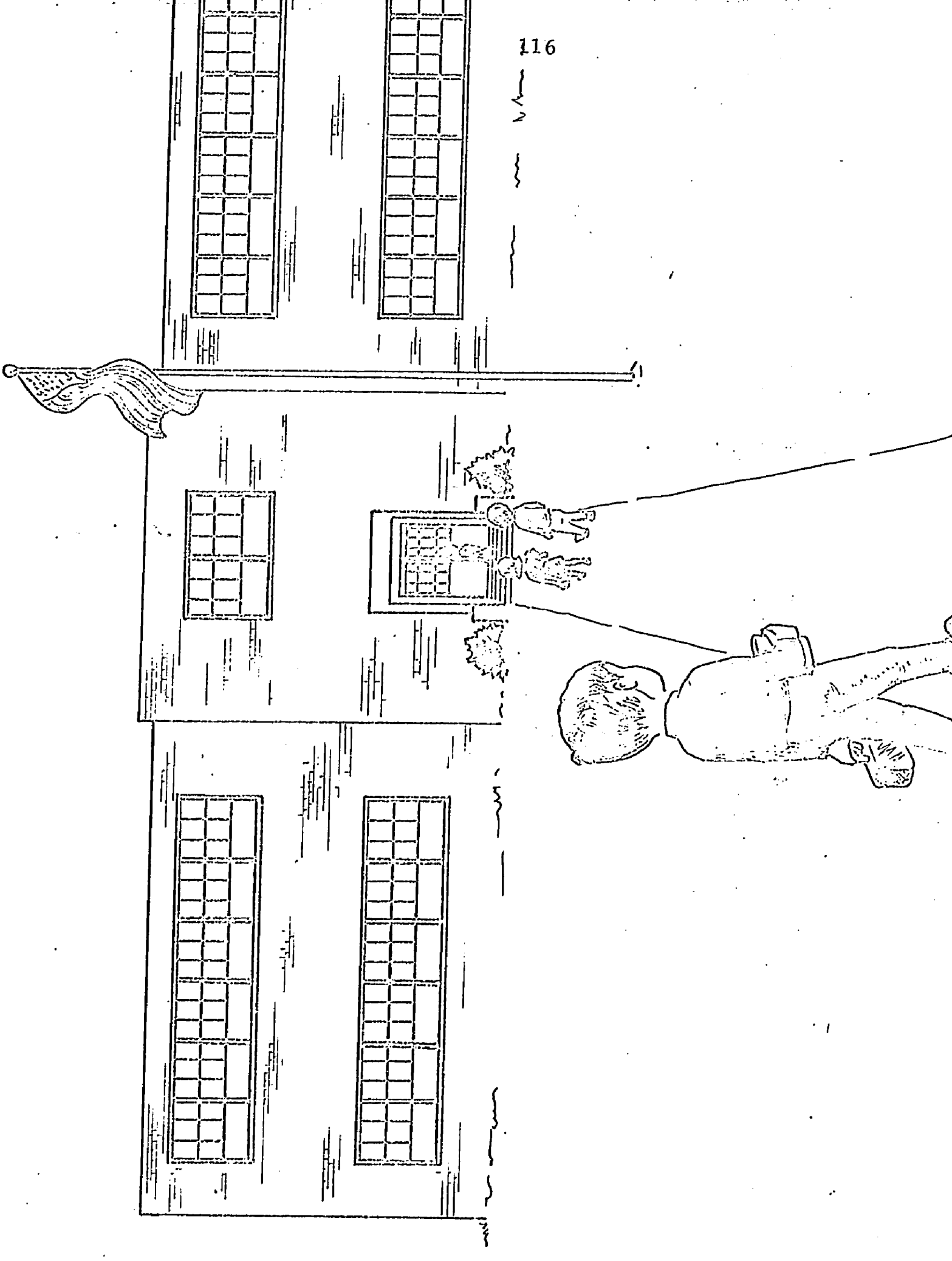
APPENDIX C

STIMULUS PICTURES USED WITH PROJECTIVE SELF-ESTEEM









APPENDIX D

INSTRUCTIONS TO THE SUBJECTS OF NON-FRUSTRATION GROUPS FOR BLOCK-BUILDING ASSIGNMENTS

Instructions to the Subjects of Non-Frustration Groups for Block-Building Assignments

"There are five different jobs for you to do with these wooden blocks. I'll tell you what the jobs are. This boy (the confederate) will also be working with you. Please remember that each job is to be done in a certain time. The time is long enough that you can do each job easily. You may try as many times as you want to until the job is done. When the time is over, I'll ask you to stop. Did you understand what I said? (A slight pause.) If you have any questions, you can ask me now. Later on I'll not be able to answer your questions. (A slight pause.) O.K."

"Let me tell you something about these blocks. This is the short edge of the block. This is the long edge and this is the broad edge. These bigger (yellow) blocks are cross bars. You must do all the jobs on this wooden board, and you should not move the board from its place. Are there any questions? (A slight pause.) O.K."

"Well, your first job is like this."

APPENDIX E

BLOCK-BUILDING ASSIGNMENTS FOR THE SUBJECTS IN EXPERIMENTAL AND TREATMENT GROUPS

Block-Building Assignments for the Subjects in Experimental and Treatment Groups

I. Two Bridges. (E addressing both the S and the confederate) "You have to build two bridges on a river, one on top of the other. The lower bridge is for automobiles, and the upper one is for railroad. Therefore place:

1. Two red blocks on their long edges like this. (E demonstrates by placing the blocks approximately 3 inches apart.)

2. One white block on its long edge at the top of each red one like this. (E demonstrates.)

3. One gray block on its long edge at the top of each white one like this. (E demonstrates.)

4. A cross bar on its broad edge at the top of these two piles like this. (E demonstrates.)

5. The upper bridge will be built exactly like the lower one. First two red blocks, then two white blocks, then two gray blocks, and then a cross bar at the top of the two piles.

Do you understand your job? (A slight pause.) Are there any questions? (A slight pause.) O.K."

(E removes all the blocks of the demonstration bridge, and asks the S to start, clicking on the stopwatch, simultaneously. Total time = one minute and 10 seconds.)

II. Two Tall Bridges. (E addressing the S and the confederate) "Now you have to build two bridges again on a river just like your first job. Therefore, place:

1. Two red blocks on their long edges like this. (E demonstrates the construction of the first bridge as in the previous task.)

2. One white block on its long edge on top of each red one.

3. One gray block on its long edge on top of each white one.

4. One black block on its long edge on top of each gray one.

5. A cross bar on its broad edge at the top of these two piles. This completes your lower bridge.

6. The upper bridge will be built exactly like the lower one. First two red blocks, then two white blocks, then two gray blocks, then two black blocks, and then a cross bar at the top of the two piles.

Do you understand your job? (A slight pause.) Are there any questions? (A slight pause.) O.K., you may start."

(E removes the demonstration structure. Time = one minute and 10 seconds.)

III. The Apartment Building. (E addressing the S and the confederate.) "Now you have to build a three story apartment building. Place,

1. Two red blocks on their broad edges like this (E starts the demonstration of the work and completes through the first story).

2. Two white blocks on their broad edges.

3. Two gray blocks on their broad edges.

4. Two black blocks on their broad edges.

5. A cross bar on its broad edge at the top of these two piles. This completes the first story of the apartment building. The upper two stories will be built exactly like the first one. Remember the order of the colors (E points to the blocks of the completed story).

Red, white, gray, black, and a cross bar. That will complete the second story. Again, red, white, gray, black, and a cross bar. That will complete the third story.

Do you understand your job? (A slight pause.) Are there any questions. (A slight pause.) O.K., you may start."

(E removes the demonstration structure. Time = one minute and 10 seconds.)

IV. The skyscraper. (E addressing the S and the confederate.) "Now you have to build a skyscraper. It should be eight stories tall. You can use any color blocks. Place:

1. Two blocks on their long edges like this. (E starts demonstration and continues until four stories are completed.)

2. Two blocks on their long edges across the first two.

3. Two blocks on their long edges across the last ones.

4. Two blocks on their long edges across the last ones. This completes the first four stories. In the same way, you will build the eight stories of the skyscraper.

Do you understand your job? (A slight pause.) O.K., you may start."

(E removes the demonstration structure. Time = one minute and 10 seconds.)

V. The Department Store. (E addressing the S and the confederate.) "Now you have to build a department store. It should be six stories tall. You can use any color blocks. Place:

1. Two blocks on their short edges like this. (E starts the demonstration and continues until four stories are completed.)

2. A cross bar at the top. This completes the first main story.

3. Two blocks on their long edges like this.

4. A cross bar at the top. This completes the second story of the stock rooms.

5. Two blocks on their short edges, and a cross bar at the top.

6. Two blocks on their long edges and a cross bar at the top.

7. Two blocks on their short edges and a cross bar at the top.

8. Two blocks on their long edges and a cross bar at the top. That will complete the six story department store.

Do you understand your job? (A slight pause.) Do you have any questions? (A slight pause.) O.K., you may start."

(E removes the demonstration structure. Time = one minute 10 seconds.)

APPENDIX F

INSTRUCTIONS TO THE SUBJECTS OF FRUSTRATION GROUPS FOR BLOCK-BUILDING ASSIGNMENTS

Instructions to the Subjects of Frustration Groups for Block-Building Assignments

"There are five different jobs for you to do with these wooden blocks. I'll tell you what the jobs are. For each job you finish, I'll pay you a nickel, so from all five jobs you can make a quarter. For each job you don't finish you'll have to give a nickel back to me. This boy (the confederate) will also be working with you. But I'll not give him any money. Only you will get to keep the money if the job is finished. Please remember that each job is to be done in a certain time. The time is long enough that you can do each job easily. You may try as many times as you want to until the job is done. When the time is over, I'll ask you to stop. Did you understand what I said? (A slight pause.) If you have any questions, you can ask me now. Later on I'll not be able to answer your questions. (A slight pause.) O.K."

"Let me tell you something about these blocks. This is the short edge of the block. This is the long edge and this is the broad edge. These bigger (yellow) blocks are cross bars. You must do all the jobs on this wooden board, and you should not move the board from its place. Are there any questions? (A slight pause.) O.K."

"Well, your first job is like this."

APPENDIX G

INSTRUCTIONS TO SUBJECTS BEFORE TAKING THEIR MEASURE OF VERBAL AGGRESSION AGAINST THE CONFEDERATE

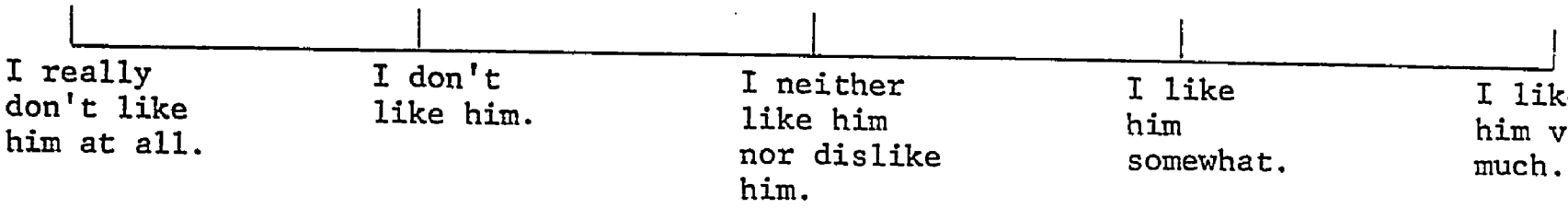
Instructions to Subjects Before Taking Their Measure Of Verbal Aggression Against the Confederate

"O.K. The boy who was working with you at the block building job is in the other room with the door closed and we're here alone. In fact you won't see him again. Remember the way he worked with you? Suppose this is a small picture of him. Show me how you feel about him by putting his picture somewhere along this line. If you really don't like him at all then put his picture here (E points to extreme left of scale). If you like him very much then put his picture here (E points to extreme right of scale). If you don't like him or dislike him then put his picture here (E points to middle of scale). (Each remaining point on scale is explained in this same manner and examples are given to convey the idea of the continuum; i.e., this means like you like your best friend, this means like you feel toward your worst enemy, etc. It is also mentioned that the figure may be placed at any point along the continuum.)

APPENDIX H

SCALE FOR MEASUREMENT OF NON-VERBAL AGGRESSION

How I Feel About The Boy Working With Me



ES ER CS CR

APPENDIX I

INSTRUCTIONS TO SUBJECTS BEFORE TAKING THEIR MEASURE OF NON-VERBAL AGGRESSION AGAINST THE CONFEDERATE

Instructions to Subjects Before Taking Their Measure of Non-Verbal Aggression Against the Confederates

"The boy who was working with you at block-building jobs is now sitting in another room. When I go to his room, I'll ask him to do the same kind of job with the blocks that you did. By pushing these two buttons (E points to the electric push-buttons on the response box) you can either help him or slow down his work. When he starts his work, this light will come on for a very short time. Then by pushing this button, you will be helping him. You see, it says "Helping." He will be able to work faster and better. By pushing this button, you will be slowing down his work. See, it says "Slowing." He will not be able to work fast and will not be able to complete his work. You may push these two buttons 20 times. At the end, this light will come on again and you will stop pushing the buttons. Remember, you can push either of these buttons. Only push one button at a time. Also remember that nobody will know which button you had been pushing. You will be alone in this room and the door will be closed. So you can do as you like. In fact, the other boy won't know who you are or that you are even here. Did you understand the instructions? (A slight pause.) If you have any questions you can ask me now. (A slight pause.) O.K. Now I am going to the room where that boy is sitting. You should wait for the light signal. (E goes out, closing the door behind him)."