

THE RELATIONSHIP OF VIOLENCE TO THE ABILITY,
ACHIEVEMENT, AND ADJUSTMENT OF
SIXTH-GRADE CHILDREN

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THE RELATIONSHIP OF VIOLENCE TO THE ABILITY,
ACHIEVEMENT, AND ADJUSTMENT OF
SIXTH-GRADE CHILDREN

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CHAPTER I

INTRODUCTION

Violence has always been with America, a country that had its beginning in the seeds of revolution. A chief difference in the violence of the past and the violence of today is that it is so much a part of perceptual awareness. Today, violence is a part of every home for it is projected into the home by television. The strife of one city becomes nationwide as the evening news is telecast. Adults are alarmed concerning the effect this violence has on young children. How much is perceived vicariously is difficult to ascertain for children do not perceive the world around them in the same way adults do (20). Much of the perceptual awareness depends on maturation and on the opportunity to learn.

This study sought to determine the relationship between violence and ability, achievement and adjustment through an investigation of perceptual awareness. Two instruments were utilized to determine which children were most cognizant of the violence in society. How does violence in the perceptual field affect mental growth? Are children who perceive much

violence less well adjusted than those children who are less aware of the violence of societies? Answers to these two questions were the purpose of this study. In the study violence became part of the ground figure for learning. An effort was made to measure and dichotomize children into the groups by verbal expressions of inner dynamics (6). Under the disguise of projective technique, the subjects revealed aspects of violence in the perceptual field as they told their fantasy stories. Every individual expresses reality as he perceives his experiential background. He then projects perception by verbal expression. The fantasy stories made in response to the Children's Apperception Test are symbolic of the storyteller's phenomenal field as he identifies with certain characters in his story. This technique is used by psychiatrists in mental therapy.

Statement of the Problem

The purpose of this research was to compare the scores on the variables of ability, achievement, and adjustment in an effort to locate areas wherein the children who perceive and project verbally a high amount of violence are significantly different from children who perceive and project a low amount of violence. There was no precedent for this particular research. The environmental climate of society

has created a need for a study of violence as it affects the perceptual field of children in today's world.

Specifically, this study involved the comparison of scores of low-violence children with the scores of high-violence children as measured by the Children's Apperception Test and a Telebinocular Fusion Test in an effort to locate growth factors that are related to the retention of high violence. In this study the following areas were explored.

1. Mental ability
2. Reading achievement
3. Language usage
4. Concepts in science
5. Arithmetic achievement
6. Social studies
7. Social adjustment
8. Self-adjustment
9. Withdrawal behavior
10. Aggressive behavior
11. Leadership potential
12. Ethnocentricity
13. Creativity

Statement of Hypotheses

Hypothesis I. There will be no significant difference between intelligence test scores of children with high and low-violence scores.

Hypothesis II. There will be no significant difference between reading achievement test scores of children with high and low-violence scores.

Hypothesis III. There will be no significant difference between language usage test scores of children with high and low-violence scores.

Hypothesis IV. There will be no significant difference between scores made on a test of concepts in science made by children with high and low-violence scores.

Hypothesis V. There will be no significant difference between arithmetic test scores made by children with high and low-violence scores.

Hypothesis VI. There will be no significant difference between social studies test scores made by children with high and low-violence scores.

Hypothesis VII. There will be no significant difference between social adjustment scores made by children with high and low-violence scores.

Hypothesis VIII. There will be no significant difference between scores on self-adjustment made by children with high and low-violence scores.

Hypothesis IX. There will be no significant difference between the scores on potential for maladjustment through withdrawal made by children with high and low-violence scores.

Hypothesis X. There will be no significant difference between the scores on potential for maladjustment through aggression made by children who have high and low-violence scores.

Hypothesis XI. There will be no significant difference between ethnocentricity scores made by children with high and low-violence scores.

Hypothesis XII A. There will be no significant difference between scores on potential for leadership made by children with high and low-violence scores when nominated by peers.

Hypothesis XII B. There will be no significant difference between scores on potential for leadership made by children with high and low-violence scores when designated as leaders by their teachers.

Hypothesis XIII. There will be no significant difference between scores on creative thinking by children of high and low-violence scores.

Background and Significance of the Study

In the past five years the bullets of assassins have taken the lives of some of America's greatest leaders: a United States president (all America watched as his assassin was murdered); a black militant leader, Malcolm X; a civil rights leader, Medgar Evers; an advocate on non-violence, Martin Luther King; and a senator of the United States, Robert F. Kennedy.

On an average day in 1967, thirty-four people were murdered. Every four minutes an American was hurt or killed with a gun; every three minutes someone was robbed by force or threat of force. Every two minutes a person was attacked by someone who tried to hurt or kill. In 1967, one of every four hundred Americans was murdered, robbed, or attacked. The Federal Bureau of Investigation reports that in 1968 robbery went up twenty-nine per cent; attack, fourteen per cent; and murder, seventeen per cent. As the population increases, incidents of violence increase. Many crimes of violence are never reported (15).

Almost two hundred years ago William Pitt said, "Where law ends, tyranny begins" (2). An act of civil disobedience is a violation of the law. The National Commission on the Causes and Prevention of Violence was appointed to investigate

the impact of violence as projected by the mass media. Charges have been made that the newsmen dwell excessively on violence in the accounts of civil disorders (18).

Today has been called the age of five revolutions: weapons-technology, access, uprooting, cultural and intellectual explosions, and a time and values revolution (11). These revolutions color the atmosphere for learning and affect both children and adults. Children themselves are more mobile than ever before. The Commission on Violence reported that the key to much of the violence in society was committed by the young people. Youth accounts for an ever increasing percentage of the population. Colleges have been warned against acceding to student protestors to the extent that disciplinary processes are paralyzed (7).

Children view the nation's violence on the television screen; they read the headlines that shout violence in the streets; they see the protestors who defy the establishment. The impact of this violence on children has been the subject for much debate. There seemed to be an urgent need for a research study concerning violence and the perceptual field. This present study was an attempt to identify any of a number of variables with which the perception of violence and the verbal projection of violence are related.

It is very important to understand what a background of violence is doing to the nation's children if the values of the society are to be the inheritance of the youth.

Limitations of the Study

This study is limited to an all-white suburban-school system that is surrounded by a metropolitan area. Conditions vary in different neighborhoods. Few mothers in this school district are employed outside of the home. The parents are very active in the life of the school. Fathers are free to work with children after school hours.

This study is limited in that these children have had the opportunity to learn to an optimum degree. Their basic needs are fulfilled. They have access to neighborhood as well as school libraries; most of them have libraries in their homes. Some of the children have television sets of their own. The majority of these boys and girls are members of service-supported organizations such as the Boy Scouts and Camp Fire Girls. Financially-secure parents see that these children are in good physical health.

This study is limited to these children at the time of testing. Had the study been conducted during the second half of the year, they would have been too old for the Children's Apperception Test. The age is an important factor.

These children were not quite out of the period of latency; they were not yet in the period of adolescence. Boys and girls are just beginning to seek new relationships with the opposite sex.

This study is limited in that the school itself is closely related to the university within its city limits. There is close cooperation between the college and the school. A college class is taught in the building during the time that the children are in school. College students observe the children as they work and play.

This study is limited to sixth-grade children. They are the oldest children in the building which accords stature to them.

This study is further limited to children who measure high in violence and to those children who measure low in violence on scores received from two instruments: The Children's Apperception Test, which was rated for aggressive content, and a telebinocular word fusion discrimination test that checked awareness of words of violent connotation.

This study is limited by a potential for learning in that only two children of the 118 had an intelligence quotient, total score, of less than 85; only seven were below 100.

These boys and girls are representatives of a verbally fluent as well as representatives of an affluent neighborhood.

Basic Assumptions

The basic assumption for this study was founded on the premise that violence in society as projected through television and other media leaves a residue in children's minds that can be measured through projective techniques. It was also assumed that each of the sixth-grade teachers would complete the Behavior Description Chart in a uniform manner. It was further assumed that all of the children in the study would cooperate willingly in the completion of the forms that were required in the study.

Procedures for Collecting the Data

Subjects for this comparative study were 118 sixth-grade children: 69 boys and 49 girls. By the use of The Children's Apperception Test and a word-recognition test that utilized a telebinocular, the children were separated into three groups. The average group was eliminated from the comparison, leaving a low-violence group and a high-violence group. To qualify for the low group, a child had to be in the lowest third of the CAT and in the bottom half of the fusion test. Children of the high-violence group had a score that appeared in the highest third of the CAT scores

and in the top half of the word-recognition test. Both of these tests were individual in nature; they were used in an attempt to measure each subject's awareness to violence in his environment.

The following instruments were used to gather the information essential to this study.

1. The Children's Apperception Test. This projective technique consists of a set of ten cards. Animals assume positions that resemble behavior of people. They were designed to elicit aggressive content (1). Cards 2, 3, 6, 7, and 8 were selected for use in this study.

2. The Telebinocular Fusion Test was designed for this study. It consists of thirty pairs of words that are similar in configuration, a word of violence and a word of neutral connotation.

3. The California Test of Mental Maturity, Level II, Short Form. This test yields three measures: verbal, non-verbal, and total (17).

4. The Stanford Achievement Test, Elementary Form. Scores for arithmetic, language, science, reading, and social studies were secured by the use of this instrument (10).

5. The Semantic Differential Scale. Osgood (13) recommends a five-step scale for elementary school children.

Concepts that were used by Roy S. Lilly (12) were employed to measure prejudice for the different races. This scale was simplified by the use of numbers and transparencies.

6. "How Pupils See Each Other" is a sociometric questionnaire that was used to obtain role designations by the subjects. From this instrument scores for social adjustment and leadership potential were obtained (4).

7. "The General Anxiety Scale for Children" developed by Sarason (15) for his study concerning anxiety in children obtained the measures for self-adjustment.

8. "The Behavior Description Chart" (9) is a forced-choice device designed by Havighurst for teachers to rate children. Three scores were obtained from it, namely: leadership, potential for maladjustment for withdrawal, and potential for maladjustment for aggression. This chart has been useful in locating children who have potential leadership or withdrawal maladjustment or aggressive maladjustment in previous studies (3). Teachers rated the children of the low and high-violence groups on traits they were most like and those on which they were least like.

9. The Torrance Tests for Creative Thinking, Forms A, Pictorial and Verbal, were used to supply the scores for measuring creativity (19).

The elementary consultant administered the mental maturity tests to each of the sixth-grade home rooms. The home room teachers gave the Stanford Achievement Test and completed the "Behavior Description Chart." All other instruments in the study were administered by the same teacher.

Procedure for Treatment of Data

Fischer's t scores were computed for The Children's Apperception Test and for the Telebinocular Fusion Test to be sure that there was a significant difference between the low-violence children and the high-violence children. Then Hotelling's T^2 was computed to ascertain whether or not there was a significant overall difference. Since no significant difference was found for an overall difference, Fisher's t scores were computed for each of the variables.

Hypothesis I was tested by comparing the scores of the high-violence children with those of the low-violence children achieved through use of the California Test of Mental Maturity. Scores were compared for verbal, non-verbal, and total intelligence potential.

Hypothesis II was tested by a comparison of reading achievement scores made by the high-violence children and the low-violence children on the Stanford Achievement Test.

Hypothesis III was tested by comparing the scores of the high-violence children with the scores of the low-violence children. These scores came from the Stanford Achievement Test.

Hypothesis IV was tested by comparing the scores of low-violence children with the scores of high-violence children on the science concepts of the Stanford Achievement Test.

Hypothesis V was tested by comparing the scores of the low-violence children with the scores of the high-violence children on arithmetic scores of the Stanford Achievement Test.

Hypothesis VI was tested by comparing the low-violence children with the high-violence children on scores in social studies of the Stanford Achievement Test.

Hypothesis VII was tested by comparing the low-violence children with the high-violence children on scores made on social adjustment peer nominations from "How Pupils See Each Other."

Hypothesis VIII was tested by comparing the low-violence children with the high-violence children on scores on self-adjustment from "The General Anxiety Scale for Children."

Hypothesis IX was tested by comparing the low-violence children with the high-violence children on scores on

potential for maladjustment through withdrawal using the instrument, "Behavior Description Chart."

Hypothesis X was tested by comparing the low-violence children with the high-violence children on scores on potential for maladjustment through aggression derived from the instrument, "Behavior Description Chart."

Hypothesis XI was tested by comparing the low-violence children with the high-violence children on scores of ethnocentricity drawn from the instrument, "The Semantic Differential Scale."

Hypothesis XII A was tested by comparing the low-violence children with the high-violence children on scores on potential for leadership drawn from the social roles instrument, "How Pupils See Each Other." Hypothesis XII B was tested by comparing the low-violence children with the high-violence children on scores on potential for leadership. Scores were secured from the "Behavior Description Chart."

Hypothesis XIII was tested by comparing the low-violence children with the high-violence children on scores of creative thinking drawn from The Torrance Tests for Creative Thinking, Figural A and Verbal A.

In an effort to find any relationship between high and low violence, Fisher's t was also computed for various

components of tests made on the instruments from which scores were derived. This was believed essential in order to determine if violence had a relationship with any of the variables under study.

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CHAPTER II

SURVEY OF RELATED LITERATURE

Introduction

In Chapter I some of the environmental forces that influence the perceptual field were reviewed. These events emphasize the present need for a study concerning the impact of violence children perceive. Learning is an individual matter and is influenced by one's personal experiences with the factors of his environment. The perceptual field is constantly being revised and changed. Learning by exposure to violence in society is achieved vicariously. The perception of the individual and his sensitivity to environmental influences govern the amount of violence that is retained. Combs and Snygg (8) list five major sources from which concrete experiences are derived.

1. The natural scene--the geographic and geologic features about us.
2. The constructions of man.
3. The world of living things.

4. The experience of the self--one's own physical, emotional, and thinking being.

5. The interaction with others.

No one is ever free from the effect of his culture on perception. These vicarious learnings that occur in the individual's field are limited both by the opportunity to learn and by the happenings of the times. The knowledge explosion, the war in Vietnam, violence in the streets, strikes, riots, and other forms of civil disobedience have been the subjects for debates and have created concern over the effect these events have on children. Much ado but little research has been conducted in an attempt to discover what is happening to the children as a result of an environment of violence.

Research Related to the Study

In "Television's Impact on the Child" Ralph Garry (12) reviews some of the studies of the effects of filmed aggression on young children. An attempt was made to measure the extent to which aggression carried over into play situations following the viewing of films with aggressive content. It was concluded that the films aroused aggressive impulses that were not discharged by the children. One of the positive conclusions was the contribution to the vocabulary development

of pre-school children. Emotionally disturbed children are more likely to be directly affected by acts of aggression on television than are the mentally healthy. The greater the parent-child conflict, the greater the use of television, radio, and motion pictures and the less the use of print. The aggressive feelings thus stimulated are more likely to fall into the anti-social category than in the socially constructive category. Heavy viewing and exclusive viewing of television should be regarded as a danger signal. For the acquisition of any positive effects of television on children, parents must take the time to view and discuss programs with the children. Parents must make their beliefs and attitudes clear in words and deeds. Parents must maintain healthy emotional relationships with their children.

A study by Witty and Martin (30) reveals that children do retain information about aggressive behavior. The study analyzed children's compositions that were written in response to a film on violence. Subjects were from 79 classrooms in forty schools of thirty-four cities. The elementary school children were shown a film without words, "The Hunter in the Forest." These stories were not scored for aggressive content but were judged on the basis of quality of writing.

A summary of the research reported that the stories revealed the awareness of violence that was depicted in the film.

Albert Bandura (1) used three experimental groups and a control group in a study on aggression that was prompted by viewing of a film of violence. Subjects were forty-eight boys and forty-eight girls with a mean age of fifty-two months. One group observed real life aggressive models; the second group viewed the same models on film; the third group saw a film of aggression of cartoon type. All three groups expressed significantly more aggressive behavior immediately after the experience than the control group did.

Marie Townsend Moore and Juliana Townsend Gensley (19) did a pilot study for the annual conference of the California Educational Research Association in March, 1967. The problem was limited to the impact of crime and incidents of destruction that fell within these categories: accidents (personal injury and property damage), arson, assault and battery, bombing, burglary, embezzlement, kidnapping, murder, rape, vandalism, use of deadly weapons, and resisting or interfering with an officer in the performance of his duty. The basic assumption of this study was that all television programs and commercials had impact. Findings revealed that time of day and time of week had a high correlation with

the incidence of crime and destruction in the television curriculum. Children's programs had a high incidence of accidents, assault and battery, bombings, arson, kidnapping, burglary, vandalism, and the use of threat. These incidents were chiefly cartoon features with commercials following like patterns. Crime and violence rarely appeared during the day. Many programs in the evening were crime motivated.

In the fall of 1963, George E. Mason (18) used twelve teachers and 345 children in grades K-7 in a study to determine if poor readers could learn words as well as good readers. Words and phrases were drawn from commercials that were presented at prime viewing times. The words and phrases were reproduced on cards in a fashion that resembled the screen presentation. Of the 11,978 responses made by the children 8,238 were correct. These responses were tabulated according to grade level. Testing of the children revealed that in general poor readers seem to learn less well from television than do good readers. This report made no attempt to control the amount of time the children viewed television nor were the subjects matched for intelligence. So many extraneous influences appeared to be working that no conclusive evidence concerning the impact of television on word perception was possible.

Myra Muste (20) investigated some influential factors concerning behavior using thirty children of kindergarten and nursery school age. This study, utilizing real life situations, indicated that the environment is an influential factor in the frequency of aggressive acts. Differences in environment may induce or lessen frequency of aggressiveness in either sex; boys consistently measure more aggressive tendencies than do girls. Father-absent boys were less aggressive than were the father-present boys. Greater aggression was shown toward the father than toward the mother. Aggressive tendencies appear to increase as a child grows older.

Olson and Pau (21) conducted a study the purpose of which was to use a psychological model and verify empirically Sylvia Ashton-Warner's observation that children learn words of intense feeling more quickly than they do static words. For the study, subjects were nine boys and nine girls of a primary school in Nova Scotia. None of the children could read. The overall design consisted of visual presentation of words, one-half of which were emotionally loaded. The other half were words of neutral meaning. The anticipation method with correction after each response was used. Words were selected from the Lorge-Thorndike word list. Children

who were not in the study made lists of words under two headings: "Words I Love" and "Words I Hate." From these lists six words were selected for the experiment. Children required significantly fewer trials to learn the emotional words than they did the neutral words. To substantiate this finding, the study was replicated.

In Violence in the Streets, Shalom Endleman (10) reviews briefly some of the research literature.

Albert Bandura observed that not only does exposure to filmed aggression heighten aggressive behavior in children, but children modeled their behavior after the film characters. Observation of television may serve as an important source of social behavior (10, p. 1).

Leonard Berkowitz found that observing violence under experimental conditions can stimulate aggressive behavior by normal as well as by disturbed people. The study revealed the inefficiency of the present media code to justified violence where the villain got the beating he deserved since it is with the one meeting the punishment that the viewer identifies (10, p. 3).

In the same digest Jerome Ellison (9) expresses great concern for the influence of the mass media on the high school dropouts who are weak in inward restraints.

In a study utilizing the Thematic Apperception Test with 256 subjects of middle-class boys, Heymann (14) found that intelligence affected the fantasy scores, aggressive behavior ratings, and the relationships between the two.

Only themes of indirect fantasy aggression were found to be significantly related to aggressive behavior and only in the fifteen-year-age group.

In another study using the Thematic Apperception Test with seventy-two white boys, aged ten to thirteen, Lesser (16) found that under conditions of maternal encouragement of aggression, a degree of correspondence seemed to exist between fantasy and overt aggression of children at a higher level than under conditions of maternal discouragement of aggression. Ferguson (11) used thirty-two boys in a study that revealed high aggression was related to unstable home environments.

Siegel (24) tried to determine the influence of the mass media on children's role expectations. His hypothesis suggested role expectations would be influenced by dramatic presentations. There were twenty-nine seven-year-old children in the experimental group. Eighteen of the subjects were boys. The control group had a total of fifteen children, nine being male. In general the data seemed to support the hypothesis.

Research Related to the Instruments

Buros (7) rates The California Test of Mental Maturity as the best of group intelligence tests. Reliability

coefficients range with the Kuder Preference at most grade levels is from .87 to .89. The average coefficient is about .75 with the Stanford-Binet and the Weschler Intelligence Test. Briggs (6) used this test to measure the intelligence of successful students in his study concerning the impact of failure on elementary school pupils.

The Stanford Achievement Test (15) was used to ascertain the achievement level of reading, language, arithmetic, social studies, and concepts in science. This test has a reliability coefficient range of .66 to .96 and is considered to be one of the best of group tests.

"The Behavior Description Chart" was developed by the Committee on Human Development of the University of Chicago under the direction of Robert J. Havighurst (13) and was published in Studying Children and Training Counselors in a Community Program, edited by Havighurst. It was developed by a study that utilized 487 children and lasted for a period of nine years. One must assume that the teachers who use this rating scale will be consistent in their interpretation. Teachers ratings correlate fairly well with the ratings of pupils.

Self-rating instruments similar to the anxiety scale used in this study (see Appendix E) and in the study by

Sarason (23) are useful in developing an understanding of children (5). The assumption must always be made that subjects are honest in compliance. The instrument has a built-in lie scale. A weakness of these instruments lies in the lack of self-knowledge by the rater.

"How Pupils See Each Other" is a sociometric instrument that pupils complete. The true structure of a classroom is revealed through role nominations. Choices disclose leaders, isolates, and the different role perceptions of the children. By having a pupil nominate himself, a measure of ego strength can be achieved. This technique has been used by Merl Bonney (4) in some of his research with elementary school children.

The Torrance Tests of Creative Thinking (27) uses both verbal and pictorial thinking. Reliability ranges from .69 to .93 for the verbal and from .60 to .85 on the figures for correlations between tests A and B. This is perhaps the best of the creativity tests for children.

A Semantic Differential Scale was constructed to measure ethnocentrism. As recommended by Osgood (22) in The Measurement of Meaning, a five-step scale was devised for elementary school children. Transparencies and numbers helped to clarify the scale for the subjects. Concepts that were rated were

Indian, Mexican, Chinese, and White. The validity of the differential attitude scale appears to be high, based on correlations that were gathered by Thurston, Likert, and Guttman types of scales. In lieu of an adequate criterion for measuring meaning, correlations of the differential scale are difficult to obtain. The instrument is usually accorded face validity (5). The design of the instrument used in this study is copied from Roy S. Lilly (17), who did a Developmental Study of the Semantic Differential connected with a naval research project.

The Children's Apperception Test is a clinical type projective test designed by the Bellaks (2). The test materials consist of ten pictures of animal figures in a variety of situations that are usually assumed by humans. The children in the present study were eleven but were not too old for this test that is designed for ten years and under. A pilot study was conducted in the spring of 1969 with a room in the subject school. Children of that study preferred the CAT to the TAT. Thema is that a child will identify with a character of his story. Stories of this present research were scored for aggressive content. The method of scoring was developed by Stone (25) as part of a Ph. D. thesis on a grant from the Department of Health, Education, and Welfare.

The Telebinocular Fusion Test was constructed for this research. During the spring of 1969, it was used in a pilot study with fifth-grade children of the elementary school from which present subjects were drawn. In the pilot study there were twenty-four subjects, fifteen boys and nine girls (see Table I).

TABLE I

A COMPARISON OF SCORES MADE BY BOYS AND GIRLS ON A TELEBINOCULAR FUSION TEST

Subjects	Violent Means	Non-Violent Means
24	14.75	15.25
15 M	15.07	14.93
9 F	14.22	15.78

Thirty pairs of words were typed on cards corresponding in size with telebinocular cards. A sample card was used to achieve fusion. The subject did not move from the machine until he had responded to all cards. Responses were recorded on a check sheet as the pupil said the word--a check was made if the violent word was perceived; a dash was made beside the number if the subject pronounced the non-violent word. From the total score the derived means were 14.75 for the violent words and 15.25 for the non-violent words. For

the boys the means for violent words perceived was 15.07 and was higher than the means for the non-violent words, 14.93. The result agrees with the study by Muste (20) that boys consistently measure more aggressive tendencies than do girls. The girls perceived more of the non-violent words than they did the violent words.

Summary

Research literature emphasizes that children's viewing of television should be monitored by the parents. Parents should discuss with the children the programs they see in order to help them clarify meanings. Many of the films of aggression are shown at the prime viewing time for children. The following conclusions are drawn from previous research.

1. Emotionally disturbed children are more likely to be affected by acts of aggression on television than are mentally healthy children.
2. Parent-child conflicts are likely to promote susceptibility to aggressive feelings that will fall into the anti-social category.
3. Exposure to violence heightens tendencies of aggression.
4. Parents should view and discuss programs with children.

5. Many evening television programs are crime motivated.
6. Children learn emotionally loaded words more quickly than they learn neutral words.
7. Boys consistently measure more aggressive tendencies than girls do.
8. Environment is an influential factor in the frequency of aggressive acts.
9. Father-absent boys are less aggressive than father-present boys.
10. The mass media has shown an influential affect on children's role expectations.
11. Aggressive tendencies appear to increase with age.
12. Indirect fantasy aggression was significantly related to aggressive behavior in the fifteen-year age group.

It is not known how high and low violence as measured by the Children's Apperception Test and by the Telebinocular Fusion Test are related to the ability, adjustment, and achievement. The purpose of the present research is related to this problem.

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CHAPTER III

METHOD

This was a comparative study of a low-violence group and a high-violence group. The study was made in an effort to discover the relationship which exists between high violence in children and their mental ability, achievement, and adjustment. Some studies have been made concerning aggression as it relates to fantasy stories (10, 11), to television and film mediated aggressive responses (1, 2, 19), and the relationship of aggressive behavior to maternal response (13). Emotionally-loaded words are learned more quickly than are neutral words (16). Other research studies dealt with television as an instructional media (6, 18). Concern over the influence of violence as it is projected by environmental forces prompted this study.

Background of Subjects

By the use of projective techniques, individually administered to 118 sixth-grade children, two groups were selected for a comparative study. The children attended a community school that has a modified home room curriculum. The elementary school is located in a residential neighborhood

that is surrounded by a large city. Children represent upper-middle-class homes; the majority of their parents have at least four years of college.

Design of the Study

This was a comparative study, non-experimental. The subjects for the comparison were assigned to two groups: a low-violence group and a high-violence group. Assignment was made on the basis of scores derived from the visual awareness of words of violence and from the projection of violence in stories of fantasy. Subjects were all in the sixth grade. The only other requirement was that they score high in violence or low in violence as measured by the two tests. Scores of the high-violence group had to appear in the upper third of the Children's Apperception Test and in the top half of the Telebinocular Fusion Test. The low-violence group had scores that appeared in the lowest third of the scores for the Children's Apperception Test and in the bottom half of the Telebinocular Fusion Test. Children of high and low violence were compared on mental ability, reading, language, science concepts, social studies, social adjustment, self-adjustment, ethnocentrism, potential for maladjustment through withdrawal, potential for maladjustment

through aggression, leadership potential, and in creative thinking.

Selection of the Groups

A class roll for each of the five groups involved was secured from the home room teachers. Each of the 118 children was assigned a number that would appear on each instrument to be completed. For the selection process, children were taken, singly, to the science equipment room where the fantasy stories were taped. Subjects for the stories were the pictures on card numbers 2, 3, 6, 7, and 8 of the Children's Apperception Test (3). The cards are in black and white. There is no scenery for background. Card No. 2 has a picture of three bears that are pulling on a rope. The two large bears and the small bear are standing on a mound. One large bear and the small bear are holding one end of the rope; the other bear is holding the rope and is facing the two. Card No. 3 shows a lion seated on a chair that has a high back. He has a pipe in his hand; his legs are crossed. A cane is leaning against the chair. A mouse is looking out of a hole in the baseboard.

On card No. 6 three animals appear to be inside of a cave. Two large animals are on the center of the card; in the foreground a small bear is lying with his eyes open.

The next card, No. 7, appears to be a scene in the jungle. It is the picture of a striped animal with open mouth and claws extended. He could be leaping at a small monkey that is grabbing for some vines. Number 8 is the last card. It shows four monkeys. Two large monkeys are seated on a divan. They have cups in their hands. One has a flower over the ear. Another monkey is seated on a stool and appears to be speaking to a small monkey. A picture of a monkey is over the divan. The frame of the left side of a door is the only other thing that is sketched on this card.

Approximately six subjects recorded stories each day. The stories were transcribed each evening and rated for aggressive content by the use of Stone's (20) scale for the TAT. After each of the five stories for each of the 118 children had been rated, the children were assigned to three groups: low violence, average violence, and high violence. The average group was eliminated for the purposes of this study.

These same children were administered the Telebinocular Fusion Test. Words for this test are in Appendix B. On each card were two words that had been typed on a primer typewriter. There were thirty pairs of words of like configuration. One word had a connotation of violence; the

other was a neutral word. Cards were presented with the words in reverse order to eliminate "eyedness." This procedure necessitated the presentation of sixty cards. The score was the number of words of violence that subject perceived when the words fused.

The telebinocular testing was done in the science equipment room. The subject was seated in a chair at the telebinocular. Fusion was achieved with a fusion card, and the testing began. Subject did not move from the machine until the test was over. Sequence was not in the same order for the reversal of the paired words. As the subject pronounced the word of first awareness, a check was made on a numbered sheet if a word of violence was pronounced by the subject. If the subject pronounced the non-violent word, a dash was placed beside the number on the score sheet. The score was the number of words of violence that were perceived.

After each of the 118 children had been checked for the telebinocular fusion of words, they were assigned to two groups: a low violence and a high violence--according to the number of words perceived as being of violent connotation. Those pupils who appeared in the top half of the telebinocular test were in the high-violence group if they were also among those in the top third of the CAT scores. For the

low-violence comparative group, each subject had to be in the bottom half of the telebinocular fusion scores and in the bottom third of the CAT scores. Final scores revealed thirty-two children in each group, but two children of the low-violence group had not taken the science test on the Stanford Achievement Test. One child who qualified for the high-violence group had missed all of the Stanford Achievement Test (12). This left thirty subjects in the low-violence group and thirty-one in the high-violence group. To equalize the number of subjects to be observed in each group, one child was eliminated from the high-violence group by the process of randomization. There remained thirty subjects in each group.

Scoring the aggressive content was developed by Harold Stone (20) for the Thematic Apperception Test. This was submitted as part of doctor's thesis to the University of California at Los Angeles in June, 1953. Stone's research with the military personnel utilizing this scoring was successful in identifying the hostile-aggressive with statistically significant results and earned a fair degree of validity.

When testing measures were completed, the scores for the Children's Apperception Test were computed at North

Texas State University computer center. (See Table II.) The range for the low-violence group was 6, the median score was 6 and the mean was 5.7, making an almost perfect curve.

TABLE II

A COMPARISON OF THE LOW-VIOLENCE GROUP WITH THE HIGH-VIOLENCE GROUP ON THE CHILDREN'S APPERCEPTION TEST

Group	N	Range	Median	Mean	SD	Fisher's <u>t</u>
Low Violence	30	6	6	5.7	1.79	
High Violence	30	19	21	22.4	4.61	-18.19*

*Significant at greater than .001.

The standard deviation was 1.79. The variance for the high-violence group was greater than for the low-violence group. The high-violence group had a range of 19, indicating that scores were more widely dispersed. The median was 21 with a mean score of 22.4. The standard deviation was 4.61. A Fisher's t score of -18.19 was significant at greater than the .001 level for the aggressive content on the CAT stories. On the basis of this measurement, it is safe to assume that the high-violence group projects a significantly greater number of violent words and acts in fantasy stories.

The computation of Fisher's t test for the telebinocular test reveals that the low-violence group's variance was less than the variance for the high-violence group as shown in Table III. For the low-violence group the range was 4; the median score was 29; the mean was 28.60. There was a standard deviation of 1.54. The high-violence group did not have scores so close together. The range was 14; the median was 32; and the mean was 33.07. The standard deviation was 2.97. Fisher's t test of -7.18 shows a significant difference at greater than the .01 level. The high-violence group perceived a significantly greater number of words of violence than the low-violence group perceived.

TABLE III

A COMPARISON OF THE LOW-VIOLENCE GROUP WITH THE HIGH-VIOLENCE GROUP ON THE TELEBINOCULAR FUSION TEST

Group	N	Range	Median	Mean	S.D.	Fisher's <u>t</u>
Low Violence	30	4	29	28.60	1.54	
High Violence	30	14	32	33.07	2.97	-7.18*

*Significant at greater than the .01 level.

Procedure for Research

The design of this study was a comparison of two groups, non-experimental; the subjects of a low-violence group and of a high-violence group were dichotomized as the result of scores that were made on two instruments. The low-violence group was used as a comparison group in an attempt to discover a relationship with the perception and projection of high violence of sixth-grade children. Comparisons were made between the two groups on mental maturity, reading, language usage, arithmetic, science, social studies ethnocentricity, social adjustment, self-adjustment, leadership, withdrawal, aggression, and creative thinking.

Instruments Used to Collect Data

All of the test instruments were administered in the fall of 1969. The first testing was the recording of fantasy stories on tape. Stories were told in response to cards two, three, six, seven, and eight of the Children's Apperception Test (3). The second test was a telebinocular fusion of two words of like configuration: a word of violence and a neutral word. These two instruments were individually administered to each of the 118 children and were used to classify the subjects for comparison.

The Stanford Achievement Test (12) was given by the cooperating teachers in the home rooms. Each teacher had no less than ten years of teaching experience. Directions that are in the test manual were followed in administering the battery of tests.

The elementary consultant administered the California Test of Mental Maturity (21) to each of the sixth-grade sections. Directions of the accompanying manual were followed. Scoring was done by computer for the Stanford Achievement Test and for the California Test of Mental Maturity. All other tests for this study were hand scored. The subjects all appeared eager to cooperate, and most of the tests seemed to be fun to do.

The Torrance Tests for Creative Thinking (22), Pictorial Form A, was the next instrument to be completed by the subjects. Two groups completed the test the last two days of one week; the other two groups did the test the first of the next week. The verbal form of the Torrance Tests for Creative Thinking was completed the following week. The tests were scored by a teacher. Pearson product-moment coefficients between scoring of trained scorers and untrained teachers are from .86 to .99. The low of .86 on originality seems to occur when the scorer rejects the scoring guide (22).

Each classroom was visited for the administration of "The General Anxiety Scale for Children (17)". Instructions were read slowly as the children followed on their scales. As questions were read a second time, the children answered "yes" or "no" to each question. The anxiety score was the number of "yes" answers that appeared on each subject's questionnaire.

"How Pupils See Each Other" (5) is a social roles nomination instrument. To prevent the overlooking of absentees, pupils were given class rolls to use while making the social roles nominations. As an introduction it was explained that no two individuals are alike. Each person has a somewhat different environment, even identical twins. This sheet proposes to identify the number of different roles that are within the classroom. One description may fit several of the students in the room. If no one fits a particular category, it should be skipped. A subject may write "me" under the categories where he sees himself. Roles were read to students. Students were then asked to mention those categories that were not clear to them. They were encouraged to use as much time as was necessary to complete the nominations. A social roles' chart was constructed for each of the sixth-grade rooms using peer nominations from the social

roles instrument. From these home room charts, a chart for the low-violence group and a chart for the high-violence group were made by placing on these two new charts each subject's nomination that were accorded him by the students in his classroom. There were eighteen descriptions on the instrument; another one was added to the role designation. The addition asked the pupils to designate the children who were good leaders. Each subject's total role score constituted his social adjustment score; the total for the leadership nomination was the subject's leadership score received from peers.

A Semantic Differential Scale was constructed to check ethnocentricity. Concepts were rated in this order: Indian, Mexican, Chinese, White. The total score on ethnocentricity consisted of a tally of points. Since the feelings concerning other races were desired, the white race ratings were eliminated from the total score. A Fisher's t score was computed for this concept when individual concepts were analyzed.

The cooperating teachers completed the "Behavior Description Chart" (9) for each subject that was in the high-violence group and for each subject who was in the low-violence group. Instructions for the completion of the chart

were explained to the teachers. When these charts were completed, the process of comparing scores of the high-violence group with the scores of the low-violence group began.

Each of the 118 children completed each instrument in the study. After the two groups were selected and the scores were obtained, individuals per se were eliminated from the study. Only the numbers of the children were used in the final analyses of scores that were obtained from the use of the instruments of this research.

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CHAPTER IV

RESULTS

The results for the Children's Apperception Test and the Telebinocular Fusion Test were presented in Chapter III in the section that described the selection of the subjects. The scores presented there revealed a significant difference between the low-violence children and the high-violence children in the areas measured. The significance was greater than the .01 level on each of the two measures. The high-violence group perceived a greater number of words of violence and used more words of violence in fantasy stories.

This chapter presents the results of the comparison of variables that were used to check the hypotheses. The proposal specified that Hotelling's T^2 would be computed to ascertain if a significant overall difference existed between the low-violence group and the high-violence group. Table IV presents the data that were obtained from this statistical analyses. Hotelling's T^2 was 15.31256. The F score was .84860. By this F score no significant difference was revealed. The low-violence group made higher scores in reading than did the high-violence group. The low-violence group also

TABLE IV
RESULTS OF HOTELLING'S T^2 * FOR AN OVERALL SIGNIFICANCE**
BETWEEN THE MEAN SCORES FOR THE HIGH
AND LOW-VIOLENCE GROUPS

Hypotheses	Low-Violence Group			High-Violence Group		
	Mean	S.D.	Variance	Mean	S.D.	Variance
I	118.57	10.81	116.78	118.27	8.14	66.20
II	69.50	24.99	624.52	65.97	22.74	517.17
III	66.40	25.65	657.97	62.93	21.93	481.06
IV	64.63	26.27	689.97	63.97	26.33	693.10
V	61.13	18.05	325.85	60.40	18.07	326.57
VI	64.40	26.02	677.24	68.83	21.73	472.07
VII	21.37	23.00	528.97	23.73	22.74	517.00
VIII	23.10	4.65	21.62	21.53	7.03	49.45
IX	1.23	1.87	3.51	1.67	2.21	4.89
X	1.33	1.99	3.96	.90	1.37	1.89
XI	12.90	12.09	146.09	10.00	11.02	121.47
XII-A	1.53	2.73	7.45	1.53	3.14	9.85
XII-B	3.93	3.71	13.73	3.67	3.49	12.16
XIII	179.80	37.95	1440.29	192.20	49.81	2481.03

* $T^2=15.31256$; $F=.84860$.

**No significant difference between the low and high-violence groups.

had higher mean scores in science, language, and arithmetic. The high-violence group had higher mean scores in social adjustment than the low-violence group had. The low-violence group had higher scores on self-adjustment than did the high-violence group. They rated other races higher than the high-violence group did. On the Torrance Tests of Creative Thinking, the high-violence group made higher scores. A study of the scores could not reveal whether or not a real difference existed in any area.

Since this study purported to investigate thirteen variables in search of a significant relationship with high violence in children, Fisher's t test was computed for each of the variables and for the various divisions involved.

The two groups in the comparative study performed almost equally well. (See Table V.) The low-violence group performed better in the non-language area with a mean score of 116.67. The mean score for the high-violence group was less than two points lower: 114.83. The scores for the low-violence group differed more from the means in all three components than did the high-violence group on the mean scores. For the low-violence group the standard deviation for each area was as follows: language, 10.54; non-language, 11.86; total I. Q., 10.81. The mean scores in each area for

TABLE V

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON
THE CALIFORNIA TEST OF MENTAL MATURITY

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Language IQ	117.23	10.54	117.93	7.78	.29*
Non-Language	116.67	11.86	114.83	10.42	.63*
Total IQ	118.57	10.81	118.27	8.14	.12*

*No significant difference.

the high-violence group were lower; their scores were closer together: language 7.78; non-language, 10.42; total I. Q., 8.14. The Fisher's t score of .29 revealed a higher score for the high-violence group in the language area. The t scores of .63 in non-language and .12 in the total I. Q. revealed that the low-violence group had a higher score in these two areas. The range of scores for the low-violence group was greater at 45; range for the high-violence group was 33. Each of the two groups had one subject with an intelligence quotient of less than 100 on the total. These scores tested Hypothesis I. There was no significant difference between intelligence test scores of low-violence children and high-violence children. The null hypothesis was therefore accepted.

It was predicted by Hypothesis II that there would be no significant difference in reading scores of the low-violence group and the high-violence group. This hypothesis was tested by comparing the scores made by the low-violence children and the scores of the high-violence children that were made on the reading section of the Stanford Achievement Test (see Table VI).

TABLE VI

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON THE READING SCORES OF THE STANFORD ACHIEVEMENT TEST

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Word Knowledge	68.4	26.37	66.93	23.30	.22*
Paragraph Meaning	71.67	25.23	65.13	24.78	.99*

*No significant difference.

The mean percentile score for the low-violence children on word knowledge was 68.4 with a standard deviation of 26.37. The high-violence group had a mean percentile score of 66.93 and a standard deviation of 23.30. Fisher's t test score was .22; the low-violence children had the higher score, but this was not a significant difference.

In paragraph meaning the low-violence children had higher scores. The mean percentile was 71.67; the standard deviation was 25.23. The high-violence group had a mean percentile of 65.13 and a standard deviation of 24.78. On both of the reading sections of the Stanford Achievement Test, the low-violence group showed greater variance from the mean score. Fisher's t score for the paragraph meaning test was .99. This figure also was insignificant, indicating that the two groups were very similar in reading achievement. The null hypothesis was accepted.

Hypothesis III stated that there would be no significant difference on language scores made by the low-violence group and language scores made by the high-violence group. Table VII shows that the mean percentile for the low-violence group in the language area was 66.40; the standard deviation was 26.25. The high-violence group had a mean percentile of 62.93 and a standard deviation of 21.93. While the low-violence group had a higher mean percentile, they also had percentiles that deviated more from the means as was indicated by their higher standard deviation. Fisher's t score of .55 was insignificant and did not reveal a difference high enough to reject the hypothesis. The t score was well below the five per cent level. The null hypothesis was accepted.

TABLE VII

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON THE LANGUAGE SCORES OF THE STANFORD ACHIEVEMENT TEST

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Language	66.40	26.25	62.93	21.93	.55*

*No significant difference.

Hypothesis IV predicted that there would be no significant difference on the scores on concepts in science made by the low-violence group and the high-violence group. As shown in Table VIII the difference was almost nil.

TABLE VIII

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON SCIENCE CONCEPTS SCORES OF THE STANFORD ACHIEVEMENT TEST

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Science Concepts	64.63	26.27	63.97	26.33	.10*

*No significant difference.

The mean percentile for the low-violence group was 64.63.

For the high-violence group the mean percentile was 63.97.

This was less than one point. Standard deviation for the low-violence group was 26.27; standard deviation for the high-violence group was 26.33. Fisher's t score of .10 indicated the two groups scored about the same on science concepts. Range for the low-violence group was 81; for the high-violence group the range was 78. This and the standard deviation indicated that there was wide variance among both groups, but they each varied much the same. The null hypothesis was accepted.

Hypothesis V predicted that there would be no significant difference in the scores on arithmetic made by the low-violence group and the high-violence group (see Table IX).

TABLE IX

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON THE SCORES IN ARITHMETIC FROM THE STANFORD ACHIEVEMENT TEST

Criterion	Low Violence		High Violence		Fisher's t
	Mean	S.D.	Mean	S.D.	
Arithmetic Computation	46.87	21.89	41.90	19.51	.93*
Concepts	68.07	18.34	63.73	23.37	.78*
Application	70.30	24.20	72.07	26.16	-.27*

*No significant difference.

In computation the mean percentile for the low-violence group was 46.87; the mean percentile for the high-violence group was 41.90. The standard deviation was greater for the low-violence group, indicating a greater range of scores.

Standard deviation in the area of computation was 21.89 for the low-violence group and 19.51 for the high-violence group. Fisher's t score of .93 revealed that the low-violence group had scores higher than the high-violence group had in arithmetic computation. This t was not significant.

The mean percentiles in concepts were 68.07 for the low-violence group and 63.73 for the high-violence group. The percentile scores for the high-violence group varied more from the means than the low group did. Standard deviation scores were 18.34 for the low-violence group and 23.37 for the high-violence group. The t score of .78 revealed that the low group had a higher score than the high-violence group had.

In the area of application the high-violence group had a percentile mean score of 72.07 and a standard deviation of 26.16. The mean percentile for the low-violence group was 70.30; the standard deviation was 24.20. Although the low-violence group had scores that varied less from the means, Fisher's t score of -.27 indicated that the high-violence

group had higher scores than the low-violence group had in arithmetic application. There was no significant difference on the scores made in arithmetic by the low-violence group and the high-violence group. The null hypothesis was accepted.

Hypothesis VI predicted that there would be no significant difference on the scores made in social studies by the low-violence group and the high-violence group. To test the hypothesis the social studies test of the Stanford Achievement Test was used (see Table X).

TABLE X

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON SCORES IN SOCIAL STUDIES DERIVED FROM THE STANFORD ACHIEVEMENT TEST

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Social Studies	64.40	26.02	68.83	21.73	-.70*

*No significant difference.

The means for the low-violence group was 64.40; the standard deviation was 26.02. They varied more from the means than did the high-violence group; the range for the low-violence group was 80. The high-violence group had a mean percentile of 68.83 and a standard deviation of 21.73. The range for

the high-violence group was 78. The t score of $-.70$ indicated that the high-violence group had higher scores than did the low-violence group. Since there was no significant difference between the two groups as measured by this test, the null hypothesis was accepted.

The range for the low-violence group on social adjustment was 89, as shown in Table XI. Variance was wide;

TABLE XI

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON SOCIAL ADJUSTMENT WITH SCORES DERIVED FROM THE SCALE "HOW PUPILS SEE EACH OTHER"

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Social Adjust- ment	21.37	22.10	23.73	22.74	$-.39^*$

*No significant difference.

the low score was 3, and the high score was 92. For the high-violence group the range was 86. The mean score for the low-violence group was 21.37; the standard deviation was 22.10. The high-violence group had a mean score of 23.73 and a standard deviation of 22.74. As observed by their peers, both groups were about equally well adjusted socially. Fisher's t score of $-.39$ revealed that children saw the

high-violence group as being slightly better adjusted socially than the low-violence group was. No significant difference between the two groups was revealed by this measure; the null hypothesis was therefore accepted.

Hypothesis VIII predicted that there would be no significant difference made on scores of self-adjustment between the low and high-violence groups. The criterion that was used to measure self-adjustment was "The General Anxiety Scale for Children" (see Table XII).

TABLE XII

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON SELF-ADJUSTMENT WITH SCORES DRAWN FROM THE "THE GENERAL ANXIETY SCALE FOR CHILDREN"

Criterion	Low Violence		High Violence		Fisher's <u>t</u>
	Mean	S.D.	Mean	S.D.	
Self-Adjustment	23.10	4.65	21.53	7.03	1.00*
Lie Scale	1.40	1.11	1.93	1.53	-1.52*

*No significant difference.

The mean score for the low-violence children was 23.10; the standard deviation was 4.65. The mean percentile for the high-violence group was 21.53; their standard deviation from the mean was 7.03. Fisher's t score was insignificant though

the low-violence group had a higher mean score than did the high-violence group. The high-violence group also told more lies than the low-violence group did as revealed by the built-in lie scale. Again the t score was insignificant at -1.52. For the .05 level of significance, this score would have had to be 2.00. The range of 23 for the low-violence group was not as wide as the range of 26 for the high-violence group. Scores for the high-violence group were more widely dispersed. The statistical analysis did not reveal a significant difference. The null hypothesis was accepted.

The "Behavior Description Chart" was the instrument that measured the potential for maladjustment through withdrawal and the potential for maladjustment through aggression. This was the forced-choice instrument that teachers used to rate pupils who were in the comparative study. (See Table XIII.)

Hypothesis IX and X made predictions concerning potential for maladjustment. Hypothesis IX predicted that there would be no significant difference on potential for maladjustment through withdrawal made by children of low-violence and high-violence scores. The low-violence group had a mean score of 1.23 and a standard deviation of 2.87 on withdrawal

tendencies as rated by their teachers. The high-violence mean score was 1.67; the standard deviation was 2.11. The high-violence group had higher scores on withdrawal than did the low-violence group. Fisher's t score of $-.81$ substantiated this although the score of $-.81$ was statistically insignificant. The null hypothesis was accepted.

TABLE XIII

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON POTENTIAL FOR MALADJUSTMENT THROUGH WITHDRAWAL AND AGGRESSION AS MEASURED BY THE "BEHAVIOR DESCRIPTION CHART"

Criterion	Low Violence		High Violence		Fisher's t
	Mean	S. D.	Mean	S.D.	
Withdrawal	1.23	1.87	1.67	2.11	$-.81^*$
Aggression	1.33	1.99	.90	1.37	$.97^*$

*No significant difference.

Hypothesis X predicted no significant difference in scores on potential for maladjustment through aggression. Fisher's t score of $.97$ suggested that the low-violence group had greater potential for maladjustment through aggressive tendencies. The mean score for the low-violence group was 1.33; the standard deviation was 1.99. The high-violence

group had a mean score of .90 and a standard deviation of 1.37. The difference in scores was not significant. The null hypothesis was accepted.

Hypothesis XI stated that there would be no significant difference between ethnocentricity scores made by children with high and low-violence scores. On this scale, the lower the score, the more prejudiced the rater (see Table XIV).

TABLE XIV

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON ETHNOCENTRICITY SCORES AS SHOWN BY A SEMANTIC DIFFERENTIAL SCALE

Concept	Low Violence		High Violence		Fisher's \underline{t}
	Mean	S.D.	Mean	S.D.	
Indian	6.37	4.82	4.73	5.10	1.25*
Mexican	.80	5.26	1.97	6.72	- .73*
Chinese	5.93	7.04	2.90	8.12	1.51*
Total Score	12.90	12.09	10.00	11.02	.95*

*No significant difference.

On the rating of ethnocentrism for the Indian, the mean score for the low-violence children was 6.37; the standard deviation was 4.82. The mean score made by the high-violence group was 4.73; the standard deviation was 5.10. Ratings of

the high-violence group were lower and deviated more from the mean, indicating a wider range of scores. Fisher's t score of 1.25 indicated that the low-violence group was less prejudiced than the high-violence group was, even though the difference was statistically insignificant.

Neither group regarded the Mexican with as much respect as they did the Indian. The mean score for the low-violence group was .80; the standard deviation was 5.26. The high-violence group had a mean score of 1.97 and a standard deviation of 6.72. Fisher's t score of -.72 indicated that the high-violence group was less prejudiced toward the Mexican than the low-violence group was.

The low-violence group had a mean score of 5.93 and a standard deviation from the mean of 7.04 when the Chinese was rated. The high-violence group earned a mean score of 2.90 and had a standard deviation of 8.12. Fisher's t score was 1.51. Since a score of 2.00 was required for the .05 level of significance, this figure was not significant.

The mean score for the total score on ethnocentricity was 12.90 for the low-violence group. The standard deviation was 12.09. The high-violence group had a total mean score of

10.00 and a standard deviation of 11.02. Since Fisher's t score of .95 did not show a difference great enough to be significant, the null hypothesis was accepted. The ratings of concepts were in this order: Indian, Chinese, Mexican. The Indian was rated the highest by the subjects; the Mexican was rated the lowest.

Hypothesis XII predicted that there would be no significant difference between scores on potential for leadership made by children with high and low-violence scores. (See Table XV.) This hypothesis was to be tested in two parts.

TABLE XV

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON POTENTIAL FOR LEADERSHIP AS NOMINATED BY PEERS AND RATED BY TEACHERS

Criterion	Low Violence		High Violence		Fisher's t
	Mean	S.D.	Mean	S.D.	
A. Leadership Nominations by Peers	1.53	2.72	1.53	3.13	.00*
B. Ratings by Teachers	3.93	3.70	3.67	3.49	.28*

*No significant difference.

For Hypothesis XII A, peer nomination scores were taken from the social roles instrument. Children were asked to designate the leaders in their room. The mean score for the low-violence children was 1.53 for leadership; the standard deviation was 2.72. The high-violence group had a mean score of 1.53 with a standard deviation of 3.13. Fisher's t test revealed no difference whatever between the groups for potential in leadership. The score was zero. Hypothesis XII A was accepted.

Hypothesis XII B scores came from the "Behavior Description Chart." As rated by their teachers, the low-violence group had a mean score of 3.93 and a standard deviation from the mean of 3.70. The mean score for the high-violence group was 3.67; the standard deviation was 3.49. Fisher's t score was again insignificant at .28. The teachers saw a greater potential for leadership for both groups than did the peers. Both A and B parts of the hypothesis proved to be of no significance. Hypothesis XII B was accepted in the null.

Both Figural A and Verbal A test booklets of the Torrance Test of Creative Thinking were administered. These were used to test Hypothesis XIII which stated that there would be no significant difference between scores on creative thinking by children of high and low-violence scores. The

figural test consisted of three ten-minute sessions of drawing from a closed curve, from curved and straight lines, and from pairs of straight lines. Directions for scoring came from the test manual. Four sets of scores were achieved from the figural test. (See Table XVI.)

TABLE XVI

A COMPARISON OF THE HIGH AND LOW-VIOLENCE GROUPS ON
CREATIVITY WITH SCORES DRAWN FROM THE
TORRANCE TESTS OF CREATIVE THINKING

Criterion	Low Violence		High Violence		Fisher's <u>t</u>	Signifi- cance
	Mean	S.D.	Mean	S.D.		
Figural A Fluency	17.43	5.10	17.47	5.95	.02	NSD
Flexibility	14.40	4.42	14.10	4.50	.26	NSD
Originality	20.43	5.65	21.73	7.73	-.73	NSD
Elaboration	44.63	18.21	52.53	23.78	-1.42	NSD
Verbal A Fluency	44.70	13.54	43.83	13.36	-.25	NSD
Flexibility	25.63	5.77	25.17	6.55	.29	NSD
Originality	12.67	4.34	16.57	6.80	-2.60	.02
Total Original.	33.43	8.41	38.47	11.83	-1.87	NSD
Overall	179.80	37.95	192.20	49.81	-1.01	NSD

The two groups were almost equal in fluency--the mean score for the low-violence group was 17.43 with a standard deviation score of 5.10. The mean score for the high-violence group was 17.47 with a standard deviation score of 5.95. The Fisher's t score was .02. The flexibility score, too, was about the same for the low-violence group as it was for the high-violence group. The low-violence group had a mean score of 14.40 and a standard deviation of 4.42. The mean score for the high-violence group was 14.10; the standard deviation was 4.50. Fisher's t score was insignificant at .26. The t scores in fluency and flexibility were higher for the low-violence group. The scores for originality and elaboration were higher for the high-violence group. In originality the mean score for the low group was 20.43; the standard deviation was 5.65. The high-violence group had a mean score of 21.73 and a standard deviation of 7.73. Fisher's t score was less than one: -.73. The high-violence group had slightly higher scores than did the low-violence group. The low-violence group members were less elaborate in picture thinking than were the high-violence children. The mean score for the low-violence group was 44.63 with a standard deviation of .21. The high-violence group had a mean score of 52.53 in elaboration and a standard deviation of 23.78.

Their scores in elaboration were higher but deviated more from the mean score. Fisher's t score was -1.42; this figure, though, is still below the level of significance. In figural thinking the two groups were almost equal on the flexibility mean score. The high-violence group had higher means on originality and elaboration in figural thinking than did the low-violence group.

In verbal thinking, both groups were almost equal on their scores on fluency and flexibility. The low group had a mean score of 44.70 and a standard deviation of 13.54 on fluency. The high-violence group had a mean score of 43.83 and a standard deviation of 13.36 on the same test. The t score was not significant at -.25. In flexibility the low-violence group had a mean score of 25.36 and a standard deviation of 5.77; the high-violence group had a mean score of 25.17 and a standard deviation of 6.55. Fisher's t score was .29. In these two areas the difference between the two comparative groups was slight. For originality the low-violence group made a mean score of 12.67 and a standard deviation of 4.34. The high-violence group had a means of 26.57 and a standard deviation of 6.80. Fisher's t score of -2.60 was significant at the .02 level.

In total originality the low-violence group had a means of 33.43 and a standard deviation of 8.41. The total score on originality for the high-violence group was 38.47. The standard deviation of 22.83 was much wider than the score of 8.41 for the low-violence group. Fisher's t score of -1.87 indicated the high-violence children were more original than were the low-violence children. The score was not significant enough to say that one group was different from the other.

The overall score for creativity, figural and verbal, was 179.80 for the low-violence group and 192.20 for the high-violence group. The means for the low-violence group was 37.95; the means for the high-violence group was 49.81. Fisher's t score was -1.01. This score was below the five per cent level of significance. The null hypothesis was accepted.

The results of this study reveal that the children of the low-violence group and the children of the high-violence group were of similar capabilities on the thirteen variables that were tested for the hypotheses.

1. The low-violence group and the high-violence group were evenly matched in mental maturity, the means for each group being in the high-average range with a score of 118.

2. According to the measures used, the low-violence group and the high-violence groups were not significantly different in the academic areas of arithmetic, language, social studies, reading, and science.

3. The two groups were not significantly different in potential for maladjustment through withdrawal or maladjustment through aggression as indicated by the ratings of their teachers on the "Behavior Description Chart."

4. When the low-violence group and the high-violence group were nominated for social roles by their peers, no significant difference was found in the area of social adjustment.

5. "The General Anxiety Scale for Children" indicated no significant difference between the low-violence group and the high-violence group in self-adjustment.

6. The measurement secured by the "Semantic Differential Scale" revealed that the two groups were similar in ethnocentrism. The low-violence group appeared to be a little less prejudiced than did the high-violence group.

7. Both groups received approximately the same nominations for leadership as accorded by peers and by teachers.

8. The only significant difference between the low-violence group and the high-violence group was in verbal

originality. The high-violence group gave more original answers to the verbal section of the Torrance Tests of Creative Thinking. Verbal originality was the only section that was statistically significant. The level of significance was $p < .05$. Scores for the high-violence group approached this level in total originality and figural elaboration.

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CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

For this comparative study 118 sixth-grade children were administered two individual tests. On the basis of scores derived from the Telebinocular Fusion Test and the Children's Apperception Test, a high-violence group and a low-violence group were secured for this study. The Telebinocular Fusion Test checked the perceptual awareness to words of violent context that were in the perceptual field of each subject. Response stories to the Children's Apperception Test were analyzed for verbal projection of violence. Children who were assigned to the high-violence group had scores that were in the top half of the visual perception test and in the highest third of the Children's Apperception Test. Children who were assigned to the low-violence group had scores that appeared in the lowest third of the Children's Apperception Test and in the bottom half of the visual discrimination test. Thirty children qualified for the low-violence group. Thirty-one children qualified for the

high-violence group; one of these subjects was randomly eliminated from the study in order to equalize the N's.

The two groups were compared on the basis of scores they made in mental maturity, arithmetic, language usage, reading, science concepts, social studies, social adjustment, self-adjustment, potential for maladjustment through withdrawal, potential for maladjustment through aggression, ethnocentricity, potential for leadership, and creativity.

Several instruments were used to collect data relative to the study: the California Test of Mental Maturity (8), the Stanford Achievement Test (5), "The General Anxiety Scale for Children" (6), "How Pupils See Each Other" (3), the "Behavior Description Chart" (4), a Semantic Differential Scale and the Torrance Tests for Creative Thinking, Verbal A and Figural A, with Norms-Technical Manual (9). All hypotheses in this study were accepted in the null since no significant overall differences were found on any of the thirteen variables.

Findings

No real difference between the low-violence group and the high-violence group was found to exist in mental maturity as tested by the California Test of Mental Maturity. Both

of the groups had a mean score of 118 which is in the high-average range for intelligence (10).

No significant difference was revealed in the area of academic achievement as measured by the Stanford Achievement Test. In reading, language, and science concepts the scores of the low-violence group were slightly higher than were the scores of the high-violence group. The means of the low-violence group exceeded the means for the high-violence group in the areas of arithmetic computation and arithmetic concepts. The high-violence group had a higher mean score than the low group had in arithmetic application and in social studies.

The high-violence group had a higher mean score on the social adjustment nomination instrument than the low-violence group had; the low-violence group had a higher score on self-adjustment than did the high group from scores derived from "The General Anxiety Scale for Children."

The mean scores revealed a tendency for more potential for maladjustment through withdrawal for the high-violence group. The low-violence group means revealed greater potential for maladjustment through aggression. These two findings are in the opposite direction from that which was expected.

The high-violence group had higher mean scores on ethnocentricity than did the low-violence group. The high-violence children showed greater prejudice toward the white race than did the low-violence group; differences were insignificant.

Both peers and teachers saw about the same number of leaders in each of the two groups. On the children's leadership nomination, the correlation was perfect. Fisher's t score for the teachers' designations was .28 and reveals a close correlation between the perception of teachers and of peers in selection of leaders.

One significant Fisher's t score was obtained on the Torrance Tests of Creative Thinking. In the area of verbal originality, the significance was greater than the .05 level. The high-violence group had higher mean scores than the low-violence group had in most of the areas of this test. The scores of the high-violence group came close to the level of significance on figural originality and in figural and verbal elaboration.

A word count was made of the response stories to the Children's Apperception Test. This revealed a finding that was unrelated to the hypotheses. A significant Fisher's t score of -4.13 revealed that the high-violence children

were more verbal in storytelling. The mean word count for the fantasy stories for the low group was 324.9; 717.2 was the mean word count on the stories for the high-violence group. The difference was significant at greater than the .01 level.

Conclusions

The subjects in this study were young children who were of the same chronological age, in the same grade, from an upper-middle class neighborhood where education receives much emphasis. All hypotheses were accepted in the null; statistical analyses reveal that these children grow in ways that are more alike than in ways that are different. This may account for the absence of trends and tendencies of significance. The youth and immaturity of subjects may be another reason statistical significance did not appear. The subjects used by Stone were adults who represented different subcultures; differences were magnified because the subculture is so influential on human growth and development.

Because of the absence of statistics of significance, the following conclusions may be drawn.

1. Due to the number of variables explored and because of the low F score and the insignificant Fisher's t score

it may be said that these children are more alike in ability, achievement, and adjustment than they are different.

2. Violence as measured in this research does not significantly contribute to maladjustment through aggression or maladjustment through withdrawal.

3. Violence as measured in this study does not lower academic achievement.

4. Violence as measured in this study does not contribute to poor self-adjustment.

5. Violence as measured in this study does not lessen peer status.

6. Violence as measured in this study does not contribute to ethnocentricity.

7. Violence as described in this study does not have a depressing effect on creativity.

8. The high-violence children of this study were more original verbally than were the low-violence children. This conclusion was revealed by a significant Fisher's t score on verbal originality from the Torrance Tests of Creative Thinking.

9. Though of no statistical importance, a review of mean scores shows that the low-violence group had higher mean scores in the academic areas with the high-violence group having higher mean scores on the creativity tests. This could indicate that two different kinds of thinking were in process.

10. The high-violence children told stories that had a significantly greater word count than did the stories that the low-violence children told. This conclusion was made as a result of the computation of Fisher's t score on a word count from the fantasy stories of the CAT.

Recommendations

This study was concerned with the perceptual awareness of children to violence and with the projection of violence in fantasy stories. Only two significant differences were found between the low-violence group and the high-violence group. The high-violence group was more original verbally and told longer stories of fantasy than did the low-violence group. The conclusions of this study reveal more by what is not significant than by results of significance. From the analyses of the study, the following recommendations can be made.

1. Further study should be made that will extend into overt acts that may be tabulated from the classroom behavior of the subjects.

2. For future studies of this nature, Stone's (7) content scale should be revised to eliminate children from the high-violence group when stories are lengthy but not necessarily violent. The point scale could be converted to a percentage score for grouping.

3. Research is needed to ascertain if spontaneity is related to high violence. Many responses of the high-violence children were unscorable on the Torrance Tests of Creative Thinking.

4. Further research is needed to determine a relationship for creativity. Another creativity test could be used as a check against the one used in this study. There may be a significant relationship between violence and creativity.

5. A research that utilizes an individual intelligence scale may prove more useful in locating a significant difference between high violence and mental maturity. If such a relationship exists, it would be valuable for youth directors to be aware of it.

6. Further research needs to be done that will investigate whether or not the low-violence child has greater potential for maladjustment through aggression.

7. Future research needs to be done that will assist in identifying the child who has potential for maladjustment through withdrawal.

8. Future research should seek a relationship between high violence, creativity, and freedom in the classroom.

9. A replication of this study should seek a relationship between high violence and parental control.

10. Further study is necessary to determine if the Telebinocular Fusion Test is checking perceptual awareness or visual acuity.

These recommendations are made after analyses of this study did not reveal significant relationships between ability, achievement, and adjustment of sixth-grade children and the perceptual awareness of violence in the field and in the projection of violence in stories of fantasy. The findings disclosed here concern these children at this particular time, for change is much a part of the dynamics of growth. Every experience is constantly changing. Reorganization of thought, environmental forces, the passage

of time, social contacts--all help to change the way these children perceive (1).

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APPENDIX A

RATING SCALE FOR THE CHILDREN'S APPERCEPTION TEST,
PLATES FOR THE CAT CARDS AND SOME SAMPLES
OF RESPONSE STORIES

The TAT Content Scale

By Harold Stone

Points

- 3 Death or death wish
(She died)
- 2 Physical aggression
(He was shot)
- 1 Verbal aggression
(They had an argument)
- 0 Non-aggressive response
(Potential Aggression--Half credit
Papa Bear thought he would get the
other bear someday)

Five Response Stories from the Low-
Violence Group

Response to Card No. 2 by Subject No. 51

Once upon a time there were three bears who were having an argument. They decided to see which was strongest so they got a rope, went up on top of a hill and were having a tug of war. Papa Bear had his son helping him. The other bear was not a very good friend and was by himself. They were pulling very, very hard. They pulled for three days and three nights. Boy, was that a big fight they had! But do you know who won? The bear that didn't have a son. He won because he had faith in himself.

The next day they got into a fight with the same bear! This time Papa Bear didn't let his son help him. They pulled and pulled, and they panted, and they were tired and hungry! Their eyes were beady looking, and they were mad; but still the other bear won. He pulled so, so hard and strong that Father Bear fell all the way to the bottom of the hill. His son came running to help him. Papa Bear thought he would get the other bear some day! He decided to move away, so they packed their clothes. They went far, far away, and they never saw the other bear again until one day they started

traveling and saw the other bear. Papa Bear felt sure that he could win. Papa Bear got a rope and he pulled and pulled. And do you know who won? Papa Bear! The other bear was so mad at himself.

"How did you win this time?"

"Well, I've been practicing. You thought that you were so good that you didn't have to practice. I've been thinking. I'm not stupid." Papa Bear was happy inside and out. They went back to their old home and stayed for the rest of their lives. As for the other bear, he left that country and went into hibernation. They never saw each other again.

Response to Card No. 3 by Subject No. 104

Once upon a time there was an old, old lion who was a king. He was so old that soon there would have to be another ruler. The lion didn't have any relatives. One day he called all of the people together to see which was smartest and would rule the best. He had everyone write names down if they intended to compete. Everybody was so sure of himself except for one little mouse.

This little mouse didn't think that he had much of a chance. His relatives talked him into entering the contest. Everyone laughed at the mouse. They said he wouldn't win;

he was too small--he hardly had any brains. On the day of the contest everyone was boasting about himself. When each took the test, he was thinking about what he could do as a ruler. They were power hungry, all except the little mouse. He just tried to get the right answers. He won.

Response Story to Card No. 6 by Subject No. 9

Betty Bear was sad. She was not used to hibernating in the winter, but she had to this year. Her mother and her father were very pleased to hibernate, but Betty Bear didn't know what it was like. During the first month of hibernation, her mother and father were asleep; but Betty Bear was awake. She was wide eyed and bushy tailed. She was wishing for spring so that she could see all of her friends again. One day her eyes got heavy and her nose started quivering. She was becoming a real bear. She went to sleep.

Months later spring came. She was the last one to wake up; she enjoyed the hibernation so much. She was glad to see her friends, and they were glad to see her. They had had the same problem during hibernation. Every winter after that Betty Bear hibernated perfectly, just like her mother and father.

Response Story to Card No. 7 by Subject No. 103

One time there was a monkey that wanted to be known. At the end of the day when the other monkeys told their stories of adventure, he never had anything exciting to tell. For this reason he never attended the monkey gatherings. One day he went out to find some excitement. He was walking around and swinging from tree to tree, trying to find something exciting to do. He had given up and was just about to eat a banana, when a lion jumped out from the bushes and just missed him by half an inch! He jumped straight up for about ten feet! He found a limb and escaped. At the end of the day, he had the most exciting story to tell.

Response Story to Card No. 8 by Subject No. 1

One time there was this little tiny monkey who wanted to be like the grownups: sit and talk and drink coffee. He was so little he couldn't. There were no brothers and sisters for him to play with. He was so unhappy that he decided he would try to join the grownups. He went into the room while the grownups were talking and conferencing.

He said, "I've come to join you."

"What are you talking about," the grownups started laughing, "You little baby monkey! Come to join us! You've got to be kidding!"

One grownup monkey with the ear rings said, "Now, listen, honey. You're not a grownup yet, and we don't want you here. Now go."

The little monkey went out and thought. If there was only some way that he could prove he was grownup enough to talk with them! He was so worried that he ran into a tree and bumped his head. He just had to prove that he was grownup!

One night this wolf was howling, and the grownups were getting scared although they didn't show it. They were eating dinner when the wolf began howling. Wolves can be very, very dangerous. It was so close. They decided they'd go out there and trap the wolf. The little baby monkey went with them--he was going to try to capture the wolf. The little monkey was the lightest in weight so he could swing from the branches the fastest. So as he would swing from the branches, he led the wolf away! He led the wolf a long time away. The other monkeys said, "How foolish. He's going to get eaten!"

Finally the little monkey came back, and he said, "Well, I led him away, and I secretly caught him under some vines and came back."

The other monkeys said, "Wow! You did that? We wouldn't have thought of that. You're grown up enough that

you can come and have talks with us. But I don't think you should have any coffee quite yet."

The little monkey said, "Yip! I don't like coffee anyway. But I'll come and talk with you. That'll be fun!"

Five Stories from the High-

Violence Group

Response Story to Card No. 2 by Subject No. 118

There was a family of bears that liked to wander through the caves and all over the mountains where they lived. These bears lived together in a little, brown mud hut. They had to move away from their cave because it caved in during the winter. Now they were stuck in a little mud hut. They couldn't find very much food so they fought over what they did find. The little bear needed a lot to eat because he was so little and he needed to grow up some more. The big bears thought that they needed more food because they were bigger and needed food to keep themselves warm. After the little bear talked with the big bears, they finally agreed that he needed more food since he was so little and didn't have much fat or hair. They decided he might freeze to death if he didn't have any more energy and that he needed to get fat and fluffy. The little bear and one of the big

bears challenged the other big bear to a tug of war fight. They were all one family so they sort of didn't want to fight. They didn't want to fight bad so they just challenged the big bear to a tug of war fight. They were pulling and tugging, and pulling and tugging; still the larger bear was getting ahead of the other two.

Then the middle sized bear who had the little bear on his side said, "Time out! Time out! I've got to rest!"

So they took time out. They went over to a little flower. They had a little huddle and they talked about what they were going to do. They were running out of luck. They weren't winning.

They went back with confidence. They just had to win! The big bear just couldn't win over them. They pulled and they tugged, and they pulled and they tugged. Finally, the little bear and his partner flicked the big bear over their shoulders, and down the valley he fell! They never saw him again. He must have found his own little private mud hut if he hadn't broken his neck or something. He would have to get his own food from now on. The End.

Response Story to Card No. 3 by Subject No. 114

King Leo, III, wondered what he could ever do about those mice! He's thinking that he had better have a cat invasion. King Leo really wants to get rid of those mice. The mice are smarter than he thought. When the mice went to the store, Leo decided to set a mouse trap. It didn't work. Those mice just took the cheese out of that little trap! So he catches two little mice and puts them in a box-- he caught them with a booby trap. He takes the box and throws it into the river where it sinks to the bottom. The box rises, and the mice are trapped on the top. They keep floating and floating down the river. They floated to a creek where they saw Leo taking a bath. All of a sudden they were stoned. They were stoned so bad that they couldn't move a bit until Leo jumped on them. Leo is dismayed that these are the same mice. His counselor tells him to give them rat poison. He gives them the rat poison, and that's the end of the story.

Response Story to Card No. 6 by Subject No. 15

There was a family of bears. They wandered through the caves and all over the mountains where they lived. One day it became winter, and they started to hibernate. When winter

was over, they came out and gathered food. They kept it in the caves. One day one of the bears was looking for food. A hunter came by and shot the bear. Then there wasn't a father. There were hunters all over the mountains. Practically all of the bears were killed. There was one very young one that lived in the cave where no one could see. He came out one day to find his mother. He was looking for food. The hunters were gone, but a hawk was watching. The hawk swooped down and grabbed him. The hawk carried the bear off to its nest. He fed the baby bear to his babies.

Response Story to Card No. 7 by Subject No. 11

Many, many years ago there was a servant to the lion who had teeth sharper than knives, claws sharper than pins. Monkeys, gorillas, animals of the jungle all hated him. They called him the killer of the jungle. Not only did the natives call him the killer of the jungle, but they didn't know who was in there. The natives fought desperately to get rid of him. Many natives were killed by him.

One day the lion got very hungry for some food. He pounced on a rabbit; he tore him to shreds. He went for this monkey, but the monkey wasn't just an ordinary monkey. He knew how to stop this ferocious tiger. He swatted the tiger on the nose and then he hit him in the face. The

tiger was furious--raging mad. The monkey shot up a tree and threw a coconut on his head. The coconut knocked the tiger out. Then the monkey went over to a village. The village had a cage which had been there for this tiger. He grabbed the tiger, put him in the cage, closed the cage forever. The tiger was no longer seen in the forest again.

Response Story to Card No. 8 by Subject No. 62

This is about my grandmother, my grandfather, and my friends. I'm the littlest monkey here. My grandmother is on the picture. She died a long, long time ago. My mother is scolding me as usual. My mother's friends are having a tea party. Maybe I'll join the tea party.

Then Dad came in; he always spoils everything. He spoiled it for me again.

Dad said, "All right, you can have three lollipops today, Son."

As I was going to the drugstore, I saw Butch. He is my worst enemy. I can't stand him! He is what we call dirt. We got into another fight like usual, and I came home.

"Mother, Mother," I cried, "Butch gave me two black eyes."

"Well," Mother said, "you'll have to talk to your father about it."

So we talked to my father, and he said, "Oh, that boy's gonna get it one of these days. Is that boy going to get it, and it's going to be from you."

"From me?"

"Yeah, 'cause I'm going to teach you how to box," so he taught me how to box. Mother calls me, and all of a sudden Dad hits me right on the cheek. Oh, I got a red cheek that day.

The next time I saw Butch, he said, "Are you going to shut up or am I going to fight you again?"

I said, "I'm not going to shut up." He started hitting me and I hit him right in the jaw. He fell flat right on his back!

Rating of Stories of Low-Violence

Children

<u>Card No.</u>	<u>3</u>	<u>2</u>	<u>1</u>
2	0	x x x x	x x
3	0	0	x
6	0	0	0
7	0	x	0
8	0	x x	x
	<hr/>	<hr/>	<hr/>
	0	14	4

TOTAL VIOLENCE SCORE = 18

Rating of Stories of High-Violence

Children

<u>Card No.</u>	<u>3</u>	<u>2</u>	<u>1</u>
2	0	x x x x	0
3	0	x x x x x	0
6	x x	x x	0
7	x	x x x x x x	x
8	x	x x x	x x x x
	<hr/>	<hr/>	<hr/>
	12	40	5

TOTAL VIOLENCE SCORE = 57

APPENDIX B

TELEBINOCULAR FUSION TEST

Fusion Card: Fuel, Duel

1. HATE	HALE	16. HIT	HAT
2. WAR	WAS	17. TRY	CRY
3. BASKET	ROCKET	18. LOSE	LOVE
4. BEAT	BEET	19. BALL	BAWL
5. GUN	GUM	20. SHIP	WHIP
6. SLAP	SLIP	21. INCLUDE	EXCLUDE
7. FLIGHT	FRIGHT	22. INVADE	INVITE
8. BOTTLE	BATTLE	23. PROTECT	NEGLECT
9. ROB	RUB	24. SORRY	MERRY
10. STEAL	STEEL	25. CAKE	MAKE
11. BLOOM	BLAME	26. WORRY	HURRY
12. FEAR	FAIR	27. KILL	HILL
13. BAIL	FAIL	28. VIOLETS	VIOLENT
14. SLANDER	SLENDER	29. REJECT	EXPECT
15. FOUGHT	BOUGHT	30. PLUNDER	THUNDER

The same pairs of words were reversed and presented a second time in scrambled order.

APPENDIX C

SEMANTIC DIFFERENTIAL SCALE

A.	Cooperative	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Uncooperative	(<u>1</u>)	(<u>2</u>)
B.	Intelligent	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Unintelligent	(<u>1</u>)	(<u>2</u>)
C.	Calm	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Excitable	(<u>1</u>)	(<u>2</u>)
D.	Mature	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Childish	(<u>1</u>)	(<u>2</u>)
E.	Friendly	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Unfriendly	(<u>1</u>)	(<u>2</u>)
F.	Honest	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Dishonest	(<u>1</u>)	(<u>2</u>)
G.	Thrifty	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Wasteful	(<u>1</u>)	(<u>2</u>)
H.	Quick	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Slow	(<u>1</u>)	(<u>2</u>)
I.	Artistic	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Inartistic	(<u>1</u>)	(<u>2</u>)
J.	Safe	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Dangerous	(<u>1</u>)	(<u>2</u>)
K.	Strong	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Weak	(<u>1</u>)	(<u>2</u>)
L.	Trusting	(<u>2</u>)	(<u>1</u>)	(<u>0</u>)	Superstitious	(<u>1</u>)	(<u>2</u>)

APPENDIX D

"HOW PUPILS SEE EACH OTHER"

Name _____ Grade _____ Teacher _____

Directions: By listing the names asked for in the blanks, you will help your teacher to better understand this class so that she can help each child gain the most from this year's work. In the blanks under the questions below you may list the name of any child more than once if you wish, but probably you will want to think of some different names to put under the different questions. If you believe that no child fits a question, you may leave the space blank. If you think you fit a question, you may list "me."

In this class which children are:

1. Most likely to do or say something unusual or original?
2. Most likely to dare to be different in some ways from most of the group?
3. Most likely to do or say something which helps the group to settle some kind of difficulty on the playground or in the halls?
4. Most likely to do or say something which helps settle a difficulty between two or more children in the classroom?

5. Among the best in making an oral report before the class?
6. Among the best in acting a part in a play or dramatization?
7. Most likely to do or say something to cheer up a group or introduce some kind of humor?
8. Among the best at making posters or other kinds of art exhibits?
9. Among the best in playing games during play periods or noon hours?
10. Among the best in writing stories which are interesting to the rest of the class?
11. Among the best in bringing to the class some form of musical enjoyment through singing, playing the piano, violin, horn, or other instrument?
12. Most likely to show some concern about the difficulties and failures of other children?
13. Most likely to show concern about the whole class doing well and being a "good class" in whatever is undertaken?
14. Most likely to offer good suggestions during a class discussion on a topic in social studies, language arts, or some other subject?
15. Among the best in being friendly with most other class members?

16. Most likely to offer to share school materials when needed by other children?
17. Most likely to have a good time and enjoy himself wherever he is?
18. Among the best in thinking out the answer to a problem in one of our school subjects as given in the book or by the teacher?
19. Good leaders and are best at getting others to do things?

APPENDIX E

"THE GENERAL ANXIETY SCALE FOR CHILDREN"

Yes-No

1. When you are away from home, do you worry about what may be happening at home?
2. Do you sometimes worry about whether other children are better looking than you are?
3. Are you afraid of mice or rats?
4. Do you ever worry about knowing your lessons?
5. If you were to climb a ladder, would you worry about falling off it?
6. Do you worry about whether your mother is going to get sick?
7. Do you get scared when you have to walk home alone at night?
8. Do you ever worry about what people think of you?
9. Do you get a funny feeling when you see blood?
10. When your father is away from home, do you worry about whether he is going to come back?
11. Are you frightened by lightning and thunderstorms?

- _____ 12. Do you ever worry that you won't be able to do something that you want to do?
- _____ 13. When you go to the dentist, do you worry that he may hurt you?
- _____ 14. Are you afraid of things like snakes?
- _____ 15. When you are in bed at night trying to go to sleep do you often find that you are worrying about something?
- _____ 16. When you were younger, were you ever scared of anything?
- _____ 17. Are you sometimes frightened when looking down from a high place?
- _____ 18. Do you get worried when you have to go to the doctor's office?
- _____ 19. Do some of the stories on television or radio scare you?
- _____ 20. Have you ever been afraid of getting hurt?
- _____ 21. When you are home alone and someone knocks at the door, do you get a worried feeling?
- _____ 22. Do you get a scary feeling when you see a dead animal?
- _____ 23. Do you think you worry more than other boys and girls?

- _____ 24. Do you worry that you might get hurt in some accident?
- _____ 25. Has anyone ever been able to scare you?
- _____ 26. Are you afraid of things like guns?
- _____ 27. Without knowing why, do you sometimes get a funny feeling in your stomach?
- _____ 28. Are you afraid of being bitten or hurt by a dog?
- _____ 29. Do you ever worry about something bad happening to someone you know?
- _____ 30. Do you worry when you are home alone at night?
- _____ 31. Are you afraid of being too near fireworks because of their exploding?
- _____ 32. Do you worry that you are going to get sick?
- _____ 33. Are you ever unhappy?
- _____ 34. When your mother is away from home, do you worry about whether she is going to come back?
- _____ 35. Are you afraid to dive into the water because you might get hurt?
- _____ 36. Do you get a funny feeling when you touch something that has a real sharp edge?
- _____ 37. Do you ever worry about what is going to happen?
- _____ 38. Do you get scared when you have to go into a dark room?

- _____ 39. Do you dislike getting in fights because you worry about getting hurt in them?
- _____ 40. Do you worry about whether your father is going to get sick?
- _____ 41. Have you ever had a scary dream?
- _____ 42. Are you afraid of spiders?
- _____ 43. Do you sometimes get the feeling that something bad is going to happen to you?
- _____ 44. When you are alone in a room and you hear a strange noise, do you get a frightened feeling?
- _____ 45. Do you ever worry?

Questions 4, 8, 12, 20, 25, 29, 33, 37, 41, 16, and 45 form the lie scale.

APPENDIX F

BEHAVIOR DESCRIPTION CHART

Instructions: In each of the sets of descriptive statements below, pick out two statements. (1) Pick out that statement which you find fits the child most aptly--the one which the child is most like. (2) Then pick out the statement which the child is least like. Place the letters of those statements on the record sheet under the number corresponding to the set of statements. Do not be concerned if the statement does not apply exactly, and do not dwell too long upon your decision. Go through the entire chart for one child at a time. Experience shows that the ratings can be completed in just a few minutes per child.

1. A. Others come to him for help
B. Causes disturbances
C. Lacks confidence in himself
D. Reports those who break the rules
E. Shows emotions in a restrained way
2. A. Other children find it hard to get along with him
B. Is easily confused
C. Other children are eager to be near him or on his side
D. Likes to see things done his way
E. Interested in other people's opinions and activities
3. A. Sensitive, touchy, hurt by criticism
B. Shows off, attention getter
C. Is self-confident
D. Enjoys being a part of the group without taking the lead
E. Finds excuses when his work is not done
4. A. Is extremely quiet and passive
B. Is a natural leader
C. Is boastful
D. Does his share, but does not seek leadership
E. Dislikes criticism

5.
 - A. Frequently gets into fights
 - B. Helps to make and enforce rules
 - C. Seems anxious and fearful
 - D. Criticizes other people
 - E. Is generous when in the mood
6.
 - A. Makes sensible, practical plans
 - B. Breaks rules
 - C. Becomes discouraged easily
 - D. Usually willing to share with others
 - E. Does not care what others think
7.
 - A. Takes an active part in group projects and other activities
 - B. Is shy and retiring
 - C. Others cannot work with him
 - D. Polite
 - E. Assertive
8.
 - A. Quarrelsome
 - B. Is tense or ill at ease when reciting or appearing before a group
 - C. Likes jobs which give him responsibility
 - D. Is quiet and seems content with himself
 - E. Enjoys conversation
9.
 - A. His presence or absence is not noticed by other children
 - B. Figures out things for himself
 - C. Is impulsive and easily excited
 - D. Is a good follower
 - E. Is usually courteous to other children
10.
 - A. Tries to bully and domineer over others
 - B. Is quick to see valuable things in other people's suggestions
 - C. Is hard to know
 - D. Is boisterous
 - E. Pleasant to talk with but seldom initiates a conversation

Teacher _____ School _____

BEHAVIOR DESCRIPTION CHART RECORD FORM

Name		1	2	3	4	5	6	7	8	9	10	Score	Leave Blank
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	
	most like											A	W
	least like											L	

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