PSYCHOLOGICAL NEEDS AND
VERBALLY EXPRESSED AGGRESSION OF
ADOLESCENT DELINQUENT BOYS

DISSERTATION

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By

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* * * * *

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CHAPTER I

STATEMENT OF THE PROBLEM

The problem discussed in the present study relates to an examination of differences between delinquent and non-delinquent adolescents in the directional aspects of behavior.

Throughout the literature on adolescence, the hypothesis has been proposed that delinquent behavior is an aggressive response pattern related to frustration in the attainment of such primary goals as affection, security, and recognition. Early studies by Healy and Bronner (22) concluded that an important factor in the cause of delinquent behavior was the thwarting of these goals, especially in the context of familial relationships. Merrill (33) advanced the possibility that delinquents may show a lower level of tolerance for frustration, thus tending to react more quickly to blockage in goal attainment. Dollard, Miller, et al (14) cited delinquent behavior as a concrete example of the operation of the frustration-aggression hypothesis. Kvaraceus (27) also used the frustration-

aggression hypothesis as a possible description of the causes of delinquency. Horrocks (24) wrote, "An adolescent ... who is frustrated because his goals are blocked will tend to display aggressive behavior, the amount and strength of the aggressive behavior being a direct function of the frustration."

The point-of-view of the writers cited above can be summarized by Miller's statement of the frustration-aggression hypothesis:

Frustration produces instigations to a number of different responses, one of which is an instigation to some form of aggression (36).

Assuming the existence of a relationship between delinquency and frustration-aggression, two hypotheses are suggested for the present study:

- 1) Delinquents and non-delinquents differ in goal-attainment.
- 2) Delinquents and non-delinquents differ in "aggression."

In order to test the first hypothesis, some conceptual framework of normative adolescent development of goal-attainment was necessary. Such a formulation was made by Lucas and his associates in a series of investigations of the entire adolescent school population of Delaware, Ohio. The theoretical bases of the construct "need" developed during these investigations may be found in Lucas (32),

Benimoff (8), Weinberg (51), and R. Murray (39).

Briefly, "needs" as defined by Lucas (32) may be considered "a classification of the observed and directional aspects of behavior." Lucas' classification was derived from a survey of the needs mentioned in the literature on adolescence. Since the classification was developed for a "normal" adolescent group, it seemed valuable to explore how delinquents would differ from this population. An underlying assumption is that thwarting in goal attainment is reflected in the difference in need patterns.

The second hypothesis implies a construct "aggression." Because male delinquents are judged so by juvenile courts for aggressive acts, it seemed fruitful to develop a psychological construct "aggression." Such a construct has been proposed by H. A. Murray (37) in his personality theory. It is also used as a scoring category in the TAT Manual (38).

"Aggression" was defined in the present study as follows:

The need to attack; to overcome obstacles by force. The need to control others by force, and to resist by forceful physical or verbal action attempts by others to control one's behavior or attitudes.

This construct makes several assumptions:

- 1) Behavior has directionality.
- 2) Within a direction behavior varies in intensity.

The construct "aggression" refers to the directional aspects of behavior as do the Lucas' "needs." However, as Lucas pointed out, a construct is not independent of the operations used in its definition. Therefore, "aggression," as measured, may not be incorporated into the Lucas system.

Whether delinquents would be expected to show more or less aggression than non-delinquents could not be predicted. Bellak (7) reported a direct relationship between overt aggression and the number of aggressive words in the TAT. Gluck (19) found no relationship between fantasy and overt aggression. Symonds (46) and Sanford (41) suggested an inverse relationship between behavioral and fantasy aggression. The hypothesis adopted in this investigation states, therefore, that delinquents and non-delinquents differ in aggression, without postulating the direction of the difference.

CHAPTER II

REVIEW OF THE LITERATURE

Orientations to the Study of Delinquency

Classification of approaches taken in the study of delinquency is necessarily arbitrary. Students of delinquent behavior cross over the somewhat amorphous boundaries between anthropology, sociology, and psychology. To facilitate understanding of the differences in approach of students of the problem, orientations have been labelled biological, sociological, psychological, and multi-causal or eclectic.

Biological Orientation to the Study of Delinquency

Biological orientations assume that a primary factor in the causation of delinquent behavior is a biological or constitutional predisposition. The additional assumption that the biological predisposition is inherited is usually either implied or explicitly stated.

In this century, the concept of a biological predisposition to criminal behavior gained wide acceptance, especially in England, through Tredgold's description of

the "moral defective" (47). So great was the influence of Tredgold's work in England that the Mental Deficiency Act of 1913 established in law the category of "moral imbecile." The terms "psychopathic personality" and "constitutional inferiority," according to Lowrey (31), also stress the inherent deficiency of the moral sense.

The concept of "criminal man," credited to Lombroso (30), considers the criminal as biologically atavistic, a throwback to savage or even subhuman ancestral types. More recently Hooton (23) has made the claim that criminals are biologically inferior to non-criminals.

Sociological Orientations

Sociological orientations seek the major causative factors in delinquency in the social processes in the environment of the delinquent. Neighborhood disorganization, characterized by family instability, lack of supervision of children, breakdown of neighborhood social control, and economic poverty are thought to be primary factors in delinquency. In some cases, the community rewards delinquent behavior. The sociological approach to delinquency is represented by Shaw and McKay (43) and Faris (18). Delinquency for these writers is a part of complex societal and institutional patterns; factors peculiar to

delinquent individuals are minimized.

Psychological Orientations

Psychological approaches search out factors relating to individual behavior patterns. Healy and Bronner (22), Merrill (35), and Kvaraceus (27) have conducted major studies based on this approach.

These authorities have stated that the delinquent act has meaning to the individual delinquent. It is meaningful in the sense that the act can be shown to be (1) an attempt to fulfill needs, wishes, or desires for affection, security, recognition, etc.; (2) a reaction to thwarting, frustration, or blocking of needs, wishes or desires in familial or peer relationships. Healy and Bronner have stated:

Interferences with these fundamental wishes are felt by the young person as thwartings and deprivations causing keen dissatisfactions... Some activity must offset dissatisfactions and delinquency offers one of the possibilities (22 p. 7).

Kvaraceus pointed out that economic poverty, unstable homelife and widespread disorganization in community control have the effect of frustrating basic psychological needs (27). In his Passaic, New Jersey, study, the orientation

was based on the statement of the frustration-aggression hypothesis by Dollard, Miller, et al.:

Aggression is always the consequence of frustration. More especially the proposition is that the occurrence of aggressive behavior always presupposes the existence of frustration and, contrariwise that the existence of frustration always leads to some form of aggression (14 p. 1).

Kvaraceus then concluded:

Hence, the condition of "aggression" was usually present in the Bureau cases. The inquiry, therefore, seemed to involve largely an analysis of the life story of the children as individuals and the searching out of the nature of the frustrating influences (27 p. 54).

Merrill (35) considered frustration tolerance as an important variable. This concept, in her view, helps to explain why one boy turns to delinquent behavior, while another, exposed to similar environmental and familial circumstances, does not. As a further aid to understanding delinquent behavior, Merrill used Shaffer's (42) concept of integration of motives. The delinquent has failed "to organize his behavior in such a way that all of his needs are satisfied without undue emphasis or slighting of any motive" (35 p. 191).

Eclectic Orientations

Glueck and Glueck (19) viewed delinquency as imbalances or disharmonies in the life of the delinquent. These

imbalances, they argued, could be viewed at several levels and assessed by methods developed from several disciplines. In their search for imbalances, differences between delinquents and non-delinquents were sought in somatic functioning, by physician and anthropologist; in socio-cultural functioning, by social investigator; in intellectual functioning, by psychologists and psychiatrists; and in emotional-temperamental functioning, by psychiatrist and Rorschach-analyst.

Characteristics of Delinquents

Physical Status and Development

Healy and Brunner report "many more of the delinquents than of the controls had been subject to interference with normal (physical) development" (22 p. 57). However, they found no evidence of differences in the present physical condition of the delinquent and control groups. Glueck and Glueck (20) also report no differences in the present physical condition of the delinquent and control groups. They reported a significant difference in the morphology or bodily type of delinquents and controls. The delinquent group was more homogeneous with respect to bodily type. A far greater number of delinquents showed evidence of a strong "mesomorphic" (muscular) component

than the controls.

Socio-cultural Status

Major studies agree in finding that delinquent individuals are likely to be classified on the low end of socio-economic scales. When type of neighborhood or residence (27), physical adequacy of the home, monthly income (20, 35), occupation of parents (27, 35) are used as criteria, the lower status of delinquents is shown.

Shaw and McKay (43) report relationships between delinquency rate and population mobility, minority group concentration, tuberculosis rate and poor housing.

In a recent factor analysis of socio-economic factors and delinquency in Baltimore, Lander (29) concludes that many of the high correlations between delinquency rate and socio-economic indicators may reflect only surface relationship to delinquency. Kvaraceus (28) and Horrocks (24) point out that selective or differential referral to Juvenile Courts tend to distort the socio-economic picture. Young people who commit illegal acts are more often caught in lower socio-economic areas, and if caught are more frequently turned over to the police, and if turned over to the police, more quickly "officially" stamped delinquent by the court.

Family Characteristics

The family life of the delinquent tends to be less stable than his non-delinquent counterpart. Merrill (35) Glueck and Glueck (20), and Kvaraceus (27) report a higher proportion of delinquents than controls are living in homes broken by separation, divorce, or death of the parents. Discipline in the home is rated poorer for delinquents than controls by Merrill (35). Glueck and Glueck (20) found more corporal punishment was used by parents of delinquents than by parents of controls.

Both Merrill (35) and Glueck and Glueck (20) found more intense feelings of hostility toward parents expressed by delinquents than by controls.

Healy and Bronner (22) concluded that the failure of delinquents to establish strong affectional relationships in the home was the primary causative factor in delinquency.

Herein we have found answer to one of our prime questions: Why, living under the same environmental conditions, often inimical, is one child non-delinquent and the other delinquent? The latter we almost universally found to be the one who at some stage of his development had been blocked in his needs for satisfying relationships in his family circle. On the other hand the non-delinquent had nearly always been without any such acute frustrations. His relationships with those in his immediate social environment had been much more satisfying (22 p. 201).

Interests and Activities

Bartlett and Harris (4) found delinquents engage more frequently in socially undesirable activities. This finding was confirmed by the Glueck and Glueck (20) study. Healy and Bronner (22) and Merrill (35) reported that delinquents attend the movies more frequently than non-delinquents. Horrocks (24) concluded that several studies show delinquents are more likely to seek socialized activities and less likely to seek solitary activity. This finding was also found by Glueck and Glueck (20).

As a group, delinquents dislike school (22, 35). Their grades are low (27, 20). Healy and Bronner (22) reported a minority of delinquents to be educationally retarded, but a greater number than the non-delinquent group. They emphasized the small number of educationally retarded delinquents, but Kvaraceus (28) in interpreting their data stressed the differences between delinquents and non-delinquents in grade placement and achievement.

In summary, the delinquent child is likely to dislike organized, supervised situations, including supervised clubs and groups and curricular and extra-curricular school activities. He is more likely to prefer adventurous, forbidden or disapproved activities such as smoking, hopping

freights, or "hanging around" street corners.

Intelligence

The findings about the Intelligence test scores of delinquents are inconclusive. Merrill (35) found a small difference between delinquents and non-delinquents on the 1916 and 1937 revisions of the Binet Scale. In two of the three samples, the differences were significant. Kvaraceus (27) reported a significant difference between delinquents and non-delinquents on the Kuhlman-Anderson, but socio-economic factors were not controlled in this comparison. Healy and Bronner (22) reported no significant difference in IQ between delinquents and their non-delinquent siblings, but the tests used were not reported.

Tulchin (48) found no difference in the scores of 10,000 Illinois prisoners and the Illinois World War I Army draft sample on the Army Alpha test.

Glueck and Glueck (20) matched their delinquent and control groups on total Wechsler-Bellevue I IQ, preventing comparison. They found no significant difference in Performance IQ, but Verbal IQ was higher for controls than delinquents. There were also significant differences in scores on several sub-tests on both Verbal and Performance Scales.

Personality Characteristics

In this section characteristics labelled variously as "personality," "temperament," "character," "motivation" and "emotional dynamics" will be discussed. The discussion of definitions and referents, distinctions between terms, and theoretical differences in concepts utilizing these terms is elsewhere available. The present discussion will be based on the instruments used to differentiate responses of delinquent individuals from non-delinquents.

Several personality self-rating instruments discriminate between delinquent and non-delinquent populations. This type of instrument is generally considered useful in screening individuals for more intensive study of problems and in differentiating between groups. Anastasi (1) suggests that the self-report instrument may be used in an actuarial or factual way, but cautions against attempts to draw diagnostic significance from scores. Neither Anastasi (1) nor Cronbach (12) consider the self-report instrument a substitute for a psychiatric diagnostic interview or case study.

On the Woodworth-Mathews Questionnaire, delinquents selected more "psychoneurotic responses" than non-delinquents in studies reported by Slawson (44), Bridges and

Bridges (9), Bartlett and Harris (4), and Daniels (13). Merrill (35) and Casselberry (11) found that the Woodworth-Cady Psychoneurotic Inventory also discriminated between delinquents and controls. Durea and Fertman (16), Durea and Assim (15), and Durea and Heston (17) concluded that delinquents were more "emotionally retarded" on the Pressey Interest-Attitude Test, that is their scores were lower, age for age, than the normative groups. But Odoroff and Harris (40) reported differences considerably smaller than those observed by Durea and his associates when delinquent and non-delinquent groups were matched for socio-economic status and intelligence.

Washburn's Social Adjustment Inventory, devised to discriminate between school children showing good adjustment and those with problems, including one group of delinquents, was found to discriminate between delinquent and non-delinquent girls by Capwell (10). Zakolski (52), analyzing differences between delinquent and control boys on sub-scores, found the greatest difference in the "Alienation" score.

On the Bell Adjustment inventory, the delinquent group in the study by Bartlett and Harris (4) was scored more maladjusted than the controls on the "Home" category.

In Merrill's study, this finding was confirmed on one sample, but did not hold up on a second sample. Zakolski (52) found only the "health" category discriminated between his fifty delinquents and fifty controls.

In summarizing a series of studies on the MMPI responses of delinquents, Hathaway and Monachesi (21) reported a positive correlation between delinquent status and High Scores on Scales 4 (Psychopathic Deviate) and 9 (Hypomania). However, of importance also is the authors' statement:

Also those adolescents whose MMPI Profiles show no high deviation, and who are thus indicated to be normal, are very unlikely to be found delinquent, and this finding seems to us to be more clearly substantiated in the data than is any positive probability trend (21 p. 137).

Merrill (35) and Glueck and Glueck (20) utilized the Rorschach technique in their studies on the personality characteristics of delinquents. Merrill apparently recommends using the Rorschach technique for "revealing, not a behavior pattern, but an underlying structure of personality" (35 p. 48). She presented an interpretation of Rorschach responses of a delinquent girl as an illustration of its usefulness in understanding the child.

Glueck and Glueck (20) administered the Rorschach to five hundred delinquents and an equal number of controls.

The delinquency status of subjects was not known to the Rorschach analyst. The Rorschach analysis showed the delinquent group to be more vivacious, more emotionally labile or impulsive, more destructive and sadistic, more aggressive and adventurous. They were found to show attitudes described as hostile, defiant, resentful, and suspicious. The delinquent group was found to contain a higher proportion of socially assertive boys, and those who had feelings of not being recognized.

Merrill (35) interpreted TAT stories for a few of her subjects in connection with illustrative case summaries. She made no attempt to analyze the TAT responses for the entire delinquent group. However, she pointed out the need for statistical treatment of data secured from Projective Techniques.

The writer was unable to find a published study of delinquency using the TAT pictures. In an unpublished study, Snyder (45) reported on a descriptive study of Air Force Court-Martial cases using Thematic pictures selected especially for the group. Responses were classified according to needs, press, outcomes, and themes. The group was found to express strong needs for achievement, recognition, and sex. There was little evidence of aggressive-destructive content. Feelings of being dominated and dejection

were frequent. Since the majority of cases were convicted of Absence Without Leave and Absence Over Leave, the populations seem dissimilar to a delinquent adolescent group where aggressive behavior predominates.

Jensen (25) secured written stories for ten TAT pictures from three groups of male high school students. No relationship was found between aggressive story content on the TAT and ratings of aggressive school behavior.

An unfinished story technique was employed by Zucker (53). More delinquents than controls wrote endings in which the hero went to friends rather than parents to seek advice. A greater number of delinquents also wrote endings in which the hero disobeyed parental injunctions against stealing.

Summary

The literature indicates delinquents are to be found in circumstances of poverty, family instability, and poor school and social adjustment. Their personality characteristics have been analyzed in terms of problem check lists and psychiatric classifications. The delinquent's perception of need-satisfaction has not been adequately studied as yet.

Also needing further study is the delinquent's reaction

to thwarting of need-satisfaction. The frustration-aggression hypothesis would lead to a prediction of greater aggression for delinquents. However, studies by Bellak (7), Gluck (19) and Symonds (46) and Sanford (40) indicate the relationship between overt aggression and aggressive story content on thematic pictures is not clear. The fact that the TAT is used clinically with delinquents (35), but is virtually unreported in the literature of delinquency further suggests that the approach used in this investigation would be fruitful.

CHAPTER III

DESIGN AND SAMPLE

Design of the Study

A relatively straightforward design was used in testing both hypotheses. The Revised Needs Inventory was administered to a delinquent group and to a non-delinquent high school population. By the selection of a high school located in a relatively low socio-economic district of the city, partial control was maintained on that variable. Subsequent examination of the available data indicated that age and intelligence were similar for the two groups.

Items discriminating between the two groups were classified according to psychological variables, behavioral settings, and orthogonal factors. These classifications and the factor analysis were developed by Lucas (32, 33). The Chi Square statistic was used. The .05 level of significance was adopted.

Individual delinquents and non-delinquents were paired on the thematic material because of the small number of subjects available. Pairs were matched on variables of age,

sex, intelligence and race, as suggested by Anderson (2). Socio-economic status was partially controlled by using pairs from the same school district. By matching IQ scores, additional control was exerted on socio-economic status because the two variables are correlated (2).

A system devised by Jensen (25) was used to rate aggressive content of the stories. This system classifies stories with respect to hero aggressor, hero victim, or indeterminate. Intensity of "aggression" in the content of the story is rated on a six step numerical scale, based on samples provided in the directions.

Each story was rated by three judges. Scorer reliability was estimated by Kendall's Coefficient of Concordance. No statistical test was applied to the proportion of delinquent and non-delinquent stories classified in the categories hero aggressor, hero victim, and indeterminate, because inspection showed them to be similar.

The t-test for differences between pairs was utilized to determine the significance of difference between delinquents and non-delinquents in aggression ratings.

Instruments Used

The hypotheses that delinquents differ from non-delinquents in the degree of goal attainment and that they are

likely to respond in a direction that can be described by the construct "aggression" were tested by two different instruments.

The Horrocks-Lucas Revised Needs Questionnaire, designed to sample the needs of adolescents, was used in determining the status of need-satisfaction of delinquents as compared to non-delinquents. A description of the Questionnaire is found in Chapter V. Use of the instrument permitted several types of analyses of the need pattern of delinquents: (1) classification of needs by psychological variables; (2) classification of needs on the basis of "behavioral situations" or environmental settings; (3) classification on the basis of an orthogonal factor analysis performed by Lucas (32).

To determine whether or not adolescents differ in "aggression" as a typical mode of response, thematic picture stories consisting of four TAT pictures and six original pictures were used. A complete discussion of the advantages and disadvantages of thematic pictures can be found elsewhere (6, 50).

According to Cronbach "they (projective techniques) tap forces which underlie overt behaviors and are otherwise not observable" (12 p. 450). Anastasi (1) considers the principle advantages to be prevention of malingering and

dissimulation; ease of gaining rapport; and possible use of responses as "raw material" for other, more structured, instruments.

Studies of reliability and validity are considered poor by Cronbach (12) and Anastasi (1). Bell (6), Anastasi (1), and White (50) point out the need for further research with the TAT.

Several factors were considered in the decision to use the thematic pictures:

1. It was believed that the instrument might discriminate between delinquent and non-delinquent stories on the ratings of "aggression."
2. A scoring system based on the content of stories could be used instead of inferences about "underlying traits" about which there appears to be much disagreement.
3. The ratings could be treated statistically.
4. The raw data (tape recordings) could be preserved for future research.

Sample

In the sections following, are descriptions of selection and characteristics of the subjects to whom the Horrocks-Lucas Revised Needs Questionnaire and the Thematic Pictures were administered.

The results on the Horrocks-Lucas Revised Needs Questionnaire suggested the need for further investigation

of delinquent behavior. The thematic material was developed for this purpose. The original delinquent subjects were unavailable at the time the thematic material was used. Therefore, a new sample was secured. A design using the same subjects would have strengthened the results. In addition, the fact that the original delinquent sample was in a detention home, while the second sample was not, further reduced the comparability of the groups.

Horrocks-Lucas Revised Needs Questionnaire Sample

The Revised Needs Questionnaire was administered to twenty-seven boys held at the Montgomery County Detention Home and to fifty-five male ninth-grade students at Roosevelt High School. The Detention Home boys constituted the "delinquent group" and the Roosevelt students, the "comparison group."

The Detention Home is a division of the Montgomery County, Ohio, Juvenile Court. The sole function of the Detention Home is to detain boys and girls under eighteen years old who have been accused of committing an unlawful act. The youth may be held at the Detention Home for a period ranging from a few days to several months pending the Juvenile Court's investigation and disposition of their case.

The population of the Detention Home is not representative of all persons under eighteen accused of committing illegal acts. Instead of Detention Home placement, the court may release a youth to his parents or guardians or place him in the Montgomery County Jail. The Juvenile Court's decision is influenced by the stability and supervision in the home, by the seriousness of the offense with which he is charged, and by factors peculiar to each situation. In addition, racial and socio-economic status of the family may be related to initial placement.

To secure subjects for the Revised Needs Questionnaire the writer visited the Detention Home over a two-week period in July and August, 1957. The first week was spent in conversations with groups of boys, individual, loosely structured, one-hour interviews with four boys, and becoming acquainted with the staff of the Detention Home. The Questionnaire was administered to six groups totaling twenty-seven subjects. All subjects were volunteers. Several times each day for three days, the examiner made the following announcement to the boys gathered in the day rooms:

I am interested in young people. I have some questions for you to answer. Your answers will be included with those from many other boys. No one will be told about your answers. These questions have no connection with your case, or the Court, or the Detention Home. Your cooperation is voluntary.

The directions on the cover of the Needs Questionnaire and several items were read aloud to the group to show them the type of item. About half of the group congregated usually volunteered to take the Needs Questionnaire. The volunteers were taken in groups of four or five to an unused room in the Detention Home building.

The subjects taking the Needs Questionnaire are not necessarily representative of the Detention Home population. The necessity of relying on volunteers biased the sample. Furthermore, boys assigned to outside work details, Court Hearings, and recreational activities may not have been present in the building at the times the Questionnaire was administered. The group present in the building included a number of boys who are restricted from work and recreational activities because of a history of run-aways, fighting, and non-co-operation with the staff.

The comparison, or non-delinquent group, consisted of fifty-five male ninth-grade students enrolled in three homerooms at Roosevelt High School. Roosevelt High School was chosen from among the ten High Schools in the Dayton City School District for several reasons.

- 1) Its student population comes largely from the lower end of the socio-economic scale. (U.S. Census of Population: 1950 Vol. III Census Tract Statistics)

- 2) The administration of the school was believed to be interested in co-operating in a study like the present one.
- 3) Room was available for administration of the questionnaire.

The Questionnaire was administered by the writer to each of the all-male home-rooms. The "activity period," during which all boys are assigned to their home-rooms was used for the Questionnaire. The forty-five minute period proved ample time for most of the subjects, but the three or four in each class that required it, were given extra time.

The characteristics of the Detention Home and Comparison Populations are described in the following tables:

Table 1 shows the type of offense which led to placement in the Detention Home. The number of offenses is greater than the number of subjects reporting because several boys reported more than one offense. The source of the information is the report of the subject himself on the cover of the Revised Needs Questionnaire.

Table 2 indicates the last grade placement of the boys in the Delinquent Group. The Comparison Group consisted entirely of ninth-grade boys.

TABLE 1

DELINQUENT GROUP CLASSIFIED BY TYPE OF OFFENSE.

Offense	Number Reporting
Breaking and Entering	7
Auto Theft	3
Theft (Except Auto)	2
Carrying Concealed Weapon	3
Shooting to Wound	1
Arson	1
Vandalism	1
Run-away from Children's Home	3
Fraudulent Draft Card	1
Resisting Arrest	2
Breaking Probation	1
Not Reporting	<u>6</u>
Total	31

TABLE 2

GRADE PLACEMENT OF DELINQUENT GROUP

Grade	5	6	7	8	9	10	Occupational School	Not Reporting
Number Reporting	1	2	3	5	8	3	2	3
Median Grade Placement <u>9</u>								

In Table 3 the age distributions for the Delinquent and Comparison Groups are presented. The third column, "Random Group" describes one hundred fifty-three boys randomly chosen

by pulling alternate boys' cards from the Cumulative Pupil Record cards at Roosevelt High School. The purpose for the subject pool of 153 boys will be discussed later in the study. The data is presented here to acquaint the reader with the Roosevelt student population.

TABLE 3
AGE DISTRIBUTION OF DELINQUENT GROUP,
COMPARISON GROUP, AND RANDOM GROUP.

Age	Delinquent Group	Comparison Group	Random Group
12	2	-	-
13	3	5	5
14	5	14	57
15	9	24	57
16	6	-	5
17	2	3	10
Not Reported	-	3	10
Total	27	55	153
Median Age	14.4	14.7	14.7

Table 3 indicates that the median age of the Delinquent Group differs by only three months from that of the Comparison Group.

Table 4 presents the Total IQ Scores on the California Tests of Mental Maturity, Form S '50, for the Delinquent Group, Comparison Group, and Random Group. The California

Scores were obtained from Pupil Record Cards and from School reports on Group Testing at the Administration Offices of the Dayton School District. There were scores available for only eleven of the twenty-seven boys in the Delinquent Group. Another consideration limiting the usefulness of IQ Scores in comparing the groups is that some of the Delinquent Group would have taken the California Tests in the fourth grade, while the entire Comparison Group took the California in the eighth grade.

TABLE 4

DISTRIBUTION OF TOTAL IQ SCORES ON THE CALIFORNIA TESTS OF MENTAL MATURITY, ELEMENTARY FORM S '50 FOR THE DELINQUENT, COMPARISON, AND RANDOM GROUPS.

Score	Delinquent Group	Comparison Group	Random Group
Below 70	-	1	2
70-79	2	7	17
80-89	5	8	30
90-99	1	11	49
100-109	3	15	28
110-119	-	6	14
Not Reported	16	7	13
Total	27	55	153
Median IQ	86.5	90.0	93.8

The information presented in Tables 2 through 4 indicate the Delinquent Group and Comparison Group are similar

in median age, grade placement, and California Mental Maturity IQ Scores. The range of ages and grade placement is considerably wider for the delinquent group. The small number of IQ scores available for the delinquent group makes comparison on this variable hazardous.

Thematic Pictures Sample

The ten-picture instrument was administered to twenty-one male delinquent-non-delinquent pairs matched on variables of age, intelligence and race. Names of delinquents attending schools in the Roosevelt High School District were obtained through the Juvenile Court, Pupil Personnel Department of the Dayton Schools, and the High School Guidance Counsellors. In each case, the subject's record in the Pupil Personnel file was checked to be sure he was adjudged delinquent by the Juvenile Court. Table 5 shows the offenses which led to the court adjudication.

A list of fifty potential subjects was drawn up, however the mobility, truancy and elusiveness of some of the subjects reduced the number actually contacted to twenty-one.

Non-delinquent subjects were selected from a random sample of one hundred fifty-three Roosevelt High School students and, for delinquents in elementary schools, from the student body attending the same school.

TABLE 5

DELINQUENT GROUP FOR THEMATIC PICTURES
CLASSIFIED BY TYPE OF OFFENSE

Offense	Number Reporting
Breaking and Entering	7
Petty Larceny	7
Malicious Destruction of Property	1
Auto Theft	1
Cutting to Wound	1
Rape	1
Strong-arm Robbery	1
Bicycle Theft	2
Concealing Stolen Articles	2
Incorrigible	1
Robbery	1
Purse Snatching	<u>1</u>
Total	26

Age, race, and intelligence of the two groups is shown in Table 6. The small differences between individuals indicates that pairing was successful. No pair differed by more than one year in age or six points in I.Q. score.

The reported I.Q. for many of the delinquent subjects is for the Wechsler-Bellevue I, Full Scale, while for the controls the California Mental Maturity IQ's were used. While not equivalent, the two tests were believed to have enough in common to permit matching for the purposes of the present study. All subjects were matched with respect to race.

TABLE 6

AGE, RACE AND INTELLIGENCE OF DELINQUENTS
AND MATCHED CONTROLS.

Subject		Age			Intelligence			Race	
Del.	Cont.	Del.	Cont.	Diff. (Mos.)	Del.	Cont.	Diff. (IQ Pts.)	Del.	Cont.
1	23	13-7	14-2	8	110	108	2	W	W
2	24	17-2	17-5	-3	72 ^a	76	-4	N	N
3	25	13-0	13-1	-1	87	85	2	W	W
4	26	15-1	15-3	-2	74	75	-1	N	N
5	27	12-9	12-1	8	86	91	-5	W	W
6	28	16-6	16-5	1	71	76	-5	N	N
7	29	15-10	15-6	4	79	73	6	W	W
8	30	16-10	16-10	0	94	93	1	N	N
9	31	15-3	15-2	1	88	93	-5	W	W
10	32	15-3	15-0	3	95	98	-3	N	N
11	33	14-2	14-6	-4	106	100	6	W	W
12	34	16-1	15-11	2	70	77	-7	N	N
13	35	14-1	14-9	-8	91	96	-5	W	W
14	36	18-1	17-1	12	94	90	4	N	N
15	37	15-2	15-0	2	114	111	3	W	W
16	38	16-7	17-0	-5	83	88	-5	N	N
17	39	15-9	15-2	7	103	102	1	W	W
18	40	16-6	16-1	5	76 ^b	76	-	N	N
19	41	15-2	15-3	-1	90	94	-4	W	W
20	42	12-10	12-9	1	84	87	-3	N	N
22	44	14-7	14-4	3	113 ^c	115	-2	N	N

Notes:

IQ Scores are Total IQ on the California Test of Mental Maturity, Intermediate, Short-Form, 1950, unless otherwise indicated.

^a Wechsler-Bellevue, Form I, Full-Scale IQ

^b Teacher's Estimate - 70-80 IQ

^c Revised Stanford Binet, Form L

Socio-economic status was not individually matched, but partial control was gained by restricting the investigation to one of the eight High School Districts in the City of Dayton. The district appeared to include no neighborhoods higher than lower-middle class. Pairing subjects on the basis of race also tended to match individuals to some degree on the socio-economic factors.

CHAPTER IV

THE REVISED NEEDS QUESTIONNAIRE

Background of The Revised Needs Questionnaire

The Revised Needs Questionnaire was constructed by Lucas (32) to identify the "needs" of adolescents with reference to categories and definitions used in his study. The construction of the Questionnaire was a part of a program of psychological investigations of the adolescent population of the City of Delaware, Ohio, conducted by Horrocks and his associates.

In a survey of the literature on adolescence, Lucas found frequent use of the term "need," but little agreement as to its definition. Four major types of investigations: behavioral observations, case studies, studies of free responses of adolescents to broad questions, and studies of responses to problem check lists or inventories were used by various investigators to infer need categories. However, differing theoretical approaches and methodology resulted in a multitude of terms describing what appeared to be similar concepts pertaining to adolescent motivation and a

few terms which seemed to have widely different meanings.

To order the terminology and definitions applied to adolescent "needs," Lucas compiled a list of "needs" of adolescent youth postulated in the literature. The terms were categorized by seven members of the Delaware survey team by sorting and resorting until agreement on categories was reached. The criteria used in the sorting were as follows:

- 1) Each need must be relatively independent of other needs in the system.
- 2) Each need must be independent of non-need variables.
- 3) The needs themselves must be neither too broad nor too specific abstractions of the behavior referents.

Guiding the sorting team was the following definition of the term "need" formulated by Lucas:

An abstraction from a classification of the observed and directional aspects of behavior. This definition involves as few assumptions as possible regarding the nature and operation of the construct. The definition of need, as it is to be understood in the present study, requires but one assumption - behavior has observable directionality. The observable can be classified along qualitative and quantitative lines with reference to its directionality. To observe behavior, to distinguish therein a particular pattern and then to infer from it a hypothetical construct called "need" is logically sound. The inference of "needs" from observed behavior is actually a method of classifying the observable. "Need" here is not defined as an entity; it is not a "thing" independent of the

operations which define it. This definition avoids the innate versus acquired controversy, and the question of basic or derived, stable or unstable, universal or specific. It leaves room for accounting for many or few needs, long lasting needs or ever changing needs. It is thought that the concept as here defined, will adequately order the facts of behavior whatever they may be (p. 17).

The seven judges were able to classify needs into twelve categories on the basis of the three criteria, the definition, and the list of needs from the literature. The twelve need-categories were defined as follows:

Definition of Needs

1. Acceptance. The need to feel that others' attitudes toward one are favorable or positive. To feel that others respect, sanction, or approve of one. To be secure in the feeling that one is a worthwhile person in another's eyes. To feel that others regard one as an equal. To feel that one is not rejected.
2. Achievement. The need to acquire, gain, receive, win, or strive to accomplish goals, tokens of status and respect, or knowledge. To attain, prove, secure, surmount through praiseworthy exertion.
3. Affection. The need to be loved, cherished, emotionally wanted for one's own sake; to receive unconditional love and affection. To receive emotional love from parents, relatives, friends, or lover.
4. Approval. The need to have others behavior toward one indicate that one is a satisfactory person, or that one's deeds are satisfactory. To seek overt rewards or others signs of approval. To be given overt demonstration by others of one's worthiness. To avoid blame, criticism, and punishment.
5. Belonging. The need to feel a part of a group or institution. To identify one's self with a person, group, institution or idea. To be a member of some genial group.

6. Conformity. The need to be like others, to avoid marked departure from the mode. To yield or conform to custom. To avoid being different in dress, behavior, attitudes and ideals.
7. Dependence. The need to have to ask for or depend on others for emotional support, protection, care, encouragement, forgiveness, or help.
8. Independence. The need to be free of external control by friends, family, associates, and others. To do things in a self-determining manner, to make one's own decisions, to be self-sufficient, and to rely on one's self.
9. Mastery-Dominance. The need to control, to be in power, to lead, to manage, govern, control, overcome people, problems, or obstacles. To influence the behavior, feelings, or ideas of others.
10. Recognition. The need to be noticed, to become known. To avoid effacement of one's own individuality. To be identified by others as a unique individual, to be distinguished from others. To find one's place, to be regarded as an important human being.
11. Self-realization. The need to function at one's ability level. To learn, understand, perform to the best of one's ability. To avoid performing at a mediocre level. To strive for always better accomplishment within the limits of one's capacity.
12. To Be Understood. The need to feel in sympathetic rapport with parents, relatives, friends, or associates. To feel one with others. To feel free to express one's innermost thoughts and problems to one or more person without loss of affection or personal status. To feel that another identifies with oneself.

To obtain a representative picture for each need-category, Lucas constructed items representing each of eight behavioral situations, or environmental settings. Each of

the twelve need categories was presented in the following environmental context:

1. Self
2. Unisexual peer group
3. Heterosexual peer group
4. Unisexual pairs
5. Heterosexual pairs
6. Family
7. School
8. Adults

Lucas' item design was an adaptation of that used by Rogers in "A Test of Personality Adjustment". Each item presents a statement about hypothetical boys or girls behaving in hypothetical settings, for example,

Item No. 1. Luke almost always stays out of trouble.
 Am I like him?Yes No
 Do I want to be like him? . . .Yes No
 Who do I know in school like him_____.

The Revised Questionnaire was administered to the entire High School population in Delaware, Ohio, by the Delaware survey team. R. Murray (39) has compiled normative information for each item, psychological variable (Need category), behavioral setting, and for the questionnaire as a whole. The tabulations are presented by age and sex of respondents. Weinberg (51) investigated the statistical significance of acceptance or rejection of needs by the Delaware adolescents grouped by age and sex.

In a supplementary study Lucas (33) performed an orthogonal factor analysis on a sample of the Delaware

group. Six factors were found in the orthogonal analysis.

The six factors with Lucas' descriptive interpretation are as follows:

- Factor I. Items No. 3, 10, 16, 26, 27, 38, 47, 48, 58, 61, 62, 66, 76, 85.
Response Pattern: No - Yes.
"Factor I appears to be a need for acceptance and approval in unisexual peer relationships and in situations where adult relationships may be involved."
- Factor II. Items No. 15, 44, 84, 88, 89.
Response Pattern: Yes - Yes.
"Factor II appears to be a need for dependency such as is found in adolescent chum relationships."
- Factor III. Items No. 2, 13, 28, 43, 82.
Response Pattern: Yes - Yes.
"Factor III appears to be a need for academic achievement."
- Factor IV. Items No. 6, 21, 32, 60, 40, 71, 75, 78.
Response Pattern: Yes - Yes.
"Factor IV appears to reflect a need for independence and emancipation from the role of a child, especially in a family setting."
- Factor V. Items No. 9, 23, 33, 36, 42, 51, 55, 59, 60, 64, 68, 79, 83, 85, 86.
Response Pattern: No - Yes.
"Factor V appears to be a need to feel that one's own positive psychological response toward the opposite sex is reciprocated."

Factor VI. Items No. 1, 19, 29, 44, 56, 57, 63, 67, 77.
 Response Pattern: No - Yes.
 "Factor VI represents a complex need--the need for self-realization going hand in hand with a need to accept and to conform voluntarily to adult standards (such as actually may occur during late adolescence). Such a need might be present in the adjusted late adolescent who is leaving behind the crowd society and motivations of earlier adolescence."

Scoring and Tabulation of Data

Each of the ninety items on the Revised Needs Questionnaire had two sub-questions. The following example is taken from Item No. 1.

Luke almost always stays out of trouble.
 Am I like him? Yes No
 Do I want to be like him? Yes No

The subject's answer to both sub-questions was considered a single Response Pattern in the present study. There are, then, four possible Response Patterns: Yes-Yes; No-No; Yes-No; No-Yes. In addition to the four Response categories, the subject could omit one or both parts of an item.

Responses were tabulated for each item for the Delinquent Group and the Comparison Group. For each item the number of Delinquents and the number in the Comparison Group responding Yes-Yes, No-No, Yes-No, No-Yes and Omissions were recorded. The tabulation is shown in Appendix II.

Analysis of the Data

Each item on the Revised Needs Questionnaire was analyzed to determine if one or more of the four response patterns discriminated between the Delinquent and Comparison groups. The significance of observed differences in the proportions of subjects selecting a response pattern was evaluated with the Chi Square Statistic. If the Chi Square value was significant, the Fourfold Point Coefficient (Phi) was computed to evaluate the extent of association between the response pattern and delinquent status.

The null hypothesis was that there was no relationship between membership in the Delinquent or Comparison group and selection of one of the response patterns. If the difference in the proportions between Delinquent and Comparison responses is so great as to occur by chance in only five per cent of samples where the proportions are equal, the null hypothesis is rejected. In that case, the item was considered to discriminate between the two groups.

Table 7 presents the items on the Revised Needs Questionnaire that discriminated between the two groups on the basis of differences in the proportions of subjects selecting the Yes-Yes Response Pattern. There are twenty-three items. For twenty-two items the proportion of Yes-Yes

TABLE 7
ITEMS DISCRIMINATING BETWEEN DELINQUENT AND
COMPARISON GROUPS BY DIFFERENCE IN
FREQUENCY OF YES-YES RESPONSE.

Item No.	Frequencies		Proportions		Chi Square ^a	Phi- Coefficient
	Del.	Comp.	Del.	Comp.		
1	9	32	.33	.58	4.5	.23
6	11	10	.41	.18	4.8	-.24
11	9	36	.33	.65	7.6	.30
20	13	40	.48	.73	4.8	.24
22	13	40	.48	.73	4.8	.24
24	9	35	.33	.64	6.7	.29
30	7	26	.26	.47	3.4	.20
38	7	27	.26	.49	4.0	.22
39	7	31	.26	.56	6.5	.29
43	12	38	.44	.69	4.6	.23
46	13	39	.48	.71	4.0	.22
50	11	33	.41	.60	4.5	.23
56	10	36	.37	.65	5.9	.27
57	7	31	.26	.56	6.5	.28
59	6	23	.22	.42	3.7	.21
62	13	41	.48	.75	5.6	.26
70	11	39	.41	.71	6.9	.29
73	6	39	.22	.71	17.3	.46
75	10	36	.37	.65	5.9	.27
76	9	37	.33	.60	8.5	.32
77	10	35	.37	.64	5.1	.25
78	8	36	.30	.65	9.3	.34
82	7	30	.26	.55	6.0	.27

^aThe Distribution for Chi Square with one degree of freedom is as follows:

P	.10	.05	.02	.01	.001
Chi Square	2.7	3.8	5.4	6.6	10.8

responses was significantly lower for the Delinquent Group than for the Comparison Group. Only on Item No. 6 did the Delinquent Group select the Yes-Yes response more frequently than the Comparison Group. Of the twenty-three items on Table 7, twenty-one items are significant at the five, two, and one per cent levels. Two items, No. 30 and No. 59 are significant between the five and ten per cent levels. They were included because in this type of exploratory study it was believed more fruitful for further research to risk wrongful inclusion than wrongful exclusion of items.

The following nine items discriminate between groups at the five per cent level of significance, on the Yes-Yes responses: Items No. 1, 6, 20, 22, 38, 43, 46, 50, 77.

Six items significantly discriminate between groups at the two per cent level on the Yes-Yes response pattern: 39, 56, 57, 62, 75, 82.

Six items are significant at the one per cent level: 11, 24, 70, 76, 78, 73.

The fourfold point correlation for the twenty-three items on Table 7 range from .20 to .46. The median coefficient is .26. Interpretation of the Phi coefficient is difficult because the values for Phi run considerably lower than the tetrachoric correlation coefficient. The obtained values in Table 7 indicate that the relationship between

proportion of Yes-Yes response choices and Delinquency status of the group is low.

Tables 8 through 10 show the items that significantly discriminated between the two groups on the No-No, Yes-No, and No-Yes Response Patterns. There are seven items discriminating between groups on the basis of the No-No response, two items on the basis of the Yes-No response pattern, and four items on the basis of the No-Yes response pattern.

TABLE 8

ITEMS DISCRIMINATING BETWEEN DELINQUENT AND COMPARISON GROUPS BY DIFFERENCES IN PROPORTION OF NO-NO RESPONSE.

Item No.	Frequencies		Proportions		Chi Square ^a	Phi- Coefficient
	Del.	Comp.	Del.	Comp.		
18	13	38	.48	.69	3.3	.21
22	10	8	.37	.15	5.5	-.26
30	9	8	.33	.15	4.0	-.22
31	4	19	.14	.35	3.5	.21
41	5	22	.19	.40	3.8	.21
44	2	20	.07	.36	7.3	.30
74	8	38	.30	.69	11.5	.37

^aThe Distribution for Chi Square with one degree of freedom is presented at the foot of Table 7.

On Table 8 two items, Nos. 18 and 31, are significant only at a level between five and ten per cent. Nos. 30 and

41 are significant at the five per cent level. No. 22 is significant at the two per cent level and Nos. 44 and 74 at the one per cent level. Both items on Table 9 are significant at the five per cent level. On Table 10 Items 44 and 83 are significant at the five per cent level and Nos. 10 and 73 at the one per cent level.

TABLE 9

ITEMS DISCRIMINATING BETWEEN DELINQUENT AND
COMPARISON GROUPS BY DIFFERENCES IN
PROPORTION OF YES-NO RESPONSE.

Item No.	Frequencies		Proportions		Chi Square	Phi- Coefficient
	Del.	Comp.	Del.	Comp.		
38	11	2	.41	.04	4.0	-.22
53	6	25	.22	.46	4.2	.23

TABLE 10

ITEMS DISCRIMINATING BETWEEN DELINQUENT AND
COMPARISON GROUPS BY DIFFERENCES IN
PROPORTION OF NO-YES RESPONSE.

Item No.	Frequencies		Proportions		Chi Square	Phi- Coefficient
	Del.	Comp.	Del.	Comp.		
10	3	22	.10	.40	7.4	.30
44	12	11	.44	.20	4.8	-.24
73	13	10	.48	.18	7.9	-.31
83	7	27	.26	.49	4.0	.22

Several factors should be considered in interpreting Tables 8 through 10. Not every item could be analyzed for the No-No, Yes-No and No-Yes response patterns, because on many items, the total number of subjects choosing one of the response patterns was less than fifteen. In that circumstance, the expected frequency for the Delinquent Group is less than five. Walker (49) is of the opinion that with Yates' Correction for Continuity, an expected frequency as low as one may be used in computing Chi Square. McNemar (34) does not recommend using very small expected frequencies, but does not state where the limit should be set. In the present study, it was decided to exclude from analysis the response patterns which were selected by fewer than fifteen of the eighty-two subjects.

Six items discriminated on two response patterns. Items No. 22 and 30 discriminated on the Yes-Yes and No-No response patterns. Item 38 discriminated on the Yes-Yes and Yes-No patterns. Item 73 discriminated for Yes-Yes and No-Yes patterns and Item 44 on both the No-No and No-Yes patterns. That two response categories for a single item discriminate between the two groups may be an artifact of the method of analysis, since the four response categories are not independent. A large discrepancy in the proportions of the two groups selecting one response category makes

differences more likely in the proportions selecting another response category for the same item.

With these considerations taken into account, interpretation of Tables 8 through 10 is made easier.

On Table 8 (Response Pattern No-No) the proportion of the Delinquent Group is lower on Items 18, 31, 41, 44, and 74. On Items 22 and 30 the proportion of Delinquents responding No-No is higher, but these two items are also significant for the Yes-Yes Response Pattern with the Delinquent Group showing a lower proportion for that pattern.

On Tables 9 and 10 the direction of the differences in proportion between the two groups is not consistent. For three of the six items the Delinquent Group selected fewer Yes-No and No-Yes responses, but on the other three items a greater proportion of the Delinquent Group than the Comparison Group selected these response patterns.

Interpretation of the Data

Except for Item 6 all of the items discriminating on the basis of the Yes-Yes Response Pattern are "popular responses for the Comparison Group. Table 7 indicates that the proportion of the Comparison Group selecting the Yes-Yes Response Pattern ranges from .41 to .75. The Comparison

Group seemed to feel that the hypothetical roles presented in the items are descriptive of their own behavior and they are satisfied with that condition. The Delinquent Group responded less frequently with the Yes-Yes response indicating they feel that either the roles presented are not descriptive of their behavior, that they do not accept the roles presented as desirable, or both.

For Item 6, .41 of the Delinquent Group, but only .18 of the Comparison Group responded Yes-Yes. Item 6 reads, "Charles can often make his parents change their minds."

For the five items (Nos. 22 and 30 have already been discussed in preceding paragraphs) discriminating on the basis of the No-No Response Pattern, a sizeable proportion of the Comparison Group (.35 - .69) rejects the roles presented as descriptive of their behavior, but also indicates satisfaction with their condition. On the other hand, fewer Delinquents indicate rejection of the roles presented, satisfaction with such rejection, or both.

Since only three items not already discriminating on the Yes-Yes or No-No Response Patterns were added by the inclusion of the No-Yes and Yes-No patterns, no generalized interpretation of those items was made.

Classification of Items by Psychological Variables and Behavior Situations.

The Revised Needs Questionnaire was designed by Lucas (32) as a means of classifying the needs of adolescents. On the basis of needs reported in the literature on adolescence, twelve need categories were devised by Lucas and his colleagues as a way of classifying the directions of adolescent motivations. In addition to "needs," or "psychological variables," Lucas considered the situational aspects of behavior to be an important variable. It was on the basis of apriori Variables and Situations that the items on the Revised Needs Questionnaire were constructed by Lucas.

On Table 11, all of the items found to discriminate between the Delinquent and Comparison Group on the basis of one or more of the Response Patterns are classified by the Behavioral Situation and Psychological Variable.

Table 11 indicates that seven of the eight items included in the Psychological Variable, Approval, significantly discriminated between the Delinquent and Comparison Groups. Four of the eight items included in the variable "Self-realization" also discriminated. The remaining twenty-one items appear to be spread among the other ten Psychological variables.

TABLE 11

ITEMS DISCRIMINATING BETWEEN DELINQUENT AND
COMPARISON GROUPS CLASSIFIED BY BEHAVIORAL
SITUATION AND PSYCHOLOGICAL VARIABLE.

Variables	Situations ^a							
	1	2	3	4	5	6	7	8
Acceptance								50
Achievement		62	83					
Affection								76
Approval	1	20	30	41		78	82	53
Belonging		10				70	73	
Conformity						57	74	
Dependence		59				44		
Independence		11	18			75		
Mastery-Dominance		46				6		34
Recognition							31	39
Self-Realization	56		77			43		22
To Be Understood						24		38

^aKey to Behavioral Situations:

1. Self
2. Unisexual peer group
3. Heterosexual peer group
4. Unisexual pairs
5. Heterosexual pairs
6. The family group
7. The school
8. Adults

In the columns indicating "Behavioral Situations," eight of the twelve items included in "The family" significantly discriminated between response patterns of the two

groups. Seven of the twelve items included in "Adults" discriminated, and six of the twelve in the "Unisexual peer group" category.

Lucas (33) completed a factor analysis of the responses for a sample of the Delaware group on the Revised Needs Questionnaire. His orthogonal analysis extracted six factors. The factor analysis was done in terms of four response patterns for each of the ninety items. Table 12 shows the response patterns discriminating between the Delinquent and Comparison Groups classified by orthogonal factors evolved by Lucas.

TABLE 12

ITEMS DISCRIMINATING BETWEEN DELINQUENT
AND COMPARISON GROUPS CLASSIFIED
BY ORTHOGONAL FACTORS.

Factor	I	II	III	IV	V	VI
Response Pattern	NY	YY	YY	YY	NY	NY
No. of Items in Factor	14	5	5	9	15	9
Discriminating Items	10	-	43 82	6 75 78	83	44

Only eight of the thirty-three discriminating items are included in the orthogonal factors extracted by Lucas.

Twenty-five remaining items were found not to fit into the orthogonal factor classification. Since a relatively small proportion of the data could be classified in the factor scheme, no interpretation was attempted.

Summary

The Revised Needs Questionnaire devised by Lucas and his colleagues was administered to twenty-seven adolescent boys held at the Montgomery County Detention Home and to fifty-five High School students as a comparison group. Tabulation was made of the number in each group selecting each of four response patterns for every item. Differences in the proportions of the two groups selecting a response pattern were evaluated with the Chi Square statistic. The fourfold point correlation was reported for items discriminating between the groups.

Discriminating items were classified on the basis of response patterns, "psychological variables," "behavioral situations," and Lucas' orthogonal factor classification.

Thirty-three items discriminated between the Delinquent and Comparison Groups. Twenty-three were significantly discriminating in the proportion of Yes-Yes responses; on twenty-two of the twenty-three the Delinquent Group selected a significantly smaller number of Yes-Yes

responses. Seven items were discriminating on the basis of the proportions of No-No responses; two, on the basis of Yes-No responses; and four on the basis of No-Yes responses. Five items were significantly discriminating on two response categories.

On the Classification by "Psychological Variable," seven of the eight items included in the "Approval" category were discriminating. Four of the eight included in "Self-realization" differentiated response patterns of the two groups.

On the Classification by "Behavioral Situation," eight of the twelve items included in "The family group," seven of the twelve included in "Adults" and six of the twelve in "Unisexual peer group."

The classification by six orthogonal factors included only eight of the thirty-three discriminating items.

The implications of these findings will be discussed further in Chapters VI and VII.

CHAPTER V

THEMATIC PICTURE STORIES

Background of the Instrument

Thematic pictures were used to test the hypothesis that delinquents differ from non-delinquents in "aggression." The choice of this type of instrument was based on the following criteria:

- 1) A large sample of verbal responses could be secured.
- 2) Difficulty in malingering and faking responses.
- 3) Ease of recording exact responses.
- 4) Simplicity of an available scoring method.

The only assumption made in using thematic stories was that they are a sample of behavior. No theory concerning projection, repression, or other "dynamic" aspects of behavior was postulated.

As a behavior sample, the material was planned to reveal differences between subjects on a construct "aggression."

Major problems in using thematic material are scorer

reliability and scaling of responses. Several scoring systems were examined and found to be subjective in approach and cumbersome because they presented so many variables. Jensen's scoring system was chosen for the following reasons:

- 1) It provided scoring for the variable "aggression."
- 2) The rating scale provided six steps which would permit a more sensitive analysis than a dichotomous classification.
- 3) Both direction and intensity of "aggression" were rated.
- 4) It was easily scored.
- 5) Face validity insured co-operation of judges.

Following are the directions for scoring of the stories:

Instructions for Scoring the Picture Stories

Score only what is explicitly stated in the Story.

Aggression Score

Hero Aggressor. The main character of the story is responsible for the aggression; he (or she) is the one who can be called the aggressor.

Hero Victim. When the main character of the story is aggressed against by another character in the story, the aggression is scored in the Hero Victim category, since the hero is not the one who commits the aggressive act but is the victim of the aggressive act.

Indeterminate. When there is aggression in the story and it is difficult or impossible to decide if the story has a main character, the aggression should be scored in the Indeterminate category.

- 0 Inert, no action, mere contemplation; neutral or non-aggressive action; no indication of aggression in any form.
- 2 A character in the story dominates or controls another, takes self-initiated action, seems to do things with a purpose of his own.
- 4 Character in the story is actively working, struggling, striving, willfully overcoming obstacles, resisting pleas of others, daring exploits, being actively brave, etc.
- 6 Verbal aggression; swearing at another, "telling off" another, threatening another; verbal coercion.
- 8 Physical aggression not resulting in death and which usually is not expected to cause death: fighting, struggling with another, hitting, causing injury, physically subduing, rape, robbery, and deliberate destruction of property.
- 9 Physical aggression not resulting in death but which usually results in death, such as shooting another person, choking someone, knifing, inflicting any kind of injury which seems severe enough to result in death. (This score differs from 10 in that killing or death, or the intent to kill or cause death, are not explicit.)
- 10 Physical aggression resulting in death: murder, killing. (Killing or intent to kill must be explicit (25 p. 5).

Four TAT pictures (38), 3BM, 4, 6BM, and 7BM were selected on the basis of sampling different situations. In addition six original pictures were used. These pictures were designed to sample situations in which lower class

adolescents would be able to identify.

The original pictures may be described as follows:

- A) Boy sitting in an office with his head resting on his hand. (Photograph from magazine.)
- B) A blurred photograph showing two boys in movement. A rear view of a running man. (Photograph from magazine.)
- C) A boy and a girl sitting on a bench. (Photograph from magazine.)
- D) A boy seated with his hands on his head and books in front of him. (Pencil and ink drawing by T. H. Bradrick.)
- E) Boy leaning on pole. Man and woman standing. Man pointing finger. (Pencil and ink drawing by T. H. Bradrick.)
- F) Group of boys. One has fist cocked. Another's head is tilted. (Pencil and ink drawing by T. H. Bradrick.)

The original pictures may be found in the Appendix pp.

Administration

The TAT Picture Stories were administered to each subject individually by the investigator. A preliminary interview of about fifteen minutes duration was conducted to develop a satisfactory working relationship with the subject.

The directions used were taken from the TAT Manual

(38), Form B. The directions read as follows:

This is a story-telling test. I have some pictures here that I am going to show you, and for each picture I want you to make up a story. Tell what has happened before, and what is happening now. Say what the people are feeling and thinking and how it will come out. You can make up any kind of story you please. Do you understand? Well, then, here is the first picture.

The last two sentences in the directions, "You have five minutes to make up a story. See how well you can do." were omitted.

The pictures were administered to all subjects in the following order: TAT Pictures 3BM, 4, 6BM, 7BM; Picture Stories A, B, C, D, E, F.

Insofar as possible, the interviewer's remarks were limited to four questions: What happened before? What is happening now? What are the people feeling and thinking? And, how will it come out? However, when the subject seemed unable to tell any story, became defiant, or asked specific questions, it was necessary to deviate from the stated procedure. In every case, the overriding consideration was to secure stories from the subject in as relaxed a situation as possible.

Recording of Stories

Verbal content of the interview and stories was tape-

recorded with the consent of the subjects. Verbatim protocols of the stories were typed from the tape recordings. Pauses of more than five seconds duration were indicated in the protocols. Limitations of time and personnel prevented typing of the preliminary interviews, but the tape-recordings have been preserved for use at some future time. A sample protocol may be found in Appendix pp. 86-93.

Scoring of Stories

Each story was rated by three judges as to the direction and degree or "velocity" of aggressive content, following the Jensen (25) system. The judges were school psychologists, experienced in examining delinquent adolescents. Four psychologists, two of whom rated half of each group, comprised the panel of judges.

The TAT stories were rated first. The four TAT stories for each subject were rated sequentially in the order that the pictures were administered. The order of rating subjects was random, but the same for the TAT and Picture Stories. The subject order is presented in the Appendix

Identical face sheets were attached to the protocols for the TAT and Picture Stories. Code Number, Age, Grade placement, Intelligence Test Scores, Race, and Family status

(divorced, Father or Mother deceased, or intact), and number of siblings were stated on the face sheet.

The name of the subject was omitted to prevent recognition, since the judges had previously examined a large number of the delinquent subjects. The delinquency status of the subjects was withheld to minimize the effects of preconceptions about delinquents.

Analysis of Results

Scorer reliability was estimated using Kendall's coefficient of Concordance, W (26). The statistic W provides an estimate of correlation for more than two sets of scores, giving an overall estimate of scorer reliability for the three ratings on each story. Its expected value is equal to the mean of separate product-moment r 's when the assumptions for that measure can be met. Estimates of scorer reliability for the TAT stories and Picture Stories are shown for delinquents and controls in Table 13.

Table 13 indicates that reliability was approximately the same for the TAT and Picture Stories (W equals .55). Scorer agreement was also similar for delinquent and non-delinquent stories.

The classification of stories into categories of Hero Aggressor, Hero Victim and Indeterminate did not discrimi-

nate between delinquent and non-delinquent groups. Inspection of Tables 14 and 15 indicate that the number of stories placed in each category was approximately equal for both groups. Jensen found that the three categories failed to discriminate between Aggressive and Passive High School males. The findings in the present study were in agreement with his results.

TABLE 13

SCORER RELIABILITY: COEFFICIENTS OF CONCORDANCE, W

Judges	A, N, I		A, N, J		Mean W
	Del.	Cont.	Del.	Cont.	
TAT Scores	.675	.673	.420	.510	.569
Picture Story	.456	.655	.725	.352	.547
Mean W	.566	.664	.573	.431	.558

While the direction of aggressive behavior depicted in the stories was not different, there was a tendency for the delinquent stories to be rated lower in the degree of aggression.

Table 16 shows that the mean Aggression Scores for the delinquent group was lower than that of the controls on the

MEAN NUMBER OF DELINQUENT AND NON-DELINQUENT STORIES
CLASSIFIED HERO-AGGRESSOR, HERO-VICTIM AND
INDETERMINATE BY THREE JUDGES ON TAT.

[illegible]

MEAN NUMBER OF DELINQUENT AND NON-DELINQUENT STORIES
CLASSIFIED HERO-AGGRESSOR, HERO-VICTIM AND
INDETERMINATE BY THREE JUDGES ON PICTURES.

[illegible]

TABLE 16
DESCRIPTIVE STATISTICS FOR DELINQUENT
AND CONTROL GROUPS.

Instrument	Mean Aggression Score		Standard Deviation	
	Del.	Control	Del.	Control
4 TAT Pictures	45.6	52.2	17.0	18.4
6 Picture Stories	78.0	85.1	18.4	15.8
10 Pictures	123.1	137.3	26.9	28.1

Table 17 indicates that the ten picture instrument discriminated between groups. The null-hypothesis, that the average difference in Aggression Scores between delinquent and non-delinquent individuals is equal to zero, is rejected at the five per cent level of significance.

Tables 18 and 19 indicate that the differences in Aggression Scores were lower for the delinquent subjects on the TAT and Picture Stories, but for neither instrument was the difference significant at .05. The results of the significance tests indicate that the differences in ratings were too small to be significant for the limited samples of responses obtained on the six Picture Stories and the four TAT Pictures. On the larger sample obtained for the ten picture instrument, the cumulative differences were sufficient to attain significance.

TABLE 17

DIFFERENCES IN TOTAL AGGRESSION SCORES FOR TEN STORIES.

Pair		Score		D	D ²
Del.	Control	Del.	Control		
1	23	118	138	-20	400
3	25	176	154	22	484
5	27	112	170	-58	4624
7	29	128	161	-33	1089
9	31	134	116	18	324
11	33	122	123	- 1	1
13	35	116	102	14	196
15	37	114	143	-29	841
17	39	105	154	-49	2401
19	41	98	160	-62	3844
2	24	96	118	-22	484
4	26	134	126	8	64
6	28	124	176	-52	2704
8	30	142	145	- 3	9
10	32	130	126	4	16
12	34	98	114	-16	256
14	36	94	139	-45	2025
16	38	146	142	4	16
18	40	88	68	20	400
20	42	190	181	9	81
22	44	126	126	0	0
Sums		2591	2882	-291	19899

t 2.26

p less than .05

TABLE 18
DIFFERENCES IN TOTAL AGGRESSION SCORES
FOR FOUR TAT STORIES.

Pair		Score		D	D ²
Del.	Control	Del.	Control		
1	23	36	36	0	0
3	25	70	58	12	144
5	27	14	78	-64	4096
7	29	50	56	-6	36
9	31	64	54	10	100
11	33	54	33	21	441
13	35	32	44	-12	144
15	37	42	47	-5	25
17	39	42	62	-20	400
19	41	46	72	-26	676
2	24	28	36	-8	64
4	26	48	63	-15	225
6	28	52	66	-14	196
8	30	80	61	19	361
10	32	30	38	-8	64
12	34	24	32	-8	64
14	36	50	57	-7	49
16	38	52	56	-4	16
18	40	30	18	12	144
20	42	72	99	-27	729
22	44	34	36	-2	4
Sums		950	1102	-152	7673

t 1.83

p less than .10

TABLE 19
DIFFERENCES IN TOTAL AGGRESSION SCORES
FOR SIX PICTURE STORIES.

Pair		Score		D	D ²
Del.	Control	Del.	Control		
1	23	82	102	-20	400
3	25	106	96	10	100
5	27	98	92	6	36
7	29	78	105	-27	729
9	31	70	62	8	64
11	33	68	90	-22	144
13	35	84	58	26	676
15	37	72	96	-24	576
17	39	63	92	-29	841
19	41	52	88	-36	1296
2	24	68	82	-14	196
4	26	86	63	23	529
6	28	72	110	-38	1444
8	30	62	84	-22	484
10	32	100	88	12	144
12	34	74	82	-8	64
14	36	44	82	-38	1156
16	38	94	86	8	64
18	40	58	50	8	64
20	42	118	82	36	1296
22	44	92	90	2	4
Sums		1641	1780	-139	10307

t 1.41

p less than .20

The biserial correlation coefficients shown in Table 20 also supports this conclusion. The bi-serial correlation coefficients between the dichotomy, delinquent, non-delinquent and aggression scores is reported in Table 20. This table indicates that the relationship between delinquency status and aggression scores was consistently negative. The correlation is low, but not negligible.

TABLE 20
BISERIAL CORRELATIONS BETWEEN TOTAL AGGRESSION
SCORES AND DELINQUENCY STATUS.

Instrument	Biserial r
4 TAT Pictures	-.24
6 Picture Stories	-.26
10 Pictures	-.32

CHAPTER VI

SUMMARY AND CONCLUSIONS

Restatement of the Problem

Two hypotheses were proposed in this investigation:

- 1) Delinquents and non-delinquents differ in goal-attainment.
- 2) Delinquents and non-delinquents differ in "aggression."

The first hypothesis was tested by analyzing the response patterns of delinquents and non-delinquents on the Horrocks-Lucas Revised Needs Questionnaire. This instrument was designed to sample the goal-attainment of adolescents.

The second hypothesis was tested by rating delinquent and non-delinquent stories on thematic picture material, consisting of four TAT pictures and six original pictures. Story content was rated on a postulated construct "aggression."

Summary of the Findings

The hypothesis of differences in goal-attainment was supported by the analysis of responses on the Horrocks-Lucas

Revised Needs Questionnaire. Thirty-two of the ninety items on the instrument were found to discriminate between delinquents and non-delinquents at the .05 level.

On twenty-one discriminating items, a smaller proportion of the delinquent group responded "Yes-Yes" on the Questionnaire. The Yes-Yes response pattern indicates the subject considers hypothetical behavior presented in the item as descriptive of his own behavior. The Yes-Yes pattern also indicates the subject accepts as desirable the described behavior. The smaller number of delinquents selecting "Yes-Yes" implies incongruity between perceived behavior and goals. From the delinquents' point of view, their behavior is not successful in leading toward goal attainment.

While the item analysis provided strong evidence of differences in the proportion of delinquents and non-delinquents responding "Yes-Yes," the remaining discriminating items were scattered in the "No-No," "Yes-No," and "No-Yes" categories. The evidence indicates that the delinquents perceive the discrepancies between their behavior and goals. However, there is little indication whether delinquents reject the applicability of hypothetical behaviors presented but accept them as desirable; accept the behaviors, but

consider them undesirable; or reject both the hypothetical behaviors and their desirability.

Three types of classification were made for the discriminating items, environmental settings, psychological variables, and orthogonal factors.

Evidence of thwarting and goal-attainment was found in behavioral settings involving the family group, adults, and unisexual peer groups. More than half of the items in each of these categories discriminated between the groups. At the other extreme, no discriminating items were found in the category "heterosexual pairs," only one item in "heterosexual peer group" and two items in the category "self." This evidence indicates that thwarting of needs does not occur in all settings. Problem areas are found in relationships with the family group, other adults, and the unisexual peer group. On the other hand, in development of heterosexual relationships and in perception of self, problems of delinquents appear to differ little from those of non-delinquents.

Seven of the eight items comprising the psychological need "approval" differentiated the groups. Four of the eight items classified as "Self-realization" were significant. The other significant items were scattered among the

ten main "need" categories. Paradoxically, only one item classified "acceptance" and one item classified "affection" were found to be significant. This is interesting because acceptance, affection and approval are so often considered to be psychologically similar.

Few of the items discriminating between delinquent and non-delinquent groups were included in the orthogonal factors extracted by Lucas. The finding that neither the apriori need classification nor the orthogonal factor analysis accounted for differentiating items, might indicate that motive organization for both groups is very similar.

On the thematic picture material, the classifications "hero-aggressor," "hero-victim," or "indeterminate," did not differentiate between delinquents and non-delinquents. While the placement of aggression did not differ between the two groups, the content of the delinquent stories showed less aggression. This finding was consistent for both TAT stories and original picture stories. Assuming that delinquents display more aggression in their behavior, an inverse relationship was found between behavioral aggression and aggression ratings of story content.

Conclusions

The hypothesis that delinquents and non-delinquents

differ in goal-attainment was supported by the data. Delinquent responses on the Horrocks-Lucas Revised Needs Questionnaire show greater discrepancy between perceived behavior and goals than non-delinquent responses. Thwarting is shown in family, adult, and same-sex peer relationships.

The hypothesis that delinquents and non-delinquents differ in "aggression," was also supported by the data. The delinquent stories showed lower aggressive content than non-delinquent stories. This finding supports Symonds' (46) statement of an inverse relationship between overt aggression and aggression in thematic stories.

CHAPTER VII

IMPLICATIONS OF THE FINDINGS

Of major theoretical interest is the finding that the items discriminating between the delinquent and non-delinquent subjects on the Revised Needs Questionnaire were grouped more decisively by the "behavioral settings" classification than on the "psychological variable" or "need category" classification. There is evident a piling up of items on three of the eight "behavioral settings" while only one "need category" is clear in accounting for the items. This finding, should it not be an accidental occurrence, would imply that the place to start looking for differential behavior of delinquents might be in settings in which the behaviors take place.

Such an approach has been used by Barker and Wright (5) in an extensive investigation of the children of "Midwest."

One setting, the home of the delinquent, stands out as a key to understanding of delinquent behavior, according to the responses on the Revised Needs Questionnaire and also

in findings reported in the literature. Unfortunately, most of the information about the family life of the delinquent youth reported in the literature is from interviews with the delinquent and his parents. The accuracy of this information and interpretations based on it are open to serious question. The present findings suggest that something is awry in the family relationships of the delinquent. The implication would be that direct observation of the delinquent in his family surroundings are required. The analysis of family patterns by Baldwin, Kalhorn, and Breeze (3) comes to mind.

The finding of a negative correlation between delinquency and aggression ratings on the thematic picture stories confirms statements made by Symonds (46) and Sanford (41) to the effect that there is an inverse relationship between needs expressed on the TAT and "overt" behavior. If this finding were confirmed in future studies, it would mean that the TAT might be used in measurement and prediction of behavior, something Cronbach (12) and Anastasi (1) find lacking in many of the presently used scoring methods.

The use of story content based on story action would imply that scoring should be more reliable than using

"traits" or "underlying dynamics," but in the present investigation scorer reliability (W equals .55) was disappointingly low. Perhaps preliminary training would improve the scorer reliability.

The approach in this study, as in most studies of delinquency, was to find differences between delinquents and non-delinquents. While differences were found, the similarity of the groups should not be overlooked. While one-third of the items on the Revised Needs Questionnaire discriminated, two-thirds did not. The discriminating items clearly piled-up in only one "need-category" suggesting that motive organization is very similar for both groups. While significant differences in aggressive content on stories were found, they were very small. The evidence suggests that the classification "delinquent" may have as much to do with the environmental setting as with individual behavior patterns measured apart from that setting.

CHAPTER VIII

SUGGESTIONS FOR FURTHER RESEARCH

The Revised Needs Questionnaire shows promise of becoming a practical as well as theoretical instrument in the study of delinquency. The following steps would seem desirable in validating the instrument:

- 1) Cross validation using matched groups as in the present study.
- 2) Cross validation without matching socio-economic status, permitting maximum variation in response patterns between delinquent and non-delinquent groups.
- 3) Reliability studies, including test-retest and split half methods.
- 4) Factor analysis studies with delinquent populations to aid in reclassifying items.

If the discriminating items found in this and succeeding studies stand up in cross-validation, additional items could be constructed. A "delinquency key" could be devised using these items. The key could be tested not only for groups already delinquent, but on "normal" populations with follow-up studies to determine the power of the instrument to predict delinquency.

The grouping of differentiating items on the classification on "behavioral settings" suggests further research along certain theoretical lines. The recent work by Barker and Wright (5) provides valuable techniques and concepts for evaluating behavior in terms of its setting. What behavior takes place where would seem pertinent to delinquent behavior. Observations made in homes, "hang-outs" and street corners might initiate a fruitful approach to the psychological study of delinquency. An analysis of family relationships of delinquents using the orientation and techniques of Fels Institute for Child Development would be valuable.

Replication of this study is necessary to confirm the finding of a negative correlation between delinquency and "aggression" in story content on the thematic material. In such a study, preliminary training of raters is suggested to raise scorer reliability. Other constructs such as "approval" which appeared to be important variable on the Revised Needs Questionnaire might be rated on an intensity scale using thematic stories.

The tape-recordings and protocols of the stories provide "raw material" for further investigation. A detailed analysis of story content would prove interesting. An

analysis of language structure might be done. If significant differences in story content or language structure are found, a multiple choice story-preference instrument could be constructed.

APPENDIX I

THE HORROCKS-LUCAS REVISED NEEDS QUESTIONNAIRE

BOYS FORM

The questions on the following pages are to help us understand the feelings and wants of young people. Your answers will be included with answers from many other young people like you. There are no "right" or "wrong" answers. Everyone will answer differently. Just try to put down what you really think and really want.

Name _____
 Last Name First Name Middle Name

Date of Birth _____ Age _____ Grade _____
 Month Year

My Address is _____ School _____
 House Number Street

My father works at _____ He _____
 Name of company, business or employer Tell exactly what he does there.

He owns a business. _____ It is _____
 Yes or No What business does he own?

My mother works at _____ She _____
 Name of company, business or employer Tell exactly what she does.

She owns a business. _____ It is _____
 Yes or No What business does she own?

Name _____
Last Name First Name Middle Name

Date of Birth _____ Age _____ Grade _____
Month Year

My Address is _____ School _____
House Number Street

My father works at _____ He _____
Name of company, business or employer Tell exactly what he does there.

He owns a business. _____ It is _____
Yes or No What business does he own?

My mother works at _____ She _____
Name of company, business or employer Tell exactly what she does.

She owns a business. _____ It is _____
Yes or No What business does she own?

10. Bill is always welcome to go around with a bunch of boys he knows.
 Am I like Bill?..... Yes No
 Do I want to be like him?..... Yes No
11. Mac doesn't always do what the other boys in his gang do.
 Am I like Mac?..... Yes No
 Do I want to be like him?..... Yes No
12. Larry is different from the other boys.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
13. William doesn't have to study to get good marks.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
14. Harold is seldom shy with a girl.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
15. Glen and another fellow almost always go around together and do lots of things.
 Am I like Glen?..... Yes No
 Do I want to be like him?..... Yes No
16. The boys in Murray's crowd think a lot of him.
 Am I like Murray?..... Yes No
 Do I want to be like him?..... Yes No
17. Alfred's teachers are always finding fault with him.
 Am I like Alfred?..... Yes No
 Do I want to be like him?..... Yes No
18. Ted goes ahead and does some things that the other boys and girls think he shouldn't do.
 Am I like Ted?..... Yes No
 Do I want to be like him?..... Yes No
19. When Gus does something, he does the best he can.
 Am I like Gus?..... Yes No
 Do I want to be like him?..... Yes No
20. Other boys often ask Red to do things with them.
 Am I like Red?..... Yes No
 Do I want to be like him?..... Yes No
21. The people at home treat Steve like a grown man.
 Am I like Steve?..... Yes No
 Do I want to be like him?..... Yes No

Read the sample sentence below and the questions that go with it. If the answer to the first question is "yes", put a check mark () on "yes". If the answer is "no", put a check mark on "no". Now do the second question in the same way.

SAMPLE: John is very good at roller-skating.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No

Do all the sentences on the following pages in the same way you did the sample.
ALL YOUR ANSWERS ARE CONFIDENTIAL.

1. Luke almost always stays out of trouble.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
2. Harry can get along very well without a boy-friend.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
3. Everybody likes Richard.
 Am I like Richard?..... Yes No
 Do I want to be like him?..... Yes No
4. Don makes sure what older people think about it before doing anything.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
5. Herby has a girl who thinks he is nicer than the other boys.
 Am I like Herby?..... Yes No
 Do I want to be like him?..... Yes No
6. Charles can often make his parents change their minds.
 Am I like Charles?..... Yes No
 Do I want to be like him?..... Yes No
7. All the boys in Tim's gang think he is a swell guy to have around.
 Am I like Tim?..... Yes No
 Do I want to be like him?..... Yes No
8. Edward's teachers do favors for him and help him a lot.
 Am I like Edward?..... Yes No
 Do I want to be like him?..... Yes No
9. Hank has a girl who seems to understand him.
 Am I like Hank?..... Yes No
 Do I want to be like him?..... Yes No

22. James doesn't want a job where he will loaf.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
23. Will has a girl-friend who gives him sympathy and encouragement.
 Am I like Will?..... Yes No
 Do I want to be like him?..... Yes No
24. Harvey can talk to his family about his thoughts and problems.
 Am I like Harvey?..... Yes No
 Do I want to be like him?..... Yes No
25. Leroy does almost everything the other boys and girls do.
 Am I like Leroy?..... Yes No
 Do I want to be like him?..... Yes No
26. Chuck has one loyal friend who will stand by him no matter what they say.
 Am I like Chuck?..... Yes No
 Do I want to be like him?..... Yes No
27. Al runs almost every activity that goes on in his school.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
28. Arnold gets some of the best marks in his class.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
29. Gary does most of the things he is supposed to do.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
30. The boys and girls seldom say anything bad about Albert.
 Am I like Albert?..... Yes No
 Do I want to be like him?..... Yes No
31. Jim is president of quite a few clubs in his school.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
32. Ron has succeeded in getting older people to treat him like an adult.
 Am I like Ron?..... Yes No
 Do I want to be like him?..... Yes No
33. When a crowd of boys and girls are having fun together, they like to have Ray along.
 Am I like Ray?..... Yes No
 Do I want to be like him?..... Yes No

34. Chris can get grown-ups to do some things he wants.
 Am I like Chris?..... Yes No
 Do I want to be like him?..... Yes No
35. Sam spends a lot of time with a swell crowd of boys and girls who are a lot of fun.
 Am I like Sam?..... Yes No
 Do I want to be like him?..... Yes No
36. The boys and girls often let Melvin know how much they like him.
 Am I like Melvin?..... Yes No
 Do I want to be like him?..... Yes No
37. Kenneth is like his boy-friend in many ways.
 Am I like Kenneth?..... Yes No
 Do I want to be like him?..... Yes No
38. Older people usually know how Andrew feels about things.
 Am I like Andrew?..... Yes No
 Do I want to be like him?..... Yes No
39. Everybody says Bob will do very well for himself after he finishes school.
 Am I like Bob?..... Yes No
 Do I want to be like him?..... Yes No
40. When Allan tries, he can get his parents to see some things his way.
 Am I like Allan?..... Yes No
 Do I want to be like him?..... Yes No
41. Joe has a boy-friend who doesn't like some of the things Joe does.
 Am I like Joe?..... Yes No
 Do I want to be like him?..... Yes No
42. Frank has a lot of influence on his girl-friend.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
43. Jerry has a chance to show how well he really can do.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
44. Louis goes to his family for advice; he doesn't decide many things all by himself.
 Am I like Louis?..... Yes No
 Do I want to be like him?..... Yes No
45. Wilbur's closest friend thinks a great deal of him.
 Am I like Wilbur?..... Yes No
 Do I want to be like him?..... Yes No

46. The other boys listen to Hal when he makes suggestions.
 Am I like Hal?..... Yes No
 Do I want to be like him?..... Yes No
47. Pat can succeed at most things better than his boy-friend.
 Am I like Pat?..... Yes No
 Do I want to be like him?..... Yes No
48. Most of Calvin's teachers are very fond of him.
 Am I like Calvin?..... Yes No
 Do I want to be like him?..... Yes No
49. Other boys say that Gordon is the strongest boy in town.
 Am I like Gordon?..... Yes No
 Do I want to be like him?..... Yes No
50. Older people like to have Sidney around.
 Am I like Sidney?..... Yes No
 Do I want to be like him?..... Yes No
51. Phil is the leader when boys and girls get together.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
52. Barry's teachers can't tell him what to do anymore.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
53. Older people sometimes treat Ralph as if he were a younger boy.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
54. Sometimes the other boys can't figure out Ben.
 Am I like Ben?..... Yes No
 Do I want to be like him?..... Yes No
55. Edwin has a girl who thinks he is pretty special.
 Am I like Edwin?..... Yes No
 Do I want to be like him?..... Yes No
56. Nothing stops Hugo from doing the best he can.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No
57. Walter does what his parents expect him to do.
 Am I like Walter?..... Yes No
 Do I want to be like him?..... Yes No
58. Mark feels at home with older people.
 Am I like him?..... Yes No
 Do I want to be like him?..... Yes No

59. Lee gets help, sympathy, and advice from the boys in his crowd.
Am I like Lee?..... Yes No.
Do I want to be like him?..... Yes No
60. Tom has a girl-friend who seldom tells him what to do.
Am I like Tom?..... Yes No
Do I want to be like him?..... Yes No
61. Art's teachers feel that he is a fine person.
Am I like Art?..... Yes No
Do I want to be like him?..... Yes No
62. Herb usually succeeds when he works hard for what he wants.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
63. Carl behaves like older people want him to.
Am I like Carl?..... Yes No
Do I want to be like him?..... Yes No
64. Michael's girl tells him she is proud of him.
Am I like Michael?..... Yes No
Do I want to be like him?..... Yes No
65. The boys and girls almost always help Dan when he needs help.
Am I like Dan?..... Yes No
Do I want to be like him?..... Yes No
66. Donald's parents show him in many ways that they love him.
Am I like Donald?..... Yes No
Do I want to be like him?..... Yes No
67. It bothers Floyd if he doesn't do his best.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
68. The other boys and girls look up to and admire Jack.
Am I like Jack?..... Yes No
Do I want to be like him?..... Yes No
69. Boys and girls sometimes make fun of George.
Am I like George?..... Yes No
Do I want to be like him?..... Yes No
70. Pete and his family enjoy doing many things together.
Am I like Pete?..... Yes No
Do I want to be like him?..... Yes No
71. Nelson gets his way when he really wants it.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No

72. Douglas does most things rather well.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
73. Bert goes to one of the best schools in this part of the state.
Am I like Bert?..... Yes No
Do I want to be like him?..... Yes No
74. Fred sometimes breaks school rules because the other boys do.
Am I like Fred?..... Yes No
Do I want to be like him?..... Yes No
75. Vic's family let him make up his own mind about many things.
Am I like Vic?..... Yes No
Do I want to be like him?..... Yes No
76. Older people think a lot of Howard.
Am I like Howard?..... Yes No
Do I want to be like him?..... Yes No
77. Instead of just getting by, Adam tries to do his best.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
78. Paul's family approves of most things he does.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
79. Forrest has a girl-friend all his own.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
80. Adults keep telling David how he should act.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
81. Earl doesn't like to do things that are too easy for him.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No
82. Arthur's teachers give him praise now and then.
Am I like Arthur?..... Yes No
Do I want to be like him?..... Yes No
83. Craig can date almost any of the girls he knows whenever he tries.
Am I like him?..... Yes No
Do I want to be like him?..... Yes No

84. Oliver and his boy-friend usually do what Oliver thinks is best.
Am I like Oliver?..... Yes No
Do I want to be like him?..... Yes No
85. Sandy and his girl go to the same places and do the same things the other couples do.
Am I like Sandy?..... Yes No
Do I want to be like him?..... Yes No
86. Lewis has a girl who lets him know that she really likes him.
Am I like Lewis?..... Yes No
Do I want to be like him?..... Yes No
87. Henry's family think he is just about okay in every way.
Am I like Henry?..... Yes No
Do I want to be like him?..... Yes No
88. Mike goes to his best friend when he has something to get off his chest.
Am I like Mike?..... Yes No
Do I want to be like him?..... Yes No
89. Robert almost always asks his boy-friend what he should do about some things.
Am I like Robert?..... Yes No
Do I want to be like him?..... Yes No
90. Andy has a boy-friend who thinks Andy is tops in just about everything.
Am I like Andy?..... Yes No
Do I want to be like him?..... Yes No

TABLE 21

FREQUENCY OF RESPONSES OF DELINQUENT AND NON-DELINQUENT GROUPS, CLASSIFIED BY RESPONSE PATTERN ON REVISED NEEDS QUESTIONNAIRE.

Item No.	Response Pattern							
	Yes-Yes Del. Comp.		No-No Del. Comp.		Yes-No Del. Comp.		No-Yes Del. Comp.	
1	<u>9</u>	<u>32^a</u>	3	4	3	3	11	16
2	6	10	16	36	3	8	2	1
3	<u>7</u>	<u>25</u>	1	4	2	1	16	23
4	9	26	7	14	1	1	10	12
5	11	22	7	16	1	4	6	12
6	<u>11</u>	<u>10</u>	10	21	1	8	5	15
7	<u>15</u>	<u>28</u>	2	7	3	1	5	18
8	<u>14</u>	<u>19</u>	4	8	0	4	8	23
9	15	22	4	8	0	2	8	23
10	18	22	4	9	1	2	<u>3</u>	<u>22</u>
11	<u>9</u>	<u>36</u>	11	10	1	4	6	4
12	7	11	13	30	3	7	4	7
13	6	6	9	19	0	1	12	29
14	9	16	8	12	4	10	5	16
15	<u>14</u>	<u>37</u>	6	10	4	1	2	7
16	13	29	4	11	1	0	8	14
17	4	5	<u>11</u>	<u>34</u>	9	13	2	3
18	5	5	<u>13</u>	<u>38</u>	7	9	2	2
19	15	37	4	2	0	2	7	14
20	<u>13</u>	<u>40</u>	6	6	3	2	4	7
21	8	22	7	10	2	1	10	22
22	<u>13</u>	<u>40</u>	<u>10</u>	<u>8</u>	2	4	2	3
23	12	19	5	12	3	0	7	23
24	<u>9</u>	<u>35</u>	7	6	1	0	9	14
25	<u>14</u>	<u>23</u>	6	20	2	0	5	10
26	13	35	4	10	3	0	5	9
27	7	2	12	28	0	3	8	22
28	6	10	2	2	1	0	17	42
29	12	39	4	2	2	1	8	11
30	<u>7</u>	<u>26</u>	<u>9</u>	<u>8</u>	2	2	9	18

^aUnderlined items significant at .05 by chi-square test.

TABLE 21--Continued

Item No.	Response Pattern							
	Yes-Yes Del. Comp.		No-No Del. Comp.		Yes-No Del. Comp.		No-Yes Del. Comp.	
31	6	1	<u>4</u>	<u>19</u>	2	0	15	35
32	10	27	5	8	0	0	9	19
33	17	32	2	6	2	0	4	15
34	11	30	5	4	3	1	6	18
35	13	33	2	7	1	1	9	13
36	15	26	1	9	1	0	6	17
37	10	25	8	17	1	5	5	6
38	<u>7</u>	<u>27</u>	5	9	<u>11</u>	<u>2</u>	1	16
39	<u>7</u>	<u>31</u>	1	3	1	0	16	20
40	16	28	1	9	0	4	8	13
41	7	13	<u>5</u>	<u>22</u>	7	16	5	3
42	13	26	5	12	0	1	7	15
43	<u>12</u>	<u>38</u>	2	3	0	2	9	11
44	5	19	<u>2</u>	<u>20</u>	5	4	<u>12</u>	<u>11</u>
45	17	35	2	7	0	0	5	11
46	<u>13</u>	<u>39</u>	2	5	0	1	9	10
47	11	23	4	10	2	2	8	19
48	9	21	4	9	3	1	7	21
49	2	3	8	23	2	1	<u>14</u>	28
50	<u>11</u>	<u>33</u>	3	8	1	2	9	11
51	5	8	8	16	2	2	9	27
52	5	5	14	38	2	3	4	9
53	0	5	14	24	<u>6</u>	<u>25</u>	4	1
54	5	8	10	26	7	19	3	1
55	13	24	4	11	0	0	7	20
56	<u>10</u>	<u>36</u>	5	0	1	0	10	19
57	<u>7</u>	<u>31</u>	6	6	2	3	10	14
58	10	21	7	20	6	2	1	12
59	<u>6</u>	<u>23</u>	7	19	3	3	7	10
60	9	29	8	15	3	2	5	7

TABLE 21--Continued

Item No.	Response Pattern							
	Yes-Yes Del. Comp.		No-No Del. Comp.		Yes-No Del. Comp.		No-Yes Del. Comp.	
61	10	29	6	5	1	0	7	18
62	<u>13</u>	<u>41</u>	4	1	0	0	6	12
63	10	20	6	9	1	10	7	16
64	10	23	4	10	1	0	9	22
65	<u>14</u>	28	1	5	2	0	6	21
66	16	<u>42</u>	2	7	1	2	<u>4</u>	<u>4</u>
67	10	30	7	11	2	<u>4</u>	5	9
68	10	17	2	9	1	1	11	27
69	1	6	15	26	7	23	2	0
70	<u>11</u>	<u>39</u>	3	5	0	0	10	11
71	<u>5</u>	8	13	29	2	0	5	18
72	<u>14</u>	32	2	3	0	1	8	18
73	<u>6</u>	<u>39</u>	4	5	1	1	<u>13</u>	<u>10</u>
74	<u>6</u>	6	8	38	8	9	<u>3</u>	2
75	<u>10</u>	<u>36</u>	7	5	3	1	<u>4</u>	13
76	<u>9</u>	<u>37</u>	4	3	0	1	11	12
77	<u>10</u>	<u>35</u>	4	4	2	1	8	15
78	<u>8</u>	<u>36</u>	2	3	1	2	13	<u>14</u>
79	12	26	1	10	1	2	9	17
80	3	11	10	<u>24</u>	7	19	3	1
81	9	26	5	<u>14</u>	4	3	5	12
82	<u>7</u>	<u>30</u>	8	10	2	2	5	12
83	10	<u>14</u>	4	13	3	0	<u>7</u>	<u>27</u>
84	9	21	5	18	2	<u>4</u>	9	11
85	10	23	7	22	2	2	6	8
86	15	27	0	8	4	3	6	16
87	10	22	1	10	2	1	12	22
88	12	26	9	21	0	1	4	7
89	10	<u>24</u>	11	23	1	1	2	7
90	9	23	8	12	2	1	6	18

APPENDIX II
THEMATIC PICTURE STORIES

SAMPLE PROTOCOL OF
THEMATIC STORIES

Identifying Data

Code: 7

Age: 15-10

Grade: 8

California Mental Maturity Total IQ: 79

Race: White

Family Status: Father deceased

Number of Siblings: 6

#3BM

- S. It looks like she's crying over something looks like she's mad at something about somebody.
- E. You make up a story about that. That's very good.
- S. Well, it looks like her and her boyfriend have just broken up and then she went home and looks like she's throwing something on the floor there just put up her head against the couch and sat down there and cried--
- E. And how does the story end?
- S. Well, I guess maybe she just don't care about him anymore or she might just go back and make up with him and try and go steady with him again.
- E. Which ending do you think fits the best?
- S. I think the ending that fits the best where she goes back and goes steady with him.

#4

- S. Well, this here looks like she's really crazy about him but he don't have no sympathy or anything for her and looks like he's mad or something maybe he's been drinking about ready to run out on her don't care for her any more.
- E. What led up to that story?
- S. Well, he probably was out with another girl or something.
- E. And how does the story end?
- S. Well, he probably just ran out on her, went with this other girl. Maybe after a while he probably went back to her.

#6BM

- S. This here looks like a boy and his mother I believe. And the boy done something wrong possibly and his mother's looking out the window wondering what to do about him. And she cannot find how anything to go about him or somebody like that.
- E. She cannot find what?
- S. The way to go about it.
- E. The way to go about it. -8- Go right on.

#6BM Continued

- S. Lets see, maybe he's in a wreck or something done something he shouldn't have done and he has to go to court like I had to and a he possibly makes up with his mother and everything gets quiet down and settled out pretty good.
- E. Okay.

#7BM

- S. Hmm, that one's got me there. That looks like a boy and his father there somebody that works for him. I say it was a boy and his father. It looks like his father's proud of him for doing something. He got a nice smile on his face. Maybe the boy done something, saved somebody's life or a hero of some kind. And his father really thinks alot about him and maybe his father'll give him a reward or give him a car or something if he hasn't got one.
- E. How does the boy feel about it?
- S. The boy, he feels pretty good about it. It looks possibly he don't think too much about it.
- E. What do you mean?
- S. Well, it looks like here in the picture the way his face is I mean he wouldn't like to be called a her or something if he done something like that.
- E. He wouldn't like to be called a her.
- S. Uh, uh.

#A

- S. That looks like this boy down in the court room or something in an office of some kind and a I'd say he's in the court room and the probation officer or judge is talking to him and he reads the sentence off and the boy puts his head down and he's very sad about it. Might have to go out here to the detention home or else to BIS.
- E. What led to the boy being in the court room?
- S. Oh, he probably went out and got in some kind of trouble some sort. He looks like he's old enough to have a car or something.
- E. Go ahead and give me a story about that.

#A Continued

- S. -6- (laughs) Pretty hard.
E. Yeh, I know.
S. You couldn't see I don't think his mother's with him or somebody's probably there with him that you can't see them in the picture and the way he looks he's pretty sad and I guess he did have to go somewhere. Well, that's pretty good. That's all I can say to it. (laughs)
E. All right.

#B

- S. That's blurred
E. That is blurred.
S. That looks like that looks like a man or something. This boy has done something and the man is running to catch him. Looks like he's stolen something or committed a crime of some sort. And this man I don't know he looks something like a policeman or somebody that owns a shop of some kind and he's running after this boy. This boy looks like he's a colored boy of some sort and this man's running after him to catch him and bring him back to see what he stolen.
E. How does the boy feel do you think?
S. Well, the boy he's pretty happy when he done it and now after he probably gets caught he probably looks pretty sad about it real awful.
E. Why was he happy when he done it?
S. Well, he thought he had some maybe some money or something he thought he had something in his pocket that he could get away with. Might have a good time of some kind thought he'd be pretty happy about it.
E. How does the man feel?
S. Well, the man, he feels probably pretty bad if it was something of value that belonged to him and that's why he's probably after the boy.
E. And how did it end? I forgot.
S. Well, it looks like he probably caught him and the boy had to go to court or something.

#C

- S. Well, this one here looks like a boy and a girlfriend here and she's got his ring on and it looks like they're going steady or maybe thinking of getting married in the future. And the boy he's just sitting there looking at her and the girl looks like she's crying over something. She got a handkerchief in her hand and maybe the boy said something he shouldn't have said and they're sitting there and the boy's just staring at her and she's about ready to cry.
- E. What could the boy have said? What could have led up to the crying?
- S. Well, he could have said alot of things. He could of maybe he could of said something about seeing another girl or she might have saw him with another girl.
- E. And how does the story end?
- S. Well, the story ends probably she gives him his ring back and they break up.
- E. Okay.

#D

- S. This one here looks like a boy he's got his fingers in his ears or something holding his ears or just thinking, concentrating on his books, lessons of some kind. Looks like he might have his eyes closed and waiting for the answer to pop into his head.
- E. What's he thinking about and feeling?
- S. Oh, he's thinking about the story in the book and a I don't know what he could be feeling could be thinking about what he was reading or could be his history or mathematics or something like that or he could be in study hall.
- E. How does he feel about it?
- S. Well, from the way he looks he don't feel too good about it. And he feels in between, say medium somewhere around there. He does look pretty good about it though.
- E. Okay and how does the story end?
- S. Well, the story ends I guess the boy probably gets his lessons and he caught up on it.
- E. Okay

#E

- S. This one here looks like a boy leaning up against a post and I believe this might be his mother and father some kind telling him to get home or something like that or the boy's blocking the sidewalk if that is it and the man is asking him to get out of the way. And the boy looks like he gives the man a smart remark and the man's telling him something.
- E. How do the people feel and what are they thinking about?
- S. Well, the people don't look too happy about it but probably they're pretty mad about the way he's acting something like that.
- E. How does the boy feel?
- S. Well, the boy thinks he's pretty smart, I reckon.
- E. What finally happens in that story?
- S. Well, I guess the boy stands there or something and maybe makes people move around him or he might step back for them to get through.
- E. What do you think happens?
- S. What do I think happens? Well, I think the boy just probably stayed there didn't care about them.
- E. Okay.

#F

- S. This here looks like a fight two boys it looks like his hands are behind him. Looks like somebody's holding his hands or either tied up and there's a gang behind him and the boys are standing laughing at him watching the fight. And I believe this boy in the background here or they just might be initiating him for a club. Might be a bunch of gang of kids getting together to beat him up or they might not approve of him or like him.
- E. What led up to that do you think?
- S. Somepa-----some kind of argument something like that.
- E. See if you can make up what would lead up to that.
- S. Well, say they was in gym or something and they're downstairs taking their shower or something like that and one boy come in and push this other boy down and went outside said they'd meet each other outside and fight it out. So they met each other outside these other boys that was with this one guy that's drawing back to hit this other boy were probably with this one boy here with

#F Continued

his fists doubled up and held this other kid's hand and this one kid worked him over.

E. How does the story end finally?

S. Well, the story finally ends this here boy goes home all messed up and the other boys feeling pretty good and this gang's behind him carrying him down the road or down the sidewalk or something like that.

E. I'm going to ask you to choose which boy you're most like in that picture. Which one do you think you're most like?

S. I think I'd like this guy over here on the left unless possibly if he started it.

E. Not which one you like but which one you think you are like. You know what I mean?

S. (laughs) I don't know about that. It all depends how the fight started or something say if that boy here say this was me with my fist drawn back and that boy started wising off to me and everything so I'd let him think it don't make much difference wouldn't want to hit the boy if his hands were tied behind his back like that.

E. Oh, Okay.

SIX ORIGINAL THEMATIC PICTURES

TABLE 22

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE A.

Subject	Story			
	3BM	4	6BM	7BM
1	v	i	i	i
3	v	i	i	i
5	v	i	i	i
7	a	i	a	i
9	v	i	a	a
11	v	a	i	i
13	v	a	i	a
15	a	i	a	i
17	a	i	i	a
19	v	i	v	a
2	v	i	i	v
4	a	i	i	v
6	v	a	a	i
8	v	a	i	a
10	i	i	i	a
12	v	i	a	i
14	a	i	a	i
16	v	a	v	a
18	v	i	i	i
20	a	a	a	a
22	a	a	i	i

TABLE 23

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE A.

Subject	Story			
	3BM	4	6BM	7BM
23	v	i	i	a
25	v	i	i	i
27	a	a	a	a
29	v	a	a	v
31	a	i	i	i
33	i	i	a	i
35	i	i	i	i
37	v	a	a	i
39	a	i	i	i
41	v	i	v	v
24	v	i	i	v
26	v	i	v	v
28	i	a	a	i
30	a	a	a	i
32	a	i	a	i
34	a	i	v	i
36	v	a	i	v
38	v	a	i	i
40	v	i	i	i
42	v	a	a	i
44	v	i	a	i

TABLE 24

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE N.

Subject	Story			
	3BM	4	6BM	7BM
1	v	i	a	i
3	v	a	v	a
5	v	i	a	i
7	i	a	a	v
9	v	i	a	a
11	v	a	a	v
13	v	a	v	a
15	v	i	i	i
17	v	a	v	a
19	v	a	i	a
2	v	a	a	i
4	a	i	i	v
6	i	v	a	a
8	v	a	a	a
10	i	a	i	a
12	i	i	i	v
14	v	a	i	v
16	a	a	i	a
18	v	a	i	i
20	a	a	a	a
22	v	v	i	i

TABLE 25

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE N.

Subject	Story			
	3BM	4	6BM	7BM
23	i	a	v	v
25	v	a	v	i
27	a	a	a	a
29	v	a	i	a
31	a	a	i	a
33	a	a	a	i
35	a	v	a	a
37	a	a	a	i
39	a	i	i	v
41	v	a	v	v
24	v	a	i	v
26	v	a	v	a
28	i	a	a	a
30	a	v	i	a
32	i	a	v	i
34	v	i	a	a
36	i	a	i	a
38	a	a	v	i
40	v	a	i	i
42	a	a	a	a
44	v	a	a	i

TABLE 26

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE I.

Subject	Story			
	3BM	4	6BM	7BM
1	a	i	a	i
5	v	a	i	i
9	v	a	a	a
13	v	a	i	i
19	v	a	v	i
2	i	a	i	i
12	v	i	i	i
16	v	a	v	i
18	v	a	i	i
20	a	a	i	i
22	a	v	i	i

TABLE 27

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE I.

Subject	Story			
	3BM	4	6BM	7BM
23	i	i	a	i
25	v	i	i	i
31	i	i	v	i
33	i	i	a	i
35	v	a	a	a
24	v	i	i	v
34	v	i	i	i
38	a	i	i	i
40	v	i	a	i
42	a	a	a	a
44	v	a	v	i

TABLE 28

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE J.

Subject	Story			
	3BM	4	6BM	7BM
3	v	a	v	a
7	a	a	a	a
11	v	i	i	i
15	a	a	a	a
17	v	a	a	a
4	v	a	a	i
6	i	a	a	a
8	a	a	a	a
10	a	a	i	a
14	a	a	a	i

TABLE 29

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE J.

Subject	Story			
	3BM	4	6BM	7BM
27	a	a	a	a
29	v	a	i	a
37	a	a	a	i
39	a	a	i	a
41	v	a	v	v
26	a	a	v	v
28	v	v	a	a
30	a	a	a	a
32	v	v	a	a
36	i	a	i	v

TABLE 30

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE A.

Subject	Story					
	A	B	C	D	E	F
1	a	i	i	i	i	i
3	a	a	i	v	v	i
5	a	i	a	a	i	a
7	i	a	i	i	i	i
9	a	a	i	i	i	i
11	v	i	i	i	i	i
13	a	a	i	i	i	a
15	i	a	i	i	v	a
17	i	i	i	i	i	i
19	a	i	i	i	i	v
2	i	a	i	i	i	a
4	a	i	i	i	a	a
6	a	i	i	i	i	a
8	a	a	i	i	a	i
10	a	a	i	v	a	v
12	a	a	i	i	i	i
14	i	i	i	i	i	i
16	a	a	i	i	i	i
18	i	a	i	i	i	a
20	a	a	i	v	a	a
22	a	a	i	i	a	a

TABLE 31

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE A.

Subject	Story					
	A	B	C	D	E	F
23	a	a	i	v	a	i
25	a	i	a	i	i	i
27	a	i	i	i	i	i
29	a	a	i	i	v	v
31	a	i	i	i	v	i
33	a	i	i	i	a	i
35	a	i	i	i	i	i
37	a	a	i	i	i	v
39	a	v	i	i	i	i
41	i	a	i	i	a	i
24	a	a	i	i	v	a
26	i	i	i	i	v	i
28	a	i	i	i	a	i
30	a	a	i	i	i	i
32	a	i	i	i	i	a
34	i	i	i	i	v	i
36	a	v	i	i	a	i
38	a	a	i	i	a	a
40	a	i	i	i	i	a
42	a	i	i	i	i	a
44	a	i	i	i	v	a

TABLE 32

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE N.

Subject	Story					
	A	B	C	D	E	F
1	a	a	a	i	v	v
3	a	a	i	v	v	v
5	a	a	i	v	a	a
7	v	a	i	i	a	i
9	a	v	i	v	v	i
11	v	a	i	i	a	a
13	a	a	i	v	v	v
15	i	v	i	i	v	v
17	i	i	i	i	a	i
19	v	i	i	i	a	a
2	v	a	i	i	a	v
4	a	i	i	i	a	i
6	a	a	i	i	i	i
8	a	a	i	i	a	v
10	a	a	a	v	v	v
12	a	a	a	i	a	v
14	a	i	i	i	v	i
16	a	a	i	a	a	a
18	a	i	i	i	v	a
20	a	a	a	a	a	a
22	a	a	i	i	v	a

TABLE 33

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE N.

Subject	Story					
	A	B	C	D	E	F
23	a	i	i	v	v	i
25	v	i	v	a	a	i
27	a	a	i	i	a	v
29	a	a	i	i	v	a
31	v	a	i	i	v	a
33	a	a	a	v	a	v
35	a	a	i	i	v	i
37	a	a	i	a	a	v
39	a	i	i	i	v	v
41	a	a	i	i	i	i
24	v	a	i	i	v	a
26	a	i	i	i	a	a
28	a	v	a	i	a	v
30	a	a	i	i	a	v
32	a	i	i	a	v	v
34	a	i	i	i	v	a
36	a	v	i	v	v	i
38	a	a	i	i	a	a
40	v	i	i	i	a	i
42	a	v	i	v	a	a
44	a	i	a	v	v	a

TABLE 34

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE I.

Subject	Story					
	A	B	C	D	E	F
5	a	i	i	i	a	v
9	a	a	v	a	i	i
13	a	i	i	i	v	v
17	i	a	i	i	v	a
19	a	i	i	i	i	v
2	i	a	i	a	a	a
8	i	i	i	i	i	i
12	a	i	i	i	i	i
16	a	a	i	i	v	v
18	i	a	i	i	v	a
20	i	a	a	a	v	a
22	a	a	i	a	a	a

TABLE 35

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE I.

Subject	Story					
	A	B	C	D	E	F
23	i	i	i	i	i	i
31	a	a	i	i	v	i
33	a	i	a	v	i	a
35	a	i	i	i	i	i
24	v	a	i	i	v	i
28	i	v	a	i	a	i
34	a	a	a	i	v	v
38	a	a	i	i	i	a
40	i	i	i	i	i	i
42	a	i	i	i	v	v
44	a	i	v	a	v	v

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TABLE 36

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE J.

Subject	Story					
	A	B	C	D	E	F
1	i	i	i	i	i	i
3	a	a	i	v	v	v
7	i	i	i	i	i	i
11	v	v	i	v	a	i
15	i	a	i	a	v	i
4	a	a	i	i	a	a
6	a	a	i	i	i	a
10	i	a	v	v	a	v
14	i	i	i	i	v	a

TABLE 37

CLASSIFICATION OF HERO AGGRESSOR (a), HERO VICTIM (v),
OR INDETERMINATE (i) FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE J.

Subject	Story					
	A	B	C	D	E	F
25	i	i	i	i	v	i
27	a	a	a	a	a	i
29	a	a	a	i	i	v
37	a	a	i	v	v	v
39	a	a	a	i	a	v
41	v	i	i	i	a	a
26	i	i	i	i	i	i
30	a	a	i	i	v	a
32	a	i	i	i	v	v
36	a	v	i	i	i	a

TABLE 38
 AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
 ON FOUR TAT STORIES BY JUDGE A.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
1	2	0	8	0	10
3	4	8	0	0	12
5	2	4	0	0	6
7	4	2	8	0	14
9	2	4	6	6	18
11	4	4	0	0	8
13	2	4	4	4	14
15	8	0	6	0	14
17	6	0	0	8	14
19	6	4	0	6	16
2	2	4	0	4	10
4	4	4	6	0	14
6	0	0	4	0	4
8	6	8	2	10	26
10	0	4	0	2	6
12	4	4	0	0	8
14	2	0	8	0	10
16	6	10	10	8	34
18	6	4	0	0	10
20	4	8	10	10	32
22	0	0	10	0	10

TABLE 39

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE A.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
23	0	0	0	2	2
25	8	4	8	4	24
27	2	10	10	2	24
29		8	10	6	24
31	8	4	8	0	20
33		4	10	0	14
35	2	4	4	4	14
37	6	4	10	0	20
39	4	6	0	0	10
41	6	6	9	6	27
24	2	4	0	4	10
26	2	8	6	4	20
28	0	6	8	10	24
30	9	8	2	0	19
32	6	0	4	0	10
34	2	0	4	8	14
36	9	6	0	6	21
38	10	4	10	0	24
40	2	6	0	0	8
42	4	10	10	9	33
44	8	4	0	0	12

TABLE 40
 AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
 ON FOUR TAT STORIES BY JUDGE N.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
1	6	0	8	0	14
3	8	4	8	10	30
5	4	0	4	0	8
7	6	4	8	2	20
9	6	4	6	6	22
11	6	4	10	2	22
13	4	6	6	6	22
15	8	4	6	0	18
17	2	2	2	8	14
19	6	2	0	8	16
2	0	6	4	4	14
4	6	0	6	4	16
6	0	8	8	4	20
8	6	8	6	10	30
10	0	4	8	6	18
12	2	6	4	4	16
14	8	4	8	2	22
16	2	6	0	8	16
18	6	4	0	0	10
20	4	8	8	10	30
22	4	8	6	0	18

TABLE 41
 AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
 ON FOUR TAT STORIES BY JUDGE N.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
23	0	2	6	6	14
25	8	4	10	4	26
27	4	10	10	4	28
29	2	4	2	8	16
31	8	4	8	6	26
33	4	2	9	0	15
35	2	6	4	4	16
37	2	4	10	0	16
39	4	6	10	6	26
41	6	4	10	6	26
24	4	6	4	6	20
26	4	8	4	6	22
28	0	4	8	8	22
30	10	6	2	2	20
32	6	8	6	0	20
34	4	0	6	6	16
36	9	4	2	2	17
38	10	6	6	0	22
40	2	4	0	0	6
42	4	10	8	10	32
44	8	4	8	0	20

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TABLE 42

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE I.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
1	6	6	0	0	12
5	0	0	0	0	0
9	6	6	6	6	24
13	2	4	0	0	6
19	6	2	0	6	14
2		4	0	0	4
12	0	0	0	0	0
16	0	2	0	0	2
18	6	4	0	0	10
20	2	8	0	0	10
22	4	2	0	0	6

TABLE 43

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE I.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
23	6	0	6	4	16
25	8	0	0	0	8
31	8	0	0	0	8
33	0	0	4	0	4
35	8	2	2	2	14
24	2	0	0	4	6
34	2	0	0	0	2
38	10	0	0	0	10
40	2	0	2	0	4
42	6	10	10	8	34
44	2	4	0	0	6

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TABLE 44

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE J.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
3	8	2	8	10	28
7	2	2	8	4	16
11	10	4	10	0	24
15	8	2	2	8	20
17	2	2	2	8	14
4	4	10	4	0	18
6	10	4	4	10	28
8	4	8	2	10	24
10	0	4	0	2	6
14	8	2	8	0	18

TABLE 45

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON FOUR TAT STORIES BY JUDGE J.

Subject	Story				Sum of Ratings
	3BM	4	6BM	7BM	
27	4	10	10	2	26
29	2	4	10	0	16
37	2	0	9	0	11
39	2	4	10	10	26
41	6	2	9	2	19
26	9	8	2	2	21
28	0	2	8	10	20
30	10	8	4	0	22
32	2	2	4	0	8
36	9	8	0	2	19

TABLE 46

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE A.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
1	8	8	4	0	4	10	34
3	8	8	4	6	6	8	40
5	8	8	6	4	6	8	40
7	0	8	4	0	4	8	24
9	10	4	0	4	0	8	26
11	6	4	0	0	4	8	22
13	8	8	0	0	4	8	28
15	0	8	4	0	6	8	26
17	0	9	0	0	2	8	19
19	0	8	0	0	0	6	14
2	0	8	0	0	0	8	16
4	8	8	0	0	8	8	32
6	8	8	0	0	0	8	24
8	0	8	4	0	0	8	20
10	8	8	4	8	0	8	32
12	8	8	0	0	4	8	28
14	6	0	0	0	4	8	18
16	8	8	4	4	4	8	36
18	0	8	0	2	0	8	18
20	10	10	8	8	4	8	48
22	8	8	4	0	0	10	30

TABLE 47

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE A.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
23	8	8	0	6	8	8	38
25	8	8	0	6	6	8	36
27	9	8	4	4	0	8	33
29	8	8	4	0	6	9	35
31	6	4	6	0	6	8	30
33	8	8	4	0	8	8	36
35	8	8	0	0	4	8	28
37	8	8	0	2	0	8	26
39	8	8	0	0	6	8	30
41	2	8	4	0	8	8	30
24	8	8	0	0	6	8	30
26	0	0	4	0	6	8	18
28	8	8	8	0	6	10	40
30	8	8	0	0	4	8	28
32	8	8	0	0	4	8	28
34	4	0	6	0	6	8	24
36	8	8	0	0	6	8	30
38	8	8	0	0	4	8	28
40	8	8	0	0	4	8	24
42	8	0	0	0	4	10	26
44	8	8	4	0	6	8	34

TABLE 48

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE N.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
1	8	8	4	0	2	8	30
3	8	8	6	6	6	8	34
5	8	8	4	6	6	8	36
7	6	8	6	0	6	8	34
9	8	6	6	6	6	8	40
11	6	4	0	0	4	8	22
13	8	4	2	2	4	6	26
15	0	8	0	0	6	8	22
17	0	8	4	0	6	8	26
19	4	8	0	0	6	8	28
2	4	8	4	0	6	6	28
4	8	8	0	0	4	8	28
6	8	8	0	0	0	8	24
8	8	8	0	0	8	8	32
10	4	8	2	8	6	8	36
12	8	8	4	4	6	8	38
14	8	0	0	0	4	8	20
16	8	8	0	4	6	8	32
18	4	8	4	0	4	6	26
20	8	8	8	8	6	8	46
22	8	8	4	0	4	8	30

TABLE 49

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE N.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
23	8	6	0	6	6	8	34
25	6	8	6	4	4	6	30
27	8	8	0	0	6	8	30
29	8	8	4	0	6	10	36
31	6	6	0	0	4	6	22
33	8	8	4	2	8	8	38
35	8	8	0	0	6	8	30
37	8	8	4	2	6	8	36
39	8	6	4	4	6	8	34
41	4	8	4	0	8	8	32
24	6	8	4	0	4	8	30
26	6	0	6	0	6	8	26
28	8	8	8	0	6	10	40
30	8	8	0	0	6	8	30
32	8	8	0	4	6	8	34
34	6	8	6	0	6	8	34
36	8	6	0	2	6	4	26
38	8	8	0	0	6	8	30
40	4	8	0	0	6	8	26
42	8	8	4	2	6	10	38
44	6	6	6	4	6	8	34

TABLE 50

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE I.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
5	8	0	0	0	6	8	22
9	10	8	6	0	0	0	24
13	8	8	0	0	6	8	30
17	0	8	0	0	2	8	18
19	2	0	0	0	0	8	10
2	0	8	0	4	4	8	24
8	0	8	0	0	2	0	10
12	8	0	0	0	0	0	8
16	4	8	0	0	6	8	26
18	0	4	0	0	4	6	14
20	0	4	8	2	2	8	24
22	8	8	0	4	4	8	32

TABLE 51

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE I.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
23	8	8	4	0	2	8	30
31	8	2	0	0	0	0	10
33	4	0	4	0	0	8	16
35	8	0	0	0	2	0	10
24	8	8	0	0	6	0	22
28	0	8	8	0	2	10	30
34	4	4	2	0	6	8	24
38	8	8	0	4	0	8	28
40	0	0	0	0	0	0	0
42	2	0	0	0	6	10	18
44	8	0	2	4	0	8	22

TABLE 52

AGGRESSION RATINGS FOR DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE J.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
1	0	8	0	0	2	8	18
3	8	8	2	4	2	8	32
7	0	8	2	0	2	8	20
11	8	4	0	2	2	8	24
15	0	8	0	2	6	8	24
4	8	8	0	0	2	8	26
6	8	8	0	0	0	8	24
10	2	8	2	8	4	8	32
14	0	0	0	0	4	8	12

TABLE 53

AGGRESSION RATINGS FOR NON-DELINQUENT SUBJECTS
ON SIX PICTURE STORIES BY JUDGE J.

Subject	Story						Sum of Ratings
	A	B	C	D	E	F	
25	8	8	2	0	2	10	30
27	9	8	2	0	2	8	29
29	8	8	2	0	2	10	30
37	8	8	0	8	2	8	34
39	8	8	2	0	2	8	28
41	2	8	0	0	8	8	26
26	2	8	2	0	9	8	29
30	8	8	0	0	2	8	26
32	8	8	0	0	2	8	26
36	8	8	0	0	2	8	26

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AUTOBIOGRAPHY

I, Nathan Wolf Gottfried, was born in New York, New York, June 14, 1928. I received my secondary school education in the public schools of Stamford, Connecticut, and my undergraduate training at Antioch College which granted me the Bachelor of Arts degree in 1950. From Teachers College, Columbia University, I received the Master of Arts degree in 1951. While in residence there I was a President's Scholar. I entered the Ohio State University in 1953. I held the position of teaching assistant from 1953 through 1955 in the Department of Psychology while completing requirements for the degree Doctor of Philosophy.