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An Investigation of Personality Correlates of Some Common Patterns of Level of Aspiration Response in Children

Therese Lorraine De Sousa
Loyola University Chicago

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**AN INVESTIGATION OF PERSONALITY CORRELATES OF SOME
COMMON PATTERNS OF LEVEL OF ASPIRATION
RESPONSE IN CHILDREN**

by

Therese Lorraine De Sousa

**A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy**

June

1956

LIFE

Therese Lorraine De Sousa was born in Chicago, Illinois on September 14, 1923.

She was graduated from the Maria Academy, Chicago, Illinois, in June of 1941, and from the Chicago Teacher's College in June, 1949, with the degree of Bachelor of Education.

The author taught mentally retarded children for the next year and a half at Lengfellow school, Chicago, Illinois, and was employed as a psychologist for the Bureau of Child Study, Chicago Board of Education, for the following two and one-half years. She is now employed as instructor in the Department of Psychology at Chicago Teacher's College.

She began her graduate studies at Loyola University in June, 1949, and received the Master of Arts degree in June, 1952.

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Chapter One

STATEMENT OF THE PROBLEM

Attempts to assess personality have in the past decade taken widely divergent approaches. On the one hand, there is apparent an effort to make personality the subject of laboratory study. In the same fashion that psychologists have analyzed sensory response, motor development, and intellectual activity in terms precise and definitive utilizing techniques which lend themselves to quantification and permit objectivity of scoring, the emergence of techniques designed for the scientific analysis of personality is now apparent. Psychometric devices which purport to measure tendencies, habits, and attributes; factor analysis of traits and trait constellations; and laboratory analysis of the individual's behavior in standardized situations such as the level of aspiration situation are all illustrative of the traditional approach which demands the abstraction of one function at a time from the total complex person and the objective recording and accurate quantification of the dimensions of this function.

On the other hand, psychiatry and clinical psychology in practice have adopted tools which seek to explore that which is unique to the individual rather than those tools which define him

in terms of his deviations from the norms established for various abstracted attributes. The idiosyncrasy of the associational process, the wide variation in expressive movement, and the marked individual differences in perception have all intrigued the clinically-oriented scientist in his approach to the study of personality. Perhaps most strikingly, fantasy, traditionally the sphere of artists and poets, has become the subject of psychological investigation since the development by Morgan and Murray of the Thematic Apperception Test (TAT), a method for the stimulation, recording, and analysis of fantasy (66). While this interest in expressive movement, fantasy, and selective perception may be indicative of a trend from the cognitive and quantitative to the affective and qualitative on the part of the clinician, it must be recognized at the same time that neither discipline is independent of the influence of its protagonist. More and more evidence is seen of recognition on the part of the "pure" scientist that the personality is projected into every bit of motor and cognitive expression while at the same time the clinically-oriented scientist's recognition of the necessity for quantification and experimental verification of the intuitive becomes increasingly apparent.

To what extent the products of these two divergent types of personality investigation are related is, in a sense, one of the questions asked in this study. When the level of aspiration situation is regarded as an experimental approach to the study of personality and the fantasy produced in response to a projective

technique is seen as a clinical approach to the study of the same reality, it follows that relationships between the products of both types of research should be clearly demonstrable. Logically the specific level of aspiration response fits into the more general reaction patterns of the individual. It seems reasonable, then, to suppose that the level of aspiration response forms a part of a cluster of associated personality characteristics which function as a whole in a number of different situations. When, further, the level of aspiration response of some individuals is characterized as realistic because they consistently set goals slightly above their previous performance, and the responses of other individuals as unrealistic because they tend consistently to overestimate or underestimate their capacity in the goal-setting situation, the supposed operation of important and central needs of the personality is made still more explicit. Yet objective demonstration of personality correlates of common patterns of aspiration behavior has proceeded very slowly. To what extent this is a function of seeking relationships between variables too broadly or too narrowly defined or of the use of ineffective instruments will be considered in a later chapter as well as the implications of previous efforts in this direction for methodology in this study.

The purpose of this investigation, then, is to explore the relationships between common patterns of goal-setting behavior and personality characteristics demonstrated in the realm of fancy.

Specifically, it is hypothesized that the individual whose orientation in the miniature life situation in which the scientist explores aspiration behavior is unrealistic will display similar maladaptive characteristics in his responses to a projective technique. Further, it is hypothesized that:

- A. The unrealistic groups will tend to identify most readily with characters depicted as inferior, inadequate, aggressive, and rejected.
- B. The unrealistic groups will tend to display antagonistic attitudes toward authority figures, and will represent these figures as threatening influences.
- C. The unrealistic groups will tend to depict environmental forces as threatening and will introduce into their stories figures and circumstances of a threatening nature.

Conversely, it is to be expected that those whose behavior in a goal-setting situation is relatively realistic will demonstrate adaptive patterns of response in a fantasy situation. More specifically, it is hypothesized that:

- A. The realistic group will tend to identify most readily with characters depicted as adequate, confident, and accepted.
- B. The realistic group will tend to display wholesome attitudes toward authority figures, and will represent these figures as benign influences.
- C. The realistic group will tend to depict environmental forces as benign or as neutral and will introduce few figures and circumstances of a threatening nature into their fantasy.

To this point, differences in apperceptive response have been hypothesized for two groups, realistic and unrealistic. The latter category, up to this point of the discussion, includes then those

whose level of aspiration responses may be thought of as consistent tendencies to overestimate and those who display some consistency in the direction of underestimation. Both groups, it is predicted, will respond similarly in a number of the areas to be investigated in this study. Differences in the response patterns of the two groups, it is hypothesized, will appear in the goal-striving behavior which occurs in the fantasy situation. Specifically, it is hypothesized that:

- A. Overestimators will tend to set more goals for the figure of identification, but will reveal strong dependence on others and on "deus ex machina" solutions for attainment of these goals.
- B. Underestimators will fantasy fewer goals, and will emphasize their failure to attain such goals.
- C. The realistically-oriented, while stating fewer goal objects, will tend to reveal greater independence in goal pursuit than seen in either of the other groups.

In summary, then, it is expected that deviant responses in the level of aspiration situation will be correlated with evidences of deviation in the fantasy produced in response to a projective technique. Further, it is predicted that more subtle and more refined differences within the deviant patterns will be discerned in the goal-oriented aspects of the fantasy material produced by those who tend to overestimate and those who tend to underestimate in an aspiration situation.

Chapter II

APPERCEPTIVE APPROACHES TO CHILDREN'S FANTASY

Most early investigations of the picture-story technique with children were concerned with determining the type of picture best suited for eliciting fantasy material. Symonds (80), for example, assembled a set of eighty-one pictures which were presented in a high school English class as a test of creative imagination. Eleven hundred sixty-eight stories were obtained and analyzed. Symonds' conclusion was that pictures which had a minimum of detail and which contained characters with which the subject could readily identify were best for eliciting fantasy material.

Vernon (84) reached a similar conclusion in a study of children's immediate recall responses to pictures. Pictures showing a collection of minor detail induced only description and enumeration while pictures having a central unifying event facilitated an interpretative response. He also confirmed Binet's earlier observations of three stages in the development of verbal responses of children to complicated pictures. Vernon found that the younger child responds enumeratively. At about age seven, the normal child can give simple descriptions of pictures which are enlarged upon as his age increases; the emotions and actions of the

people involved in the interpretations are inferred and described while irrelevant detail is suppressed. The third stage occurs at about age eleven or older in normal children. It is at this stage that the child is able to fully understand a complicated picture and interpret it as a whole. An additional finding of Vernon was that children of retarded physical, intellectual, or emotional development did not follow the normal pattern of the three stages, some being unable to reach the final stage of imaginative synthesis. In these retarded cases the child's expression represents an earlier stage in the process of cognition; or, fantasy may be so overactive that the child's mind is dominated by it and his contact with reality impaired. Inventions in these cases are numerous, containing much description of movement, emotion, and color.

Developmental tendencies in perceptual reaction to pictures have also been studied by Amen (5). Her conclusion is similar to Vernon's in that there is a tendency to interpret the visual stimulus first in terms of static form, and later in terms of activity. Interpretation in terms of inner activity, thought, and feeling, is a more mature pattern of interpretation than that of outward activity. Also found was a tendency to interpret a visual stimulus first in terms of a primitive unanalyzed whole, or a detail representing a whole, with gradual development of the capacity to enlarge the whole and increase detail.

Horowitz and Murphy (51) found that the use of pictures with pre-school children could be very productive in the study of

attitudes of the young child. Several techniques were devised by the authors which simplified the test situation for the child by the use of a choice procedure. In the first instance, the child compared two pictured situations dealing with parent-child and sibling relationships. The authors then used these choices to compare his ideas about his position in the family with reality. In the second instance, two pictures of contrasting views of the same type of situation were presented and the child chose his situation. The series of pictures was then repeated and the child chose the picture he liked best. Inferences were then drawn concerning the discrepancies between the world the child perceives as his and the world he desires. Pictures were also used to clarify the child's conceptions of his teachers, parents, siblings, and status in home and school situations. Murphy says of the use of the pictures (63):

"From the point of view of method, the results obtained from the picture experiment is one of the most fruitful and economical in the study of children's attitudes and personality."

Also working with pre-school children, Temple and Amen (82) used a series of twelve pictures of their own selection in an analysis of anxiety reactions in young children. They found the projected material reflected the most important areas of anxiety in the young child as well as the type of behavioral adjustment preferred by the child. While impressed with the usefulness of this technique in psychological diagnosis, the authors point to the need for a normative approach in projective studies.

In general, then, investigations of the utility of the method indicate that the technique may be a valuable tool in the study of children. Investigators are agreed that pictures having a minimum of detail, a central unifying event, and characters with which the child can readily identify lend themselves most readily to an interpretative response. Although Vernon's (84) findings concerning age levels at which an interpretative response may be secured do not correspond closely with those of Amen (3), the difference may be due to the relative complexity of Vernon's pictures in comparison with those of Amen. Later work has indicated that the method, with carefully chosen, simply-structured pictures, can be productive even on the pre-school level.

A more recent variation of the picture story technique is the use of animals in human-like situations instead of humans on the supposition that children are better able to identify with this type of stimulus. Bills (16), for example, reports on a comparison of stories told to a series of animal pictures that he devised and TAT stories. Subjects were forty-eight children from five to ten years of age. Bills found that the total word count elicited by the animal pictures was significantly greater than that obtained for the TAT cards. Qualitatively, the stories told to the animal cards appeared to have more coherency than those told in response to TAT pictures. While both sets of cards led to the production of material of a fairy tale nature, neither produced a sufficient amount to interfere with content analysis. In a later study, Bills

in cooperation with Leiman and Thomas (17), presents his findings on a comparison of the qualitative aspects of the projected material on the two tests. Eight children were enrolled in a series of six individual play therapy interviews, at the end of which each child was given the animal card test and the first ten of the TAT cards. In order to make the scoring as objective as possible, only manifest needs were scored, using the scoring system proposed by Murray. The needs shown by a child in the final three play therapy interviews were selected as the criteria for manifest needs. After independent scoring of all tests by the three authors, they conclude that the play therapy, the animal pictures, and the TAT displayed an agreement among manifest needs, and that the animal pictures and the TAT reveal to a small degree the same needs, and are valid for revealing these needs as compared with other data. The authors admit the limitations of their own set of cards since they were not structured to investigate such areas as parent-child and sibling relationships. Nevertheless, they believed that the animal cards were as useful and as valid as the TAT cards, that they provided an easier situation for formulating projective stories than did the TAT cards, and that the animal cards were adaptable to revision so that they could produce more meaningful results than the TAT.

More recently, however, Armstrong (5) compared children's responses to animal and human figures and reported that human figures evoked more verbalization than the animal pictures she em-

ployed. Similarly, Biersdorf and Marcuse (15) report that on a comparison of responses to human and animal pictures, they found no significant difference in productivity. The same scene and situations were employed for each of the series of pictures, six of which were copies of pictures from the Children's Apperception Test (CAT). Thirty children ranging in chronological age from 5-11 to 8-0 were used as subjects. Criteria for productivity included the length of time before response, length of response time, the number of words used, the number of ideas present, the characters mentioned who were and were not pictured, and the blockings and rejections encountered. Using any of these criteria, no significant differences were found in the responses to individual animal pictures as compared with those to individual human pictures. Light (59) also used five of the CAT cards as well as five TAT cards to test the assumption that children would more readily identify with animal figures than with human figures. The ten pictures were projected on a screen and seventy-five fourth and fifth grade children wrote stories in response to each picture. Six criteria were employed to compare the stories given in response to CAT and TAT cards. These included length, feelings, conflicts, outcomes, themes, and figures introduced. Light concludes, on the basis of this comparison, that for this particular age group there was better identification with human than with animal pictures.

It would seem, then, that the supposition that animal pictures facilitate identification and in all cases lead to the production of more meaningful and relevant clinical data cannot be accepted at face value. It may well be that productivity is more crucially related to the meaningfulness of the picture in the life history of the child responding to it than to the actual picture content. On the other hand, it should be noted that the clinician is rarely concerned with the quantitative criteria employed in most of these studies to assess productivity, but is instead concerned with the qualitative aspects of the apperceptive material, regardless of its length. In this regard, studies such as Bills' (17) and Light's (59) are possibly more relevant for the design of new projective materials for children.

Parallel with the attempt to determine the type of projective material most suitable for use with children, a number of investigators have been concerned with assessing the picture-story technique in terms of its utility in distinguishing clinical groups. Leitch and Schafer (57), using the TAT, compared stories of psychotic and non-psychotic maladjusted children. They found that the stories of psychotic children are characterized by the presence of several indicators of severe disturbance of thought organization, gross perceptual distortions, and frequent references to violence and death. Another investigation of childhood psychosis serves also to indicate the usefulness of this method with clinical groups. Des Lauriers and Halpern (29) examined the

TAT stories of approximately one hundred childhood schizophrenics before and after shock therapy. The TAT stories, they found, were most useful in bringing to light the psychological mechanisms used by the subject. They note, too, that the child's denial of reality as well as his struggle to gain some true contact with the world around him often appears dramatically in his stories.

Balken and Van der Veer (7), working with maladjusted children, administered a modified form of the TAT to forty children referred to the Psychiatric Division of the University of Chicago Clinic for treatment of neurotic symptoms. In regard to administration, the authors stress the importance of establishing rapport when working with children. They point out, however, that if the child remains fearful, suspicious, or resistant in the testing situation, then his attitude is largely a function of factors inherent in his personality and is therefore reflected in his relationship with the examiner as it would be in all of his relationships. They note, further, that the immediate responses of children below ten years of age are characterized by description and enumeration. When the child has finished his spontaneous production, the examiner must use tactful inquiry to elicit a completed story. They conclude that such reactions to the pictures follow from observations by Binet and others that the stages of enumeration, description, and interpretation respectively depend on the chronological age and the intelligence of the child. A later analysis (8) of the stories in terms of the psychoanalytic orientation of

the authors revealed that fantasy frankly revealing repressed impulses often produces an immediate strengthening of the defense forces and is followed by a sterile, evasive, noncommittal response to the next picture. Also, dynamic material called forth by one picture may not be verbalized immediately, but may appear as a delayed response to a subsequent emotionally neutral picture. Fantasies were found to be dynamically related in that expressions of hostility were often followed by another story containing expressions of guilt because of the hostility, and then by another which contains attempts at restitution. Generally, they found that projections of anger, aggression, hostility, and depression tended to predominate in the stories of the neurotic children. They conclude that the test brings into sharp relief certain psychological features of the case, confirms and supplements the psychiatrist's formulations, and thus contributes to a more rapid and accurate clinical evaluation.

Schafer and Leitch (75), also using the TAT, worked with nursery school children rated on the basis of psychiatric interviews as adequately adjusted, moderately maladjusted, and severely maladjusted. In a search for criteria that might distinguish the three levels of adjustment, they found that the quality of the aggressive content of the stories, the nature of perceptual distortions, and the presence of blocking were most useful. In analyzing the aggressive content of the stories, the authors distinguished between controlled and uncontrolled aggression.

The latter was characterized by gory, unusually intense expressions concerning violence, destruction, and death. The controlled type of aggression was characterized by a much less intense and less detailed expression concerning aggressive acts of a more common variety, such as spanking and fighting. While stories with aggressive content tended to occur in all cases, the severely maladjusted children, it was found, gave many stories in which the uncontrolled type of aggression was present. Absurd distortions of picture material and repeated blocking also proved to be characteristic of the severely maladjusted group. The average number of such indicators for each group was found to be 0.4 for the adequately adjusted, 2.3 for the moderately maladjusted. The authors conclude that apperceptive techniques are valuable tools in determining the presence and severity of maladjustment in children.

One of the few studies attempting analysis of goal striving behavior in TAT story materials was designed to explore personality differences in high and low academic achievers (79). Two groups of high school boys matched for intelligence, socio-economic status, and chronological age were given eleven of the TAT cards and then instructed to make up a composite story in which as many of the pictures as possible were employed. Initial analyses of the stories in terms of such variables as dependence, hostility, and rejection failed to indicate significant differences between the two groups. Differences were apparent, however, when analysis of

the stories was undertaken in terms of a number of variables related to story outcome. These included variables dealing with the hero's reaction to a number of emotional situations, objectively and subjectively valued goals, and mode of goal striving. Results of story analysis suggest that high achievers tend to be self-disciplined in comparison with low achievers, to see their goals clearly and objectively, and can tolerate delay in goal achievement. Low achievers, on the other hand, tend to view goals subjectively, and tend to seek immediate gratification.

Other applications of the picture-story technique to distinguish clinical groups include Sarason's (72), Abel's (1), and Gothberg's (38) work with mentally defective children; Broida, Cruikshank, and Izard's (20) work with orthopedically handicapped youngsters; and Saxe's (74) work with the emotionally disturbed child.

Thus studies investigating the utility of the method concur in indicating that the picture story technique is a valuable device for distinguishing clinical groups, for reflecting areas of anxiety, and for study of children's attitudes and personality. There is a suggestion, however, that while the method may be suitable for children, the material can be improved. Bellak's innovation of the Children's Apperception Test is a step in this direction. Based upon the assumption that children will be able to identify more readily with animals than with humans, the test consists of ten pictures of animals engaged in a variety of

human-like activities. Because of its fairly recent publication, however, few published studies are available to indicate how valuable the test may or may not be. The test itself was published on the basis of the relatively small sample of one hundred children's records on the assumption that a projective test does not need the validation and establishment of norms so essential to other types of tests (11). Clinical findings were employed, Bellak states, to validate blind analyses of most of the one hundred sample cases. Bellak reports that the responses to his pictures brought out problems which the clinical workers had pointed out, and further, that the stories illuminated the dynamic background of these problems. For interpretation, the Bellaks suggest content analysis based upon the hypothesis of apperception and psychoanalytic understanding. An analysis sheet dealing with ten variables considered essential is suggested for the study of each story. It is suggested that the test may be most useful clinically in determining what dynamic factors may be related to a child's reaction to events and figures in the home, in the school, and in his peer group.

Among the early studies using the CAT, the work of Bieradorf and Marcuse (15) and Light (59) have been mentioned in connection with explorations of the relative merits of animal and human pictures for use with children. The test has also recently been employed to study the effects of variations in ambiguity on the projections of children, (87) and in a number of normative

studies. A tabulation scheme for accumulation of normative data has been prepared by Peters and Bellak, and is included in Bellak's recent book (14). Normative data for pre-school children is also available (21) in published form. Reported as work in progress are normative studies on five through nine-year olds, comparisons of various clinical groups, an evaluation of dynamic story content in comparison with manifest behavior, and a study of emotional development as evidenced in story content (14). Probably most relevant to this study is an investigation by the author (30) in which the CAT responses of adjusted and maladjusted groups were compared to determine the extent to which the test proved useful in distinguishing clinical groups. The plan of analysis was similar to the type employed in the present study, although no effort was made to assess goal-striving behavior as it appeared in the fantasy production. It was found that the groups differed significantly in regard to a number of structure and content variables. Analysis of structure took into account instances of incoherence, indecision, and self-reference. Significant differences between the two groups were observed in the frequency with which incoherence and indecision occurred in the records of the maladjusted group. The occurrence of reference to self-proved to be lacking in significance. The stories of both groups were also analyzed in terms of the prevailing mood of the story, the nature of the ending, and the amount of verbalization recorded. The maladjusted group produced a significantly greater

significant differences appeared in the greater occurrence in the maladjusted group of punishment, death, violence, accidents, aggression, friends, and enemies. The maladjusted group also introduced injustice, deception, stealing, pursuers, and weapons into their stories significantly more frequently than did the adjusted group.

In vrief, then, there is evidence that the picture story technique can be successfully employed with children provided pictures have a minimum of detail, a central unifying event, and characters with which the child can readily identify. There is some question as to whether animal or human figures best facilitate identification for the child; however, both types of material have proved useful in distinguishing clinical groups, in reflecting maturational trends, and in indicating areas of anxiety.

Chapter III

FACTORS RELATED TO LEVEL OF ASPIRATION

Since the introduction of the concept of level of aspiration by Dembe in 1931, the technique has often been regarded as a favorable milieu in which to observe individual differences. While most of the pioneer investigations were concerned with the assessment of the technique itself in terms of reliability and validity and with determining the laws pertaining to the change of goals following success and failure, Frank (33) early became intrigued with the possibilities of the technique as a method of studying personality. Level of aspiration behavior, Frank notes, depends on the relative strength of three needs; (1) the need to keep the level of aspiration as high as possible, (2) the need to make the level of aspiration approximate the level of performance as closely as possible, and (3) the need to avoid failure. The relative strength of these needs is dependent, in turn, on personality characteristics of the individual. Frank's initial work emphasizing factors inherent in the individual and his characteristically quantitative approach to analysis of such factors was of vital importance in shaping the trend of research work in the years following. While we find ample evidence in the literature

that investigation of the influence of temporary situational factors has continued as an area of interest, we note in increasing numbers investigations of the influence of cultural factors and individual differences on goal-setting behavior.

Since investigations of the influence upon level of aspiration of a wide variety of situational and cultural factors have been undertaken, no attempt will be made here to review in any detail these studies. Instead, a brief summary of findings which are the combined results of a number of investigations will be presented followed by more extensive review of work relevant to the problem here.

Type of Task. One of the major methodological problems has been the selection or devising of appropriate tasks. While there seems to be general agreement that the tasks should have interest value, should be of intermediate difficulty, and should arouse some degree of ego-involvement, a fairly wide variety of tasks has been employed in aspiration studies. These range from psychomotor tasks such as dart-throwing, card-sorting, and cancellation through a variety of cognitive tasks, including code-substitution tests, vocabulary, and arithmetic problems. Related to the type of task chosen is the problem of generality of aspiration response. Reported correlations range from .25 to .70, highest correlations being reported where phenomenal similarity between the tasks is apparent. Another consideration influencing the kinds of tasks chosen arises when actual scores are to be reported to the sub-

ject. The question then as to whether the task should permit improvement with practice becomes important. Where it is deemed important, as in this study, that the individual be permitted to make some realistic appraisal of his next performance, it is generally agreed the task should be one which permits improvement within the trial series.

Scores Employed. Most commonly used in level of aspiration studies is the goal discrepancy score which is defined as the difference between the level of the last performance and the level of the new goal set by the individual. This is the scoring employed for this study, although it is recognized that more detailed analysis of level of aspiration behavior might make more explicit and more refined some relationships apparent in the results reported later. Also widely used is the attainment discrepancy score which is defined as the difference between the goal level and that of the new performance. More recent studies also employ measures of rigidity or fluidity in the sequence of goal setting, and pattern analysis based upon shifts in goal direction following success or failure. In general, it would seem that the most fruitful, although not always the most expedient, scoring takes into consideration all aspects of aspiration behavior.

Type of Instructions. Wording of the instructions designed to elicit expression of the goal selected for each trial has been found to have a direct influence upon the goal stated. Questions which emphasize the goal which the subject would "hope" to get or

would "like" to get tend to elicit levels of aspiration which are wishful and unrealistic, while statements which emphasize the goal which the subject "intends" to attain or "expects" to attain lead to more realistic goal-setting. In this regard, the experimenter's purpose will often determine the instructions given for the task as well as the wording designed to elicit verbal expression of the subject's goal.

Success and Failure Experiences. In general, it may be stated that the level of aspiration will be raised as the attainment reaches the stated goal and lowered as the attainment fails to reach the stated level of aspiration. Further, ratings of the strength of success or failure judged to be experienced by the subjects indicate that the stronger the success experience the greater will be the percentage of raising the level of aspiration, and the stronger the experience of failure the greater will be the lowering of the level of aspiration. More simply stated, success generally leads to a raising of the level of aspiration, and failure to lowering of the aspiration level. More recent studies on the effects of success and failure in a series indicate that failure is more likely than success to lead to withdrawal in the form of avoidance of setting a level of aspiration, and that the effects of failure on the aspiration level are more varied than those of success. In this regard, the degree of subject ego-involvement in the level of aspiration task appears to be crucial; failure creating tension when the task bears a resemblance to a

life situation in which the subject is ego-involved or is stimulating enough to provide a challenge which induces ego-involvement on the part of the subject.

Group Standards. When subjects are apprised of their standing in relation to group performance in an aspiration setting, there is apparent a trend for subjects who find themselves above the average of the group to have a negative discrepancy score, for subjects who find themselves close to the average of the group to have a slightly positive discrepancy score, and for those subjects who find themselves below the average of the group to have a large positive discrepancy score. Knowledge of the performance of groups other than his own is also seen to affect aspiration scores if the subject makes value judgments as to the prestige or lack of prestige associated with these other groups.

Other Factors. Several other factors have been studied in relation to aspiration level, although experimental findings reported in relation to these variables are not always in accord. For example, there is some evidence to suggest that socioeconomic status influences level of aspiration, although some studies report no apparent differences. Similarly, there is some evidence indicating that boys and men tend to have higher discrepancy scores than girls and women, although other studies fail to confirm this observation. Similarly, grade level and I.Q. have been studied in relation to their influence upon level of aspiration but no clear-cut relationships emerge from perusal of

these studies. In view of the fact, however, that each has been suggested as having possible influence on aspiration behavior, it was felt best to equate the groups used in this study for each of these variables. As can be seen from even the brief review of studies presented here, many difficulties arise in, attempted comparisons of results of level of aspiration investigations. There is no certainty, first of all, that the experimental behavior in a given level of aspiration situation is typical of behavior in other life situations. Nor is there when a number of determinants are involved in a given study any ready comparison with other studies employing variants of these determinants. Much more extensive study of these individual determinants is needed as well as investigation of the relationships between determinants.

Attempts to relate behavior in the goal-setting situation to specific personality characteristics have not as often met with success. Some of the early studies, for example, indicate only the experimenter's inferences as to a number of personality characteristics without any independent measure of these traits. Hausman's (46) work is illustrative of this kind of approach. Hausman presents a descriptive analysis of each subject's reactions in the level of aspiration situation and then indicates personality characteristics on the basis of this subjective analysis. For example, he describes the goals set and goals attained in a series for a particular subject and then indicates that "we feel that an individual who shows a similar behavior is of an unsteady make-up,

easily discouraged, unstable, whose self-confidence cannot withstand undamaged any pressure from environmental forces." Records of six subjects are evaluated in this fashion.

In other cases, correlations between level of aspiration behavior and ratings by self and others have been sought. Among such early studies we find the work of Sears (77) and Gardner (37), who employ self-ratings and the ratings of others to assess personality variables. Relationships between level of aspiration patterns and such personality characteristics as self-confidence, defensiveness, "comfortable" feelings, and selfconsciousness are reported. Employing a more sophisticated rating technique, Ax (6) divided twenty-five subjects into "better integrated" and "less integrated" groups on the basis of psychological and psychiatric interview material. A digit symbol substitution task was used to measure level of aspiration for each of the groups. Ax found that the less integrated group tended consistently to overestimate or underestimate when setting goals, while the better integrated group tended to scale their estimates quite close to their performance. Rotter (69) supplements ratings with case history material in an attempt to correlate level of aspiration behavior and personality characteristics. Using a group of 205 subjects, some of whom were prison inmates and others crippled college students, Rotter analyzes level of aspiration behavior in terms of discrepancy score, frequency of shifts, unusual responses, and incidental comments. He found level of aspiration behavior fell into nine

characteristic patterns of response, each of which is then described in terms of associated personality traits. The low positive pattern, for example, "gives the impression of stability"; the very high positive suggests "a strong tendency toward unreal solutions"; and the high negative pattern "little self-confidence". Any kind of combination of the nine response patterns characterized by Rotter may also occur in the individual record, it should be noted.

Holt (48), also using a rating technique, presents rank-difference correlations between four measures of level of aspiration behavior and personality variables. The latter were obtained by ratings based on the pooled independent judgments of ten clinicians who used data obtained on objective and projective tests, experiments, interview, and personal documents in their rating. Correlations are reported between such variables as "need for seclusion, need for diffuse affiliation, need for succorance, need for rejection, need for understanding" and goal discrepancy scores. Holt indicates that while some may criticize the reported correlations on the basis of the small sample of ten subjects, he feels his results merit attention in view of the fact that no statistically significant correlations, much less of his size, have been reported previously.

More numerous are studies which make use of the many personality inventories available in an attempt to establish relationships between goal-setting behavior and personality traits, Gould

(39), for example, administered the Maslow Social Personality Inventory to subjects given a level of aspiration task, and failed to find any relationship between performance in the goal-setting situation and inventory scores for introversion and dominance. In a later study, Gould in cooperation with Kaplan (40) used 82 college students to secure level of aspiration measures for six tasks. These included addition, digit-symbol substitution, words, steadiness, cancellation, and target shooting. A seventh level of aspiration measure, devised to obtain aspiration level in the life situation, was secured by asking students their grade expectation on weekly quizzes in a psychology class. Goal discrepancy scores for these aspiration measures were then correlated with scores on the Maslow Social Personality Inventory and on introversion-extroversion scale devised by the authors. They report only slight relationships between discrepancy scores and tendencies toward dominance and extroversion. Klugman (56), using the McFarland and Seitz Psychosomatic Inventory found a low relationship between performance on several level of aspiration tasks and emotional stability as measured by this inventory. Similarly, Bills (18) found a low relationship between level of aspiration scores on a series of five motor and verbal tasks and scores on the Index of Adjustment and Values. Further, Bills points out, acceptance of self as shown by Index scores was significantly related to attitude toward performance, direction of expressed attitude toward performance, and recall of performance.

Gruen (42) used the Rogers Test of Personal Adjustment to divide his subjects into maladjusted and well-adjusted groups. The maladjusted group, he found, tended consistently to overestimate or underestimate their performance on a symbol substitution task, while the group characterized as well-adjusted tended to set slightly positive aspiration levels. Similarly, Escalona (31) contrasted overtly well-adjusted with overtly maladjusted adolescents; group placement being made by the author on the basis of school records and interviews. Initially, it was hoped that scores on the California Personal Adjustment Scale would provide an independent measure of adjustment in terms of which placement in one of the two groups would be more sharply defined. It was found, however, that while a low score on this test appeared to indicate adjustment difficulties, average or higher scores were obtained by overtly and seriously maladjusted subjects as well as by apparently well-adjusted pupils. As a result, scores on this test were not used in the experimental analysis. Instead, personality characteristics manifest in the level of aspiration situation are reported in terms of "clinical impressions". These impressions were based on the level of aspiration behavior itself, the subjects' verbalizations during the test, the subjects' behavior in terms of nervous mannerisms, facial expression, and the like, and the subjects' responses to the experimenter as a person. Conclusions about the psychological state of the subject, then, were drawn in much the same way as is customary in drawing con-

clusions from a clinical interview, Escalona points out. The clinical impressions were then compared with composite case history data and school records, and agreement between the two sets of data rated as good, fair, or poor. Agreement was considered good if the most outstanding characteristics mentioned in the case history were confirmed in the clinical impressions. Fair agreement was indicated when some of the characteristics mentioned in the history were confirmed in the clinical impression and none of the statements made in the clinical impression were contradictory to any aspect of the history. Agreement was considered poor if the most outstanding characteristics mentioned in the history were not indicated in the clinical impression, or if there was conflict between statements in the two sets of data. In most instances, agreement between the clinical impression and history is reported as good or fair.

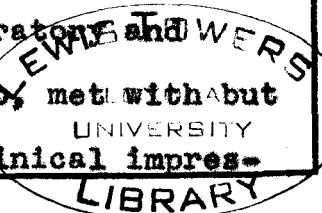
Sears (77) also used a questionnaire in combination with ratings of others in a study of academically successful and unsuccessful groups. She selected three groups of school children, ages nine through twelve, in terms of their school achievements in reading and arithmetic. One was a "success" group, another a "failure" group, and the third a "differential" group made up of children who had been successful with reading, but had not achieved well in arithmetic. She found the three groups differed in level of aspiration response in that the success group tended to set low positive levels of aspiration and the failure group either high

positive or high negative levels of aspiration. The differential group was not characterized by any particular pattern. In an attempt to relate her findings to personality characteristics of the children in the three groups (73), she found self-confidence and self-motivation associated with the low positive pattern, self-motivation characteristic of the high positive approach, and social motivation characteristic of the high negative pattern of response. These are the only correlates reported in terms of quantitative findings. Descriptive findings, based on her observation of the children, are much more extensive. Here the child with the high positive aspiration level is termed "tense, apprehensive, sensitive, insecure, and immature." Children in the high negative group are spoken of as "self-conscious and embarrassed, insecure, self-protective, and defensive." The low negative pattern, on the other hand, is adopted by children who are reported as "secure, self-confident, and at ease in the testing situation."

Only a few investigators have employed the more recently developed projective techniques in an effort to study personality characteristics in relation to aspiration behavior. Frank (35) reports low correlations between level of aspiration behavior and the wish to do well, a subjective attitude, and the ability to dismiss failures as seen in TAT stories. These correlations were low, however, and as suggested by Lewin et al (58) this may be a function of variables that were ill-defined and too generalized to

yield a clearer picture. More recently, McClelland (62) used Murray's scoring system to secure a measure of need for achievement in TAT stories. An anagrams test was also scored for need for achievement as well as level of aspiration. Neutral and achievement related words were then presented tachistoscopically for recognition. McClelland found that the imaginative and performance measures of need for achievement were significantly related to the speed with which subjects recognized need related words even three to four months after the initial measures were taken. Further, he found that subjects with moderate need for achievement tended to be "security-minded", that is, to set a minimal level of aspiration while subjects with greater need for achievement were concerned more directly with achieving success, or with attaining a maximum level of aspiration. Cohen (24), using the Rorschach and a level of aspiration task, failed to find the expected relationship between feelings of adequacy and goal striving behavior. He did, however, find very high and very low levels of aspiration related to rejection of the self. Only those who could accept themselves were able to use low positive aspiration levels. Similarly, Zelens (89) found relationships between rigidity as expressed in the level of aspiration situation and the customary measures of rigidity employed in Rorschach analysis.

In brief, then, efforts to demonstrate relationships between behavior in the goal-setting situation of the laboratory and personality characteristics have, for the most part, met with but small success. Each approach, however, whether clinical impres-



sions, rating sheets, or personality inventories are employed, suggests that relationships do exist though they may not be easily demonstrable. Part of the difficulty here may lie in the use of inadequate tools to assess personality characteristics; part may be a result of using poorly defined and not too readily identified personality variables. Difficulty may lie too, in some studies at least, in the efforts to analyze in exhaustive fashion all aspects of aspiration behavior and then to relate personality variables to goal discrepancy, attainment discrepancy, rigidity scores, and typical response patterns while manipulating experimentally experiences of success and failure. While it is to be assumed that more detailed analysis of the level of aspiration behavior of the subjects used in this study as well as more refined analysis of CAT responses would make explicit many relationships in the individual case as well as in the three groups selected which will not be here apparent, such analysis is forthwith abandoned in the hope of setting forth in clear-cut and unmistakable fashion some broad areas of relationship which may be subjected to further study. It should perhaps be noted that this is deemed advisable not only in the light of expediency, but as well as a result of the feeble successes reported in previous efforts.

Chapter IV

DESIGN OF THE RESEARCH

The sixty subjects chosen for this study were selected from an initial group of one-hundred and forty-one children who were given a level of aspiration test, in terms of which each child was later classified as tending toward overestimation, underestimation, or realism in goal-setting behavior. In order to rule out factors which might influence goal-setting behavior, age, sex, I.Q., and socio-economic status were considered in choosing the children for the level of aspiration task. Children were chosen within the chronological age range from 8-0 to 10-11 in view of investigations which indicate that all components of level of aspiration behavior observed in adults can be found in eight year olds (58) and Bellak's (11) suggested limits for use of the Children's Apperception Test. Because level of intelligence has also been indicated as operating in level of aspiration behavior (77), children were selected only within the I.Q. range from 90 to 110 to insure normal intelligence. School test data which was available as a result of the group mental testing program in the Chicago Public Schools was employed to make this selection. Further, since there are some indications that

socio-economic status may be relevant in goal-setting patterns (58) all children were chosen from two neighboring public schools. The area which this school population represents might best be described as low-average in the socio-economic scale. Finally, boys and girls were chosen in equal numbers for both the initial sample of one hundred and forty-one children and the selected sample of sixty children who were given personality tests.

A digit symbol substitution task (Appendix I, Page 96) was chosen for ascertaining the level of aspiration, after some preliminary work utilizing other types of tasks. The digit symbol task was chosen in terms of its frequent use in other investigations, the ease and speed of administration in a school setting where limitations of time and space are important, and its basic similarity to school activities. This latter seemed an important consideration in view of earlier observations that tasks which are more play-oriented when introduced suddenly into the routine school day of the child may arouse undue excitement which can at times interfere with the experimenter's purposes. Each of the level of aspiration tests was administered individually in a small private room in the school. Instructions were given as follows:

We are going to play a game today which is probably a little different than anything you have done before. I'll explain the game first, and then I'll let you practice it to be sure that you know what to do when the game starts.

Look at these boxes at the top of your sheet. (Key) You see that each box is divided into two smaller boxes. There is a number in the top of the box - 1, 2, 3, 4, 5 - and a mark in

the bottom part of the box. Notice that every number has a different mark. Now look at the boxes down here. There is a number in the top part of the box, but the bottom part of the box is empty. I want you to put in each one of these boxes the mark that should go there. You do it like this. Here is a 2, so you put in this mark. (Permitting child to enter mark) Here is a 1, what mark should go in there? (Again, permitting child to enter mark) Now you do it. Begin here and fill in as many squares as you can without skipping any. Keep working until I tell you to stop. If you finish the first row before I tell you to stop, go right on to the second row.

Two practice trials were permitted before the ten test trials were begun in order to be certain that the child understood directions and to permit some familiarity with the task before goal discrepancy scores were ascertained. In all cases, forty-five seconds per trial was allowed. Such a time limit served to permit improvement within the trial series as well as to prevent completion of all fifty squares. This latter consideration was deemed important in view of the experimenter's desire to permit a realistic attitude to operate in the aspiration situation. At the end of each trial, the child was asked to "Count how many you did that time"; the experimenter noting the figure on record sheets prepared for easy computation of discrepancy scores. Each child was asked then to indicate his goal for the next trial in response to the question "How many do you think you can do next time?" Again, the experimenter noted the child's response. When all ten trials had been completed, the discrepancy between the goal attained on the previous trial and the level of the new goal was computed by subtracting algebraically the obtained score on each trial from the goal set for the succeeding trial. When the goal

for the following trial was larger than the score achieved on the preceding trial, goal discrepancy scores were positive. On the other hand, when the goal set for a succeeding trial was less than the score achieved on the preceding trial, goal discrepancy scores had negative values. The range of the goal discrepancy scores for the ten trials was from -113 to 4109 with a mean of 8.0 and a standard deviation of 29.1. Distribution of the scores from which the above statistics were obtained approximate a normal curve (Appendix II, Page 97).

Having an initial group normally distributed according to an independent variable, the problem then was to select those groups from this distribution most likely to reveal significant differences when compared on the basis of a correlated dependent variable, such as aggression. Since the sample groups were to be limited to twenty each, it was necessary to decide from where in the distribution of the independent variable three groups of twenty should be selected in order to maximize the possibility of obtaining a significant relationship between the two variables being studied. A number of divisions were possible. For example, the level of aspiration scores could have been divided on the basis of a fifty-fifty split into upper and lower groups, a common but inefficient practice if the two groups are to be compared for differences since errors of measurement or the unreliability of the independent measure will cause many cases which belong in the lower group to be included in the upper group and vice-versa. The scores could also have been split using only the

top few and bottom few scores. This split would yield two groups of maximum difference in level of aspiration, but a large error term would be involved. The most efficient split of the criterion group lies somewhere between these two extremes of upper and lower halves and the highest and lowest score split. It has been determined that the use of the upper and lower twenty-seven per cent of the distribution of criterion scores will yield a maximum critical ratio between the means of upper and lower groups (53). It follows that, since this twenty-seven per cent split results in maximum certainty of differentiation of groups, any variable related to the criterion variable will show maximum relationship with such a split. Applied to the data here, the cut off point for overestimators becomes 426 with scores for this group ranging upward to 4109. The lower twenty-seven per cent ranges from -6 to -113. Having established an upper and lower group, the next problem was to select a middle or realistic group. Again, the problem was to maximize the critical ratios of the mean differences between this middle group and each of the extreme groups. This was done by selecting the middle group from those scores nearest the mean of the distribution of criterion scores. Scores for this group ranged from -2 to -16. While distributions in these three selected groups were somewhat skewed, as is the case in many studies employing educational and psychological data, the F score is relatively insensitive to these variations, and basic assumptions involved in the variance

analysis design employed here have not been violated.

Within the boundaries thus established for the three sample groups, selection again took place in terms of I.Q., chronological age, and sex. The mean chronological age for overestimators was 114.10 months, for underestimators, 113.15 months, and for the realistic group, 112.65 months. Critical ratios for underestimators versus overestimators, underestimators versus realistic, and overestimators versus realistic groups were .268, .152, and .39 respectively, indicating that the three groups do not differ significantly in chronological age. Mean I.Q.'s for the three groups were 102.00 for the overestimators, 101.80 for underestimators, and 102.90 for the realistic group. Critical ratios here ranged from .001 to .53, again indicating that the groups do not differ significantly in intelligence.

When it was determined that the three groups did not differ significantly on any of the variables thought relevant, the Children's Apperception Test was administered. The materials for this test consist of 10 pictures of animals engaged in various types of human-like activity. A brief description of each of the pictures follows:

- I. Three chicks are seated at a table on which there is a large bowl of food. A large chicken, dimly outlined, appears at one side of the card.
- II. One bear is pulling a rope on one side while a large bear and a baby bear pull on the other side.
- III. A lion with pipe and cane is sitting on a large chair. A mouse peeps out from a hole in the lower right hand corner of the card.

- IV. A kangaroo with a bonnet on its head is carrying a basket with a milk bottle. One baby kangaroo is in her pouch, and another is riding a bicycle beside her.
- V. This is a darkened room in which there is a crib with two baby bears in it. In the background there is a large bed.
- VI. This is a darkened cave with two bear figures in the background and a baby bear lying in the foreground.
- VII. A tiger with bared fangs is leaping at a monkey which is leaping toward a nearby tree.
- VIII. One adult monkey is talking to a baby monkey at one side of the card. Seated nearby are two other adult monkeys drinking from tea cups.
- IX. In a darkened room, a baby rabbit sits up in bed and looks toward the open door.
- X. A baby dog is lying across the knees of an adult dog. They are in a bathroom.

The CAT was administered individually to each child in a private room in his own school situation since it was felt that familiar surroundings would be helpful in establishing and maintaining rapport. A conversation period preceded each test in an attempt to be certain that the child was at ease before actual testing was begun. The test was introduced as a story-telling game in which the children were to describe the events leading up to the action depicted in the picture, the action itself, what the characters were thinking and feeling, and the outcome. These requirements were explained in language suited to the child before actual testing was begun, and were then listed on a blackboard for ready reference during the testing. Encouragement, reassurance and

praise were used liberally throughout the testing period, whether or not the stories merited the treatment. As much time as necessary was permitted, and interruptions were permitted when deemed necessary by the examiner. Inquiry was used rather sparingly, and only when it was necessary to bring out any aspects of the requirements which the child had neglected in his story, or to clarify stories in which the subject had created difficulties which he did not spontaneously resolve.

Analysis of the six hundred stories was then undertaken in terms of both structure and content variables. The plan for analysis used here represents a combination of Bellak's analysis sheet for the Children's Apperception Test (14), Kobler's guide to analysis of the Thematic Apperception Test, and the writer's analysis sheet for the Children's Apperception Test. Analysis on structure variables included coherence, mood, story ending, detail treatment, and presence or absence of indecision in the stories (Appendix III, Page 98). Content analysis involved characteristics of the story hero, his attitudes toward authority figures and their attitudes toward him, his perception of environmental influences, and the figures and circumstances introduced into the Hero's fantasy world (Appendix IV, Page 99). In addition, the hero's goal-striving behavior was analyzed in terms of the nature of the goals set by the hero, their attainment or non-attainment, the means used for attainment as well as the barriers which prevented attainment, and the consequences of the

hero's goal striving behavior (Appendix 5, Page 100). It should be noted in evaluating the variables chosen for investigation in this study, that "interpretation" of the stories, if such it may be called here, more closely approximates a nomothetic than an ideographic approach. No effort is made, for example, to deal with the dynamics of the individual record, to observe the significant conflicts of the individual child, to assess the nature of his anxieties, to record the unusual or bizarre in his stories, or to reflect the intensity of any of the variables studied. Selection of variables to be employed in this study was based primarily, not on clinical significance or utility of either structure or content story characteristics, but rather in terms of previous work attempting to link behavioral aspects of goal setting behavior and inferred personality characteristics. Previous studies, it would seem, erred either in the direction of working with too precisely defined and delineated personality traits and clinical syndromes such as dominance, rigidity, and neuroticism, or, on the other hand, ill-defined and fairly nebulous characteristics such as prudence, realism, and the wish to do well. Selection of variables for this study, then, involved drawing up a list of crucial areas to be investigated, such as hero characteristics, attitudes toward authority, etc., and then choosing within these areas variables which could be clearly defined and which lent themselves to categorization rather than to placement on a continuum. This latter consideration was

important in view of conceiving this study in terms definitive and quantitative rather than descriptive. Some samples of scoring procedure are presented in Appendix 7, Page 116.

Each of the six hundred stories was scored once for content and structure variables by the writer and then rated within two months of the initial scoring without reference to the original rating. Instances of disagreement in the two ratings were carefully considered by the examiner and another psychologist, and doubtful scores reclassified to indicate their ambiguity. In addition, a table of random numbers was employed to select sixty of the stories for scoring by another psychologist. Agreement on structure variables, readily seen as more easily defined and recognized than content variables, ranged from 91 per cent to 96 per cent. Agreement on content variables, somewhat more nebulous by the very nature of the task set in this study, ranged from 73 per cent to 92.4 per cent.

After the stories were classified according to content and structure variables, the problem of determining significance of results was resolved by selecting for use the variance analysis design of Block, Lewin, and Mc Nemar (19). This design was particularly well suited for this study since replicated measures for "n" variables could be obtained for every individual, making possible a more stable error term without requiring a large number of subjects. Furthermore, differences in group profiles emerge as group by variable interactions. Once overall

significance was determined by the F test for the relationship between level of aspiration and a given variable, a more detailed analysis of the profiles was made using the t test. A critical difference for each comparison of paired means was established by multiplying the error term for the particular group by variable interaction by 1.96 and 2.58 defining, respectively, the .05 and .01 levels of significance. It was then possible to determine in addition to the overall significance of relationship between criterion and experimental variable, the significance between level of aspiration groups on specific categories within each variable. Use of the t test then permitted a more refined analysis and discussion of results.

Chapter V

FINDINGS AND INTERPRETATION

In analyzing the structure of the responses to each card, the stories were classified as to coherence or incoherence, the mood or prevailing tone of the story, the nature of the ending, and the presence or absence of indecision in the story. The kind of detail treatment was also noted in the consideration of structure variables. A factual presentation of the data in each of the structure categories and the statistical treatment will be presented first, followed by discussion and interpretation of structure data in its entirety.

Stories of the three groups were first classified in terms of the presence or absence of incoherence. Analysis of variance indicates that the groups differ significantly in relation to this variable; the F obtained is 12.36 which is significant beyond the .005 level. Tabular presentation of the sources of variance, degrees of freedom, mean squares, and F values is contained in Appendix VI, Page 101 for each structure and content variable discussed in this chapter. Further analysis of the coherence variable indicated that the significance lies in the greater amount of incoherence present in the stories of over-estimators and underestimators in comparison with the amount of

incoherence present in the stories of the realistic group. Over-estimators differ significantly from the realistic group, as do underestimators in this regard. Overestimators and under-estimators do not differ significantly from one another, however. Table 1 presents the results of this comparison.

Table 1
Standard Score Means of Level of Aspiration
Groups of Coherence Variables*

Level of Aspiration group	Standard score mean	
	Coherence	Incoherence
Overestimators	4.54	5.46
Realistic	5.59	4.41
Underestimators	4.71	5.29

*A difference in adjusted means of .49 is significant at the .05 level; a difference of .64 is significant at the .01 level.

Analysis of the mood of each story was undertaken in terms of whether the predominating tone of the story was happy, depressed, or neutral. The F obtained in analysis of variance was 17.09 which indicates that the groups differ significantly beyond the .005 level in regard to this variable. Significant differences here lie in the greater preponderance of happy stories and the relatively small number of depressed stories in

the realistic group, and the larger number of stories classified as depressed and much smaller number of happy stories in the other two groups. Again, overestimators and underestimators differ significantly from the realistic group, but do not differ significantly from one another. Results obtained in the analysis of story mood are presented in Table 2.

Table 2

Standard Score Means of Level of Aspiration
Groups on Mood Variables*

Level of Aspiration group	Standard score mean		
	Happy	Depressed	Neutral
Overestimators	4.57	5.51	4.69
Realistic	5.96	4.08	5.51
Underestimators	4.56	5.40	4.83

*A difference in adjusted means of .56 is significant at the .05 level; a difference of .74 is significant at the .01 level.

Each story was also classified in terms of the nature of the story ending. Here, each story ending was categorized as being happy, unhappy, or neutral. Analysis of variance yielded an F of 4.72 which indicates that differences in story ending are significant beyond the .005 level within the groups. Significance here lies, first of all, in the larger number of unhappy endings

in the stories of underestimators and overestimators than in the stories of the realistic group, and in the greater number of happy endings in the realistic group when compared with the number of happy endings in the stories of underestimators. Significant differences are also apparent in the analysis of variable profiles for each group. The realistic group, for example, tells significantly more stories with happy than unhappy endings. The underestimators, on the other hand, tell significantly more stories with unhappy than happy endings, while overestimators end about the same number of their stories happily and unhappily. Table 3 presents the standard score means involved in these comparisons.

Table 3
Standard Score Means of Level of Aspiration
Groups on Story Ending Variables*

Level of Aspiration group	Standard score mean		
	Happy	Unhappy	Neutral
Overestimators	5.01	5.12	4.71
Realistic	5.35	4.23	5.41
Underestimators	4.64	5.43	4.91

*A difference in adjusted means of .71 is significant at the .05 level; a difference of .93 is significant at the .01 level.

The presence or absence of indecision in the stories was next considered in the analysis of structure variables. The F obtained in analysis of variance was 2.63, which indicates that differences between the groups are not significant in regard to this variable. Inspection of group profiles, however, indicates that underestimators display some tendency to indecisiveness in their stories, while this is characteristic of neither of the other groups. Table 4 contains a summary of the standard score means involved in this comparison.

Table 4
Standard Score Means of Level of Aspiration
Groups on Indecision Variables*

Level of Aspiration group	Standard score mean	
	Decisive	Indecisive
Overestimators	5.01	4.99
Realistic	5.19	4.80
Underestimators	4.61	5.39

*A difference in adjusted means of .72 is significant at the .05 level; a difference of .95 is significant at the .01 level.

Unusual treatment of details in the pictures was also noted and categorized as to the nature of the treatment. Omission, alteration, and distortion of detail were categorized, as well as

usual detail treatment. Analysis of variance yielded an F of 3.84 which indicates that the groups differ significantly beyond the .005 level in regard to treatment of card detail. Further analysis reveals, however, that significance lies, not in the specific type of unusual treatment seen in the stories of underestimators when compared with the greater frequency of usual treatment in the stories of overestimators and the realistic group. Underestimators differ significantly from overestimators as well as from the realistic group in this regard. Standard score means involved in comparison of detail treatment in the three groups are presented in Table 5.

Table 5
Standard Score Means of Level of Aspiration
Groups on Detail Treatment Variables*

Level of Aspiration group	Standard score mean			
	Omission	Alteration	Distortion	Usual
Overestimators	5.09	4.96	5.04	5.02
Realistic	4.73	4.90	4.80	5.44
Underestimators	5.28	5.30	5.35	4.48

*A difference in adjusted means of .54 is significant at the .05 level; a difference of .70 is significant at the .01 level.

In summary of the analysis of structure variables the three

groups differ in overall significance in coherence, mood, nature of story ending, and detail treatment. Overestimators and underestimators differ significantly from the realistic group in coherence, mood, and nature of the story ending. Underestimators differ significantly from both the realistic group and overestimators in detail treatment. Perhaps, most strikingly here, our findings suggest similarities to results of other investigations in which contrasts between adjusted and maladjusted groups have been made. Leitch and Schafer (57), for example, point to the presence of incoherence and the alteration, distortion, and omission of detail which characterize the stories of the disturbed child. Balken and Van der Veer (8) note the preponderance of depression found in the stories of maladjusted children, and a previous study by the author (30) indicated the strong tendency for maladjusted children to end their stories unhappily.

In this frame of reference, some tentative interpretations may here be suggested. For example, the greater amount of incoherence in the stories of overestimators and underestimators may reflect to some degree the influence of emotional disturbance upon intellectual functioning, as may the unusual detail treatment seen in the case of the underestimators. More clearly seen is the fact that the maladaptive state is related to unhappiness in both the unrealistic groups as evidenced in the strong tendency to depression apparent in the fantasy produced by these children. Related to this frequent occurrence of depression is the preponderance of unhappy story endings seen in both unrealistic groups.

If each of the stories is seen as a small world of fantasy reflecting the individual's ability to manipulate his environment, his capacity in problem solving, and his confidence in dealing with others we see that the attitude of the unrealistic groups is in sharp contrast with the happy, optimistic frame of reference of the realist. Analysis of content data should serve to illuminate some of the impressions gained in this tentative analysis of structure data.

Analysis of content variables included categorization in terms of hero characteristics, attitudes toward parental figures and the attitudes of these figures toward the hero, the nature of the environment in which the hero is seen, and the figures and circumstances introduced into the stories. Finally, an attempt was made to investigate the hero's goals, the means he chooses to attain them, and his fantasied success or failure in striving toward a goal.

The hero, or figure of identification, in each story was determined in accord with the principles set forth by Murray (66) and Bellak (11) for hero identification, and then classified in terms of five categories each of which contained four alternatives. First treated was a category in terms of which the story hero was classified as to his adequacy in the situation depicted. Alternatives here included adequacy, inadequacy, ambivalence, and a fourth classification where cases indicative of neither hero adequacy or inadequacy were placed. The F obtained in analysis

of variance for hero adequacy was 6.17, which indicates that the groups differ significantly beyond the .005 level in regard to this variable. More detailed analysis reveals that the realistic group identifies significantly more often with characters who are depicted as adequate, while overestimators and underestimators identify significantly more often with characters who are portrayed as inadequate. All three groups exhibit about the same amount of ambivalence in regard to hero adequacy. Standard score means involved in these comparisons are presented in Table 6.

Heroes in each story were also classified as to whether they were accepted or rejected by other figures in the stories. Again, a category was employed to handle cases where ambivalence was indicated, as well as a category for stories where neither acceptance nor rejection of the hero was to be noted. These latter classifications were employed in all of the analyses of hero

Table 6
Standard Score Means of Level of Aspiration
Groups on Hero Adequacy Variables*

Level of Aspiration group	Standard score mean			
	Adequate	Inadequate	Ambivalent	Neither
Overestimators	4.75	5.38	5.08	4.71
Realistic	5.53	4.28	4.98	5.66
Underestimators	4.75	5.35	5.14	4.74

*A difference in adjusted means of .60 is significant at the .05 level; a difference of .79 is significant at the .01 level.

characteristics. Analysis of variance yielded an F of 9.41 which indicates that the groups differ significantly beyond the .005 level in regard to hero acceptance. Significance lies here in the greater frequency with which the realistic group identifies with heroes portrayed as accepted and their significantly infrequent identification with a rejected hero, compared with the frequent identification of underestimators and overestimators with characters pictured as rejected. Also of significance is a tendency for overestimators to be ambivalent about acceptance when compared with the realistic group who exhibit least ambivalence in regard to hero acceptance. This latter trend is not apparent for underestimators who see their heroes as rejected significantly more often than accepted. Table 7 presents the standard score means involved in these comparisons.

Table 7

Standard Score Means of Level of Aspiration
Groups on Hero Acceptance Variables*

Level of Aspiration group	Standard score mean			
	Accepted	Rejected	Ambivalent	Neither
Overestimators	4.44	5.18	5.44	5.00
Realistic	5.83	4.33	4.73	5.01
Underestimators	4.56	5.48	4.95	5.09

*A difference in adjusted means of .59 is significant at the .05 level; a difference of .78 is significant at the .01 level.

A similar analysis of the self-confidence or lack of confidence of each story hero was next undertaken. Statistical analysis yielded an F of 3.38 which is significant at the .05 level of confidence. Significance lies here, it is seen on further analysis, in the strong tendency for overestimators to identify with heroes who are ambivalent in regard to confidence. None of the groups characteristically identify with heroes portrayed as either confident or apprehensive, although there is some slight tendency for underestimators to see their heroes as more apprehensive than is the case for either overestimators or realists. The standard score means involved in comparisons relating to hero confidence or lack of confidence are presented in Table 8.

Table 8
Standard Score Means of Level of Aspiration
Groups on Hero Confidence Variables*

Level of Aspiration group	Standard score mean			
	Confident	Apprehensive	Ambivalent	Neither
Overestimators	5.16	4.92	5.52	4.56
Realistic	4.85	4.80	4.76	5.49
Underestimators	5.14	5.30	4.80	4.92

*A difference in adjusted means of .75 is significant at the .05 level; a difference of .99 is significant at the .01 level.

A further classification of the story heroes in terms of tendencies toward submission or aggression in conflict situations was also attempted. The F obtained in analysis of variance for this variable was 6.17 which is significant beyond the .005 level of confidence. More detailed analysis reveals that significance in this case lies in the greater frequency with which underestimators identify with a character depicted as either aggressive or submissive in contrast with the other two groups. Inspection of group profiles indicates that overestimators tend to see their heroes as aggressive, submissive, or ambivalent in approximately equal proportions. Realists, on the other hand, most frequently identify with characters portrayed as neither aggressive nor submissive. Table 9 contains a summary of the standard score means involved in these comparisons.

Table 9
Standard Score Means of Level of Aspiration
Groups on Hero Aggression Variables*

Level of Aspiration group	Standard score mean			
	Aggressive	Submissive	Ambivalent	Neither
Overestimators	5.01	5.13	5.17	4.80
Realistic	4.50	4.51	5.23	5.69
Underestimators	5.52	5.34	4.62	4.51

*A difference in adjusted means of .61 is significant at the .05 level; a difference of .80 is significant at the .01 level.

A last classification of hero characteristics attempted to tap the hero's dependence on other figures he had introduced into his stories. The F obtained in analysis of variance in this case was 4.24 which indicates that the groups differ significantly beyond the .005 level of confidence in regard to hero dependence and/or independence. Significance here lies in the preponderance of dependent heroes chosen by the group of underestimators, and in the realistic group's avoidance of hero characterization in terms of either dependence or independence. Overestimators tend most often to portray their heroes as either dependent or ambivalent in regard to dependence. The standard score means involved in comparisons relating to hero dependence and hero independence are presented in Table 10.

Table 10
Standard Score Means of Level of Aspiration
Groups on Hero Dependence Variables*

Level of Aspiration group	Standard score mean			
	Dependent	Independent	Ambivalent	Neither
Overestimators	5.19	4.63	5.18	4.98
Realistic	4.50	5.17	4.96	5.54
Underestimators	5.33	5.28	4.88	4.48

*A difference in adjusted means of .75 is significant at the .05 level; a difference of .99 is significant at the .01 level.

Also of interest was the story hero's attitudes toward parental figures. These were classified into one of three categories, defined as expressing wholesome, antagonistic, or neutral attitudes toward the mother and father figures. In neither case did analysis of variance yield an F sufficiently large to be statistically significant. The F value for attitudes toward the father figure was 1.15, and for attitudes toward the mother figure, 1.87. There is a tendency apparent in the analysis of group profiles, however, for the realistic group to depict wholesome attitudes toward the mother, and for underestimators' stories to reflect antagonistic attitudes toward her. Table 11 presents the standard score means for hero attitudes toward the mother figure, and Table 12 presents standard score means for hero attitudes toward the father.

Table 11
Standard Score Means of Level of Aspiration Groups
on Attitude toward Mother Variables

Level of Aspiration group	Standard score mean		
	Wholesome	Antagonistic	Neutral
Overestimators	4.72	5.13	5.19
Realistic	5.52	4.48	4.93
Underestimators	4.79	5.46	4.92

*A difference in adjusted means of .68 is significant at the .05 level; a difference of .90 is significant at the .01 level.

Table 12

Standard Score Means of Level of Aspiration Groups
on Attitude toward Father Variables*

Level of Aspiration group	Standard score mean		
	Wholesome	Antagonistic	Neutral
Overestimators	5.05	5.19	5.08
Realistic	5.13	4.64	4.93
Underestimators	4.87	5.27	5.04

*A difference in adjusted means of .60 is significant at the .05 level; a difference of .79 is significant at the .01 level.

Parental influences upon the figure of identification were classified as to whether they represented benign, threatening, or neutral forces. The analysis of variance for maternal influence resulted in an F of 6.00 which is significant beyond the .005 level of confidence. Significance lies here in the realistic group's presentation of maternal influence as predominately benign and infrequently threatening in contrast to overestimators' and underestimators' frequent characterization of the maternal figure as threatening and less frequent representation as a benign influence. Analysis of variance for paternal influence resulted in an F of 1.44, indicating that the groups do not differ significantly in this regard. Table 13 presents the standard score means for maternal influence, and Table 14 shows this data for paternal influence upon the here.

Table 13

Standard Score Means of Level of Aspiration Groups
on Maternal Influence Variables*

Level of Aspiration group	Standard score mean		
	Benign	Threatening	Neutral
Overestimators	4.69	5.16	5.13
Realistic	5.57	4.34	5.03
Underestimators	4.73	5.52	4.91

*A difference in adjusted means of .61 is significant at the .05 level; a difference of .80 is significant at the .01 level.

Table 14

Standard Score Means of Level of Aspiration Groups
on Paternal Influence Variables*

Level of Aspiration group	Standard score mean		
	Benign	Threatening	Neutral
Overestimators	5.80	5.06	5.09
Realistic	5.06	4.64	5.01
Underestimators	4.78	5.33	4.97

*A difference in adjusted means of .60 is significant at the .05 level; a difference of .79 is significant at the .01 level.

Also categorized in terms of benign, threatening, or neutral influence upon the hero were the environmental forces depicted in the stories. The F obtained in analysis of variance for this variable was 14.98 which is significant well beyond the .005 level of confidence. Further analysis indicates that the realistic group tends to portray environmental forces as benign or neutral and only infrequently as threatening, while the reverse is true for both underestimators and overestimators. Most frequently underestimators and overestimators depict environmental forces as threatening, and less frequently as either benign or neutral. The standard score means involved in comparisons relating to the influence of environmental forces are presented in Table 15.

Table 15
Standard Score Means of Level of Aspiration Groups
on Environmental Influence Variables*

Level of Aspiration group	Standard score mean		
	Benign	Threatening	Neutral
Overestimators	4.40	5.51	4.86
Realistic	5.81	4.13	5.49
Underestimators	4.82	5.35	4.67

*A difference in adjusted means of .56 is significant at the .05 level; a difference of .74 is significant at the .01 level.

Analysis was also made of the kinds of figures and circumstances introduced into the stories of each of the three groups. Among the circumstances considered was the occurrence of aggression. Aggressive acts appeared in 137 of the stories of the underestimators, 136 times in the stories of overestimators, and 88 times in the realistic group. Analysis of variance resulted in an F of 13.62 which indicates that the groups differ significantly beyond the .005 level in regard to the occurrence of aggression in the stories. Overestimators and underestimators differ significantly from the realistic group, but do not differ from one another. At this point, it should be noted in regard to this variable as well as to other of the circumstances considered in analysis of the stories that a story was classified only once and in only one category even though the particular circumstance being considered occurred many times in the same story. For example, a story containing five acts of aggression was considered as one occurrence of aggressive behavior and was tallied as such so as not to violate assumptions involved in the statistical procedures employed for this study.

The occurrence of death in the stories of the three groups was also noted. In the stories of underestimators there were 44 references to death; 42 of the overestimators' stories included death of one or more figures in the story; and 21 of the stories of the realistic group included reference to death. Analysis of variance yielded an F of 4.41 which is significant at the .05

level of confidence. Again, overestimators and underestimators differ significantly from the realistic group, but do not differ from one another. Similarly, the occurrence of illness was noted in the fantasies of the three groups. The F of 6.38 obtained here indicates that the groups differ significantly beyond the .005 level. Again, overestimators and underestimators differ significantly from the realistic group in the frequency with which illness is introduced into their stories, but do not differ significantly from one another. The standard score means of the three groups for aggression, death, illness are presented in Table 16.

Table 16

Standard Score Means of Level of Aspiration Groups
on Aggression, Death, and Illness Variables

Level of Aspiration group	Standard score mean		
	Aggression	Death	Illness
Overestimators	5.39	5.23	5.35
Realistic	4.22	4.57	4.59
Underestimators	5.38	5.31	5.27
	.50	.54	.46
	.66*	.71*	.61*

*The differences in adjusted means significant at the .05 and .01 levels of confidence.

Also noted was the occurrence of violence and accidents in

the stories. The F obtained for the occurrence of violence in the stories of the three groups was 6.17 which is significant beyond the .005 level of confidence. Analysis of variance for the occurrence of accidents yielded an F of 7.82 which is also significant beyond the .005 level. In both cases, underestimators and overestimators differ significantly from the realistic group in the higher frequencies of violence and accident occurrence, but do not differ significantly from one another. Such was the case also for the occurrence of deprivation where an F of 6.65 was obtained in analysis of variance indicating that the groups differ significantly beyond the .005 level in regard to this variable. The same pattern was again noted; both underestimators and overestimators differing from the realistic group, but not from one another. The standard score means of the three groups for violence, accidents, and deprivation are presented in Table 17.

A change in pattern was apparent when the occurrence of injustice was tallied in the stories of the three groups. While the F of 5.47 obtained in analysis of variance indicates that the groups differ significantly beyond the .005 level of confidence, significance here lies in the greater number of stories containing injustice in the group of overestimators when compared with underestimators and the realistic group. Overestimators differ significantly from both the underestimators and the realistic group, but underestimators and the realistic group do not differ significantly from one another. Similarly, the F of 7.56

Table 17

Standard Score Means of Level of Aspiration Groups
on Violence, Accidents, and Deprivation Variables

Level of Aspiration group	Standard score mean		
	Violence	Accidents	Deprivation
Overestimators	5.39	5.41	5.45
Realistic	4.61	4.45	4.42
Underestimators	5.19	5.24	5.10
	.45 .59*	.46 .61*	.56 .74*

*The differences in adjusted means significant at the .05 and .01 levels of confidence.

obtained when the occurrence of deception was noted indicated that the groups differed significantly in regard to this variable. Again underestimators and the realistic group did not differ from one another. Significance in this case lies in the preponderance of stories in which deceptive practices were employed by overestimators. Finally, in consideration of circumstances introduced in the stories of the three groups, the occurrence of disobedience was noted. Analysis of variance for this variable indicates that the groups do not differ significantly in this regard. Standard score means of the three groups for injustice, deception, and disobedience are presented in Table 18.

Table 18

Standard Score Means of Level of Aspiration Groups on
Injustice, Deception, and Disobedience Variables

Level of Aspiration group	Standard score mean		
	Injustice	Deception	Disobedience
Overestimators	5.48	5.57	5.01
Realistic	4.77	4.60	4.61
Underestimators	4.92	4.94	5.32
	.44 .58*	.50 .65*	.57 .78*

*The differences in adjusted means significant at the .05 and .01 levels of confidence.

The introduction of four types of figures into the stories was also considered. These included friend, enemy, protector, and punisher. The *F* obtained for introduction of a friend into the stories of the three groups was 1.99 which is not significant. Similarly, the *F* obtained for introduction of a protector into the stories was 1.43 which again indicates that the groups do not differ in the frequency with which they introduce a figure of protection. On the other hand, the *F* obtained for introduction of an enemy into the stories was 7.57 which is significant beyond the .005 level. Overestimators and underestimators again differ significantly from the realistic group in that they introduce more enemies into their stories. They do not, however, differ

significantly from one another. The same pattern is apparent for introduction of a punisher into the fantasy material. The F obtained here was 8.70 which is significant beyond the .005 level of confidence. Again, overestimators and underestimators differ significantly from the realistic group, but not from one another. Standard score means involved in comparisons relating to story figures are presented in Table 19.

Table 19

Standard Score Means of Level of Aspiration
Groups on Story Figure Variables

Level of Aspiration group	Standard score mean			
	Friend	Protector	Enemy	Punisher
Overestimators	5.35	5.25	5.49	5.31
Realistic	4.87	4.75	4.43	4.35
Underestimators	4.90	5.02	5.12	5.35
	.53 .70*	.39 .52*	.53 .69*	.53 .70*

*The differences in adjusted means significant at the .05 and .01 levels of confidence.

Finally, an assessment of goal-striving behavior as it appeared in the stories was attempted. The stories were first analyzed as to whether or not a goal or objective was stated by the story hero. Analysis of variance yielded an F of 21.40 which is significant well beyond the .005 level indicating that the

groups clearly differ in the frequency with which goals are introduced into their fantasy. The difference lies, it is seen on profile analysis, in the far greater number of goals set by overestimators in comparison with the much smaller number in the stories of the realistic group and of underestimators. Overestimators differ significantly from underestimators and the realistic group in this regard. Underestimators and the realistic group do not differ significantly from one another, however. Standard score means for goal statement are presented in Table 20.

Table 20

Standard Score Means of Level of Aspiration Groups
on Goal Statement Variables*

Level of Aspiration group	Standard score mean
	Goal statement
Overestimators	5.85
Realistic	4.38
Underestimators	4.73

*A difference in adjusted means of .45 is significant at the .05 level; a difference of .59 is significant at the .01 level.

The goals set in the three groups were then categorized as to whether they were socially approved, socially disapproved, or neutral goals. The F of 7.29 obtained in analysis of variance again indicates that the groups differed significantly beyond the

.005 level of confidence. Inspection of group profiles indicates that the realistic group chooses socially approved goals more often than disapproved or neutral goals, and more often than either underestimators or overestimators. Overestimators choose more disapproved and neutral goals than they choose approved goals, and underestimators choose about the same number of approved, disapproved, and neutral goals. The standard score means involved in comparisons relating to approved and disapproved goals are presented in Table 21.

Table 21

Standard Score Means of Level of Aspiration Groups
on Goal Evaluation Variables*

Level of Aspiration group	Standard score mean		
	Approved	Disapproved	Neutral
Overestimators	4.71	5.42	5.79
Realistic	5.35	4.68	4.41
Underestimators	5.10	4.93	4.80

*A difference in adjusted means of .55 is significant at the .05 level; a difference of .72 is significant at the .01 level.

It was also thought it would be interesting to determine the types of barriers to goal achievement which appeared in the stories. These were classified as physical if they arose predominately out of environmental forces, and social if they

related to interference or threat of interference by another person. A third category was employed for those cases where no barrier to goal achievement was present or where the nature of the barrier was not made explicit. The F obtained in this case was 6.70, which indicates that the groups differ significantly beyond the .005 level in the types of goal barrier employed in their stories. Profile analysis indicates that overestimators introduce barriers to goal achievement more often than do either of the other two groups. These barriers are seen as physical about as often as they are of a social nature. The realistic group introduces less barriers into their stories than either of the other two groups. When employed, these are seen as physical barriers to achievement far more frequently than they are seen as social barriers. Underestimators, on the other hand, see barriers to goal achievement as social somewhat more often than these are pictured as physical. Table 22 presents the standard score means involved in these comparisons.

Whether or not the fantasied goals were attained was the next question asked. Again, the F of 7.83 obtained here indicates that the groups differ significantly in regard to this variable. Overestimators emphasize attainment more than either of the other two groups and more than they emphasize non-attainment. Realists also emphasize goal attainment, but to a lesser degree than the overestimators, while the reverse is true for underestimators who infrequently depict goal attainment and very frequently emphasize non-attainment. Table 23 presents the group means for this variable.

Table 22

Standard Score Means of Level of Aspiration
Groups on Goal Barrier Variables*

Level of Aspiration group	Standard score mean		
	Physical	Social	Neither
Overestimators	5.52	5.62	4.79
Realistic	4.88	4.32	5.48
Underestimators	4.74	5.05	4.85

*A difference in adjusted means of .57 is significant at the .05 level; a difference of .75 is significant at the .01 level.

Table 23

Standard Score Means of Level of Aspiration
Groups on Goal Attainment Variables*

Level of Aspiration group	Standard score mean	
	Attained	Not attained
Overestimators	5.51	5.26
Realistic	4.95	4.46
Underestimators	4.54	5.29

*A difference in adjusted means of .67 is significant at the .05 level; a difference of .88 is significant at the .01 level.

who rarely see the goal attained by the hero. Both underestimators and overestimators see the goal attained more frequently through the intervention of others or through means characterized here as "acts of God". Finally, the effects of goal attainment were assessed to determine whether these were seen predominately as pleasant, unpleasant, or neutral. The F of 1.06 obtained in analysis of variance is not statistically significant, and indicates that the groups do not differ in the way in which they portray the consequences of goal attainment. Standard score means found for this last variable are presented in Table 25.

Table 25

Standard Score Means of Level of Aspiration Groups
on Consequences of Goal Attainment Variables*

Level of Aspiration group	Standard score mean		
	Pleasant	Unpleasant	Neutral
Overestimators	5.03	5.48	5.40
Realistic	5.18	4.90	4.84
Underestimators	4.83	4.71	4.81

*A difference in adjusted means of .57 is significant at the .05 level; a difference of .75 is significant at the .01 level.

In discussion of the results obtained in analysis of hero characteristics, it must first be noted that while the groups differ significantly in the frequency with which they relate

stories about characters portrayed as adequate, accepted, confident, aggressive, and dependent, these differences are only infrequently in the direction of the hypothesized differences. While it was thought that the unrealistic groups would differ significantly from the realistic group but not from one another, quite different patterns are seen instead for each of the three groups. The heroes of underestimators, for instance, are most frequently seen as inadequate, as unable to cope with personal or environmental forces, and as might be expected in view of such inadequacy display a lack of self-confidence. This tendency toward identification with a figure portrayed as lacking in self-confidence may indicate that inability to operate competently and successfully is seen, on the part of the underestimator, not so much as the result of pressures from the environment as it is the result of feared personal inadequacy. Thus, although the underestimator's heroes tend to see themselves as rejected by others in their environment they are, because of their own inadequacy, dependent upon the figures by whom they are rejected. Since they are rejected, but dependent nevertheless, they seem to vacillate between aggression and submission in their attempts to deal with others; aggressive behavior presumably arising out of recognition of rejection and attempted retaliation, and submissive conforming behavior occurring when dependence on others is emphasized in the particular interpersonal relationship.

The realistic group, on the other hand, relates stories

about characters depicted as adequate most frequently, and see their heroes as accepted by most of those with whom they deal. As a result, their heroes rarely tend to be either aggressive or submissive in their relations with others. Similarly, problems of dependence and independence seem to be of little concern for them although they display more self reliance than dependence which would be expected in view of their felt adequacy in most situations.

Overestimators present a still different picture. While their heroes are portrayed as inadequate as are the heroes of underestimators, they seem uncertain about their status with others, and are most frequently pictured as alternately accepted and rejected. As a result, they appear to be ambivalent in regard to dependence, apparently uncertain whether they can depend upon others or must handle their problems independently. Similarly, they seem to have no characteristic mode of handling difficulties which arise in inter-personal relationships, but are aggressive about as frequently as they are submissive or ambivalent. Most interestingly, though the overestimator's hero is portrayed as inadequate, he is apparently ambivalent in relation to self-confidence, which might be interpreted to mean that he is uncertain whether his inadequacy arises out of a personal inability or as a result of unfavorable environmental pressures which prevent his dealing successfully with the problems and conflicts which arise.

Neither did attitudes toward parental figures follow the predicted pattern. Hero attitudes toward parental figures do not differ between the groups, nor is there any difference apparent in the way in which the groups depict the father's influence upon the hero. In this respect, it is interesting to note the similarity to a previous study (30), where attitudes toward and influence of the father figures did not serve to distinguish between adjusted and maladjusted groups. Both underestimators and overestimators however, tend to portray the mother figure as a threatening influence in contrast to the realistic group's depiction of the maternal figure as a benign influence. To what extent this difference in conception of the maternal figure is an indication of the crucial role mother-child relationships play in adjustment can only be a matter for conjecture here. It should be pointed out, however, that we may see here on the part of the deviant groups a generalized attitude of resistance to authority which is directed at the mother as the primary socializing agent in the home.

Analysis of environmental forces, on the other hand, indicated that the groups differed significantly from one another in the expected directions. Both unrealistic groups tend to depict environmental forces as hostile and threatening, and introduce frequently into their fantasy illness, violence, death, and accidents. Aggressive behavior and deprivation occur often in their stories, and threatening figures occur significantly

more often in the stories of the unrealistic groups than in those of the realist. To what extent the differences between the deviant and realistic groups mirrored here reflect actual differences in the youngster's environment cannot be ascertained as no attempt was made to assess the individual child's home and school climate. That the data do reflect, however, a significant and crucial difference in psychological environment is clearly apparent.

Perhaps most strikingly, differences in deviant patterns appear in the goal-striving behavior depicted in fantasy. The underestimator's hero, inadequate, rejected, and lacking in self-confidence sees the odds against him as overwhelming. He chooses few goals, he sees himself most frequently defeated in attainment of the few he depicts. A hostile environment and an unfeeling and rejecting society will not permit him success, and he fears that he does not have the ability to win it on his own. His is most characteristically a defeated cause, embraced without hope, abandoned without effort. The overestimator's hero, on the other hand, is uncertain about his relations with others, and so is propelled by a strong drive to gain acceptance. He does so in fantasy by striving to achieve. Despite the fear that he is inadequate and in the face of hostile environmental forces, he struggles against a host of barriers toward attainment of the goal. He refuses to accept failure, though he is himself inadequate, and so pictures the attainment of goals in terms

magical and miraculous or as the result of the bounty of others. His is, in many respects, a more positive approach than is that of the underestimator. He still struggles, though in the face of tremendous odds; for the underestimator the battle has been lost before it is begun so he no longer tries at all.

The realist, on the other hand, sets few goals for his heroes although these are mainly socially approved goals which are attained more frequently than not. He depicts far fewer barriers to goal attainment than do either the underestimators or overestimators, and when depicting obstacles to goal attainment portrays these mainly as physical rather than social barriers. His heroes are self reliant when it comes to goal attainment for they least often rely on the efforts of others or upon the manipulation of the environment to secure the goals they have chosen.

In summary, then, the realist's hero, who is adequate and accepted by others, sees his environment as benign and fantasizes few personal or social threats. From this vantage point of security, he has little need for achievement; he is not driven to impress others or to reassure himself. Instead, he is confident of his ability to attain the goals he selects, at ease in his relations with others, and comfortable in the small world he occupies. The underestimator's typical hero, on the other hand, is unable to cope with a hostile and threatening environment. Faced with impending disaster, he finds himself inadequate to deal

with the forces which threaten to overwhelm him, and cannot turn to an antagonistic and rejecting society to aid him. Unhappy and depressed, he withdraws from competition accepting failure as inevitable, inadequacy as irrevocable, and rejection as his due. The overestimator's hero occupies, in a sense, a midway position between that of the underestimator and the realist. Though uncertain of his ability and insecure about his relations with others, he strives to prove himself adequate and to gain acceptance by achievement. Such achievement is difficult for him, however, in the light of threatening environmental forces and his recurring fear that he may be found inadequate. Difficult though it may be, such achievement is necessary in view of his need for acceptance and reassurance, and we see the overestimator's striving made apparent in both aspiration and fantasy behavior.

Chapter VI

SUMMARY AND CONCLUSIONS

A level of aspiration test was administered to one hundred and forty-one children to secure a population from which three groups could be selected on the basis of average goal discrepancy scores. Twenty children were selected for each of the groups, referred to in this study as overestimators, underestimators, and realists. High positive discrepancy scores characterized the overestimators, high negative discrepancy scores the underestimators, and low positive discrepancy scores the realistic group. Because socio-economic status and intelligence have been suggested as influential in modifying aspiration behavior, children were chosen only within the I.Q. range from 90 to 110 to insure normal intelligence and from schools in the same neighborhood to insure similar socio-economic status. Further, children were chosen within the chronological age range from eight through ten years in terms of suggested limits for use of aspiration tests and the personality test employed in this study. Boys and girls were chosen in equal numbers for the three groups. There were no significant differences between mean chronological age or I.Q.'s in the three groups chosen.

Once selection of the experimental population was completed, the CAT was administered individually to each child. Analysis of the six hundred stories obtained was then undertaken in terms of both structure and content variables. Among structure variables treated were instances of incoherence and indecision, mood, story ending, and detail treatment. Content variables included hero characteristics, attitudes toward authority figures and their attitudes toward the hero, an assessment of environmental influences, and an analysis of goal striving behavior. Reliability of ratings in each of the areas was assessed by determining agreement on ratings made by the writer and by another psychologist. After the stories were classified according to content and structure variables, a variance analysis design was selected for determining significance of results. Statistical analysis indicated that the groups differed significantly in the occurrence of a number of content and structure variables. These differences are reported in summary fashion below:

Structure Variables

Coherence: Underestimators and overestimators told significantly more incoherent stories than did the realistic group.

Mood: Underestimators' and overestimators' fantasies were classified significantly more frequently as depressed and significantly less frequently as happy in tone in comparison with the realistic group. A relatively small number of depressed stories and a preponderance of happy stories occurred in the realistic group.

Story Ending: Significantly more unhappy story endings occurred in the stories of underestimators and overestimators than in the stories of the realistic group. The realistic group tells significantly more stories with happy than unhappy endings.

Indecision: Differences between the groups were not significant in regard to this variable.

Detail Treatment: Alteration, distortion and omission of detail occurs significantly more frequently in the stories of underestimators than in the stories of overestimators and realists. No significant differences appeared, however, in the type of unusual detail treatment employed.

Hero Characteristics

Adequacy: Overestimators and underestimators identify significantly more frequently with characters depicted as inadequate, while the realistic group most often identifies with heroes portrayed as adequate.

Acceptance: Underestimators identify most frequently with heroes rejected by others in the environment while realists identify most often with heroes who are accepted by others. Overestimators identify either with characters portrayed as rejected or as alternately rejected and accepted.

Aggression: Underestimators tend to portray their heroes as either aggressive or submissive, while realists depict them as neither aggressive nor submissive. Overestimators tend to see their heroes as aggressive, submissive, or

ambivalent in approximately equal proportions. Underestimators least frequently identify with characters portrayed as ambivalent in regard to aggression.

Confidence: Overestimators identify most frequently with characters who are ambivalent in regard to confidence, while neither underestimators or realists tend to identify with heroes who are either confident or apprehensive.

Dependence: Significance here lies in the preponderance of dependent heroes chosen by underestimators, and in the realistic group's avoidance of hero characterization in terms of either dependence or independence. Overestimators tend most often to portray their heroes as either dependent or ambivalent in regard to dependence.

Relations with Parental Figures

Attitudes Toward Parental Figures: No significant differences were observed in the three groups' attitudes toward either the mother or father figures.

Parental Influence Upon Hero: Significant differences appeared in analysis of influence of the mother figure. The realistic group presents maternal influence as predominantly benign in contrast to the overestimators and underestimators frequent characterization of the maternal figure as threatening. The groups did not differ significantly in their characterization of paternal influence.

Environmental Influence

Environmental Forces: The realistic group tends to portray environmental forces as benign or neutral and only infrequently as threatening in contrast to overestimators and underestimators who most often depict environmental forces as threatening.

Circumstances Introduced: Overestimators and underestimators introduce significantly more aggression, death, illness, and violence into their stories than do realists. They also introduce accidents and deprivation into the fantasy material more frequently than do realists. Overestimators significantly more often employ injustice and deception in their stories than do either underestimators or realists.

Figures Introduced: Underestimators and overestimators introduce significantly more enemies and punishers into their stories than do the realists. No significant differences were observed in the frequency with which friends or protectors were introduced into the stories of the three groups.

Goal-Striving Behavior

Goal-Setting: Overestimators set significantly more goals in their fantasy than do either underestimators or realists. Evaluation of these goals in terms of whether they were socially approved or disapproved indicated that the realistic group chooses more socially approved than disapproved or neutral goals, overestimators chose more disapproved and neutral goals than they chose approved goals, and

underestimators chose about the same number of approved, disapproved, and neutral goals. Classification of barriers to goal attainment indicated that overestimators introduce more barriers to goal achievement than do either of the other two groups, while the realistic group introduces least barriers. Overestimators employ physical barriers as frequently as social barriers, underestimators tend to depict these as social, and realists as physical.

Goal-Attainment: Overestimators emphasize goal-attainment more than either of the other two groups and more than they emphasize non-attainment. Realists also emphasize attainment more than non-attainment, while the reverse is true for underestimators who infrequently depict goal-attainment. An analysis of means employed to reach selected goals indicated that realists most frequently depict self attainment of goals in contrast to underestimators who rarely see the goal attained by the hero. Both underestimators and overestimators see the goal attained more frequently through the intervention of others or through means characterized here as "deus ex machina." There were no significant differences between the groups in the way in which effects of goal-attainment were depicted.

Perhaps most importantly, this study indicates the crucial role that individual differences play in goal setting behavior. To a variety of temporary situational factors and to a number of

cultural factors must be added the individual's evaluation of his own characteristics and abilities as well as his appraisal of his relation to others and to the environment as important determinants in goal selection and goal striving. That such relationships have been here only crudely and superficially demonstrated is at once apparent, as is the fact that more questions are raised by this study than are answered. When we consider, however, the fact that we experience success or failure only in relation to the goals we seek, goal selection becomes indeed an important factor in adjustment. When further, we recognize that even as early as third grade we find sharply defined tendencies to "hitch your wagon to a star", to retreat in the face of difficulty, the need for further and more definitive study of aspiration behavior is readily seen. Most needed now is more exhaustive study of aspiration behavior in terms of rigidity and fluidity in goal adjustment, subject reactions to success and failure, and attainment discrepancy, each of which bears investigation in relation to the personality variables studies here.

Of theoretical import too is the suggestion arising from the data that may strengthen earlier clinical impressions of a neurotic drive to achievement. The relatively small number of goals set by realists suggests that the secure person has little motivation to strive for success in contrast to the threatened individual whose needs make achievement of paramount importance. At the other end of the tension continuum which might be

postulated here, so much of the individual's energy is consumed in conflict that again achievement becomes relatively unimportant. Research designed to investigate relationships between achievement and a number of personality variables is needed to clarify the problem suggested here.

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APPENDIX I

Digit-Symbol Substitution Task

1	2	3	4	5

2 1 3 1 4 3 4 3 5 2 1 3 5 4 1 3 1 3 2 1 5 1 3 5 3

5 3 2 1 4 3 5 4 1 4 1 5 4 5 3 2 3 4 2 5 1 2 1 3 5

APPENDIX II

Distribution of Goal Discrepancy Scores obtained on the Level of Aspiration Task

<u>Interval</u>	<u>Frequency</u>
105 to 114.....	1
95 to 104.....	0
85 to 94.....	1
75 to 84.....	0
65 to 74.....	1
55 to 64.....	6
45 to 54.....	4
35 to 44.....	6
25 to 34.....	20
15 to 24.....	11
5 to 14.....	22
-5 to 4.....	25
-15 to -6.....	15
-25 to -16.....	9
-35 to -26.....	5
-45 to -36.....	4
-55 to -46.....	2
-65 to -56.....	1
-75 to -66.....	1
-85 to -76.....	0
-95 to -86.....	0
-105 to -96.....	0
-115 to -106.....	1

N = 141

APPENDIX III

Data Sheet for Structure Variables

Coherence

Coherent_____

Incoherent_____

Indecision

Decisive_____

Indecisive_____

Detail Treatment

Omission_____Alteration_____Distortion_____

Mood

Happy_____

Depressed_____

Neutral_____

Ending

Happy_____

Unhappy_____

Neutral_____

APPENDIX IV

Data Sheet for Content Analysis

Hero Characteristics

Dependent _____
Independent _____
Ambivalent _____
Neither _____

Adequate _____
Inadequate _____
Ambivalent _____
Neither _____

Accepted _____
Rejected _____
Ambivalent _____
Neither _____

Aggressive _____
Submissive _____
Ambivalent _____
Neither _____

Confident _____
Apprehensive _____
Ambivalent _____
Neither _____

Hero Attitudes Toward Authority Figures

Toward Father

Wholesome _____
Antagonistic _____
Neutral _____

Toward Mother

Wholesome _____
Antagonistic _____
Neutral _____

Influence of Authority Figures on Hero

Father

Benign _____
Threatening _____
Neutral _____

Mother

Benign _____
Threatening _____
Neutral _____

Influence of Environmental Forces

Benign _____
Threatening _____
Neutral _____

Other Circumstances Introduced

Punisher _____
Accidents _____
Aggression _____
Illness _____

Enemy _____
Friend _____
Deception _____
Deprivation _____
Protector _____

Death _____
Violence _____
Injustice _____
Disobedience _____

APPENDIX V

Data Sheet for Analysis of Goal-Striving Behavior

Goal Statement

Objective stated_____

Not stated_____

Evaluation of Goal

Socially approved_____

Socially disapproved_____

Neutral_____

Barriers to Goal Attainment

Physical_____

Social_____

Neither_____

Goal Attainment

Objective attained_____

Not attained_____

Means of Attainment

Self_____

Others_____

D.M._____

Results of Attainment

Pleasant_____

Unpleasant_____

Neutral_____

APPENDIX VI

Variance Analyses of Structure and Content Variables by Level of Aspiration Groups

Appendix to Table 1 Variance Analysis of Story Coherence by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	0			
Variables	1	0			
Group x variable	2	25.47	12.73	12.36	.005
Within group	57	0			
Individual x variable	57	58.93	1.03		
Total	119	84.40			

Variance Analysis of Story Mood
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	2.62			
Variables	2	0			
Group x variable	4	56.03	14.01	17.09	.005
Within group	57	4.41			
Individual x variable	114	93.74	.82		
Total	179	156.80			

Appendix to Table 3

Variance Analysis of Story Ending
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.10			
Variables	2	0			
Group x variable	4	26.24	6.56	4.72	.005
Within group	57	.35			
Individual x variable	114	157.98	1.39		
Total	179	184.67			

Variance Analysis of Story Indecision
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	0			
Variables	1	.54			
Group x variable	2	7.11	3.55	2.63	Not sig.
Within group	57	0			
Individual x variable	57	77.20	1.35		
Total	119	84.85			

Appendix to Table 5

Variance Analysis of Detail Treatment
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.68			
Variables	3	0			
Group x variable	6	16.82	2.80	3.84	.005
Within group	57	3.21			
Individual x variable	171	124.91	.73		
Total	239	145.62			

Variance Analysis of Hero Adequacy
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.83			
Variables	3	0			
Group x variable	6	35.18	5.86	6.17	.005
Within group	57	4.87			
Individual x variable	171	161.68	.96		
Total	239	202.56			

Appendix to Table 7

Variance Analysis of Hero Acceptance
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.20			
Variables	3	0			
Group x variable	6	41.76	6.96	9.41	.005
Within group	57	31.32			
Individual x variable	171	127.12	.74		
Total	239	200.40			

Variance Analysis of Hero Confidence
by Level of Aspiration Group

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.23			
Variables	3	0			
Group x variable	6	20.09	3.35	3.38	.05
Within group	57	3.00			
Individual x variable	171	170.44	.99		
Total	239	193.76			

Appendix to Table 9

Variance Analysis of Hero Aggression
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.04			
Variables	3	0			
Group x variable	6	35.78	5.96	6.16	.005
Within group	57	2.47			
Individual x variable	171	165.43	.967		
Total	239	203.72			

Appendix to Table 10

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Variance Analysis of Hero Dependence by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.13			
Variables	3	0			
Group x variable	6	24.97	4.16	4.24	.005
Within group	57	12.90			
Individual x variable	171	168.56	.98		
Total	239	206.56			

Appendix to Table 11

Variance Analysis of Hero Attitudes toward Mother by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	10.34			
Variables	2	0			
Group x variable	4	8.37	2.09	1.87	Not sig.
Within group	57	9.73			
Individual x variable	114	128.05	1.12		
Total	179	156.49			

Appendix to Table 12

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Variance Analysis of Hero Attitudes toward Father
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.35			
Variables	2	0			
Group x variable	4	4.29	1.07	1.15	Not sig.
Within group	57	23.93			
Individual x variable	114	106.02	.93		
Total	179	134.59			

Appendix to Table 13

Variance Analysis of Mother's Influence on Hero
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	.20			
Variables	2	0			
Group x variable	4	24.72	6.18	6.00	.005
Within group	57	9.08			
Individual x variable	114	117.55	1.03		
Total	117	151.55			

Variance Analysis of Father's Influence on Hero
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	1.39			
Variables	2	0			
Group x variable	4	5.48	1.37	1.44	Not sig.
Within group	57	24.88			
Individual x variable	114	108.17	.949		
Total	179	139.92			

Appendix to Table 15

Variance Analysis of Influence of Environment
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	1.79			
Variables	2	0			
Group x variable	4	49.45	12.36	14.96	.005
Within group	57	.39			
Individual x variable	114	94.18	.826		
Total	179	145.81			

Appendix to Table 16
Variance Analysis of Aggression, Death, and Illness
by Level of Aspiration Groups

Variable	Source	df	Sum of squares	Variance estimate	F	p
Aggression	Between groups	2	17.97	8.99	13.62	.005
	Within groups	57	37.42	.66		
	Total	59	55.39			
Death	Between groups	2	6.70	3.35	4.41	.05
	Within groups	57	43.11	.76		
	Total	59	49.81			
Illness	Between groups	2	7.14	3.57	6.38	.005
	Within groups	57	32.17	.56		
	Total	59	39.31			

Appendix to Table 17

Variance Analysis of Violence, Accidents, and Deprivation
by Level of Aspiration Groups

Variable	Source	df	Sum of squares	Variance estimate	F	p
Violence	Between groups	2	6.55	3.27	6.17	.005
	Within groups	57	30.26			
	Total	59	36.81			
Accidents	Between groups	2	10.48	5.24	7.82	.005
	Within groups	57	38.30	.67		
	Total	59	48.78			
Deprivation	Between groups	2	10.79	5.39	6.65	.005
	Within groups	57	45.91	.81		
	Total	59	56.70			

Appendix to Table 18

Variance Analysis of Injustice, Deception, and Disobedience
by Level of Aspiration Groups

Variable	Source	df	Sum of squares	Variance estimate	F	p
Injustice	Between groups	2	5.58	2.79	5.47	.005
	Within groups	57	29.31	.51		
	Total	59	34.89			
Deception	Between groups	2	9.68	4.84	7.56	.005
	Within Groups	57	36.57	.64		
	Total	59	46.25			
Disobedience	Between groups	2	5.17	2.58	3.07	Not sig.
	Within groups	57	47.91	.84		
	Total	59	53.08			

Appendix to Table 19
 Variance Analysis of Story Figures
 by Level of Aspiration Groups

Variable	Source	df	Sum of squares	Variance estimate	F	p
Friend	Between groups	2	2.90	1.45	1.99	Not sig.
	Within groups	57	41.82	.73		
	Total	59	44.72			
Protector	Between groups	2	2.39	1.20	1.43	Not sig.
	Within groups	57	48.07	.84		
	Total	59	50.46			
Enemy	Between groups	2	10.90	5.45	7.57	.005
	Within groups	57	41.14	.72		
	Total	59	52.04			
Punisher	Between groups	2	12.71	6.35	8.70	.005
	Within groups	57	41.37	.73		
	Total	59	54.08			

Appendix to Table 20
 Variance Analysis of Goal Statement
 by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Between groups	2	23.54	11.77	21.40	.005
Within groups	57	31.36	.55		
Total	59	54.90			

Appendix to Table 21
 Variance Analysis of Goal Evaluation
 by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	7.76			
Variables	2	0			
Group x variable	4	22.42	5.61	7.29	.005
Within group	57	13.75			
Individual x variable	114	87.91	.77		
Total	179	131.84			

Variance Analysis of Goal Barriers
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	7.01			
Variables	2	0			
Group x variable	4	22.52	5.63	6.70	.005
Within group	57	13.51			
Individual x variable	114	95.76	.84		
Total	179	138.80			

Appendix to Table 23

Variance Analysis of Goal Attainment
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	9.69			
Variables	1	0			
Group x variable	2	18.32	9.16	7.83	.005
Within group	57	15.38			
Individual x variable	57	66.71	1.17		
Total	119	110.0			

Variance Analysis of Means to Goal Attainment
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	9.37			
Variables	2	0			
Group x variable	4	11.26	2.82	3.71	.01
Within group	57	36.02			
Individual x variable	114	87.02	.76		
Total	179	143.67			

Appendix to Table 25

Variance Analysis of Consequences of Goal Attainment
by Level of Aspiration Groups

Source	df	Sum of squares	Variance estimate	F	p
Groups	2	7.85			
Variables	2	0			
Group x variable	4	3.69	.92	1.06	Not sig.
Within group	57	30.42			
Individual x variable	114	98.94	.87		
Total	179	140.80			

Appendix VI

SCORING SAMPLES

Variable: Hero Adequacy

- VII. The lion is after the monkey. The monkey is trying to get away by swinging in the trees and if he doesn't get away the tiger is going to catch him. He'll eat the monkey if he catches him. He's not going to catch him though. The monkey isn't scared, he's smart. He's swinging up in the trees here and then the lion can't catch him. Then the tiger will have to look for something else to eat.

Hero: Monkey
Score: Adequate

- II. It is about some bears playing tug of war. That is the baby bear helping the mother and this is the father bear. The father bear might pull them across this line or maybe the mother might pull him across the line. I think the father will pull the mother and baby across. The mother and baby don't feel so good and kind of sad. They wanted to win.

Hero: Baby
Score: Inadequate

- II. Well, these three bears are having a tug of war. The mother bear and baby bear are on one side, and the father is on the other side. Well, they want to pull something - like a fish or something they caught - up the cliff, and each one of them wants the rope so they can have the fish. So the father pulls the hardest and he gets the fish and eats it and then the mother and baby are sad, and the little baby is crying. So he's going to go down to the river and try to get some fish for himself, and he catches an even bigger fish than his father has, and then he's happy and then he

shows his mother and she gets out two dishes and they cook the fish and they eat it and won't give the father any. So he goes to bed crying and they go to bed laughing.

Hero: Baby
Score: Ambivalent

- I. The mother hen has her little chicks and they're ready to eat. One hasn't got a napkin around his neck and the others have. They have a very big dinner. They finish supper and go out and play with the other chicks and then they come back in and go to bed.

Hero: Chicks
Score: Neither adequate nor inadequate.

Variable: Hero Attitudes toward Authority Figures

- VIII. There's a party! The mother monkey invited two people to come over - a man and a lady monkey to come and have some coffee. So the father monkey is working and that's the little boy monkey home with the mother. So the little boy monkey is helping his mother serve the coffee, so that makes the mother happy because he's being good. And then the mother is going to put the little boy to sleep soon. Then the company stays a little bit more and then they go home. And the mother sits on the sofa and waits for the father. Then he comes and they go to bed too.

Hero: Boy monkey
Score: Wholesome attitude toward Mother.

- III. Once upon a time there was a tiger. He was the kind of the four baby tigers and then the tigers went over to the king because he wanted to talk to them. And he told them, "Don't you dare go away or you'll get caught." But then they start running away, and then a thousand mice came in that hole in the wall and he told them, "Let's be pals" - so they were. So the four babies were running and running and they got so tired they fell down, and then pretty soon, they found a nice little house. And they could live there instead of that old junky house with their father, so then they went and bought a chair like the king's and so they got a rug just like this. And the king didn't like his babies anyway and he was happy they were going far

away and they didn't like their father, and so they were happier then too.

Hero: Baby Tigers

Score: Antagonistic attitude toward father.

- VI. It's a bear sleeping in his room. He goes to sleep because it's winter. And the father bear is sleeping too, and the mother bear too. And they're all going to sleep because it's winter. But one day the father has to go out and get some food. And then he comes back and they eat, and then they all go back to bed again. That's all.

Hero: Baby

Score: Neutral attitude toward mother

Variables: Figures and Circumstances Introduced

- VII. Well, this lion is after this monkey, and the little monkey climbs up a tree and the lion stands down there growling. But the monkey swings from tree to tree until he gets far away. But the monkey slips then and he fell when he was swinging and then the lion got him and ate him up. So he was tired from all that food. And then he went to sleep, but then he got awake by a big noise, and it was the elephants, and a big elephant steps right on the lion and kills him. And then it's time for the elephant to go to sleep and along comes a big rhino and he charges at the elephant, but a big elephant tramps right on him. And then he picks it up with his tail and brings it to the funeral to eat. And they eat him all up. Well, then the big elephants start to go to another jungle. And they feed the ladies and children coconuts on the way, and pretty soon the baby elephant grows up and got to be a big elephant. And he learned all the things that elephants have to know. And all the other elephants were proud of him because he had big horns, and he was real brave and everytime somebody bullied an elephant, he bullied them right back.

Scores: Punisher
Friend
Accident

Violence
Enemy
Death

Aggression

Procedure: Stories are scored once only for each variable so as not to violate assumptions involved in the variance analysis design selected for use in this study. Frequencies for each individual in each group on each variable category are then tallied, and analysis of variance employed to determine whether differences between the groups are significant.

APPROVAL SHEET

The dissertation submitted by Therese Lorraine De Sousa has been read and approved by five members of the Department of Psychology.

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the dissertation is now given final approval with reference to content, form, and mechanical accuracy.

The dissertation is therefore accepted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy.

October 8, 1956
Date

Frank Kobler
Signature of Adviser