TUTORING AS A WAY OF AIDING

THE UNDERACHIEVER

THESIS

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By

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CHAPTER I

INTRODUCTION

Academic underachievement in students with normal or better intelligence has become of increasing concern to educators, psychologists, guidance counselors, and parents. The increased sensitivity to psychological factors has resulted in underachievement becoming the most common reason for referral to the school psychologist.

Identification of the underachiever has been the object of much research with numerous definitions offered. Goldburgh and Penney (15) define the academic underachiever as the student who has the measured ability to achieve a level of academic success significantly above that which he actually obtains. This definition seems somewhat elementary. Is underachievement merely a discrepancy between actual and predicted performance? A humorous definition is offered by Russell (28): In a very general sense, the underachiever is the person who performs markedly below his capacities to learn, to make application of learning, and to complete tasks. Speaking figuratively, he is the person who sits on his potential, resisting various motivational procedures to get him off his potential, and possibly needing an adroitly directed kick in that same potential. Kornrich (20) observes
that this implies the impatience and anger the underachiever can arouse in the people around him. If underachievement is a highly active maneuver that indeed achieves something, the need for investigation of his impact on peers, parents, and teachers is apparent.

The bulk of the research in the area of underachievement has been directed toward the intellectually gifted student, with less attention given to the "slow" or "average learner". The disadvantaged youngster whose test scores, including IQ and achievement scores, place him in the lower percentiles, could be labeled an underachiever. Since much attention has been focused on the importance of helping each student realize his full potential, this study will concentrate on the student with above average intelligence.

Many suggestions have been advanced as to the causes of academic underachievement. In a review of the literature, underachievement is seen as a result of a lack of perseverance, essentially an asocial act, a person caught in a basic conflict between submission and aggression, and unresolved hostility. Additionally, academic underachievement has been related to emotional disturbances, organic brain damage, poor home background, low socio-economic level, poor teaching, and inadequate school facilities (12).

Social and behavioral scientists have been able to study and document to some extent the significance and relationship of non-intellective factors to school learning.
In one study, Weschler (36) attempted to identify the total amount of intellective factors in tests of intelligence and found that general intelligence cannot be equated with intellectual ability but must be regarded as a manifestation of the personality as a whole. Therefore, studies have effectively demonstrated the significant role unhealthy emotions can play in learning or failing to learn these skills, according to Blain (3).

Daniel (10) observes that researchers do not agree on the personality characteristics investigated. Some claim that the underachiever is hostile and suspicious, whereas others disagree. He has been described as an introvert and an extrovert. Some say he is seriously maladjusted, but others do not feel he is. He does seem to be unrealistic in his self appraisal and to lack self confidence and self acceptance. He has a narrow range of strong interests, and his occupational goals are lower and less well defined than those of the achievers.

It has been hypothesized by a number of investigators that underachievement must be related to factors indicative of personal and social difficulty. The variable of self concept appears frequently as an important factor in the identification, cause, and treatment of the underachiever.

The bulk of the research includes the definition, recognition, and reasons for underachievement. Less attention has been given to the treatment of the underachiever.
Therefore, the purpose of this study is to investigate a new method of treatment.

To the extent that underachievement is related to personality factors, the level of academic performance should rise if a specific program, designed to modify a certain personality variable, is successful. This particular method will hopefully change the self concept of the underachiever, in addition to elevating his grade average.

Review of Related Literature

As recently as a generation ago, the term "underachiever" was rarely used. A student merely left school if he was not achieving. The current attention given to this area of education is evidently needed. Have there always been underachievers? When does the phenomenon first become apparent? There are many bright children who perform on the expected level academically in the primary grades where minimal effort produced over or above average grades, but find in junior high or high school that the most difficult work requiring sustained effort is beyond them, and they begin to do poorly for the first time. (24).

The following observations were made by Goldberg (14) after a detailed study of underachievers. Most of the high ability underachieving boys begin to fall down in their school work in junior high school, when first confronted by algebra and foreign language and the need for study patterns not needed at the elementary level. By the time they enter
the tenth grade, most of the boys know that they are "smart" or at least "better than average" and have met with a great deal of home and school pressure to do better. These boys are not the group Elizabeth Drews describes as the "creative intellectuals". With few exceptions they lack any strong intellectual interests.

Does the underachieving boy suddenly quit trying, become lazy, become uninterested, change interests, and lose his self confidence? Shaw and Grubb (30) hypothesize that underachieving among bright students is not a problem which has its genesis within the educational framework, but rather one which the underachiever brings with him, at least in embryo form, when he enters high school. Bruck and Bodwin (6) state that educators have begun to share with clinicians the assumption that relationships exist between certain facets or components of personality and specific abilities and have operated on this assumption. In some instances, this assumption has resulted in the equating of the underachiever with being "emotionally disturbed". This has tended to obscure the growing evidence that underachievement is really the outcome of several interacting causal factors that exist both within and outside of the student.

A review of the literature indicates that a non-achieving syndrome may be observed in the underachiever. Personality characteristics have been isolated which may differentiate underachievers from achievers. There is little doubt that
in many instances underachievement is symptomatic of emotional and personal difficulties. These variables are influential because they interfere with the students' lives. The resulting conflict and frustration tends to perpetuate itself and result in a person whose psychological capacity for academic learning becomes limited.

Bricklin and Bricklin (4) report that investigators have estimated that from forty to ninety percent of the cases of underachievement are caused by emotional conflict. His data indicate that the ninety percent figure is probably correct. Lum (25) administered the Brown-Holtzman Survey of Study Habits and Attitudes and some sentence completion tests to some underachieving girls. They showed lower self confidence, a tendency to procrastinate, and to rely on external pressures to complete assignments.

Wellington and Wellington (37) note certain agreement from study to study about characteristics of the underachiever; low motivation, low self confidence, low capacity to function under pressure, low seriousness of purpose, low concern for others, low sense of responsibility, and low dominance. Morgan (26) concluded in his study that several non-intellective factors or personality variables related positively to the achievement of high ability college students. These included maturity and seriousness of interests, awareness and concern for other persons, a sense of responsibility, dominance, persuasiveness, self confidence, and
motivation to achieve. Underachievers, as reported by Gowan (16) have been found to lack good use of time and money, to show psychotic or neurotic tendencies, to set either no goals or impossible ones, to exhibit no seriousness of interest, to feel disinterested in others, and to lack dominance, or self confidence. They also lack an enthusiastic, socialized activity-oriented view of life.

In an investigation of 4,875 high ability students by Impellizzeri, Barr, and Cooney (18) it was found in the Rorschach substudy that both groups showed a wide variation of individual emotional disturbance. Underachievers showed more intense and more extreme difficulties in the area of "basic affectional needs" than did the achievers. Underachievers apparently have an unsatisfied hunger for warm and comfortable relationships with other people. In some instances their concern takes the form of anxiety and fearfulness, of hypersensitivity, of dependency; in other instances, it takes the form of rejection and denial of the need for affection; in all instances, it is energy consuming.

Throughout the literature, one cluster of variables appears consistently: lack of ego strength, poor self concept, and lack of self confidence. These deficiencies present difficulties in any area of a person's life, whether it be in the social, educational, or environmental area. Sutherland (34), in reporting case studies of educational failure during adolescence, found personality characteristics
of inferiority, passivity, and prominent dependency needs. When feelings of inferiority are strong, a pattern of almost deliberate failure is seen. These boys are defensive about their abilities and anxious to maintain a belief in their own superiority. Failure after honest effort is more anxiety producing than failure due to lack of effort. By not trying, it is possible to keep the situation in control. If the boy tries and does not succeed, then his sense of inferiority is intensified.

Snygg and Combs (33) have hypothesized concerning the crucial importance of the students' attitudes toward himself. They indicate that, at the root of many a students' failure is not the inability to master study methods, but a concept of self which is inadequate. They stress the importance of the self concept in all phases of adjustment and specifically with regard to its position in determining the success or failure of a student.

The research of Wylie (40) shows considerable evidence that self-overestimation is more common than self-underestimation. Therefore, the relationship between level of aspiration and self concept does not necessarily show that the underachiever has a low self concept.

In a pilot study conducted by Bruck and Bodwin (6), to explore the degree to which one personality component (self concept) is associated with the presence or absence of underachievement, it was found that there was a positive
and significant relationship between educational disability and immature self concept. Self concept was operationally defined as consisting of self confidence, freedom to express appropriate feelings, liking for one's self, satisfaction with one's attainments, and feeling of personal appreciation by others.

Kurtz and Swenson (22) concluded that bright achievers tend to possess a feeling of adequacy, while the underachievers are more often described as having an inferiority complex. In exploring some of the underlying factors of underachievement, the following were concluded: home conditions for underachievers were not favorable, with underachievers not appearing anxious to please their parents, peer relations were not as supportive, they did not have positive attitudes toward the school situation, and in many cases, few friends.

Williams and Cole (38) have suggested that differences in academic motivation may partially be attributed to differences in self concept. A child's conception of school might fundamentally be an extension of his self concept.

This study reports that a child's academic success is not determined by any one variable. However, self esteem may prove to be another major determinant. They suggest that few factors are more fundamental to a child's success and happiness than his evaluation and acceptance of himself.

Considering the above, it is suggested that the personality variable labeled "self concept" may be one of the most
important factors relating to achievement. Fink (12) has concluded that the problem of underachievement is based on a central rather than a peripheral motivating force. The conceptualization that appears to satisfy best these requirements is that of the concept of self. He defines operationally self concept as attitudes and feelings that a person has regarding himself. Furthermore, these attitudes and feelings lead to attempts on the part of the individual through various actions to enhance or defend himself.

In his study Fink used the California Psychological Inventory to test 88 freshmen in high school. He obtained certain significant items that distinguished high achieving boys from low achieving boys, with underachieving boys appearing to be the most inadequate of the four groups. The four groups included high achieving boys, low achieving boys, high achieving girls, and low achieving girls. They appear to be alienated from society and perhaps from family. They do not hold to the ideals, values, and goals of the dominant cultural groups. They tend to be pleasure oriented, but so inadequate and passive that they never achieve their goals. Instead, they complain of their powerlessness in a world dominated by power but are willing to concede that might makes right. Since Fink found a marked difference in items which characterize high and low achieving boys, these items shall be the basis for measuring self concept of underachieving boys in this study.
Coleman and Hewett (9) found strong feelings of failure and inadequacy in the underachieving boys who come to the Clinic School at the University of California at Los Angeles. He reports that it is often difficult for adults to fully appreciate the devastating effects of school failure and parental disapproval upon a boy's feelings of adequacy and worth.

Various forms of treatment have been used in the past as the reports of underachievement become increasingly more prevalent. Treatment of the problem as well as identification seems urgent at this time. Underachievement is both a problem to the individual, who may suffer from a sense of failure, and to society, which loses the full potential contributions of so many intellectually gifted students. How amenable to treatment is underachievement? Existing methods include group counseling for the underachievers, group counseling for the parents, special classes and schools, individual counseling, tutoring, perceptual training, providing special study skills, home visitation, academic advisement, and vocational guidance.

Roth, Mauksch, and Feiser (27) report that a major productive direction in which underachievement has been studied involves personality rather than other areas. Further, that if personality variables could be identified, treatment could be utilized to reverse maladaptive behavior. They used the counseling approach based on the description of
non-achievement as described by Roth and others. Particular focus was placed on dynamics including disparagement, hopelessness, and frustration. Underlying this dynamic is the choice of the student to do poorly as an attempt at maintaining his immature relations with his family so that he can successfully continue his dependance and avoid taking the risks of independent action and the consequent responsibility. It is as if he were preventing himself from being confronted by the developmental issues of adolescence. The content of the group sessions moved from the recognition of their own defensiveness to the demands of their parents, their relationships with their parents, their decisions to make choices independent of external demands, and finally, to a reexamination of their vocational goals. The rise in grade point average was statistically significant at the .01 level of significance.

Kambly (19) reports a study where the underachieving group was seeded with respective achievers. Upperclassmen were used as student teachers to serve as ego ideals and objects for identification. There was a significant increase in grade point average of the underachievers.

Research efforts investigating group counseling with underachievers have taken two directions: studies evaluating outcomes of group counseling on student achievement and differential studies. Contrasting the outcomes of group counseling with different methods of coping with academic
underachievement, Chestnut (8) reports that of fifteen investigations of the hypothesis that group counseling has a measurable effect on scholastic achievement, only two experiments have clearly indicated that group counseling can facilitate academic achievement.

Baymur and Patterson (2) found that underachieving high school students who received a series of individual or group counseling sessions or a single motivational counseling session showed an increase in Q sort adjustive scores and grade point average that was significantly greater than the controls. Gilbreath (13) investigated the effects of two different methods of group counseling on certain personality characteristics and grade point average of the male college underachiever. Data indicate that group counseling which focused on underlying personal patterns of the underachiever produced greater ego strength and a higher rate of change in academic achievement.

Drasgow (11) points out the counselor’s role to be that of helping the underachiever divorce himself from an alien curriculum. Further, the actual feeling of the failure may be prerequisite to this type of person becoming ready for counseling. Halpern (17) suggests that psychotherapy can help the underachiever. If the therapy goes well, the client will learn that he is not inadequate, helpless, or basically lazy. This will do much to restore a self confidence which has, most probably, been shattered by repeated failures.
He will learn that underachievement is cruelly self defeating. He will learn to recognize and resolve some of the anger that has led to his costly rebellion. He will overcome some of his fears of being a competent, achieving, responsible person, and above all, he will learn to find ways of being truly himself.

There are indications that the utilization of group procedures in schools has not produced expected results. Shaw and Wursten (31) point out that current research leaves many questions unanswered and that it is difficult to accept at face value the reported outcomes of many studies due to inadequate controls, inadequate statistical procedures, and inadequate outcome criteria. Group procedures do however appear to offer the school psychologist at least a partial solution to increasing both his effectiveness and the size of the population he reaches.

The relatively new treatment for underachievers proposed in this study is based on the assumption that an improved self concept in the underachiever will bring about a new direction in academic pursuits. Studies done with alcoholics, mental patients, drug addicts, and criminals have increasingly been in the direction of the subject becoming involved in a helping relationship with another person. This, if successful, appears to raise feelings of worth and improve self acceptance.

Shapiro and Voog (29) report on a study to test the possibilities that certain individuals have therapeutic
qualities which enable them, without training, to facilitate the functioning of other persons. The most general description of the helping process implies that both the helpers and the person who is being helped may not be aware that they are taking part in the helping process. It was concluded that those qualities which differentiate helpful counselors have similar effects in others. Self actualization of twenty-eight underachieving college students was measured by Lieb and Snyder (23). Significant increments in self actualization and grade point average occurred. It was felt that the special attention awarded the underachiever fulfilled lower level needs and released them for self actualization, as well as producing significant gains in grades.

Due to the exploratory nature of this method of treatment for the underachiever, a review of the literature could include success of similar treatment in working with alcoholics. The productive work done by Alcoholics Anonymous is evidence of this successful approach to treatment. Slaughter and Torno (32) described the use of responsible "senior" alcoholic patients as counselors in treatment programs to help solve the problem of inadequate numbers of professional staff members.

Zinberg and Glotfelty (41) state that the process of influencing natural group formations offers an important way of reaching patients. The power that a peer group can have to determine the behavior of a member should be
recognized by professionals. Androes and Whitehead (1) report on a system introduced to the group treatment program at a veterans' administration hospital. A "buddy", or pairing system was set up with 90 patients. The successful pairs were friendly, close, mutually supportive, and shared personal problems. It was concluded that the buddy system is a useful management device, with improved communication and organization.

The group therapeutic approach to treatment of obesity has been attempted in the Weight Watchers program. In the view of Kurlander (21) it is not just that "misery loves company" but perhaps "company gives courage". Its program is based on inspirational-confessional meetings similar to sessions of AA.

Wilson (39) in a study of motivating gifted children, points out that socialization of able students is necessary. One way to achieve the socializing objective is to have social experiences of gifted children produce high, genuine satisfaction for them. The satisfactions need to be related to both the use of their special abilities and their contribution to the happiness of others. Satisfactions in working with others in ways that give valuable results to all concerned might be considered most important.

Vriend (35) reports a program where peer leaders were developed and the academic performance of the students was examined. Commitment to change is enhanced by helping
students discover affiliation with other students who wish
to make similar changes. The opportunity to work with
peers in study groups helped the leaders to establish closer
and more meaningful relationships with the students they
helped. Vriend states that the use of peer leadership holds
promise for high school students.

Broedel and others (5) feel that most underachievers
believe that few adults will listen to them or try to under-
stand them. Because they often use peers as models and they
want to win peer acceptance, adolescents appreciate the
opportunity to exchange ideas with peers in a permissive
and accepting group. Inasmuch as they are struggling for
independence from adults, they also prefer peers' assistance
in solving their problems. Moreover, they are genuinely
reassured when they discover that their peers have problems
similar to their own.

Carkhuff (7) reports evidence that with or without
training and/or supervision the patients of lay counselors
do as well or better than the patients of professional
counselors. He discusses the "helper therapy principle",
by which persons in need of help may be selected and
trained to offer help. At a minimum, Carkhuff states,
there is evidence to suggest that indigenous persons
giving help demonstrate constructive change themselves, as
a consequence of being cast in the helping role.

It is felt that an underachieving student, placed in a
helping relationship with another underachieving student, will feel less threatened than in the individual or group counseling session. Could feelings of worth, self acceptance, and self confidence emerge in a tutoring or helping situation, one peer to another, in a paired relationship? Would a success in the academic area be an important step in the right direction after a long series of academic and personal failures?

Statement of the Problem

In keeping with the theoretical background presented above, the problem of this research may be stated as a design for treatment of the underachiever, concerned specifically with the variable of self concept, and with grade average as a measure of improved academic achievement. This problem will be investigated by having underachieving junior boys assume a helping relationship with underachieving sophomore boys in a one to one tutoring program over a twelve week period.

Hypotheses

The following are hypothesized for the present research:

1. That the mean score on the self concept inventory for the experimental group of underachieving junior boys will be significantly higher than the mean score for the control group of underachieving junior boys.

2. That the mean grade average for the experimental group of underachieving junior boys will be significantly
higher than the mean score for the control group of under-achieving junior boys.

3. That the grade average gain for the experimental group of junior boys will be significantly higher than the grade average gain for the control group of junior boys.


CHAPTER II

METHODOLOGY

Subjects

The design of the study called for the identification of a group of underachievers at the eleventh and tenth grade levels. The scholastic average which was used to define the underachiever was obtained by calculating the mathematical average of the final semester grades received in all major subjects at the end of the sophomore year. The underachiever chosen had received a grade average of 79 or less (C or less). In addition, a score of 112 or higher on the Lorge-Thorndike Intelligence Test had been recorded for each boy.

The subjects were twenty eight junior boys and fourteen sophomore boys. Fourteen junior boys, who were to tutor fourteen sophomore boys, were assigned to the experimental group. The remaining fourteen junior boys served as the control group of underachievers. The fourteen sophomore boys were included in the study to serve as the peer group to be helped or tutored. The sophomore boys also qualified as underachievers as determined by scores of 112 or higher on the Lorge-Thorndike Intelligence Test and grade average of 79 or less at the end of the freshman year.
Measuring Instruments Used

The measure used to select underachievers in the assessment of intelligence was the Lorge-Thorndike Intelligence Test. This test is considered one of the best group tests available as to statistical standardization. A review of the test by Freeman (3) indicates it is one of the sounder group instruments from the point of view of psychological insights (with regard to both content and concepts of intelligence) shown in selecting and developing the materials, and from the point of view of statistical analysis of the standardization data.

The measure of self concept used in the present study was called The Individual Attitude Inventory. This is reproduced in Appendix I. The inventory consisted of forty items taken from the California Psychological Inventory, chosen for this study because these items had been found to discriminate between underachieving and achieving boys.

Fink (2) as a result of a clinical impression that self concept is related to underachievement, conceived a study postulating a relationship between concept of self and academic underachievement. Data used for each subject included the following:

- California Psychological Inventory
- Bender Visual Motor Gestalt Test
- Draw-a-Person Test
- Gough Adjective Check List (completed by pupil)
Gough Adjective Check List (completed by teacher)

Personal Data Sheet

Brief essay describing "What I will be in 20 years"

The data were presented to three judges, who were asked to make a determination as to adequacy of self concept of each student. The results of this study confirmed the hypothesis that a relationship does exist between adequacy of self concept and level of academic achievement.

In order to validate the judges decisions, objectification of the California Psychological Inventory was attempted by Fink (1). An item analysis was done and the data were treated by Fisher's exact test for 2 x 2 tables. At the .05 level of confidence or better, 48 items on the California Psychological Inventory were found to discriminate between high and low achieving boys. Forty of the forty-eight items were chosen to be used in this study.

This inventory, the CPI, has been called the "sane man's MMPI". However, the purpose of the CPI is quite different. It is intended primarily for normal subjects, not patients, and strives to assess personality characteristics important for social living (7).

Pierce and Bowman (6) conducted an intensive study for the purpose of differentiating between able high - and able low - achieving high school students on a number of non-intellectual variables. The CPI was used as a measure of adjustment and it was found that high achievers were significantly better adjusted than low achievers. Gill and
Spilka (4) used the CPI to assess the variables of achievement by conformance (Ac scale), achievement through independent behavior (Ai scale), intellectual efficiency and resourcefulness (Ie scale), and social maturity (So scale). It was found that the groups differed significantly on all but the Ai scale.

**Design and Procedure**

The design for this study consisted of establishing fourteen pairs of underachieving boys. Each underachieving junior boy of the experimental group was paired with an underachieving sophomore boy for the purpose of tutoring or "helping" the sophomore in his academic work. The experimental group was chosen by matching the time of each junior boys' study hall period with each sophomore boys' study hall period.

Since the experimental group of juniors was paired with the sophomores by study hall periods, it cannot be said that the twenty-eight junior boys were randomly assigned to the experimental and control groups. In order to determine that the means of the two groups did not differ significantly at the beginning of the design, two tests of significance were conducted. Grade average at the beginning of the design and intelligence scores were used for the two t tests. The results, as shown in Table I indicate that there was no significant difference in the means of the experimental and control groups.
**TABLE I**

MEANS AND STANDARD DEVIATIONS FOR GROUPS ON THE CONTROL VARIABLES

<table>
<thead>
<tr>
<th>Variable and Group</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
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<tbody>
<tr>
<td>Grade Average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental group</td>
<td>73.92</td>
<td>4.23</td>
<td>-1.29</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>75.85</td>
<td>3.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intelligence Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental group</td>
<td>115.64</td>
<td>2.49</td>
<td>- .8292</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>117.07</td>
<td>5.68</td>
<td></td>
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</tr>
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</table>

Two one-hour study sessions a week were arranged during the boys' study hall periods. This study was continued for twelve weeks. In addition to the two tutoring periods a week, a conference with the investigator was held with each member of the experimental group.

When the subjects were selected and study periods arranged, the junior boys were called in individually. They were informed that they had been chosen to be part of a study to investigate whether tutoring or "helping" would result in grade averages being raised. They were not told that they were underachievers, only that previous tests had indicated that they were above average in intelligence and were capable of helping another student. They were then introduced to the individual sophomore boys who were assigned to them for the twelve week study.
The meetings took place in large rooms where privacy and freedom to talk were at a maximum. There were to be no rigid rules. The junior boy was allowed to structure the tutoring period in his own manner. The experimenter was available during each study period for support to the junior students. Sophomore boys were encouraged to go to the sophomore counselor if any problems arose concerning the tutoring period.

The Individual Attitude Inventory was administered to the experimental and control groups at the end of the study. This inventory, reproduced in Appendix I, consists of forty questions. The score was obtained by the number of "correct" answers. The scores ranged from 21 to 36 correct answers. Handscoring technique was used to score the instrument and to record the results on a data sheet. Mean scores and standard deviations were computed for each of the three variables; self concept scores, grade averages at the end of the design, and grade averages at the beginning of the design.

A t test was employed for the variables of grade average and self concept and the resultant scores checked for statistical significance by reference to the t tables in McGuigan (5). The .05 level of significance was established as the point of acceptance or rejection of the t scores.
CHAPTER BIBLIOGRAPHY


CHAPTER III

RESULTS AND DISCUSSION

Results

It will be recalled that the present research investigated three hypotheses. The first hypothesis predicted that the mean score on the self concept inventory for the experimental group of underachieving junior boys would be significantly higher than the mean score for the control group of underachieving junior boys. Table II presents the means and standard deviations of the scores on the self concept inventory. The minus t indicates that the control group was higher on the scores than the experimental group. This was not significant at the .05 level of confidence. Therefore, the first hypothesis was rejected.

TABLE II

MEANS AND STANDARD DEVIATIONS ON SELF CONCEPT INVENTORY

<table>
<thead>
<tr>
<th>Scores on Inventory</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
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<tbody>
<tr>
<td>Experimental group</td>
<td>29.000</td>
<td>3.96</td>
<td>-.7051</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>30.000</td>
<td>3.22</td>
<td></td>
<td></td>
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</table>
The second hypothesis predicted that the mean grade average for the experimental group of junior boys would be significantly higher than the mean grade average for the control group of junior boys at the end of the 12 week tutoring period. Table III presents the means and standard deviations of the grade averages of the experimental and control groups. The minus $t$ indicates that the control group obtained a slightly higher grade average than the experimental group. However, it was not significant at the .05 level. Therefore, the second hypothesis was rejected.

**TABLE III**

MEANS AND STANDARD DEVIATIONS OF THE GRADE AVERAGES AT THE END OF DESIGN

<table>
<thead>
<tr>
<th>Grade Average</th>
<th>Mean</th>
<th>SD</th>
<th>$t$</th>
<th>P</th>
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<tbody>
<tr>
<td>Experimental group</td>
<td>73.57</td>
<td>3.97</td>
<td>-1.41</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>75.78</td>
<td>4.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The third hypothesis predicted that the grade average gain for the experimental group of junior boys would be significantly higher than the grade average gain for the control group of junior boys. Table IV presents the means and standard deviations of the grade gains of the experimental and control groups. Although the direction of the grade average gain is in a positive direction for the experimental
group, it was not significant at the .05 level of confidence. Therefore, the third hypothesis was rejected.

**TABLE IV**

**MEANS AND STANDARD DEVIATIONS OF THE GRADE AVERAGE GAIN**

<table>
<thead>
<tr>
<th>Grade Average Gain</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>.3571</td>
<td>2.34</td>
<td>.2518</td>
<td>NS</td>
</tr>
<tr>
<td>Control group</td>
<td>.0714</td>
<td>3.34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

The statistical results of the present study indicate that this method of treatment for the underachiever was of little value. The control group of underachievers made a higher grade average than the experimental group, although not significantly higher. The control group also had a slightly higher mean score on the self concept inventory than the experimental group.

An explanation for this negative result could be the normal "regression" that occurs when therapy is in process. Although therapy as such was not involved in this study, it is possible that the helping relationship could show similar results. When change or growth is occurring, it sometimes appears that the client is going backward, rather than forward. Baymur and Patterson (1) point out that academic achievement may decline when counseling involves
deep problems of personal-emotional adjustment. Also, that it is too much to expect immediate and extensive results under such conditions.

This study was based on the assumption that the "helping relationship" between persons will be beneficial to the person assuming the "helping" role. Perlmutter and Durham (6) report on a program which was developed similar to the Big Brother programs, called PAL. This program used teenagers to supplement case worker service. A basic assumption of the PAL program was that the teenager would benefit from the program as much as the child client. The opportunity to fulfill an important social role by meeting the needs of a child dependent on him would serve to support the teenagers' quest for a sense of uniqueness and personal identity. The authors found that the use of teenagers in the therapeutic process not only serves an important purpose from the clients' point of view, but is also significant for the participating teenager. They suggest that perhaps even the potential high school dropout might be chosen to work with a younger child with similar problems.

If it is conceivable that the "helping" theory of treatment is indeed a valid form of therapy, then must this treatment for the underachiever be rejected? There are several probable conclusions to be considered as to the failure of this particular treatment of underachievers in the present study.
The first probable conclusion is that the underachiever has been reached too late for any form of treatment to be helpful, whether it be group or individual counseling, study clinics, or tutoring. Shaw and McCuen (7) conducted a study to determine at what specific level academic under-achievement is said to begin. They found that predisposition to underachieve academically is present when the male under-achiever enters school and becomes steadily more serious until grade ten. Shaw concludes that underachievement is not a temporary phenomenon, but rather is chronic in nature. Specifically, underachievement is not an easily modifiable surface phenomenon and the need for early identification of the underachiever is stressed. If it is true that academic underachievement is related to basic personality structure, then such behavior is likely to occur during the elementary school years.

Goldberg (3) hypothesized that if underachieving students could share their common problems and identify with and receive support from a teacher, attitudes toward school and scholastic performance would improve. Evaluating the first two years of experimentation, Goldberg states that the depth and seriousness or duration of the non-intellective problems determine the extent to which special programs will be successful for individual students. It is affirmed that many students by high school age are beyond profiting from any help given directly by the school. Karnes and others
(4) imply that early identification of the underachiever is of crucial importance.

Krugman and Impellizzeri (5) say that the question is not always one of negative emotional stability or personal adjustment, but learning, in each case, what achievement means to the individual. Even when underachievers are discovered in the secondary school, it is generally too late to do a great deal about their educational achievement, except by enormous expenditure of funds, energy, and resources. They further stress that identification must be done early to be effective.

A second probable conclusion reached is that the self concept inventory used in this study was not adequate for the purpose of obtaining a realistic self appraisal. The high scores received by both the experimental and control groups would seem to indicate that this particular inventory did not produce an objective, honest survey of self concept. It seems likely that both groups of boys rated themselves higher than was actually true.

Over the twelve week period, conferences were held with each member of the experimental group. The purpose was to inform each boy of his intellectual potential, in addition to giving him support as he attempted to tutor or "help" another student. Consistent statements which appeared in the interviews included the following; "You've made a mistake in my I.Q. scores", "People have always
told me I was smart, but I know better", "I guess I'm just lazy", "My parents are always griping about my grades--they care more about my grades than about me", "I'm just not interested in school--I have no particular interests or goals", "I have trouble concentrating", "I do just enough to get by". These feelings of inferiority and poor attitudes toward self and others were evidenced in all but one of the fourteen boys interviewed.

As acceptance and trust of the investigator increased, some positive feelings of self worth and acceptance were seen to emerge. Specifically, one student said, "I believe that now I will take the risk to try, and if I fail, it will not be because I'm stupid." Several boys reported increased communication with their parents. They seemed to understand for the first time that parental pressure for grades was not a rejection of them as persons. Others spoke of their good feelings about themselves after observing an increase in their sophomore's grades.

A final probable conclusion is that a period of twelve weeks is not long enough to effect a significant change, whether it be in self concept or in grade gain. Broedel and others (2) undertook a long range project to investigate the application of group counseling to improve the mental health and academic performance of gifted underachieving adolescents. They found that only after the boy had begun to accept himself, could he make plans to use his potentialities.
Brodel stresses that these changes come very gradually and that it is difficult for the average teacher to believe these students have changed and for parents to believe that they are willing to take responsibility for their own work.

There are certain limitations to the present research. Pairing the underachievers as to study halls made true random selection impossible. However, it was evident in this study that the experimental and control groups were similar as to intelligence, grade average, socio-economic background, and age. Also, tutoring periods were at times interrupted by absence of one student, unwillingness to cooperate by the sophomore, and inability to give attention to another person.

Although this study failed to produce statistical evidence that an underachiever helping another underachiever will improve self concept and academic performance, it should not be concluded that this type of treatment is without merit. Further investigation is needed to determine whether acceptance of self would permit the underachiever to benefit from such a program.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

SUMMARY

The purpose of the present study was to conduct an exploratory method of treatment for the underachieving high school boy. It was felt that placing an underachiever in a "helping" or tutoring relationship with another underachiever would affect a significant change in grade average and self concept.

The subjects were twenty-eight junior boys and fourteen sophomore boys chosen from a suburban high school. Fourteen of the junior boys comprised the experimental group which tutored the sophomore boys. The remaining fourteen junior boys were assigned to the control group. The sophomores served as the subjects to be tutored. The boys who qualified for inclusion in the study had received a grade average of 79 or less the previous semester and a group intelligence score of 112 or higher on the Lorge-Thorndike Intelligence Test. Both the experimental and control groups of junior boys were administered The Individual Attitude Inventory as a measure of self concept. The grade averages at the beginning and end of the twelve week period were computed.

Three t tests were employed, yielding these results on the following hypotheses:
1. That the mean score on the self concept inventory for the experimental group of junior boys would be significantly higher than the mean score for the control group of junior boys. The difference was non-significant at the .05 level; therefore, the first hypothesis was rejected.

2. That the mean grade average for the experimental group of junior boys would be significantly higher than the mean grade average for the control group of junior boys at the end of the twelve week period. The difference was non-significant at the .05 level; therefore, the second hypothesis was rejected.

3. That the grade average gain for the experimental group would be significantly higher than the grade average gain for the control group. The difference was non-significant at the .05 level; therefore, the third hypothesis was rejected.

The complex problem of the bright underachiever suggests the need for further research in the area of treatment. Early identification appears to be urgent. Perhaps this method of treatment would be more effective if attempted in the junior high school, before the label of "underachiever" is firmly attached to the student. In addition, an increased number of tutoring periods over a longer period of time might conceivably produce more significant results.

Since there are few programs designed specifically for the underachiever, this method would appear to merit further investigation.
APPENDIX I

INDIVIDUAL ATTITUDE INVENTORY

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you. You are to mark your answers in the space provided to the left of the number for each statement.

Remember to give your own opinion of yourself. Do not leave any blank spaces. Try to make some answer to every statement.

T  F

1. I seem to be about as capable and smart as most others around me.

2. When in a group of people I have trouble thinking of the right things to talk about.

3. I wake up fresh and rested most mornings.

4. I often wish people would be more definite about things.

5. I do not like to loan my things to people who are careless in the way they take care of them.

6. It's no use worrying my head about public affairs; I can't do anything about them anyhow.

7. I am a slow learner in school.

8. I think I would like to drive a racing car.

9. I have the wanderlust and am never happy unless I am roaming or traveling about.

10. I like science.

11. I like to read about science.

12. I would like to be an actor on stage or in the movies.

14. Everything tastes the same.
15. I never worry about my looks.
16. My folks treat me more like a child than a grownup.
17. If a person is clever enough to cheat someone out of a large sum of money, he ought to be allowed to keep it.
18. The future seems hopeless to me.
19. I would never go out of my way to help another person if it meant giving up some personal pleasure.
20. I doubt if anyone is really happy.
21. I have a natural talent for influencing people.
22. If people had not had it in for me I would have been much more successful.
23. The one to whom I was most attached and whom I most admired when I was a child was a woman (mother, sister, aunt, or other woman).
24. I would have been more successful if people had given me a fair chance.
25. A strong person doesn't show his emotions or feelings.
26. It seems that people used to have more fun than they do now.
27. I am often said to be hotheaded.
28. I find it hard to keep my mind on a task or job.
29. In school my marks in deportment were quite regularly bad.
30. I have been suspended from school one or more times for cutting up.
31. I think I would like to belong to a motor cycle club.
32. In school I used to give the teachers a lot of trouble.
33. My family has objected to the kind of work I do, or plan to do.

34. Education is more important than most people think.

35. I would fight if someone tried to take my rights away.

36. I like school.

37. I have a strong desire to be a success in the world.

38. In school I always look far ahead in planning what courses to take.

39. I regard the right to speak my mind as very important.

40. I feel as good now as I ever have.
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