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Factors Associated with Underachievement in Eighth-Grade Children

Barbara A. Moore

Eastern Illinois University

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Author  Date
Factors Associated With Underachievement in Eighth-Grade Children

BY

Barbara A. Moore

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Specialist in School Psychology

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY CHARLESTON, ILLINOIS

1995

YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING THIS PART OF THE GRADUATE DEGREE CITED ABOVE
Factors Associated With Underachievement
in Eighth-Grade Children

Barbara A. Moore
Eastern Illinois University
Abstract

This study investigated characteristics of underachieving adolescents. The Iowa Tests of Basic Skills (ITBS; Hieronymous, et al., 1990) and grade point averages provided the basis for selection of 83 eighth grade students into achiever and underachiever groups. Results indicated that underachievement was significantly related to males, number of absences, and number of discipline referrals, but not to race and notice of special education records. Overall self-esteem, as measured by the Self-Esteem Index (SEI; Brown & Alexander, 1991), and the subscale measure of perceptions of weak academic competence were positively related to level of underachievement/overachievement. Composite measure of behavioral/emotional problems, as measured by the Youth Self-Report (YSR; Achenbach, 1991) and the subscale measure of thought problems were positively related to levels of underachievement/overachievement.
Dedication

This thesis is dedicated to my six-month-old son,

Zachary Hansen Moore,

whose birth gave me the final incentive to complete

this study, now or never.
Acknowledgments

I would like to thank Dr. J. Michael Havey, Dr. John Rearden, and Dr. William Kirk for serving as my thesis committee. Special thanks to Dr. Rearden for assisting with the statistical procedures during retirement. A heartfelt thanks to Dr. Havey for the extra time and support given to me during graduate school and beyond.

I would also like to thank my husband, John J. Moore, for his support and patience. I will be forever in his debt for all the assistance he provided on the computer! In addition, I would like to thank my family and friends for listening to my joys and frustrations during the last several years. Their support was deeply appreciated.

Finally, I would like to thank the staff and students of Urbana Middle School who kindly volunteered their time and assistance. Special thanks to Ms. Marion Krier, Associate Principal, for her support and direction. Without the interest and participation of everyone above, this study would have never been completed.
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Chapter I
Introduction
Factors Associated With Underachievement in Eighth-Grade Children

Clearly one of the most frustrating segments of the adolescent school population for parents, teachers, and school personnel is the group of students who routinely fail to perform in the classroom at a level commensurate with the level predicted by their performance on standardized tests. These students have been most commonly referred to under the umbrella term of "underachievers" (e.g., Borislow, 1962; Kornwich, 1965; Russell, 1958). Whereas many definitions and theories of underachievement can be found in the educational and psychological literature, underachievement is defined frequently as a discrepancy between some expected level of achievement and a student's actual performance on one or more designated indices. For example, this gap can result from high scores on standardized tests, a low grade point average, or consistently low grades on daily work assignments (Ford, 1992).

Several studies have been conducted to find out what characteristics exist among underachievers in general. One of the first major studies was carried out by Terman and Oden (1947). They divided 150 men who had achieved a high level of adult performance as judged by experts who reviewed their files with 150 men who had been judged to have achieved relatively little to that time. Through interviews with these men and their relatives, Terman and his associates pieced together a pattern of personal characteristics that set these two groups apart. The underachievers seemed to possess a personal style that included the following characteristics: 1) a lack of self-confidence, 2) the inability to persevere, 3) a lack of integration towards goals, and 4) the presence of inferiority feelings. Perhaps the most dramatic of these findings was the retrospective analysis of school records when these men were preadolescents in school some twenty years earlier.
Terman and Oden concluded that these patterns of personality and personal style were present from a young age.

More recently, Carr, Borkowski, and Maxwell (1991) conducted a study that compared and predicted academic performance on the bases of motivational, affective, and metacognitive processes. The study consisted of testing 98 underachievers and 102 achievers on multiple measures of ability, attributions, reading awareness, and reading performance. Using a self-esteem questionnaire derived from Nicholls (1978), underachievers tended to have lower self-esteem than achievers. In addition, underachievers were less likely to believe that effort was a primary cause of success, whereas achievers tended to believe that effort was related to success. The Krause Attributional Questionnaire (Krause, 1983) was the measure employed. The results of the Carr, et al. study suggested that metacognitive factors (such as reading awareness) and motivational factors (such as attributional beliefs about success and self-esteem) differentiate underachieving and normally achieving students. The researchers hypothesized that underachieving students have not developed the association between effort and success to the extent that achievers have, thus predisposing them to academic failure.

Mufson, Cooper, and Hall's (1989) study of twenty-three seventh-grade students revealed that underachievers are less self-confident, less socially and emotionally mature, less able to focus on one concern at a time, less accurate in their perceptions about themselves and their work, and less hard-working. The California Achievement Test and grades provided the basis for selection into the achiever and underachiever groups. Questionnaires and personal interviews with each student, a parent of the student, and all teachers associated with each student were utilized to gather data. Contrary to the view of Carr, et al. (1991), Mufson, et al. suggested that underachievers may have felt that by saying they did not work hard, they could attribute their grades to lack of effort. They
believed that underachievers' perceptions served as a protective device against criticism of their abilities.

Garzarelli, Everhart, and Lester (1993) conducted a study to investigate potential correlates of academic achievement, including self-concept, extracurricular activities, family environment, and gender. Their results showed that academically weak students were more often male, black, more often lived with a stepparent, and participated in fewer extracurricular activities. The academically weak students did not differ significantly in self-concept from the gifted students on the Tennessee Self-Concept Scale (Fitts, 1965). The latter result differed from the previous studies mentioned.

Furthermore, Goodstein (1980) noted that underachievers are less accepted by their peer group, date less, and are less popular. Karnes, et al. (1961) found that underachievers are associated with inadequate parent relationships. Other studies revealed that parents' attitude toward the child appears to be a major factor in underachievement (Morrow & Wilson, 1961; Dornsbusch, Ritter, Leiderman, & Roberts, 1987).

Bruns (1992) conducted a series of studies concerning a more specific underachiever, which he labeled as the "work-inhibited" underachiever. According to Bruns, underachievers are students whose actual performance is significantly discrepant from their expected or predicted performance. When the problem for this discrepancy is an inhibition to complete assignments, these students are referred to as "work-inhibited." Bruns defines work-inhibited students as "pupils who, in all or most academic classes over an extended period of time, routinely do not complete assigned work that they are able to understand and are able intellectually to complete. This definition does not include students who have a specific problem in just one discipline-such as those who avoid math at all costs, but are competent in other disciplines. The definition excludes students who have a bad quarter or semester and rebound during the next term. It does not include students who suffer a severe emotional experience and are so distraught..."
that temporarily they cannot concentrate or engage in normal or routine activities. Also excluded are those who just give up due to placement in classes beyond their present skills." (p. 8-9)

Bruns conducted a series of studies in 1985 to determine the incidence of work inhibition, the prevalence of work inhibition within selected groups, and characteristics of work-inhibited students. These demographic studies revealed that approximately three of every four work-inhibited students were boys, 15 percent of the 143 work-inhibited students were enrolled or had been enrolled in a program for the learning-disabled or had received instruction through the Chapter I assistance program, and nearly 25 percent had at least one disciplinary referral for disruptive behavior that year. The following were among the characteristics Bruns discovered: 1) Work-inhibited students have poor academic self-esteem; 2) Many work-inhibited students have adopted passive-aggressive behaviors; and, 3) Work-inhibited students have poor ego-strength—they tend to disregard obligations and parental standards. In his book, Bruns attempted to offer specific techniques to help these students to gain better self-sufficiency. The suggestions he offered primarily relate to the issue of self-esteem; thus, the suggestions focus on parents and teachers developing positive relationships with these students, providing supportive help to complete tasks, and offering opportunities to develop their individual strengths.

Strein (1993), however, reviewed research on academic self-concept. He described a study by Hansford & Hattie (1982) that indicated that global self-concept is related only weakly, if at all, to academic achievement and performance. Secondly, curricula specifically designed to increase global self-concept have few demonstrated effects on other variables, and are not even very effective in producing changes in measured self-concept (Strein, 1988). In addition, a comprehensive review of published research and unpublished dissertations by Scheirer & Kraut (1979) found virtually no evidence that programs designed to improve self-concept led to an increase in academic achievement. Strein (1992) further reported findings of Craven, Marsh, and Bebus (1991) that
illustrated that children given feedback in small groups by researchers showed changes in academic self-concepts, while children given similar feedback by their classroom teacher showed no changes. These changes in academic self-concepts were unrelated to changes in measured achievement. The largest change was in peer self-concept, suggesting that interpersonal interactions may have been the most salient feature of the intervention.

One of the implications of the research reviewed by Strein (1993) may be that many of the recommendations, especially those geared toward enhancing underachievers' self-esteem, offered by Bruns (1992) may not be exceptionally effective in increasing students' academic performance because there has been virtually no evidence that programs designed to improve self-concept have led to an increase in academic achievement. Therefore, further research is needed in order to determine what other characteristics, in addition to low academic self-esteem, may be significant components of student failure to perform at levels commensurate with those predicted from standardized test results. Until these additional characteristics are determined, more effective strategies cannot be developed.

The current study attempted to confirm results of previous studies as to the characteristics of underachieving adolescents and to further determine what additional characteristics may exist so that effective interventions could be developed. The primary questions addressed include: (a) Do underachieving students differ from achieving students with regard to the demographic variables of gender, race, and notice of special education records? (b) Do the two groups differ with regard to attendance patterns and discipline referrals, and to what extent does level of achievement correlate with these variables? (c) To what extent is level of achievement predicted by level of overall self-esteem, and what type of self-esteem (i.e., perceptions of self as related to family relationships, peer relationships, success in school, and a general sense of self) is the best predictor of level of achievement? and (d) To what extent is level of achievement
predicted by self-reports of feelings and behavior, and what behavioral category is the best predictor of level of achievement?
Chapter II
Method

Sample

The subjects of this study were 83 students enrolled in the eighth grade at Urbana Middle School in Urbana, Illinois. According to the 1990 Census, Urbana's population was 36,344. The total school enrollment was 1020 students, with 37 percent minority and approximately 32.8 percent low-income. The eighth grade enrollment consisted of 319 students, with 33 percent minority. Only data from those students who attended Urbana Middle School during seventh grade and were currently in the eighth grade were included in the study.

The middle school was organized into "teams," which consisted of a group of students at the same grade level who worked with the same three to five teachers for the major subjects of mathematics, science, English, and history. Students in this study came from the three different eighth grade teams.

The population for this study consisted of those boys and girls who received standard scores of 85 or higher after percentile ranks on the Iowa Tests of Basic Skills (ITBS; Hieronymous, et al., 1990) were converted. The cut-off score of 85 was chosen as it falls one standard deviation below the mean ($X = 100$, $SD = 15$). The ITBS was the only standardized estimate of ability available, because the school system does not administer intelligence tests. The ITBS was constructed to provide for comprehensive measurement of growth in the fundamental skills: listening, word analysis, vocabulary, reading, the mechanics of writing, methods of study, and mathematics.

Obtaining the Sample

Parental permission was sought for all eighth grade students through mass mailing. The eighth grade team teachers were then asked to derive lists of students that they viewed as underachievers. The primary criterion that they were given was that these
students routinely do not complete work that they appear cognitively capable of doing. A total of 42 students were listed. A second mailing was then sent to those students' parents who did not respond initially. The purpose of this procedure and second mailing was to increase the chance that a large enough number of underachievers would be included in the sample in order for more accurate comparisons to occur. A total of 128 permissions were eventually obtained.

Three forty-minute sessions were scheduled within one month during which the participating students completed the required inventories, to be discussed in the next section. There was one session per eighth grade team. Those students who were unable to complete the required forms in the allotted time were given time at a later date to finish. Nine students did not attend a session to complete the forms and three students withdrew from the school before the time of the sessions. A total of 116 students eventually completed the required forms.

A review of cumulative folders for the participating students was then conducted. Data was gathered for the following areas: age, gender, race, final seventh-grade grade point average (g.p.a.), number of absences during seventh grade, number of discipline referrals during seventh grade, percentile for the Complete Composite Score of the ITBS given during seventh grade, and notice of special education records. The ITBS percentile scores were then converted to standard scores based on a mean of 100 and a standard deviation of 15. Of the 116 students, only 87 students met the criteria of ITBS scores above 85 and enrollment at Urbana Middle School during seventh grade. Of the 29 students eliminated from the study after their folder review, 11 students had been listed by their teachers as appearing to be underachievers. Six of those 11 were eliminated due to their low ITBS scores and five due to lack of enrollment at the school the previous year.

Instrumentation
Two inventories, the Self-Esteem Index (SEI; Brown & Alexander, 1991) and the Youth Self-Report (YSR; Achenbach, 1991), were administered to those students for whom parental permission was obtained.

The SEI is an 80-item, multi-dimensional, norm-referenced standardized measure of the way that individuals from the ages of 7-0 through 18-11 years perceive and value themselves. The SEI can be administered to individuals or groups in approximately 30 minutes. The self-report format requires subjects to read the SEI items and then to classify each item on a Likert-type scale as Always True, Usually True, Usually False, or Always False. There are four scales on the SEI: Perception of Academic Competence, Perception of Familial Acceptance, Perception of Peer Popularity, and Perception of Personal Security. A more complete description of the scales as adapted from the manual is provided in the Appendix. The four SEI scales each yield a standard score and overall self-esteem is measured by the Self-Esteem Quotient. Quotients from 90-110 and standard scores from 8-12 are considered to be normal.

The 55 internal consistency reliability coefficients listed in the SEI manual are all significant beyond the 5% level of confidence. Of the 44 coefficients associated with the four SEI Scales 8 (18%) exceed .90 and 36 (82%) exceed .80. Predictably, the coefficients reported for the total test are even higher. Ten of 11 reach or exceed .90. According to the manual, validity coefficients resulting from correlations with the Piers-Harris Children's Self-Concept Scale, Revised (Piers, 1984), the Self-Esteem Inventories, School Form (Coopersmith, 1984), and the Index of Personality Characteristics (Brown & Coleman, 1988) were .29 to .77, .01 to .93, and .10 to .96, respectively. Most of the coefficients are statistically significant, and 97%, 76%, and 93% respectively, meet or exceed the manual's stated criteria of coefficients of .35 and higher being accepted as support for a test's validity.

The YSR is designed to obtain self-reports of feelings and behavior in a standardized fashion for comparison with reports by normative groups of 11-to 18-year-olds. All YSR
items are stated in the first person. Youth rate themselves on a 0-1-2 scale for how true the item is within the past six months. The YSR requires 5th grade reading skills, but can be read to respondents with limited reading ability. Boys Problem Scales include Anxious/Depressed, Withdrawn, Somatic Complaints, Self-Destructive/Identity Problems, Social Problems, Attention Problems, Thought Problems, Delinquent Behavior, Aggressive Behavior; Competence Scales include Activities and Social. Girls Problem Scales include Somatic Complaints, Anxious/Depressed, Withdrawn, Social Problems, Attention Problems, Thought Problems, Aggressive Behavior, Delinquent Behavior; Competence Scales include Activities and Social. The problem scales designated as Withdrawn, Somatic Complaints, and Anxious/Depressed are grouped under the heading Internalizing. The problem scales designated as Delinquent Behavior and Aggressive Behavior are grouped under the heading Externalizing. The YSR is scored on separate profiles for boys and girls. T scores for the problem scales, Internalizing, Externalizing, and Total Problem scale can be derived. The clinical cutpoint is T=60, with the borderline clinical range including T scores of 60 through 63. For this study, the results of the Self-Destructive/Identity Problem Scale were not included since they pertained only to the male subjects. The results of the Competence Scale were also omitted since many students failed to complete this section during the allotted administration time.

The mean test-retest reliability correlations for raw scores on the YSR problem scales were reported as .65 for 11-to 14-year-olds and .83 for 15-to 18-year-olds (Achenbach, 1991). On the total problem score, the test-retest r was .70 for 11-to 14-year-olds and .91 for 15-to 18-year olds. Stability rs were .56 for total problems and the mean stability r was .49 for problem scales. The manual also presented several kinds of evidence for the validity of YSR scores. Although test manuals typically provide evidence of construct validity in terms of significant correlations with scales derived from other instruments, the lack of instruments resembling the YSR limited this possibility. The YSR manual,
therefore, focuses its validity findings on the content validity of YSR items and the
criterion-related validity of YSR scale scores. Content validity was supported by the
ability of most YSR items to discriminate significantly between youth referred for mental
health services and nonreferred youths. Referred youths scored themselves significantly
higher (p < .01) on 95 of the 101 problem items that are counted toward the total problem
scale. Criterion-related validity was supported by the ability of the YSR quantitative
scores to discriminate between referred and nonreferred youths after demographic effects
were partialled out. All effects of referral status that were significant at p < .01 reflected
lower problem scores for nonreferred than referred youths.

Procedure

The discrepancy between predicted grade point average (g.p.a.), using ITBS as
criterion, and actual g.p.a. constituted a continuous measure of the degree of
overachievement/underachievement. Positive values were regarded as overachievement
and negative values as underachievement.

The statistical procedures then used to answer the research questions were as follows:
1) T-tests were conducted to determine possible differences in the demographic variables
of race, gender, and notice of special education records between overachievers and
underachievers as identified by discrepancy scores.
2) Means and standard deviations for number of absences and number of discipline
referrals were calculated for the achieving and underachieving groups. Pearson product-
moment correlations between the dependent variable,
overachievement/underachievement, and the continuous independent variables of age,
number of absences, and number of discipline referrals were also calculated.
3) A Pearson product-moment correlation was calculated between
overachievement/underachievement and the SEI total test scores. A stepwise multiple
regression was then conducted with overachievement/underachievement and the four
subscales of the SEI.
4) A Pearson product-moment correlation was calculated between overachievement/underachievement and the YSR total test scores. A stepwise multiple regression was then conducted with overachievement/underachievement and the eight subscales of the YSR. The last subscale, Self-Destructive/Identity, was omitted because it pertained only to male subjects.
Chapter III

Results

A total of 47 students were identified as achieving at or above their expected level and 36 students achieving below their expected level. Four of the original 87 participants who met criteria for inclusion in the study were omitted from the analysis because their predicted g.p.a. was greater than 5.0. The correlation between g.p.a. and aptitude (ITBS composite score) was .569 for the total sample.

Table 1

Demographic Variables as a Function of Level of Achievement

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Achieving at or Above Expectancy</th>
<th>Achieving Below Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 47</td>
<td>n = 36</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Notice of Special Education Placement</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>
The data in Table 1 shows the breakdown for the demographic variables of gender, race and notice of special education placement for the achieving and underachieving groups. Table 2 shows the comparisons between these demographic variables and the dependent variable of level of achievement. A significant relation was found between level of achievement and gender. Males were significantly inferior to females in achievement. Racial differences and special education placement were not significant factors affecting achievement. This may have been due to the disparity of the group sizes. The category of "Other" was not figured into the correlation for race because of the small sample size and diversity of the group.

**Table 2**

*T-test Between Demographic Variables and Level of Achievement*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Cases</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>49</td>
<td>-3.04*</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>72</td>
<td>1.18</td>
</tr>
<tr>
<td>Black</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sp. Ed Notice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>72</td>
<td>.44</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

* p < .003
The data in Table 3 show the mean numbers of number of absences and discipline referrals for each group. A higher number of absences and discipline referrals was predictably related to the underachieving group. Significant correlations (p < .01) were found among overachievement/underachievement and number of absences ($r = -.3504$) and discipline referrals ($r = -.5245$).

**Table 3**

**Mean Numbers of Absences and Discipline Referrals as a Function of Level of Achievement**

<table>
<thead>
<tr>
<th>Level of Achievement</th>
<th>Achieving at or Above</th>
<th>Achieving Below</th>
<th>Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absences</td>
<td>6.5224</td>
<td>10.5737</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>4.8201</td>
<td>7.9447</td>
<td></td>
</tr>
<tr>
<td>Discipline Referrals</td>
<td>.1333</td>
<td>2.1579</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>.4045</td>
<td>3.9148</td>
<td></td>
</tr>
</tbody>
</table>

There were two separate stepwise regressions, that is, one per scale. Table 4 presents regression coefficients between overachievement/underachievement and the two personality measures. The combined stepwise regression (i.e., YSR + SEI) was not run because sample size was small.
A significant correlation was found between the level of achievement and the SEI total test ($r = .3559, p < .01$). Therefore, low overall self-esteem was predictably related to underachievement. Stepwise multiple regression identified the subscale Perception of Academic Competence as the best predictor of overachievement/underachievement ($r = .38726$) and accounted for 15% of the variance ($F = 14.29, p < .0003$). Other subscales did not significantly contribute to the equation.

Overachievement/underachievement was also significantly related to overall behavioral/emotional problems as seen by correlation with the YSR Total Test ($r = -.2237, p < .05$). The subscale of Thought Problems was the best predictor of overachievement/underachievement ($r = .313$) and accounted for 10% of the variance ($F = 8.805, p < .0039$). Other subscales did not significantly contribute to the equation.
Chapter IV
Discussion

The first goal of this investigation was to determine whether achieving students differ from underachieving students with regard to the demographic variables of gender, race, and notice of special education records. Consistent with the findings by Garzarelli, et al. (1993), underachievers were more likely to be male. However, whereas Garzarelli et al. found that underachievers were more often black, the current study did not produce such findings. As stated previously, this may have been due to the disparity of the group sizes in the current study; there were only five black participants compared to the 72 white participants. Notice of special education placement also did not differentiate the two groups. This may have also been due to the disparity of the group size; there were only 11 students whose records indicated special education placement. In addition, g.p.a. was used as a criterion for group differentiation. Special education students' g.p.a., however, may not accurately represent the level of achievement of these students in comparison to peers since their grading is based on modified or adapted assignments or special class instruction.

A second goal of this research was to determine differences between overachievers and underachievers with regard to attendance patterns and discipline referrals. Both variables significantly related to underachievement. This findings suggests that emphasis may need to be placed on programming for truants since underachievers were more often absent from school. In terms of discipline referrals, the current study only figured the number of formal discipline referrals as listed in the students' records and did not differentiate among the reasons for the referral. One might assume many of the referrals were a result of passive-aggressive behaviors, given the research conducted by Bruns (1992). Bruns defined passive-aggressive behaviors as subtle, indirect expressions of anger and stated that these behaviors are expressed in many ways, i.e., by being irritable and indirectly obstructive. Regardless of the type of behavior, these results suggest a
need for underachievers to receive some form of counseling or behavior modification in order to decrease the number of discipline referrals they receive.

The relationship between self-esteem and level of achievement was the third goal of this research. Many previous studies (Bruns, 1992; Carr, et al., 1991; Garzarelli, et al., 1993; Mufson, et al., 1989; Terman, et al., 1947) found low self-esteem to be significantly related to underachievers. Hansford, et al. (1982), however, indicated that global self-concept is related only weakly, if at all, to academic achievement. The present study suggested results similar to the former studies; low overall self-esteem was predictably related to underachievement. Similar to the findings of Bruns (1992), this study showed that underachievers have poor academic self-esteem, in particular. This finding, in conjunction with the results of the review conducted by Strein (1993), suggests that further research of specific interventions is important in investigating relationships between changes in academic self-esteem and measured achievement.

The final goal of this research was to determine the relationship between self-reports of feelings and behavior and level of achievement. The YSR Total Test score was found to be significantly related to level of achievement. Underachievers reported a greater number of behavior problems and emotions as did referred youth in the validity samples reported in the Manual (Achenbach, 1991). This finding suggests that further research between level of achievement and referrals for mental health services might shed additional light on characteristics of underachievers. The best predictor of level of achievement from the YSR was the subscale Thought Problems. This subscale consisted of seven items: (item 9) I can't get my mind off certain thoughts; (item 40) I hear sounds or voices that other people think aren't there; (item 66) I see things that other people think aren't there; (item 83) I store up things I don't need; (item 84) I do things other people think are strange, and; (item 85) I have thoughts that other people would think are strange. Each of these items has a space for the subject to provide a brief description after his response. All comments were used in judging whether items deserved to be
scored in accordance with the guidelines provided in the test manual. Many respondents, however, failed to provide descriptions so their response was scored the way the student scored it. Consequently, some respondents may have exaggerated their thought problems, with underachievers more likely to exaggerate their responses or place less importance on providing accurate responses. The Thought Problem score, as with all individual YSR subscale scores, must be integrated with other types of data when evaluating a student.

Of practical importance was the serendipitous result of this study that a number of students listed by their teachers as appearing to be underachievers were eliminated from the study due to lack of enrollment at the school the previous year. In other words, some children noted as underachievers were students new to the school and were, therefore, not included in the study. This finding suggests that emphasis may need to be placed on programs for transfer students, such as a mentor program.

Much remains to be learned about the characteristics of underachieving adolescents. Even though low overall self-esteem and low academic self-esteem, more specifically, appear to be key variables, it is still unclear from this study how to use this knowledge to improve measured academic achievement given the research presented by Strein (1993). Although the YSR Total Test appears to be a valid measure for differentiating between underachievers and achievers, the use of subscale of Thought Problems as the best predictor of underachievement remains questionable due to the subjective nature of scoring. It is hoped that this study will stimulate further research of intervention strategies to enhance self-esteem in ways that result in increases in measured achievement, as well as research between level of achievement and referrals for mental health services. It is also hoped that schools will concentrate their effort on specific programming for students who are either frequently absent or transient or who receive numerous discipline referrals.
References


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Appendix

Description of the SEI scales

Self-Esteem Quotient

The Self-Esteem Quotient takes into account all of the attributes and variables that are measured by the SEI. For this reason, it is the best predictor of global or general self-esteem.

Perception of Familial Acceptance Scale

The Perception of Familial Acceptance Scale is a measure of the way that individuals perceive and value themselves as members of their families and in their own homes. The 20 items of this scale address the abilities, relationships, attitudes, interests, and values of a respondent with regard to interactions with parents, siblings, and other family members and with regard to family activities. Deviant scores may indicate either very negative perceptions of home and family or disturbingly positive, glowing perceptions of home and family.

Perception of Academic Competence Scale

The Perception of Academic Competence Scale is a measure of the way that individuals perceive themselves in academic and intellectual pursuits. The 20 items on this scale are concerned with individuals' perceptions of (a) their school performance; (b) their interest in and desire to excel at academic activities; (c) the interest and support available from teachers; (d) the value that they attach to intellectual achievement; and (e) the affective qualities associated with achievement. Students with low scores are reporting difficulties at school or in academically loaded situations. They do not feel competent to meet the expectations and requirements that they encounter at school.

Perception of Peer Popularity
The Perception of Peer Popularity Scale measures individuals' perceptions of their acceptance and popularity with children their own age. The 20 items on this scale are concerned with individuals' perceptions of: (a) what friends, classmates, and other peers think about them; (b) their social and interpersonal skills and the ease with which they interact with peers; and (c) their leadership traits and characteristics. Deviant low scores are common among students who have been sheltered or who are socially inexperienced or inept, students who are immature or self-indulgent, students who are culturally or linguistically different, students who have moved recently or frequently, or unsociable conduct disordered or socially maladjusted students.

Perception of Personal Security Scale

The Perception of Personal Security Scale measures individuals' perception of their physical and psychological well-being. The 20 items of this scale are concerned with individuals' perceptions of their: (a) general health and physical condition; (b) guilt and shame over real or imagined transgressions; (c) overall feelings of anxiety and personal vulnerability; (d) desire to be younger; and (e) fears and phobias. Youngsters with deviant scores may be extremely overanxious and tend to internalize problems.