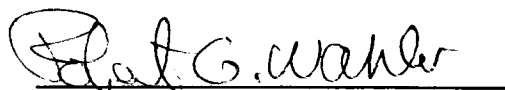


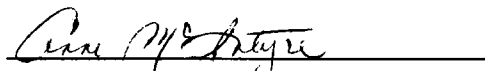
To the Graduate Council:

I am submitting herewith a dissertation written by Dan B. Goodkind entitled "Negativism and Academic Underachievement during Adolescence." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

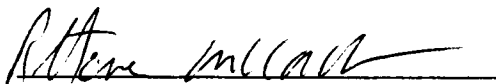


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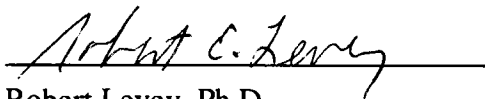
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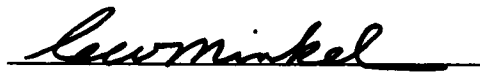


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Associate Vice Chancellor and
Dean of The Graduate School

**Negativism and
Academic Underachievement
during Adolescence**

**A Dissertation
Presented for the
Doctor of Philosophy Degree
The University of Tennessee, Knoxville**

**Dan Goodkind
May 1997**

ABSTRACT

This dissertation summarizes the results of a three-part research project designed to identify personality and attitudinal characteristics of low-achieving and underachieving high school students. In an initial, exploratory study, a battery of self-report measures, including the Minnesota Multiphasic Personality Inventory (MMPI) and the School Attitude Measure, were administered to the entering ninth grade class at an inner-city high school. A correlation matrix was created using all data from students who completed valid MMPI protocols, and student grade point average (GPA). Results showed the School Attitude Measure *Sense of Control over Performance* scale (CONTR) to be positively correlated with GPA, and the MMPI *Paranoia* scale (Pa) and MMPI *Psychopathic Deviate* scale (Pd) to be negatively correlated with GPA. In a secondary study, items identical or similar to items from each of these three scales were combined in a composite scale; this composite scale evidenced internal consistency when administered to a sample of adults. Factor analytic techniques demonstrated a strong relationship between a subset of items, which were then administered separately with reliable results. A relationship between the personality factor(s) common to CONTR, Pa, and Pd and achievement received further empirical support in the secondary study when the item subset was shown to differentiate between a group of prisoners (low achievers) and college students (high achievers). Based upon content analysis and background research, the new scale was named the *Negativism Scale*. *Negativism* is defined here as an attitudinal state characterized by distrust, pessimism, resentment, and feelings of futility. In the final study, it was hypothesized that scores on the Negativism Scale would account for a significant portion of the variation of GPA in a sample of high school students, over and above what could be accounted for by achievement test scores. Results supported this hypothesis, indicating that negativism is associated with academic underachievement in adolescents. Further analysis showed that the association between Negativism Scale scores and academic underachievement became increasingly significant as achievement test scores decreased. Negativism is discussed in context with other personality and attitudinal factors that have been empirically associated with academic underachievement.

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Introduction

Academic and Other Problems During Adolescence

Despite persistent misconceptions to the contrary (i.e., Hall, 1904; A. Freud, 1958; Erikson, 1968), studies of normative populations undertaken during the past four decades indicate that the majority of teenagers live rather conservative lives, and maturation during adolescence most often takes place in steady, quiet, and nontumultuous ways (i.e., Douvan and Adelson, 1966; Offer and Offer, 1975; Rutter et al., 1976; Offer et al., 1988). The belief that significant difficulties during adolescence -- including depression, identity confusion, and unsociable behavior -- represent normal development has *not* been supported by research. It is now known that the majority of adolescents of both genders successfully negotiate this developmental period without any major psychological or emotional disorder, develop a positive sense of personal identity, and manage to maintain close family relationships as well as adaptive peer relationships. However, for a significant number of others, the teenage years are characterized by problems and failure. Research indicates that serious psychological and behavioral problems during adolescence are not normal, will not be outgrown, and thus should not be ignored. Recent epidemiological studies indicate that approximately one in five or 20% of adolescents in the general population have experienced significant impairment due to a mental health problem, a prevalence rate similar to that of adults (Offer and Schonert-Reichl, 1992; Kazdin, 1993).

For young people with serious problems, the protracted period of adolescence is accompanied by a high degree of uncertainty and risk. Teenagers today are heavily exposed to alcohol and drugs, vehicles, weapons, and media images of violence and sexuality -- all of which present temptations to engage in risk behaviors. Risk behaviors -- which increase the likelihood of adverse psychological, social, and health consequences -- have been empirically associated with antecedent or risk factors. A wide variety of risk factors have been identified by researchers. Both risk behaviors and risk factors in adolescence tend to cluster (Dryfoos, 1990; Elliott, 1993). In a recent, comprehensive review, Dryfoos (1990) summarized risk factors associated with adolescent substance abuse, delinquency, school dropout, and adolescent pregnancy. Low grades in school are

associated with *all* of these problem areas. Academic deficiency is increasingly recognized as being a crucial marker of high risk status in adolescents, not only because it is frequently associated with other problems, but also because completing high school is one of the most critical tasks facing adolescents (Dryfoos, 1990; Elliott, 1993; Carnegie Council, 1995). Not completing high school can have grim consequences for future employment prospects: high school dropouts are less likely to be employed than are non-college trained high school graduates (about 44% compared to about 62%) and are more likely to be classified as unemployed (about 30% compared to about 19%) (Office of Educational Research and Improvement, 1988). Even when employed, high school dropouts are two to three times more likely to be in marginal jobs and to be employed intermittently (OERI, 1988).

There is a growing body of knowledge about both who succeeds and who fails to succeed academically during the teenage years. In 1986, the U.S. Department of Education published a report of a study called High School and Beyond (Rock et al., 1986) that looked at high school grades as well as achievement gains during high school. A variety of data, including grade point average, was collected from a nationally representative sample of 1980 high school sophomores. Regression analysis was carried out on the total sample and by racial/ethnic group to identify those background and student/school process variables related to grade point average. Of all factors, grade 10 vocabulary test scores were the largest significant predictor of grades. Matarazzo (1972) and Willerman (1979) have also reported high correlations (around .50) between IQs and grades, with verbal IQs being more predictive than performance IQs. While intelligence and/or achievement test scores are the best single predictor, school achievement correlates positively and significantly with the amount of time students spent doing homework and with family educational support variables such as high parental involvement (Rock et al., 1986; Dryfoos, 1990; Elliott, 1993). According to a review of literature addressing the relation between socioeconomic status and academic achievement (White, 1982), school achievement correlates moderately with parental income (.32), education of parents (.19), occupation of parents (.20), and with measures that sum across all three (.32). The major predictors for school failure and dropout are low grades and test scores (Rock et al., 1986; OERI, 1988), low family income and levels of education (White, 1982; Rock et al., 1986; OERI 1988; Dryfoos, 1990), and lack of parental support (Rock et al., 1986; Dryfoos, 1990; Elliott, 1993). Hispanics and Blacks are more likely to drop out than are whites (20-30% compared to 13%), though these differences disappear if one controls for

social class (OERI, 1988). Behavioral and mental health variables are also related. Discipline problems and truancy are strongly negatively correlated with academic achievement (Rock et al., 1986; Dryfoos, 1990) as are aggressive and delinquent behaviors (Dryfoos, 1990; Achenbach, 1993). Oppositional-defiant disorder, conduct disorder, and attention-deficit hyperactivity disorder are all associated with poor school performance (Hinshaw, 1992a, 1992b; American Psychiatric Association, 1994). The overlap between externalizing behavior syndromes and academic underachievement occurs at levels that are far above chance rates, with estimates ranging from less than 10% to more than 50% depending upon what definitions are used (Hinshaw, 1992a).

Academic Problems and IQ

As has been summarized above, a good amount is now known about the prevalence of adolescent problems and antecedent risk factors. Failure to achieve in school is frequently associated with a variety of other behavior problems, and forebodes future problems. Research indicates that school failure is associated with low test scores, lack of family support, low levels of parental income and education, and delinquent and externalizing behavior syndromes. While these findings are not controversial, hypotheses regarding causal relationships are. One of the most contentiously debated issues concerns the relationship between school performance and intelligence test scores. The body of research cited above clearly indicates that intelligence and achievement test scores are strong predictors of school performance. The existence of a relationship between test scores and academic achievement itself is not controversial; however, the meaning and the relative importance of this relationship is.

On one side of the IQ debate are those who argue there is a *general factor (g)* of cognitive ability -- which exists as a stable trait and which can be measured by standardized tests -- that is the most important and most predictive factor in determining success or failure in school as well as other areas of life. This point of view, recently and thoroughly represented in Herrnstein and Murray's book The Bell Curve (1994), is supported by evidence which indicates that: all standardized tests of intelligence and academic aptitude or achievement are highly correlated, and measure some general factor related to analytic reasoning and problem-solving; IQ scores are the best *available* predictor of both school performance and job performance; IQ scores are negatively correlated with a variety of socially undesirable outcomes, such as delinquency; IQ scores demonstrate sub-

stantial heritability (Herrnstein and Murray, 1994; Neisser et al., 1996). On the opposing side are those who argue that there are other individual characteristics -- motivation, aspects of personality, attitudes, etc. -- of equal or greater importance with regards to achievement, which can be altered by environmental influence. This point of view, recently represented by Daniel Goleman in his book Emotional Intelligence (1995), is supported by the fact that intelligence test scores account for *only about 25%* of the overall variance in school achievement. Correlations between test scores and measures of job performance are generally somewhat lower (between 10% and 25%), and correlations between IQ and social outcomes are much lower still (Herrnstein and Murray, 1994; Goleman, 1995; Neisser et al., 1996).

Clearly, the lion's share of variance in academic as well as other areas of achievement is accounted for by factors other than what is measured by IQ. However, the "g-at-the-top" hierarchical model of intelligence is the traditional model, and the majority of psychologists appear to agree with its basic premise. [According to a survey of 661 social scientists with expertise in psychometric testing -- the majority of whom were psychologists -- 58% expressed the belief that intelligence is better described as "a primary general factor with subsidiary group and special ability factors" than "a group a separate faculties" (Snyderman and Rothman, 1987).] While there may well be other individual characteristics of equal or greater importance to IQ with regards to achievement, at this point, we do not have equally reliable instruments to measure them. As with many controversies in psychology, differences of opinion concerning this issue have much to do with what has been operationalized, measured, and empirically studied.

Negativism and Academic Underachievement

A certain amount of variance in academic performance has historically been associated with mental ability, the remainder with other, potentially changeable, factors. Research in the area of *academic underachievement* (academic achievement less than expected based upon mental ability) attempts to identify such factors, and whether they are associated with underachievement in systematic and unique ways. This dissertation describes a study which tested the hypothesis that an attitudinal trait, labeled *negativism*, is associated with low levels of academic performance and with academic underachievement in high school students. Negativism has been operationalized by means of a brief, psychometric scale; the development of this construct and psychometric scale is de-

scribed in the next section, prior to presentation of the dissertation study and results. Negativism is then discussed in context with other personality and attitudinal factors that have been empirically associated with academic underachievement.

Exploratory Research and Psychometric Scale Construction

Stage One: Exploratory Research

The initial, predissertation research study was exploratory in nature, designed to collect data and generate hypotheses about personality, attitude, and behavior characteristics associated with school performance. A battery of psychological test measures was administered to a group of high school freshmen during the 1990- '91 academic year. At the year's end, test scales were statistically compared with each other and with student grades and school attendance. Student grade point average was used as an indicator of school performance.

SUBJECTS AND PROCEDURE

The initial study took place at a comprehensive public high school in the inner-city portion of North Knoxville. This high school draws most of its students from low- to middle-income families, many of whom live in neighborhoods where drug abuse and criminal activity are major problems. Student performance has declined during the past decade, according to the Principal and Guidance Counselors, and poor performance/lack of motivation are major points of concern. (Following 1990- '91, the year this initial research was done, over 40% of the ninth grade class failed to advance to the tenth grade; this remained unchanged through the 1995- '96 academic year, when the dissertation project was completed).

Freshmen entering the high school were divided for rotation through three-week orientation classes. Working with a Teacher in his classroom, the researcher met twice weekly with freshman students. During one meeting each week, values-oriented "groups" involving discussion and activity were provided; during the second meeting each week, test materials were administered. By the end of the academic year, the researcher had met with all of the freshmen (excepting those who transferred from the school prior to entering his classroom), a total of 153 students. Participation was voluntary; 5 of these 153 students declined to participate in the study.

Three questionnaire-style test measures and one survey were administered:

1) The *Minnesota Multiphasic Personality Inventory* (MMPI) (Hathaway and McKinley, 1970). Scale scores were based on adolescent norms (Marks et al., 1974). Three validity scales, ten clinical scales, and thirteen content scales were reported.

2) The *School Attitude Measure* (SAM) (American Testronics, 1990). The SAM is designed to examine several dimensions of student's attitudes regarding themselves as students and their academic environment. Information is provided on five attitudinal scales and a composite scale.

3) The *Student Social Attribution Scale* (SSAS) (Bell and McCallum). The SSAS is an unpublished test developed by Sherry Bell and Steve McCallum of the University of Tennessee. It is designed to reveal student attributions regarding hypothetical successful or failed social situations, summarized in six attributional scales.

4) The *Peer Behavior Questionnaire* (PBQ), written by the researcher, is a simple six question survey of peer behaviors regarding alcohol consumption, cigarette smoking, marijuana use, lying to parents, and stealing. This was designed to provide information about peer group influences, and thought to be less threatening than a questionnaire about personal behaviors.

148 freshman students completed at least one test protocol. Due to excused and unexcused absences, many students did not complete certain tests. A total of 130 SAM protocols, 126 PBQ protocols, 111 SSAS protocols, and 106 MMPI protocols were collected. Grade point average (GPA) was calculated and recorded for 132 students (grades could not be recovered for 21 students who dropped out or transferred schools). Attendance, calculated as the percentage of school days the student was present, was recorded for all 148 students.

All completed MMPI protocols were screened by first eliminating those that contained five or more (out of 16) inconsistent responses to repeated questions. We then used the MMPI Carelessness scale (Greene, 1978) to screen the remaining protocols. The Carelessness scale consists of 12 pairs of questions that are either similar or opposite in psychological content; inconsistent responses on the Carelessness scale indicate an inability or an unwillingness to complete the inventory appropriately. All protocols with five or more inconsistent responses on the Carelessness scale were discarded.

The above-described screening process yielded a total of 63 complete and valid MMPI protocols. A correlation matrix was created using data collected from these students (N=63: 33 male, 30 female; 53 Caucasian, 10 African-American). The matrix

consists of Pearson product-moment correlation coefficients, measuring of the strength of linear relationships between individual variables.

RESULTS AND INITIAL HYPOTHESES

Data analysis began by identifying those factors that correlated with GPA at a significantly greater than chance level of probability (see Figure 1). Not surprisingly, the highest correlate with GPA was school attendance ($r = .70$). The highest correlate with GPA other than attendance was the Sense of Control over Performance (CONTR) scale, derived from the School Attitude Measure ($r = .45$). One of the MMPI clinical scales, Paranoia (Pa) was significantly correlated with GPA in an inverse direction ($r = -.29$). Two scales from the Peer Behavior Questionnaire were significantly negatively correlated with GPA: theft (PBQ4) ($r = -.32$), and lying to parents (PBQ6) ($r = -.32$). The MMPI clinical scale Psychopathic Deviate (Pd) also evidenced an inverse relationship to GPA, although statistical significance was weaker ($r = -.22$).

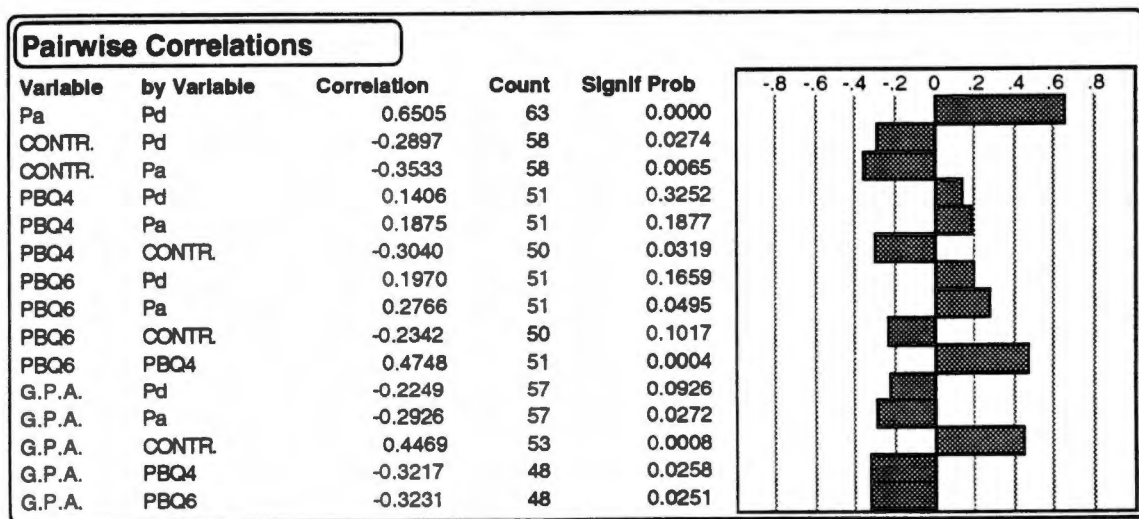


Figure 1: Correlations with GPA, Exploratory Study

Because this initial study generated a large mass of data and was exploratory in nature, a certain number of randomly high correlation coefficients were expected to appear in the correlation matrix. Therefore, while correlations between two individual variables may be important, *logical patterns* of correlation among variables related to GPA were sought before hypotheses were generated. Not only were the CONTR, Pa, Pd, PBQ4, and PBQ6 variables all correlated with school performance -- there was a logical and concordant pattern of correlation among these variables. The CONTR scale was correlated with GPA in a positive direction, while the Pa scale was correlated with GPA in an inverse direction; Pa and CONTR were inversely correlated with each other, as well ($r = -.35$). CONTR was inversely correlated with Pd ($r = -.29$), and the Pa and Pd scales were highly correlated ($r = .65$).

Sense of control over performance is a construct which posits that people differ in their attitudes about whether they can control or change their environment. In the school setting, sense of control refers to a student's feelings about whether he or she is responsible for school outcomes or whether such outcomes are the result of luck, fate, or other vicissitudes. Paranoia, when elevated, is associated with individuals described as suspicious, hostile, guarded, overly sensitive, argumentative, and prone to blame others. Psychopathic Deviate, when elevated, is associated with hostility, egocentricity, and antisocial behavior. High scorers on Pa and on Pd often express their hostility overtly and rationalize it as a result of what others have done to them.

The positive relationship between CONTR and GPA indicates that students who perform well in school tend to feel more efficacious than students who perform poorly, who may fail to appreciate the connections between their behavior and their successes or failures. The inverse relationship between Pa and CONTR and Pd and CONTR indicates that students who feel less efficacious are also more likely to be distrusting, hostile, and to engage in antisocial behaviors such as lying and stealing.

Stage Two: Psychometric Scale Construction

The goal of stage two was construction of a single psychometric scale based upon three of the variables that evidenced a correlation with student grade point average in the exploratory research -- CONTR, Pa, and Pd. It was predicted that a composite scale consisting of items identical or similar to items from each of these separate scales would evidence a high degree of internal consistency when administered to a population sample. It

was further predicted that factor analysis could be used to identify a strongly related *subset* of items, and that this item subset would then demonstrate adequate internal consistency if administered again as a *distinct and abbreviated scale*. The purpose was twofold: 1) to bring into focus the psychological factor(s) common to CONTR, Pa, and Pd, which evidenced a relationship to each other and to academic achievement; 2) to create a new scale that would have some degree of predictive value with regards to academic and (perhaps) other kinds of achievement.

PROCEDURE AND RESULTS

A total of 32 items were drawn from the School Attitude Measure *Sense of Control over Performance* scale, the MMPI *Pa* scale, the MMPI *Pd* scale, and then mixed together randomly to form a composite scale. Some items were slightly reworded to better apply to an adult population (i.e., "school" was changed to "work and school") but their essential meaning was not changed. The SAM and MMPI items upon which the composite scale was based follow:

School Attitude Measure

- 2) When I'm with my friends at school, I tend to do what they want me to do.
- 7) I work hard at school to please my parents, not myself.
- 14) Most of the things I try to do at school turn out wrong.
- 24) If I don't like a teacher, I have a hard time doing anything in that class.
- 29) There is no way a student like me will get good grades.
- 34) Nothing I do for myself in school will make school any better.
- 36) I'm not at all sure how to please my teachers.
- 49) I don't seem to have any control over the grades my teachers give me.
- 56) When a teacher is absent, I don't bother to do any work.
- 64) When things go badly for me at school, it is due to my bad luck.
- 69) I notice that when my friends don't come to school, I don't want to come.
- 71) My life at school is completely out of my control.
- 79) School is a place where others are in control of my life.
- 84) I can't predict how things will turn out at school.
- 87) I don't know how to be successful in school.
- 94) I don't think my efforts count for much at school.

MMPI *Pa* and *Pd* scales

- 16) I am sure I get a raw deal from life.
- 24) No one seems to understand me.
- 35) If people had not had it in for me I would have been much more successful.
- 107) I am happy most of the time. (False)
- 127) I know who is responsible for most of my troubles.
- 284) I am sure I am being talked about.
- 294) I have never been in trouble with the law. (False)

MMPI Pa scale

- 15) Once in a while I think of things too bad to talk about.
- 111) I have never done anything dangerous for the thrill of it. (False)
- 157) I feel that I have often been punished without cause.
- 317) I am more sensitive than most other people.

MMPI Pd scale

- 94) I do many things which I regret afterwards.
- 237) My relatives are nearly all in sympathy with me. (False)
- 244) My way of doing things is apt to be misunderstood by others.
- 245) My parents and family find more fault with me than they should.
- 296) I have periods when I feel unusually cheerful without any special reason. (False)

In order to increase item-response variance, response categories were changed from true/false to a five-point scale ranging from "agree" to "disagree," as follows:

Agree ____ Mostly Agree ____ Half and Half ____ Mostly Disagree ____ Disagree ____

Composite scales were administered to a mixed sample of adult undergraduate students, graduate students, and convicted felons (prisoners). The composite scales were expected to distinguish between these three subgroups. It was theorized that the prisoner subgroup would evidence higher scale scores than would either of the college student groups. (Prisoners are generally far less successful by common standards than are college students, and are thus analogous to the low academic performers in the initial study.) It was further hypothesized that the undergraduate student subgroup would evidence higher scale scores than would the graduate student subgroup, although the difference between undergraduate and graduate student scale scores was not expected to be as great as that between prisoner and undergraduate student scale scores.

A total of 104 initial scales were administered: 30 to graduate students; 29 to undergraduate students; 45 to prisoners. The scales completed by prisoners were screened for truthfulness by discarding those in which "I have been in trouble with the law" was responded to negatively. (Discarded scales are not included in the above numbers and this item was ignored in the statistical analysis of individual items and left out of the factor analysis when comparing groups.)

Chronbach's alpha was .87 for the initial 32 item scale. Principal component analysis was performed on the data set; 10 factors resulted. Principal component factor 1 contained 22 items with factor loadings of .4 or higher, and accounted for 26.2% of observed score variance. Varimax rotation was then performed on the data set. After varimax rotation, *rotated factor 2* became the most significant single factor, containing nine

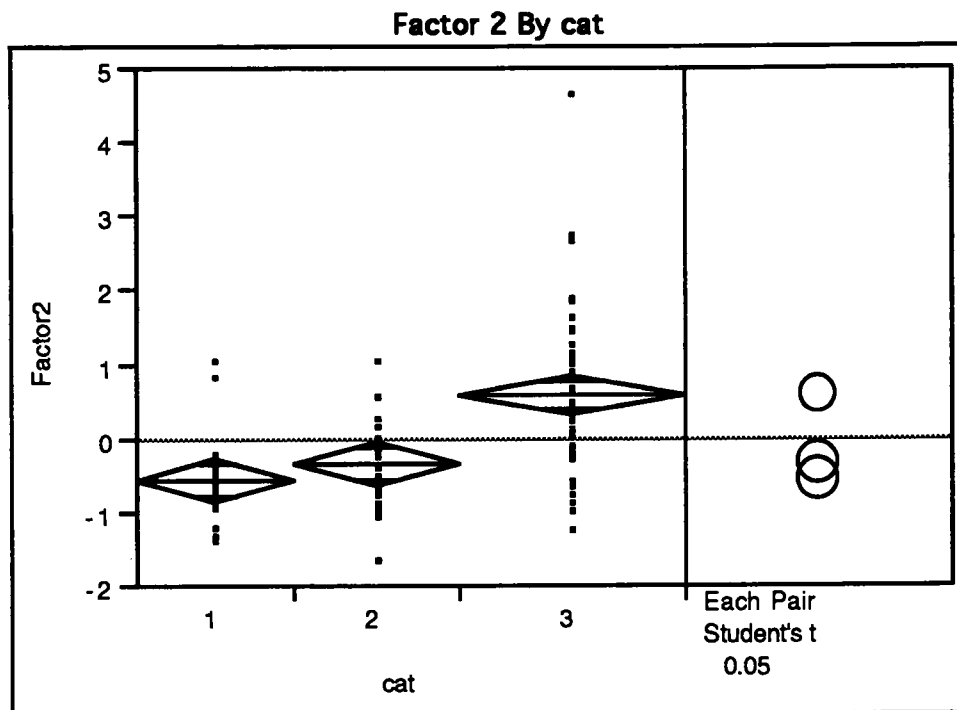
items with factor loadings of .4 or higher (all of which also had factor loadings of .4 or higher on principal component factor one).

Rotated factor 2 was analyzed for differences in average scores across groups, and shown to discriminate between the prisoner sample group and the student sample groups: prisoners scored significantly higher on rotated factor 2 than did students ($p < .0001$; see Figure 2). Undergraduate students scored slightly higher on rotated factor 2 than did graduate students, but the difference was not statistically significant. Nine items with factor loadings of .4 or higher on rotated factor 2 were chosen to create a final scale. Of these individual items, all but one received significantly higher endorsement from prisoners than from students ($p < .01$).

Rotated factor 2 contained five items drawn from the SAM *Sense of Control over Performance* scale, and four items drawn from the MMPI *Pa* and *Pd* scales. Five of these items were worded less strongly (i.e., "I am sure I get a raw deal from life" was changed to "I get a raw deal from life"), to draw greater response variance. The final scale was reworded and numbered as follows:

- 1) I can't predict how things will turn out at work or school. (SAM)
- 2) If people had not had it in for me I would have been more successful. (MMPI *Pa*, *Pd*)
- 3) A student like me is unlikely to get good grades. (SAM)
- 4) I feel that I have often been punished without cause. (MMPI *Pa*)
- 5) I don't seem to have any control over how my boss or teachers treat me. (SAM)
- 6) I do many things which I regret afterwards. (MMPI *Pd*)
- 7) My life at work and school is out of my control. (SAM)
- 8) I get a raw deal from life. (MMPI *Pa*, *Pd*)
- 9) Work and school are places where others are in control of my life. (SAM)

The final 9 item scale was administered to 121 undergraduate students to determine reliability. Factor analysis indicated that item 1 should be eliminated from the final scale. Chronbach's alpha was .79 for the final scale; with item 1 deleted from the final scale, Chronbach's alpha was .81.



Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	2	25.677261	12.8386	17.1613
Error	94	70.322739	0.7481	Prob>F
C Total	96	96.000000	1.0000	<.0001

Comparisons for each pair using Student's t

Positive values show pairs of means that are significantly different.

Abs(Dif)-LSD	3	2	1
3	-0.38401	0.513012	0.714296
2	0.513012	-0.451	-0.24941
1	0.714296	-0.24941	-0.45898

Figure 2: Prisoner Group vs. Student Groups
(cat 1 = graduate students, cat 2 = undergraduate students, cat 3 = prisoners)

Predissertation Summary and Conclusions

Following from exploratory research with adolescents, a relationship between the School Attitude Measure *Sense of Control over Performance* scale (CONTR), the MMPI *Pa* scale (Pa), and the MMPI *Pd* scale (Pd) was hypothesized. This hypothesis received further empirical support in a secondary study. Items identical or similar to items from each scale were combined in a composite scale, and this composite scale evidenced internal consistency when administered to a sample of adults. Factor analytic techniques demonstrated a strong relationship between a subset of items, which were then administered separately with reliable results. A relationship between the personality factor(s) common to CONTR, Pa, and Pd and achievement was also hypothesized based upon exploratory research results. This hypothesis received further empirical support in the secondary study when related items from each of these three scales were shown to differentiate between a group of prisoners (low achievers) and college students (high achievers).

The nature of the relationship between CONTR, Pa, Pd, and achievement will now be more closely examined based upon a content analysis of those items that comprise the final, abbreviated version of the composite scale. Based both upon content analysis and background research, I have named the new scale the *Negativism Scale*. Content analysis and definitions of negativism follow.

The following six statements appear to be reflective of a belief that one has been treated unfairly or arbitrarily by authority figures, that unfair or arbitrary treatment is an ongoing reality in one's life, and a that there is little or nothing one can do about it:

If people had not had it in for me I would have been more successful. (MMPI *Pa*, *Pd*)
I feel that I have often been punished without cause. (MMPI *Pa*)
I don't seem to have any control over how my boss or teachers treat me. (SAM)
My life at work and school is out of my control. (SAM)
I get a raw deal from life. (MMPI *Pa*, *Pd*)
Work and school are places where others are in control of my life. (SAM)

The following two statements are a bit different. They appear reflective of a belief that one cannot succeed (at least in school), and that one lacks a sufficient degree of control over one's own behavior:

A student like me is unlikely to get good grades. (SAM)
I do many things which I regret afterwards. (MMPI *Pd*)

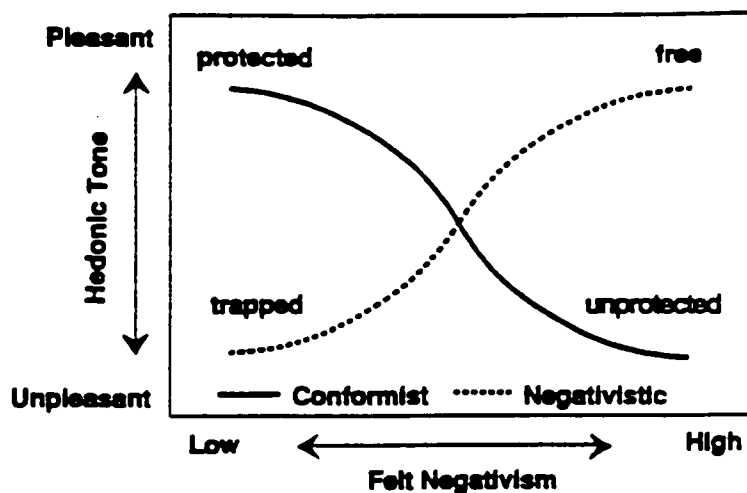
What all of these statements have in common is the assertion *I do not have control over my life*. They do not necessarily imply that one cannot predict future events, but rather

that one cannot prevent mistreatment or failure. Some degree of resentment is also indicated. In the case of agreement with the former statements, blame is projected onto others. In the case of agreement with the latter statements, blame is projected onto oneself. Whether or not individuals who endorse these items actually have been treated in an unjust or arbitrary manner, or are unable to exert control over their current life circumstances, we cannot know; we simply know that they agree with these assertions. I believe that the manner in which individuals respond to these items is reflective of a dimension of *attitude* -- a learned and relatively enduring predisposition, rooted both in affect and in cognition -- towards socially-sanctioned values and expectations regarding striving and achievement. Because this attitudinal dimension is described in terms associated with the *negation* of possibility and potentiality, I have labeled it *negativism*. Negativism is defined here as a state of mind or behavior characterized by distrust, pessimism, resentment, and feelings of futility.

Negativism is defined by reversal theory in a very similar manner. Reversal theory, which has been elaborated by Michael Apter (1982, 1989, 1993), is a general theory of mind that proposes certain tenets about human nature. Reversal theory proposes that there are a variety of pairs of metamotivational states which display polarity at a phenomenological level. For example, reversal theory holds that people can be in one of two stable states with regards to arousal. In the *telic* state, low arousal is experienced as pleasant and high arousal is experienced as unpleasant, whereas in the *paratelic* state, the reverse is true. Because high arousal is experienced as unpleasant in the *telic* state, it may be characterized as an "arousal-avoiding" state. Because high arousal is experienced as pleasant in the *paratelic* state, it can be characterized as an "arousal-seeking" state. *Telic* states are presumed to be associated with being serious-minded and goal-oriented; *paratelic* states are presumed to be associated with being sensation-seeking and present-oriented. Within the language of reversal theory, *negativism* is understood in this phenomenological manner, as a metamotivational state of mind contrasted with *conformism*. The *conformist state* is characterized by compliance, cooperation and agreeableness; the *negativistic state* is characterized by stubbornness, defiance, and anger. When in the *conformist state*, the person wants to conform to some social or personal rule. When in the *negativistic state*, individuals experience conformity as being unpleasant and are likely to act out or rebel against social norms and the expectations of others. This may result simply from sensation-seeking and/or as a reaction to interpersonal disappointment or

frustration. The relationship between negativism, conformism, and hedonic tone (pleasure) is illustrated in Figure 3.

Whereas reversal theory holds that people frequently reverse states between a given pair, different individuals will tend to be dominant in one or the other of the two states depending upon personality and environmental variables. Thus, high scores on the Negativism Scale would appear to reflect negativism dominance. This makes perfect sense, as the scale was developed by contrasting low academic achievers and convicted felons -- who are less likely to conform -- with high academic achievers and college students -- who are relatively more likely to conform.



The relationship between felt negativism and hedonic tone for the conformist and negativistic states.

Figure 3: The Negativistic/Conformist Pair
(Adapted from Potocky and Murgatroyd, 1993)

Dissertation Study

Hypothesis

Based upon results of the above-described background research, a new study was proposed to test the hypothesis that the attitudinal trait of negativism is associated with academic underachievement. In this study, it was predicted that negativism, as measured by the Negativism Scale, would demonstrate an inverse correlation with school performance, as measured by students' grade point averages. It was also predicted that scores on the Negativism Scale would account for a significant portion of the variation of grade point averages over and above what could be accounted for by achievement test scores alone. In other words, it was hypothesized that: the attitudinal trait of negativism contributes to academic underachievement; therefore, the Negativism Scale will *add* predictive value to achievement test scores, already known to be the best single predictor of school performance. This hypothesis was to be tested by comparing two regression equations:

$$(1) \text{ Achievement Test Composite Score} + \text{Error} = \text{GPA}$$

$$(2) \text{ Achievement Test Composite Score} + \text{Negativism Score} + \text{Error} = \text{GPA}$$

It was further predicted that scores on the Negativism Scale would evidence a positive correlation with self-reported delinquent and aggressive behaviors, which were expected to be inversely associated with grade point average.

Subjects and Procedure

Data collection for this study took place during the 1995- '96 academic year, at the same high school where the exploratory research was conducted, under similar conditions (in the classroom, during school hours). Data was collected with the informed consent and cooperation of the school, the school system, and all students participating as subjects in this study; parent permission was obtained prior to reviewing participating students' academic records. Participating students were drawn from three World History classes and one Sociology class. Because World History fulfills a graduation requirement, it is taken by a variety of students in all grade levels, and the demographic distribution of the 85 students in the sample group of is roughly representative of the student

population as a whole (excluding Special Education students, who were not included in the sample). Of the 85 students, approximately: 39% are male, 61% female; 86% Caucasian, 13% African-American, 1% Hispanic; 34% freshmen, 22% sophomores, 30% juniors, 14% seniors (see Figure 4). Students with high achievement test scores are overrepresented in the sample group, probably because World history is commonly recommended as a "college preparatory" course. Figure 5 shows the distributions of achievement test total battery scores (converted to normal curve equivalents), and grade point averages, within the sample group.

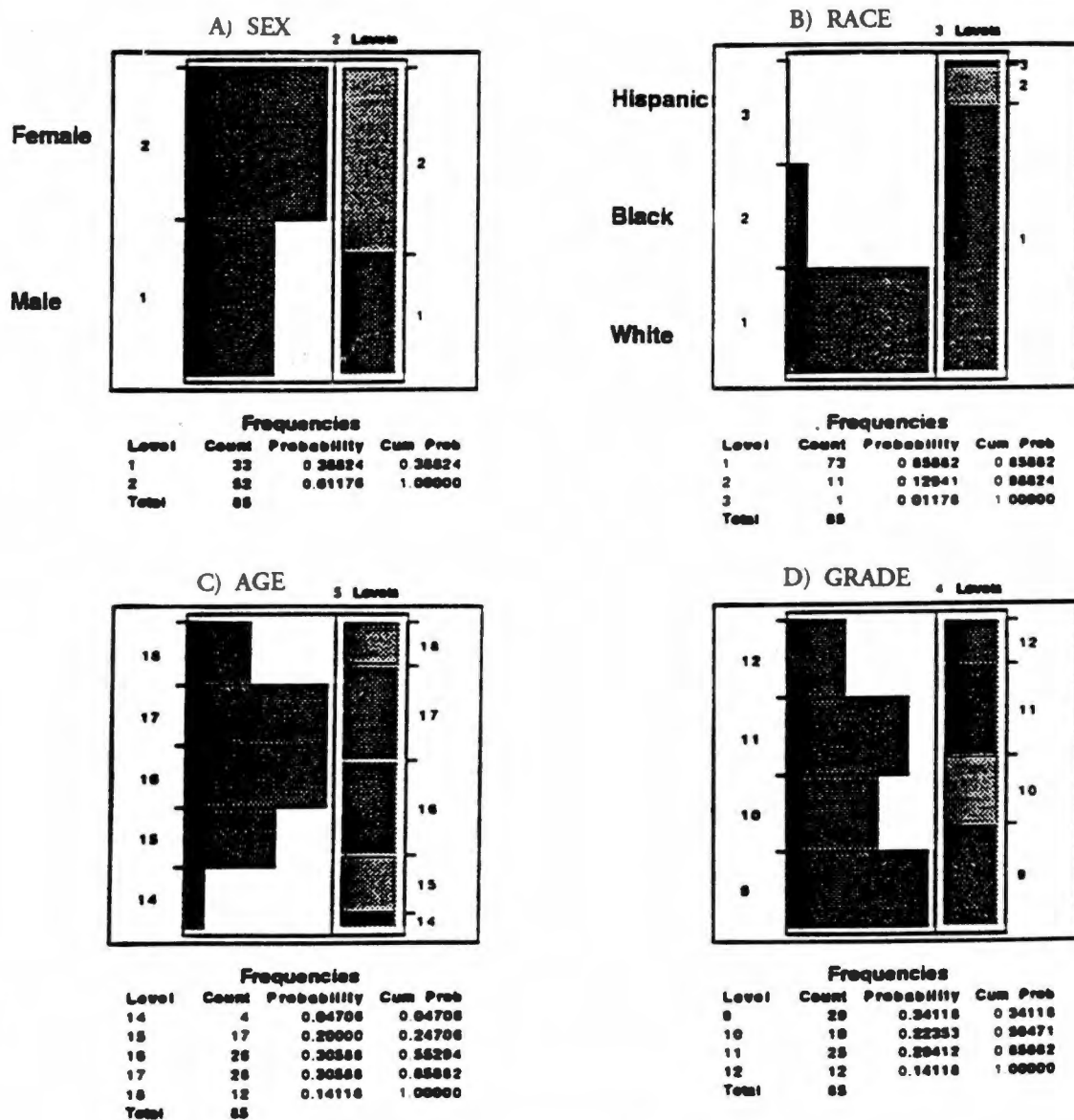


Figure 4: Demographics of Sample Group

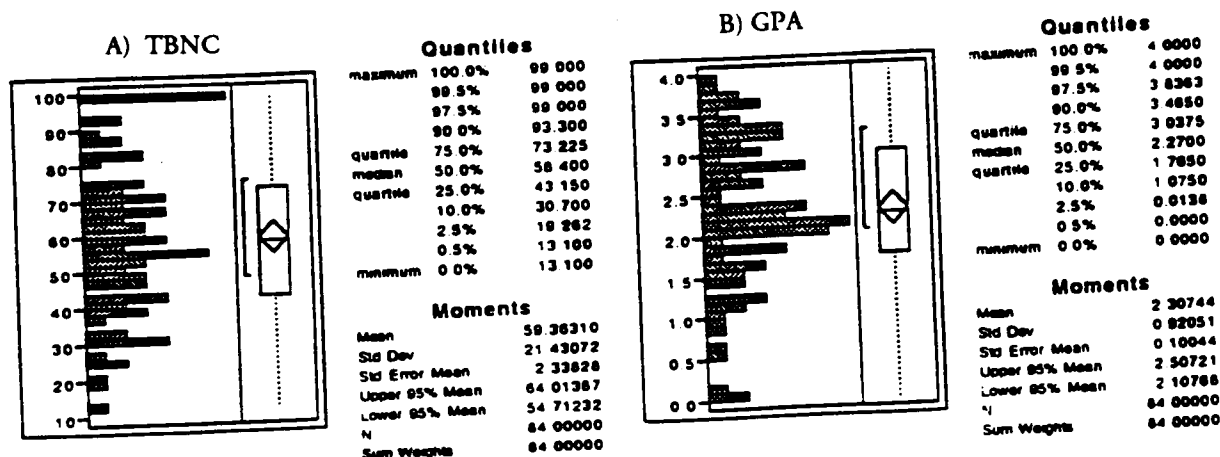


Figure 5: Distribution of Achievement Test Total Battery Scores, and GPA

Three questionnaire-style test measures were administered to every subject:

1) The *Negativism Scale*. The Negativism Scale was developed during the background research and is described above. It consists of 8 questions responded to on a five-point scale ranging from "agree" to "disagree," and was worded specifically for administration to students:

- 1) If people had not had it in for me I would have been more successful.
- 2) A student like me is unlikely to get good grades.
- 3) I feel that I have often been punished without cause.
- 4) I don't seem to have any control over how my teachers treat me.
- 5) I do many things which I regret afterwards.
- 6) My life at school is out of my control.
- 7) I get a raw deal from life.
- 8) School is a place where others are in control of my life.

2) The *Lie Scale* of the Minnesota Multiphasic Personality Inventory (MMPI) (Hathaway and McKinley, 1970). The Lie Scale contains 15 items that were originally selected to identify individuals who were deliberately attempting to lie or to avoid answering test questions in an open and honest manner. The scale covers a variety of content areas, such as the denial of aggressive or dishonest impulses, that constitute areas of human failings for the majority of individuals. While moderate elevations (in the range of 7-9/15 on adolescent profiles) may be related to tendencies toward conformity and the

use of denial, marked elevations (10/15 or above on adolescent profiles) reflect extreme denial and raise questions about response validity (Archer, 1987). The Lie Scale was administered to subjects in this study to screen for response validity. Out of 85 subjects who took this test measure, only 2 had Lie Scale scores of 8/15 or above. These 2 subjects were removed from the sample prior to data analysis.

3) The *Youth Self-Report* Form of the Child Behavior Checklist (YSR) (T.M. Achenbach, 1991). The YSR consists of 112 statements about thoughts, feelings, and behaviors, responded to on a three-point scale ranging from "not true" to "very true." The YSR provides norm-referenced information about youth behavior problems. Scored profiles include 8 behavioral syndrome scales: *Somatic Complaints*; *Withdrawn*; *Anxious/Depressed*; *Social Problems*; *Thought Problems*; *Attention Problems*; *Delinquent Behavior*; *Aggressive Behavior*. Profiles also include a *Total* problem behaviors score, and *Internalizing* and *Externalizing* problem behaviors composite scores. The syndrome scales designated as Somatic Complaints, Withdrawn, and Anxious/ Depressed are grouped under the heading of Internalizing. Syndrome scales designated as Delinquent Behavior and Aggressive Behavior are grouped under the heading of Externalizing. These groupings of syndromes reflect a distinction that has been detected in numerous multivariate analyses of children's behavioral/emotional problems (Achenbach, 1993).

At the end of the school year, participating students' academic records were reviewed and the following information was recorded for each student participating in the study:

1) Overall grade point average (GPA) since the ninth grade. GPA was computed based upon at least one full academic year for 84 subjects. (GPA was unavailable for one subject, who transferred schools prior to the end of the year.)

2) The most recent Tennessee Comprehensive Achievement Program (TCAP) Total Reading (TR), Total Language (TL), Total Math (TM), and Total Battery (TB) test scores. The TCAP TR, TL, and TM are norm referenced tests, and compare the achievement of Tennessee students with that of students at the same grade level nationally. These tests are part of the Comprehensive Tests of Basic Skills, developed by CTB of Macmillan/McGraw Hill; the 1988 standardization involved a cross-section of approximately 156,000 students in kindergarten through grade 12. TB is a composite score based on the sum of the students' TR, TL, and TM scores. The TB score has a high de-

gree of reliability (KR20, Grade 8 and Grade 10 versions, = .94), and is highly correlated with IQ scores (the correlation between TB scores and scores on CTB's intelligence test, the Test of Cognitive Skills, ranges between .76-.78 for secondary school students) (CTB, 1991). TB scores are reported here in the form of normal curve equivalents (TBNC), which are represented on an equal-interval scale of ranging from 1-99.

All students in Knox County routinely take the TCAP tests in the seventh and eighth grades. Up until this past year, students routinely took the TCAP tests in the tenth grade; it is now administered to tenth graders upon request only. Of the 84 TCAP test scores reported in this study, 53 are eighth grade scores, 28 are tenth grade scores, and 3 are seventh grade scores. (TCAP test scores were unavailable for one subject, who had transferred from another state prior to the beginning of the school year.)

Results

Data analysis for the final study began by computing a correlation matrix consisting of Pearson product-moment correlation coefficients, measuring the strength of linear relationships between individual variables. The three variables of primary interest in this study are grade point average (GPA), TCAP Total Battery score (TBNC), and Negativism Scale score (neg). As can be seen in Figure 6, GPA demonstrates a very strong positive correlation with TBNC ($r = .61$), and a strong inverse correlation with neg ($r = -.46$). TBNC and neg are inversely correlated, but the strength of this relationship ($r = -.25$) is not as great as that which exists between GPA and either of these two variables.

Figure 7 shows that the association between negativism and grades becomes increasingly significant as achievement test scores decrease. There is *no* relationship demonstrated between grade point average and Negativism Scale scores among the subgroup of 16 students whose TBNC scores are > 80 ($r < .01$, $p = .975$). Among students who TBNC scores lie between 40 and 80, GPA and neg strongly correlated ($r = -.42$, $p = .002$). Among the subgroup of 14 students who TBNC scores are < 40 , there is a very strong correlation between grade point average and negativism scale scores ($r = -.72$, $p = .004$). This difference between subgroups cannot be accounted for by variations in TBNC scores within the subgroups.

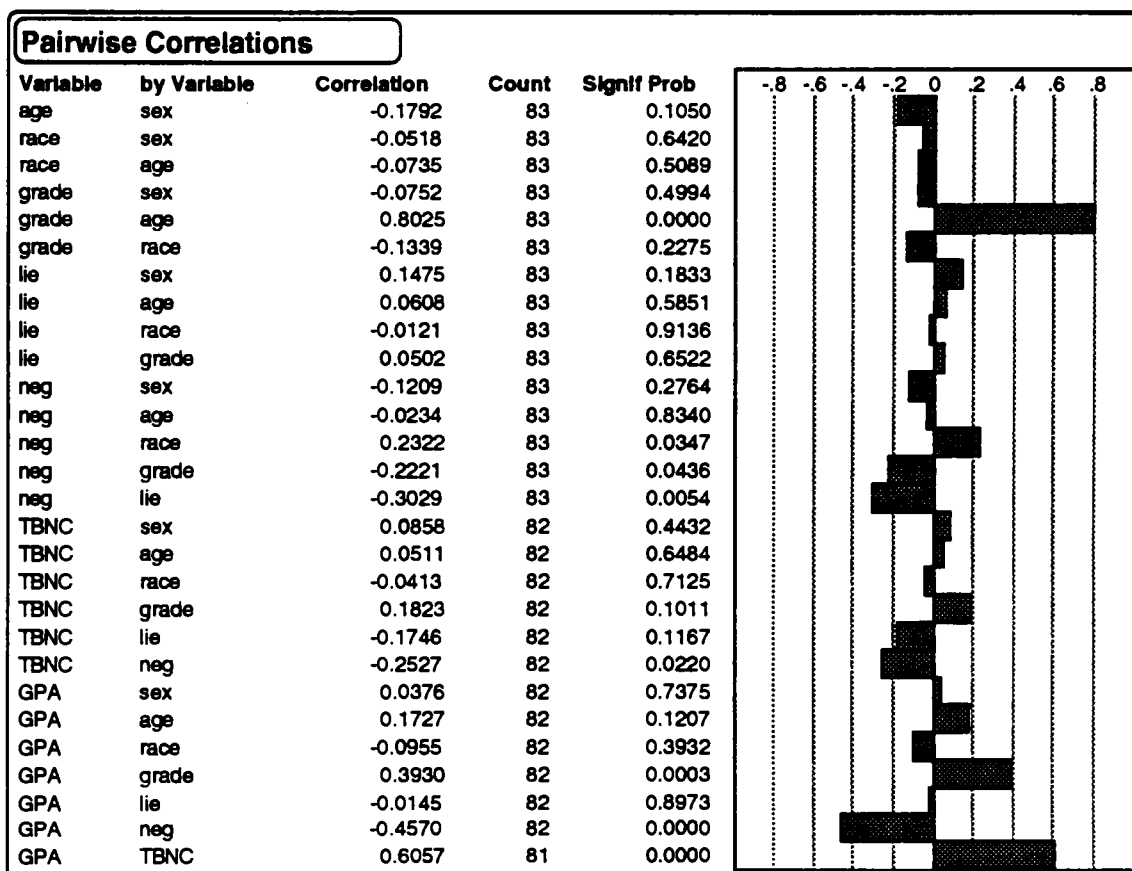


Figure 6: Correlations with GPA, Dissertation Study

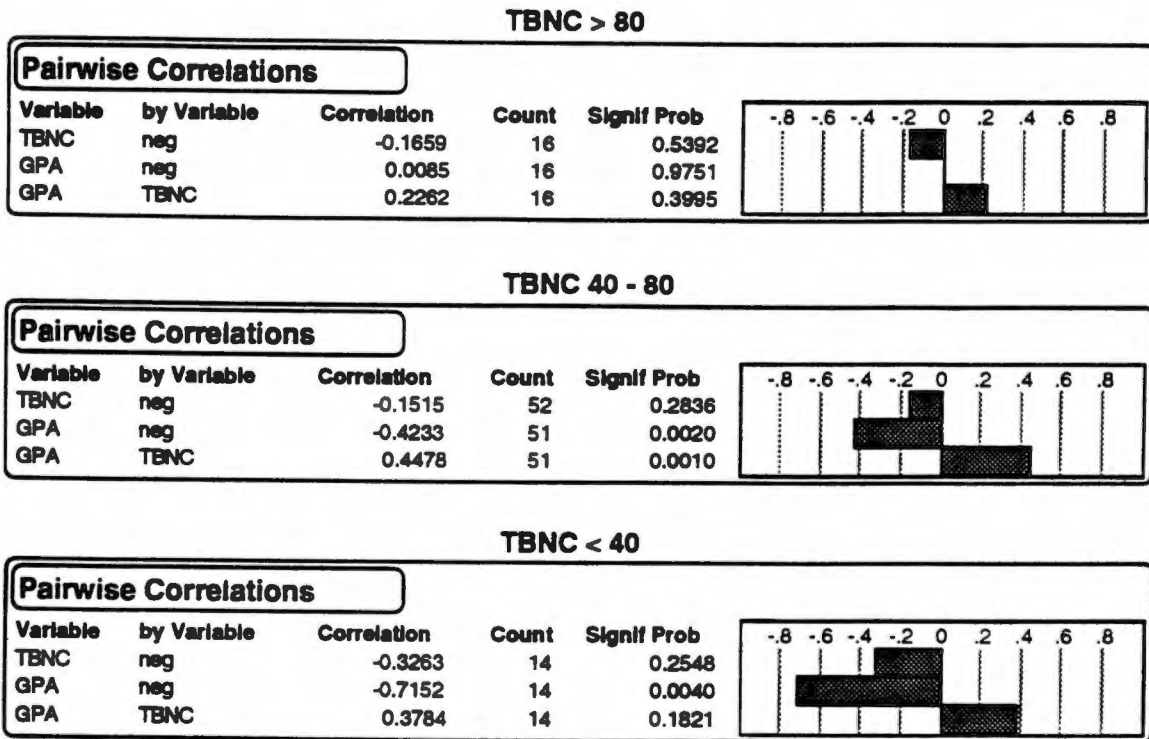


Figure 7: Correlations between GPA, neg, and TBNC by level of TBNC

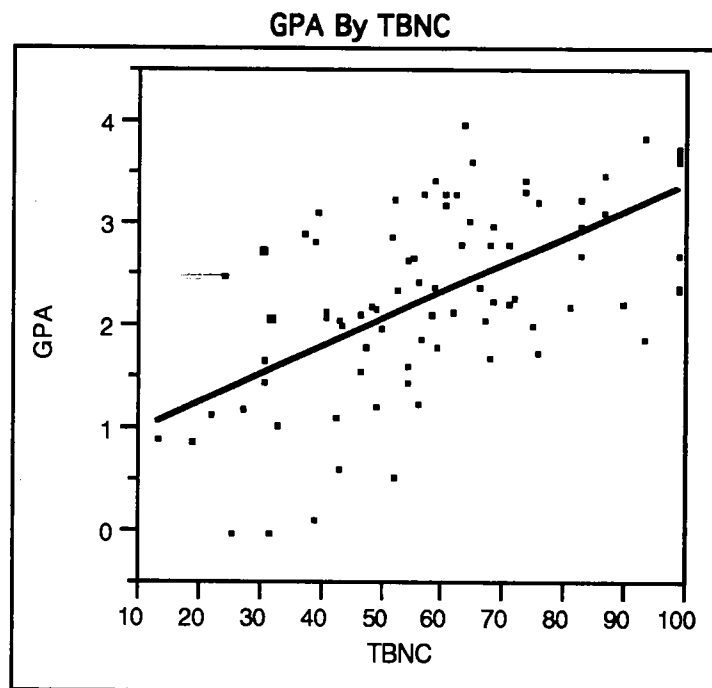
The central hypothesis to be tested in this final study was that the attitudinal trait of negativism contributes to academic underachievement, even when differences in academic ability are held constant. This hypothesis was tested by comparing the following regression equations:

(1) $TBNC + \text{Error} = GPA$

(2) $TBNC + \text{neg} + \text{Error} = GPA$

The .61 correlation between GPA and TBNC means that TCAP TB test scores alone, as represented by equation (1), account for approximately 36% (r^2 adj.) of the variation of grade point average in this sample group of high school students (this relationship is shown in Figure 8). When Negativism Scale scores are added to the regression formula, as is represented by equation (2), approximately 45% of the variation of GPA is accounted for (this relationship is shown in Figure 9; note that effect test data shows *both* TBNC and neg to be highly significant factors { $p < .0001$ and $p = .0003$, respectively}). And, when the interaction between TBNC and neg is factored into the equation ($TBNC + \text{neg} + \{TBNC \times \text{neg}\} + \text{Error} = GPA$; see Figure 10), approximately 48% of the variation of GPA is accounted for. Clearly, these results support the central hypothesis.

It was also hypothesized that scores on the Negativism Scale would evidence a correlation with self-reported delinquent and aggressive behaviors, which were expected to be inversely correlated with grade point average. As is shown in Figure 11, Negativism Scale scores do correlate with problem behaviors as measured by the YSR (YSR,T = Total problem behavior score). Both internalizing (withdrawn, somatic, anxious/depressed) (INT = Internalizing composite score) and externalizing (delinquent and aggressive) (EXT = Externalizing composite score) problem behaviors are positively correlated with Negativism Scale scores, although externalizing problem behaviors are more strongly correlated (r^2 adj. = .21 vs. r^2 adj. = .09). As is shown in Figure 12, GPA appears slightly correlated with INT, and slightly inversely correlated with EXT, but these relationships are not statistically significant. Thus, it would appear that the Negativism Scale is a better predictor of academic underachievement than is the YSR.



Linear Fit

$$\text{GPA} = 0.72931 + 0.02646 \text{ TBNC}$$

Summary of Fit

RSquare	0.366915
RSquare Adj	0.358902
Root Mean Square Error	0.746276
Mean of Response	2.314753
Observations (or Sum Wgts)	81

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	25.499398	25.4994	45.7858
Error	79	43.997297	0.5569	Prob>F
C Total	80	69.496695		<.0001

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t
Intercept	0.7293057	0.248547	2.93	0.0044
TBNC	0.0264644	0.003911	6.77	<.0001

Figure 8: TBNC + Error = GPA

**Response: GPA
Summary of Fit**

RSquare	0.467203
RSquare Adj	0.453542
Root Mean Square Error	0.688994
Mean of Response	2.314753
Observations (or Sum Wgts)	81

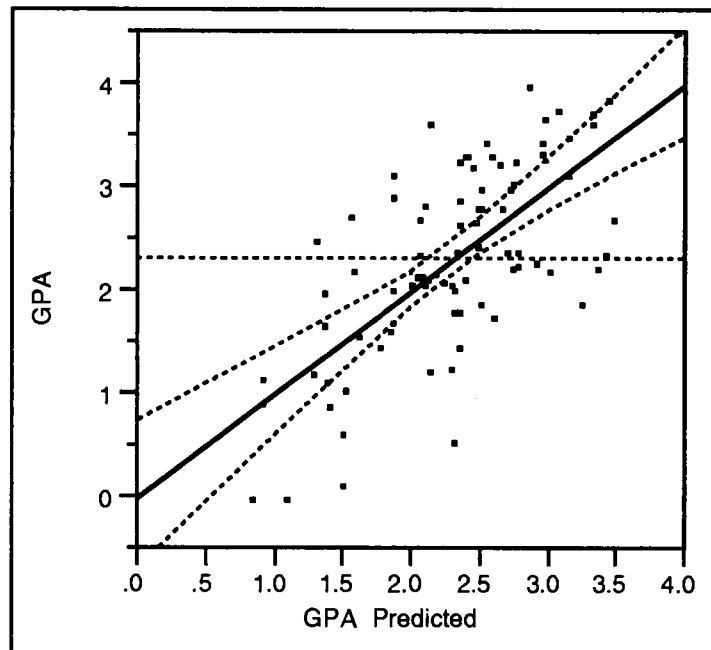
Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t	Lower 95%	Upper 95%
Intercept	1.4178971	0.291465	4.86	<.0001	0.8376332	1.998161
TBNC	0.0229281	0.003727	6.15	<.0001	0.0155083	0.0303479
neg	-0.05015	0.013088	-3.83	0.0003	-0.076207	-0.024093

Effect Test

Source	Nparm	DF	Sum of Squares	F Ratio	Prob>F
TBNC	1	1	17.966272	37.8466	<.0001
neg	1	1	6.969670	14.6819	0.0003

Whole-Model Test



Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob>F
Model	2	32.469068	16.2345	34.1986	<.0001
Error	78	37.027627	0.4747		
C Total	80	69.496695			

Figure 9: TBNC + neg + Error = GPA

**Response: GPA
Summary of Fit**

RSquare	0.498288
RSquare Adj	0.478741
Root Mean Square Error	0.672921
Mean of Response	2.314753
Observations (or Sum Wgts)	81

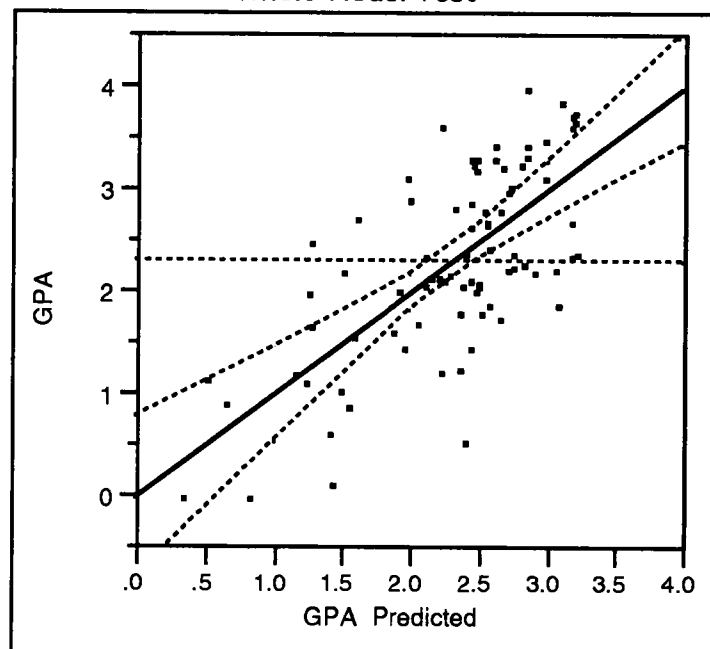
Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob> t	Lower 95%	Upper 95%
Intercept	2.2909873	0.49073	4.67	<.0001	1.3138162	3.2681585
TBNC	0.0087393	0.007446	1.17	0.2442	-0.006088	0.023567
neg	-0.126486	0.037213	-3.40	0.0011	-0.200587	-0.052385
neg*TBNC	0.0013064	0.000598	2.18	0.0320	0.0001154	0.0024974

Effect Test

Source	Nparm	DF	Sum of Squares	F Ratio	Prob>F
TBNC	1	1	0.6237221	1.3774	0.2442
neg	1	1	5.2313994	11.5529	0.0011
neg*TBNC	1	1	2.1603260	4.7708	0.0320

Whole-Model Test

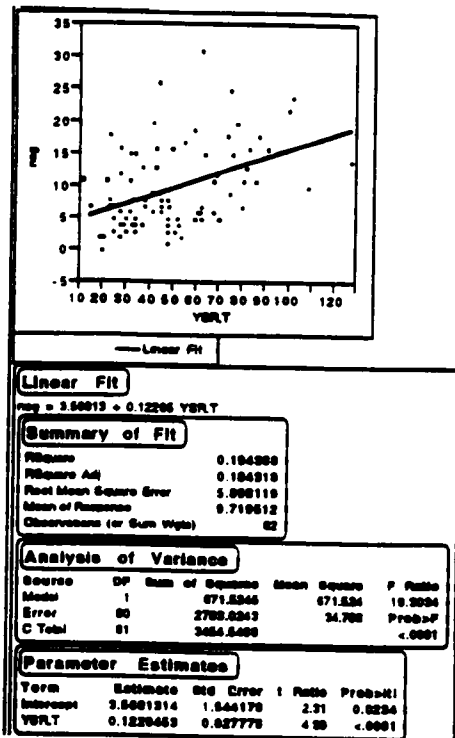


Analysis of Variance

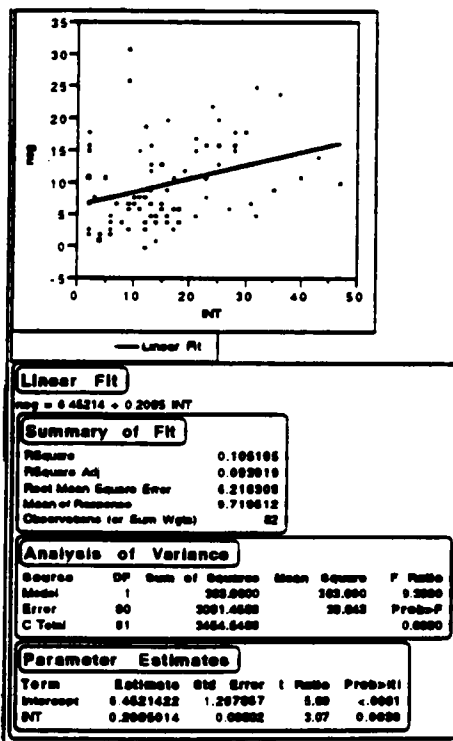
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	3	34.629394	11.5431	25.4915
Error	77	34.867301	0.4528	Prob>F
C Total	80	69.496695		<.0001

Figure 10: $TBNC + neg + (TBNC \times neg) + Error = GPA$

A) NEG BY YSR, T



B) NEG BY INT



C) NEG BY EXT

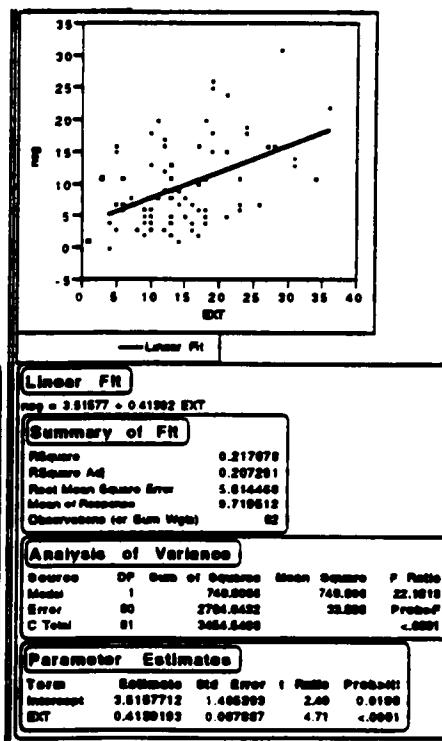
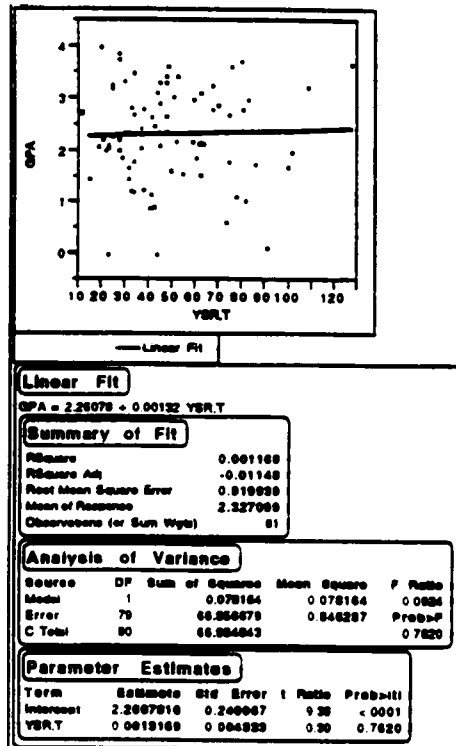
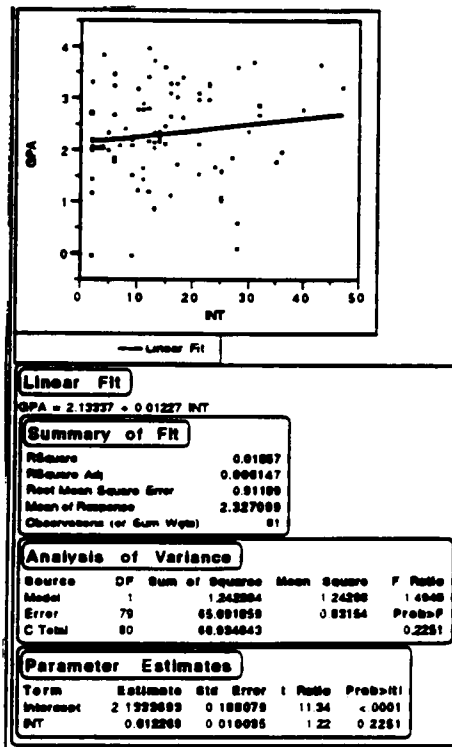


Figure 11: Correlations between neg and YSR

A) GPA BY YSR, T



B) GPA BY INT



C) GPA BY EXT

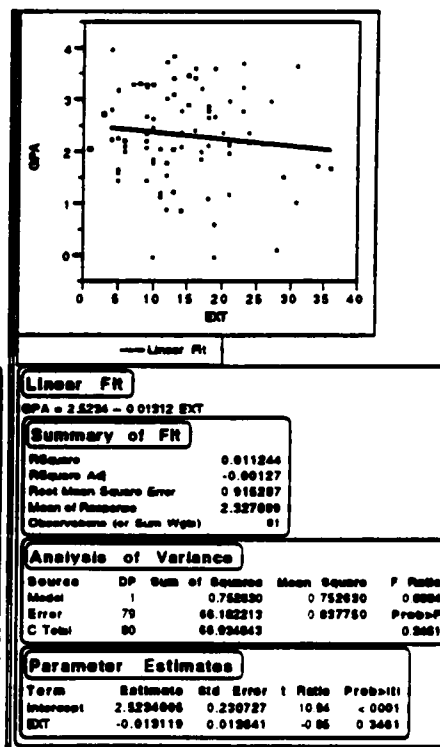


Figure 12: Correlations between GPA and YSR

Discussion

What is Negativism?

Results of this study showed Negativism Scale scores to be inversely correlated with academic achievement (grade point average). As a predictor of academic achievement, Negativism Scale scores took second place to achievement test scores, which proved to be the strongest single predictive variable. However, when combined in a regression formula, achievement test scores and Negativism Scale scores together were significantly more predictive of grade point average than was either variable by itself. Therefore, high Negativism Scale scores were associated with academic underachievement. Careful analysis of the data showed that the association between negativism and academic underachievement became increasingly significant as achievement test scores decreased; there was no relationship between Negativism Scale scores and academic underachievement among students with high achievement test scores, but there was a strong relationship between Negativism Scale scores and academic underachievement among students with low achievement test scores.

These results indicate that the Negativism Scale might be a useful psychometric device: it is brief, easily administered, and could perhaps be used by school psychologists or guidance counselors to help identify junior high or high school students at risk for academic underachievement. However, questions regarding this scale's practical utility could only be answered following additional studies, and are not directly relevant to this dissertation. The most important questions to address here are theoretical ones: what is negativism, why might it be associated with academic underachievement in students at the lower end of the ability spectrum, and how does it develop?

Negativism was so labeled because it is associated with futility, with the *negation* of possibility and potentiality. The attitude of negativism combines an external locus of control, feelings of distrust and resentment, and a tendency towards egocentrism and anti-social behavior. Negativism expresses a relationship between these intrapsychic and interpersonal phenomena; it is both an internal state of mind and a way of being-in-the-world. When a person feels negativistic, that person is doubtful of his or her ability to

achieve anything of personal value within the framework of social expectations. The negativistic individual is more likely to "look out for number one," and less likely to adhere to societal standards or strive for success, because he or she does not expect to succeed anyway. Michael Apter's (1982) definition of negativism as a metamotivational state of mind in which individuals experience conformity as unpleasant and rebellion as pleasant is a phenomenological complement to the above description. Apter's definition reminds us that negativism is not a purely defensive stance, but also a preferred way of being, and a source of pleasure for those who embrace it.

It is my belief, as is implied in the above description, that negativism is associated with academic underachievement because the negativistic individual does not strive for success in school. I am unsure why the association between negativism and underachievement might become increasingly significant as achievement test scores decrease. Perhaps high-ability students are capable of achieving good grades with minimal effort, while low-ability students are not; perhaps there are other factors associated with low achievement test scores that interact with negativism. In any case, it appears that the *combination* of below-average academic ability and a negativistic attitude is a strong predictor of academic underachievement. The nature of the relationship between negativism and underachievement, and the development of a negativistic attitude, are matters of considerable speculation given the limited data presented in this dissertation. However, more can be said if other, related research evidence is reviewed. In the remainder of this final section, negativism is discussed in context with other personality and attitudinal factors that have been empirically associated with academic underachievement.

Negativism and Types of Academic Underachievers

Academic underachievement is currently defined in the Thesaurus of Psychological Index Terms (American Psychological Association, 1994) as "academic achievement less than expected based on one's scholastic aptitude score or individual intelligence." Conceptually, this is easily understood. Parents and teachers frequently identify students who do not achieve up to their potential. Empirically, this is also easily understood. Following from the above definition, academic underachievement can be identified when IQ, scholastic aptitude, or related test scores are statistically controlled, and neurologically-based learning disorders are ruled out, in the sample being studied. However, for a variety of methodological reasons, this area of research is complicated

and problematic. Different operational definitions have been used (i.e., in measuring underachievement, and/or in distinguishing between general underachievement and specific underachievement); different portions of the ability distribution have been sampled (i.e., gifted versus nongifted students); population samples have been more or less adequately screened for neurologically-based learning disorders (the literature on underachievement predates the contemporary interest in learning disabilities) (Mandel and Marcus, 1988; McCall et al., 1992). Despite these complications, progress has been made towards identifying motivational and personality factors which influence the achievement process. In an extensive review of the research literature on academic achievement, Mandel and Marcus (1988) summarized lists of personality characteristics that have been empirically associated with academic underachievement, achievement, and overachievement (see Table 1). As can be seen below, academic underachievement has been associated with a diversity of personality characteristics, some of which appear incongruous with others.

Table 1: Personality Characteristics of Academic Underachievers, Achievers, and Overachievers
(Adapted from Mandel and Marcus, 1988)

<u>Underachievers</u>	<u>Achievers</u>	<u>Overachievers*</u>
Submissive	nAch-motivated†	Socially Aware
Defensive	Positive self-imaging	Responsible
Easygoing	Serious-minded	Grade-motivated
Considerate	Responsible	Achievement-oriented
Unassuming	Dominant	Family dependent
Rebellious; touchy	Self-confident	Approval-seeking
Extroverted	Disciplined	Internally anxious
Alienated	Future-oriented	Very Hardworking
Passive-aggressive	Independent	Consistent
Affect-inhibited		Self-starting
Hostile; resentful		Organized
Low-aspiring		
Depressed		
Anxious		
Distrustful		
<u>Pessimistic</u>		

* Students who achieve more than is generally expected of them

† nAch = Need for achievement

According to Mandel and Marcus, underachievers are a heterogeneous group because underachievement develops under different sets of conditions and has distinct symptomatologies. These researchers are unique in having studied the emergence of various *types* of underachieving students, systematically discriminated between them, and

developed a model of differential diagnosis. Their classification scheme for underachievers contains six categories. Personality style, rather than abnormality or psychopathology per se, is emphasized as a basis for classification. Several categories are consistent, although not synonymous, with diagnoses found in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (American Psychiatric Association, 1994). The six types of academic underachievers they have identified are summarized below (Mandel and Marcus, 1988, 1995; Mandel, Marcus, and Mandel, 1992).

(1) The *academic problem underachiever*, or *coaster*. These students are characterized by their easy-going demeanor, adaptive social relationships, and seeming lack of concern regarding academic performance.

(2) The *overanxious disorder underachiever*, or *anxious underachiever*. This category corresponds to the DSM-IV diagnosis of Generalized Anxiety Disorder (300.02). Anxious underachievers want to do well in school, but are disabled by excessive anxiety.

(3) The *conduct disorder underachiever*, or *wheeler-dealer*. This category corresponds to the DSM-IV diagnosis of Conduct Disorder (312.8). Conduct disorder underachievers routinely violate rules and the rights of others. They are impulsive, manipulative, and intent on instant gratification.

(4) The *oppositional defiant disorder underachiever*, or *defiant underachiever*. This category corresponds to the DSM-IV diagnosis of Oppositional Defiant Disorder (313.81). Defiant underachievers do poorly in school as an act of rebellion. Like conduct disorder underachievers, defiant underachievers violate rules and regulations; however, unlike conduct disorder underachievers, defiant underachievers do not generally violate the basic rights of others.

(5) The *identity disorder underachiever*, or *identity-searcher*. Identity disorder underachievers are preoccupied with introspection and issues of self-definition, at the expense of their school work.

(6) The *depressed underachiever*. This category corresponds to the DSM-IV diagnosis of Dysthymic Disorder (300.4) (Major Depressive Disorder is related, but indicates symptoms so severe that academic underachievement would not be a primary focus of treatment). Depressed underachievers do poorly in school secondary to symptoms of depression, i.e. low energy, low self-esteem, and poor concentration.

According to Mandel and Marcus (1995), 30% to 40% of all academic underachievers can be labeled as coasters, and 10% to 20% as anxious, with prevalence rates somewhere between 5% and 10% for each of the other four categories.

Descriptions by Mandel and Marcus of the thoughts, feelings, and behaviors typically manifested by two of these types of underachievers -- the conduct disorder underachiever, and the oppositional defiant underachiever -- are consistent with the attitude of negativism. For example, in describing conduct disorder underachievers, they state "A child who knows only angry rejection and indifference is likely to grow up with an intense and overpowering anger and related needs to get even with the world, especially if everyone in it is perceived as not really caring anyway.... These are people who feel angry at the world and believe that people are to be used. They will twist the truth, avoid close relationships with others, and attempt to satisfy their immediate needs without thinking of the consequences.... Studying and getting good grades are simply a nuisance; there's no immediate payoff" (Mandel and Marcus, 1988, pp. 240-241). The characteristics of negativism -- an external locus of control, resentment and distrust, no stock placed in playing by the rules -- are all emphasized here.

While the conduct disorder underachiever is primarily concerned with his or her own immediate self-interest, the oppositional defiant underachiever performs poorly in school for symbolic reasons: "When a suggestion is made by an authority figure, Oppositional Defiant Disorder underachievers are automatically against it. Conversely, when a like-minded friend makes a suggestion, they are automatically for it.... In other words, Oppositional Defiant Disorder underachievers base their actions on how they are treated by others rather than on their own internal goals. Obviously, with this kind of priority, academic achievement is often sacrificed in the battle" (Mandel and Marcus, 1988, pp. 314-315). Again, this description emphasizes an external locus of control, interpersonal resentment and distrust, and an unwillingness to play by society's rules. However, according to Mandel and Marcus, oppositional defiant underachievers do not necessarily underachieve because they cannot see the point of achieving, but rather because they are engaged in an ideological struggle with authority. One gets the sense that there may be a greater likelihood of change in the oppositional defiant underachiever than in the conduct disorder underachiever.

The most common type of underachiever identified by Mandel and Marcus -- the academic problem underachiever, or coaster -- is described as having an external locus of control, and as placing no stock in achievement striving: "While these students are making a careful, deliberate, and strongly motivated effort to underachieve, they are also making an equally motivated effort to convince themselves (that is, to pretend) that the underachievement is not a choice at all, but actually is a product of forces beyond their

control.... Making commitments, keeping up the energy level, taking in the fruits of success produce serious crises for these students: the pressure of being expected to achieve. Achievement is not rewarding or self-motivating or pleasurable or satisfying; it is something to be postponed for as long as possible" (Mandel and Marcus, 1988, pp. 260-261). However, these students are described as friendly and easy-going, not resentful or distrustful. Therefore, the academic problem underachiever would appear to have some, but not all of, aspects of a negativistic attitude. (Perhaps these are potential negativists who have been treated relatively well by others.) The other three types of underachievers identified by Mandel and Marcus do not appear to be characterized by negativism. This should be no surprise, as negativism accounts for only a small portion of the variance in academic achievement with ability level held constant.

Negativism and Attributional Style

The study of individual differences in achievement-related attributions stems primarily from locus of control research. Rotter (1966) proposed the now familiar distinction between internal and external locus of control, as generalized expectancies that individuals develop in relation to the control of events. In 1971, Bernard Weiner and his colleagues proposed an *attributional model of motivation* which suggested that one's affective and cognitive reactions to success or failure on an achievement task are a function of the causal attributions that are used to explain why a particular outcome occurred. Weiner, et al., proposed that the major perceived causes of achievement performance are ability, effort, luck, and task ease/difficulty. Ability and effort are causes considered to originate within or internal to the individual; task ease/difficulty and luck are considered to be within the environment or external to the individual. Weiner's attributional theory has spawned numerous studies on the consequences of causal attributions, including studies that have analyzed children's achievement behaviors. In 1985, Whitley and Frieze reported the results of a meta-analysis of research on the causal attributions of children and early adolescents. A total of 25 studies were selected for analysis. All of these studies assessed attributions for experimental or concurrent natural events, and analyzed attributions to the four causal factors of ability, effort, the task, and luck. The overall results of this meta-analysis indicated that, compared with failure, success elicits stronger attributions to ability (mean effect size = .56) and effort (mean effect size = .29),

whereas failure elicits stronger attributions to task difficulty (mean effect size = .45). The overall results for attributions to luck were non-significant.

Research provides general support for the attributional model: successful children, compared with unsuccessful children, tend to make stronger attributions to ability and effort, whereas unsuccessful children tend to make stronger attributions to task. However, attributions to chance events do not appear to be an influential factor. This is consistent with the data presented in this dissertation: items on the Negativism Scale do not imply that one cannot *predict* success or failure, only that one cannot *prevent* failure. [An item which has the former implication -- "I can't predict how things will turn out at work or school" -- was removed during the final stage of scale construction because it did not factor in with the other 8 items (pp. 10 - 11).] Which raises an important question: how can we know whether differences in attribution reflect differences in cognitive style, or differences in fundamental realities, which are themselves linked to success or failure? If, in fact, a person *is* unable to exert control over their environment, or *is* unable to succeed in school, then attributions to external circumstances or to lack of ability may be realistic appraisals. This question gets to the heart of the IQ/abilities debate, which was discussed in the introductory section (pp. 3-4). It is my belief that attributional style, while somewhat reflective of realities beyond a person's control, can become a self-fulfilling prophecy that has a significant effect in and of itself. This interpretation is supported by my dissertation study which indicates that negativism is inversely correlated with ability, but that its significant effect on academic performance cannot be accounted for by ability levels alone. It is also supported by Carol Dweck's research on children's attributional styles.

Carol Dweck and her colleagues have reported findings indicating that children tend to favor either of two functional theories of intelligence (Dweck and Bempechat, 1983; Henderson and Dweck, 1990). The first, which Dweck calls the "entity" theory, involves the belief that intelligence is a rather stable, global trait. The second, which Dweck calls the "incremental" theory, involves the belief that intelligence consists of an ever-expanding repertoire of skills and knowledge. Children who attribute intelligence to incremental effort tend to put forth more effort and are concerned with learning new skills; children attribute intelligence to a fixed entity tend to be more concerned with showing that entity to good advantage in order to receive positive judgments by performing well. Dweck claims not only that these functional theories become self-fulfilling prophecies, but that "...the tendency to display the facilitating or debilitating pattern in the

face of difficulty appears to be virtually independent of the child's level of ability -- either as assessed by such standardized measures as IQ or achievement tests or by measures of task performance prior to encountering obstacles" (Dweck and Bempechat, 1983, p. 240).

In one study, Henderson and Dweck (1990) examined the applicability of their model to the early adolescent transition. Students were followed over the first few months of the seventh grade (their first year of junior high school). Their implicit theories of intelligence, confidence in their intelligence, level of anxiety, and grades were measured. The students' sixth-grade achievement scores were also measured in order to determine how much the motivational factors contributed to seventh-grade grades over and above what was expected based upon these scores. Henderson and Dweck report the grades of four groups of students, divided according to assessments of their theories of intelligence (incremental or entity) and their confidence in their intelligence (high or low). The average grades for each of the four groups are presented in Figure 13, along with the projected grades based upon sixth-grade achievement scores. The incremental high-confidence group earned the highest grades, as was expected based upon test scores. Similarly, the entity low-confidence group did very poorly, as was expected based upon test scores. However, the two middle groups defied projections. The incremental low-confidence group did quite well relative to what was predicted; in contrast, the entity high-confidence group, who were expected to do rather well, ended up doing very poorly.

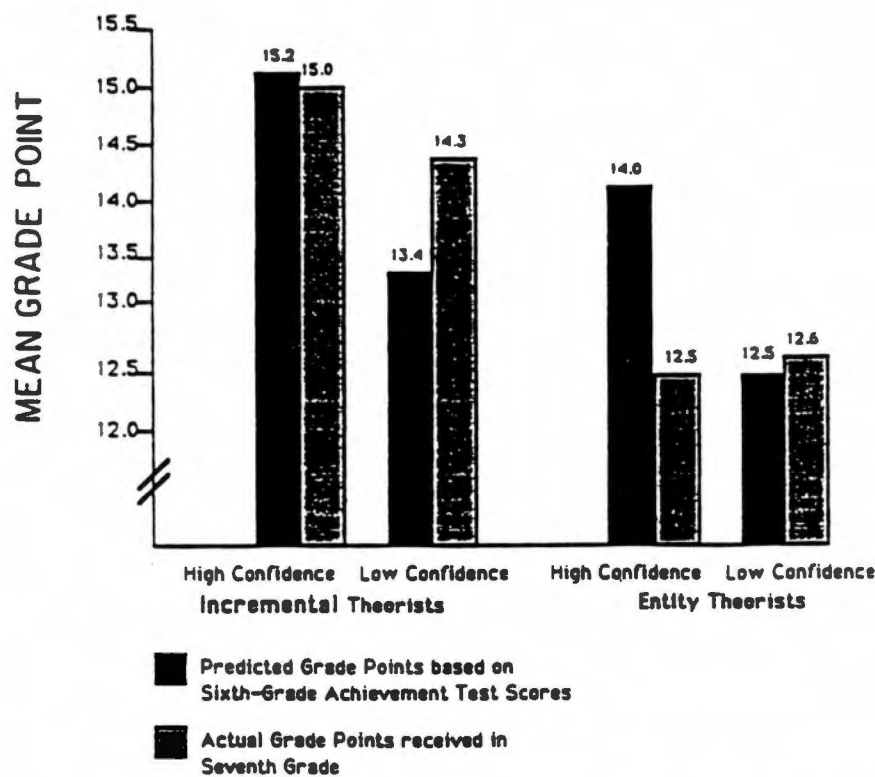


Figure 13: Predicted Grade Point and Actual Grade Point
(Adapted from Henderson and Dweck, 1990)

The Downward Spiral of Academic Failure

The study by Henderson and Dweck described above suggests that junior high school might be a major turning point for some students. There is other evidence which shows that school-related problems become more prominent and more severe during early adolescence. Student's attitudes towards school and academic subjects, and school grades, often decline during the early adolescent years. For example, Jacquelynne Eccles found that students rated "because I have to" as a more important reason for attending school after they had moved into junior high school than they had rated it earlier while they were still in elementary school (Eccles, 1991). Simmons and Blythe (1987) found a marked decline in some early adolescents' grades as they moved into junior high school. Furthermore, the magnitude of this decline was predictive of subsequent school failure and dropout, suggesting that the adolescent years mark the beginning of a downward spi-

ral for some individuals. Eccles et al. (1993) conducted a large-scale ($N = \sim 1500$), two-year longitudinal study of the impact of changes in the school and classroom environments on early adolescents' achievement-related beliefs, motives, values, and behaviors. These researchers found that the shift to junior high school is characterized by a greater emphasis on teacher control and discipline, fewer opportunities for student decision making, an increase in evaluation and competitiveness, and less personal and positive teacher-student relationships. They also found that there was a decrease in intrinsic motivation and an increase in school misconduct associated with this transition; these changes were most apparent among those adolescents who reported experiencing the greatest mismatch between their needs and their opportunities to participate in classroom decision-making. Eccles (1993, 1991) has argued that changes in the educational environment may be developmentally regressive for some adolescents, particularly for those who have not developed adequate self-confidence and an internalized sense of motivation.

The Positive Value of a Negativistic Attitude

The school-related problems which develop during early adolescence can be seen as resulting from both external changes in the school environment and from internal, developmental changes. Success in an atmosphere of decreasing interpersonal support and increasing competition requires both ability and a willingness to put forth an increasing amount of effort. Young children do not necessarily experience the conflict between effort and possible loss of self-esteem because they often believe that increases in effort can actually cause increases in ability -- in effect, holding an "incremental" theory of intelligence (Dweck and Bempechat, 1983). As adolescents' cognitive skills mature and they are exposed to the social pressures favoring high levels of performance and ability, their attitudes with regard to effort and performance may change. Those who do not have confidence that their abilities will compare favorably with other's may decide to withdraw from the competition -- *if* they are also not confident in the value of their effort, and/or feel especially vulnerable to being revealed as inadequate. This process has been described by Martin Covington, an educational psychologist at the University of California in Berkeley who has integrated attributional and motivational concepts to help explain achievement behavior. Covington's theory of *motivated cognitions* posits that a multi-step process is at work when individuals make attributions regarding their success or failure (Covington, 1983; Covington and Omelich, 1979, 1981; Covington et al.,

1980). First, individuals arrive at a private assessment of causes. These may be biased unconsciously by the need to maintain a sense of competency. Second, private perceptions may undergo further distortions as a result of public presentational concerns, which are influenced by the immediate social environment. Covington has emphasized that the motivation to avoid failure (which engenders social disapproval and a feelings of shame) has a strong influence on cognitions and on academic performance.

The discouraged student's defensive strategy of avoiding failure by withdrawing effort is adaptive in as much as it protects his or her self-esteem, and that is the problem. It is these students, I believe, who are most at risk for developing a negativistic attitude. Much of the emotional turmoil which does occur during adolescence springs from a new awareness of discrepancies between self-perceptions and aspirations, an awareness which is created by improved conceptual accuracy and increased self-presentation concerns (Damon and Hart, 1988; Damon, 1991; Markus and Nurius, 1986). If the expectation that one cannot or will not succeed has some basis in reality, then a negativistic attitude may serve as an effective defense against interpersonal disappointment or frustration. However, once such an attitude takes hold, it can take on a life of its own. Apter has described the allure of negativism: "...in the conformist state we like to keep to whatever rules we are aware of. In the opposite negativistic state, however, we feel a need to defy rules and we gain gleeful pleasure in being perverse (or if not gleeful pleasure, then at least vengeful satisfaction)" (Apter, 1993, p. 33). While this applies to most all of us on *some* occasions, in extreme cases, negativism can become the basis for much of a person's identity (Erikson, 1956, 1968). Therefore, the identification of this self-defeating adjustment strategy is important, as early as possible. If the attitude of negativism is recognized before becomes firmly ingrained, than perhaps the at-risk student's distrust of teachers and his/her own ability to succeed can be addressed through counseling.

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VITA

Dan Goodkind was born in Washington, D.C. on May 10, 1963. His interest in his dissertation topic started early when, as an adolescent, he began to experiment with a negativistic attitude within the context of his family and a repressive school environment. In later years, it occurred to Dan that he was decidedly lucky to have graduated from college (the University of California at Santa Cruz) and entered graduate school (the University of Tennessee at Knoxville, Clinical Psychology Program), where he was able to identify this attitudinal trait empirically, and actually earn a Ph.D. Dr. Goodkind currently lives in beautiful Johnson City, Tennessee. He enjoys his work as a clinical psychologist, as well as hiking in the surrounding mountains and kayaking on the local rivers. Dr. Goodkind continues to study the effects of negativism through empirical research and self-reflection.