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ABSTRACT

Factors commonly associated with underachievement in the research literature include low self-concept, low self-motivation/self-regulation, negative attitude toward school, and negative peer influence. This study attempts to isolate these four factors within a secondary school population. The purpose of the study was to design a valid and reliable instrument to measure adolescents' academic self-perceptions, attitudes toward school, motivation/self-regulation, and perceived peer attitude in order to understand the underachievement of able youth more fully. The School Attitude Assessment Survey (SAAS) attempted to isolate these factors within a secondary school population. This paper presents the results of the cross-validation of the SAAS pilot study involving 942 students from 1 middle school and 2 high schools and presents evidence of the validity and reliability of the SAAS for use with secondary school students. The cross-validation also lends credence to the construct validity of the four-factor model. An appendix contains the SAAS instrument. (Contains 52 references.) (SLD)

Running Head: SAAS

A Cross-validation study of the School Attitude Assessment Survey (SAAS)

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Abstract

The underachievement of able students frustrates parents, teachers, and counselors. Yet, many issues surrounding this topic remain unresolved. Educators continue to disagree about how to properly identify and serve underachieving students. Researchers have attempted to isolate psychological factors that appear to be correlated with underachievement. Factors commonly associated with underachievement in the research literature include low self-concept, low self-motivation / self-regulation, negative attitude towards school, and negative peer influence. The present study attempts to isolate these four factors within a secondary school population. The purpose of the present study was to design a valid and reliable instrument to measure adolescents' academic self-perceptions, attitudes towards school, motivation / self-regulation, and perceived peer attitudes in order to more fully understand the underachievement of able youth. The School Attitude Assessment Survey (SAAS) attempted to isolate these factors within a secondary school population. This presentation reports the results of the cross-validation of the SAAS pilot study and presents evidence of the validity and reliability of the SAAS for use with secondary school students.

A Cross-validation study of the School Attitude Assessment Survey (SAAS)¹

The underachievement of able students frustrates parents, teachers, and counselors. Yet, issues surrounding this topic remain unsolved. Researchers continue to disagree about how to identify and serve underachieving students (Reis & McCoach, in press). Are these students at greater risk for social or emotional problems than other students? Do they share any common behavioral or personality characteristics? Do they require differentiated counseling and instructional interventions?

Characteristics of Underachievers

Researchers have attempted to isolate psychological factors that appear to be correlated with underachievement. The diversity of this population has made such an endeavor virtually impossible. Numerous authors (Bricklin & Bricklin, 1967; Bruns, 1992; Clark, 1988; Dowdall & Colangelo, 1982; Gallagher, 1991; Mandel & Marcus, 1988; Richert, 1991; Rimm, 1995; Supplee, 1990; Van Boxtel & Monks, 1992; Whitmore, 1980) have ascribed a wide range of characteristics to underachieving students. Although lists and descriptions of "common personality traits" of underachievers abound, the utility of such lists is questionable. For each personality trait common to underachievers, many other underachieving students do not exhibit that trait. In addition, students who are not underachievers may exhibit one or several of these characteristics. Often, the lists of common personality traits contradict one another; no one

¹ McCoach, D. B. (2000, April). A cross-validation study of the School Attitude Assessment Survey (SAAS). A paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

person could possess all of these characteristics (Mandel & Marcus, 1995). Most of the research that investigates common characteristics of underachieving students has employed qualitative, clinical, or single subject research methodology. Very few large-scale quantitative studies have examined the legitimacy of these hypotheses, and the generalizability of qualitative studies is very limited. Therefore, that these lists contain contradictory characteristics is not surprising.

Some of the many factors commonly associated with scholastic underachievement include: 1) low self-concept, 2) low self-motivation and self-regulation, 3) negative attitude towards school, and 4) negative peer influence. The present study attempts to isolate these four factors within a secondary school population.

Academic Self-Perceptions

“The past three decades have witnessed a renewal of interest in self-perceptions and their correlates” (Harter, Whitesell, & Junkin, 1998, p. 654). Underachievers often exhibit low self-concept or low self-efficacy (Bricklin & Bricklin, 1967; Bruns, 1992; Clark, 1988; Diaz, 1998; Dowdall & Colangelo, 1982; Fine & Pitts, 1980; Fink, 1965; Ford, 1996; Kanoy, Johnson, & Kanoy, 1980; Supplee, 1990; Van Boxtel & Monks, 1992; Whitmore, 1980). A recent study (Lyon, 1993) suggested that academic self-concept is a significant predictor of academic achievement. Lyon found that “nearly one third of the variance in achievement is accounted for by academic self-concept alone” (p. 208). The correlation of positive self-concept with student achievement raises an interesting but unanswered question. Does low self-concept cause underachievement, does underachievement result in a deterioration of self-concept, or does a third

factor exert a negative influence on both self-concept and academic achievement? Both longitudinal studies of achievers and underachievers and the development of structural equation models of achievement and underachievement may help clarify the direction of causality between these two variables.

Peer Issues

Peer issues may also contribute to the achievement and underachievement of adolescents. Reis, Hebert, Diaz, Maxfield, & Ratley (1995) found that high achieving peers had a positive influence on gifted students who began to underachieve in high school. Positive peer interaction contributed to some students' reversal of underachievement. Likewise, negative peer attitudes can often account for underachievement (Clasen & Clasen, 1995; Weiner, 1992). Underachieving students frequently report peer influence as the strongest force impeding their achievement (Clasen & Clasen). "Sixty-six percent of the students named peer pressure or attitude of the other kids, including friends, as the primary force against getting good grades" (Clasen & Clasen, p. 68-69). An examination of the NELS: 88 data revealed that students with friends who cared about learning demonstrated better educational outcomes than those with less educationally interested or involved friends (Chen, 1997). A more recent study of peer influence on students' adjustment to school (Berndt, 1999) measured students' grades and behavior in the fall and spring of one academic year. Berndt found that students seemed to more closely resemble their friends at the end of the school year than they did at the beginning of the school year. Students' grades decreased between fall and spring if their friends had lower grades in the fall. This finding does

not imply causality, since “students often select friends whose characteristics are already similar to theirs” (Berndt, p. 18). However, these findings support the notion that there is a correlation between a student’s achievement and the achievement of his or her closest peer group.

Attitude Towards School

Underachievers appear to display negative attitudes toward school (Bruns, 1992; Clark, 1988; Diaz, 1998; Ford, 1996; Frankel, 1965; Mandel & Marcus, 1988; McCall Evahn, & Kratzer,, 1992; Rimm, 1995). “Research findings over many years have consistently indicated that young people who do well in school tend to be interested in learning” (Weiner, 1992, p. 260).

Underachievers seem to exhibit more negative attitudes toward school than average and high achievers do. Mandel and Marcus hypothesize that when underachievement relates to personality and motivational characteristics, students exhibit negative attitudes toward school. In a recent study, Majoribanks (1992) found that children’s cognitive attitudes toward school demonstrated moderate, statistically significant associations with achievement. Interestingly, affective attitudes toward school and achievement were correlated for girls, but not for boys. Again, although there appears to be a relationship between these two variables, the relationship between negative attitude towards school and underachievement does not suggest or determine any flow of causality between the two variables.

Motivation and Self-Regulation

The relationship between motivation and academic achievement is complex. Dweck’s research (1998) suggested that students’ motivational patterns are not related to intelligence or

achievement. However, self-regulation may hold the key to understanding student achievement. “The construct of self-regulation refers to the degree that individuals are metacognitively, motivationally, and behaviorally active participants in their own learning process” (Zimmerman, 1994). Components of self-regulation include time management, mastery of learning methods, and goal directedness (Zimmerman, 1994). After reviewing the literature in underachievement, Krouse and Krouse (1981) concluded that “self-control is an important factor in academic performance. Deficits in self-control can play a strong and consistent role in contributing to academic underachievement” (p. 155). Unfortunately, disentangling the constructs of motivation and self-regulation has proven challenging. Underachievers may lack motivation, self-regulation skills, or a combination of the two traits. “Underachievers may not lack knowledge of strategies, but rather they may not understand that strategic behavior in conjunction with effort results in achievement” (Borkowski & Thorpe, 1994). Research (Schunk, 1998; Zimmerman, 1994) suggests that self-efficacy and self-regulation are positively related. Therefore, the self-perception dimension and the self-regulation dimension of the SAAS should exhibit a strong positive correlation.

Purpose

The purpose of this study was to design a valid and reliable instrument to measure academic self-perceptions, attitude towards school, motivation / self-regulation, and peer attitudes in secondary school students. The School Attitude Assessment Survey (SAAS) represents an attempt to measure these traits within a secondary school population. This phase of the pilot

study was designed to cross-validate the SAAS on a new sample of students to determine the adequacy of the previously conducted analyses of reliability and construct validity.

Method, Procedures, and Results

Content Validation

Content validity is a qualitative type of validity. The goals of content validity are to clarify the domain of a concept and judge whether the measure adequately represents the domain. (Bollen, 1989). “To know the domain of a concept, we need a theoretical definition that explains the meaning of the concept” (p. 185). As part of the content validation process, 18 professors and doctoral students in the department of educational psychology at the University of Connecticut evaluated the initial item pool. The panel of experts provided two ratings for each item. First, the content judges placed each of the questions into one of the four categories (academic self-concept, attitude towards school, peer attitudes, or motivation/self-regulation) according to the definitions listed in Table 1. Then the judges rated the certainty of the item classification on a 5-point Likert scale. If at least 80% of the judges agreed that a question belonged in a certain category and felt either sure (4) or very sure (5) of the item’s placement, the item was retained. Forty-five content validated items were placed on the final form of the pilot SAAS.

Sample

This study utilized a sample of convenience. The cross-validation sample consisted of 942 students from one middle school and two high schools in three different states. All of the students attended public schools. Of the sample, 46% were male, 50.6% were female, and 3.4%

did not indicate their gender on the response form. The instrument did not inquire about the racial or ethnic identity of the students. At least 30 students from each grade level (7-12) completed the SAAS. The greatest representation within this sample came from grade 7 (n=221, 23.5%), grade 8 (n=311, 33%), and grade 12 (n=240, 25.5%).

Construct Validation

Researchers often employ factor analytic techniques in order to assess construct validity. Factor analysis represents “a broad category of approaches and an even broader collection of mathematical procedures for determining which variables belong to which groups” (Nunnally, 1978, p. 327). In this study, a Confirmatory Factor Analysis (CFA) using EQS 5.7 provided an evaluation of the construct validity of the instrument. “CFA tests the fit of theoretically or empirically grounded models to data” (Thompson, 1997, p. 6). CFA provides several advantages over exploratory factor analysis (EFA). First, in EFA, the analyst has no direct control over the linkages between indicators and factors; however, in CFA, the researcher can clearly specify a priori the linkage between factors and indicators (Kline, 1998). In EFA, the researcher cannot constrain an indicator to load on only one factor (Kline, 1998, p. 58). In addition, CFA “allows several rival models to be fit to data and consequently better honors the role of falsification within scientific inquiry” (Thompson, 1997, p. 6). Finally, parsimony can be rewarded in the CFA model (Thompson, 1997). By convention, researchers using CFA choose the simplest model that provides reasonable fit for the data.

“If the researcher’s a priori measurement model is reasonably correct, then one should see the following pattern of results: (1) indicators specified to measure a common underlying factor all have relatively high loadings on that factor, and (2) estimated correlations between the factors are not excessively high (e.g. $> .85$). The former result indicates convergent validity, and the latter discriminant validity” (Kline, 1998, p.60). Several conventional measures of model fit (i.e. Chi-square (χ^2), The Tucker-Lewis index (TLI), and the Comparative Fit Index (CFI), aided in the evaluation of original and respecified models. Many factors such as sample size, model complexity, and the number of indicators can affect fit indices differentially (Gribbons & Hocevar, 1998); therefore, a researcher should examine more than one measure of fit when evaluating a CFA model.

In a previous study (McCoach, in review), an initial sample of 668 secondary students from six schools completed the SAAS. The researcher posited that a four factor model would best explain the covariation among the questions. Rather than using a strictly confirmatory approach, the initial analysis utilized a “model generation strategy” (MacCallum, 1995), correlating five pairs of errors. Researchers must exercise extreme caution when generating new models, especially when they decide to correlate errors (Bollen, 1989; MacCallum, 1995). “A measurement error correlation reflects the assumption that the two indicators measure something in common that is not represented in the model” (Kline, 1998, p. 201). Because correlating errors represents a model generation strategy, the modified model should be validated with data from a new sample. The final model seemed to exhibit reasonable fit ($\chi^2 (159) = 498.018$ CFI=.961,

TLI=.953). Although chi-square was significant, the chi-square significance test is highly sensitive to sample size. Therefore, it is very difficult to achieve a non-significant χ^2 with a sample size above 500. The final version of the pilot instrument contained 20 questions. Each of the four factors retained four to six questions. The present study sought to replicate the results of the initial study with a new sample.

During the cross-validation of the SAAS, the researcher applied the final model of the original SAAS study to a new sample of 942 students. The fit of the cross-validated model was adequate ($\chi^2= 686.23$, $p<.001$, CFI= .951, TLI= .942). Table 2 shows both the original and cross-validated standardized regression weights for the SAAS. In general, the standardized regression weights are quite similar across the two studies. In both the original and the cross validation studies, all of the standardized regression weights were above .60.

Examining the correlations among the factors also provided insight into the structure of the instrument. Previous research suggested that all factors would be moderately and positively related to each other. All four factors were moderately to highly correlated with each other. Table 3 presents the factor correlation matrix in its entirety. According to Schunk (1998), perceived self-efficacy is a key process that underlies self-regulation and motivation. Therefore, the researcher hypothesized that factor 1 (academic self-perceptions) and factor 4 (motivation and self-regulation) would be highly correlated with each other. The confirmatory factor analysis revealed that factors 1 and 4 were in fact highly correlated. ($r=.86$). In the original CFA, the correlation between these two factors was .83. Because factor correlations above .85 may provide

evidence of discriminant validity problems (Kline, 1998), it seemed possible that the self-regulation and academic self-perceptions questions did not represent two completely distinct factors. Instead, they may have measured two different aspects of the same construct.

Competing Models

To help ensure that the hypothesized model did indeed fit the cross validation data, the researcher developed alternative models to explain the structure of the data. The researcher then compared the hypothesized model to the two competing models. Because the correlation between the academic self-perceptions factor and the motivation/self-regulation factor was so high (.86), it seemed reasonable to collapse the two factors into one construct and assess the change in chi-square. Alternative model 1 represents a three factor model in which the academic self-perceptions factor and the motivation/self-regulation factor were combined into one factor. The second alternative model was that of the four factor model with no correlated errors. Tables 4a and 4b compare the results of the three competing models. The hypothesized model exhibited better fit than either of the competing models. The results of chi-square difference tests support the researcher's contention that the hypothesized model provides the best fit to the data.

Reliability

Measurement of a latent construct with manifest indicators always contains a certain amount of measurement error (Carmines & Zeller, 1979). Reliability measures the degree to which the test score indicates the status of an individual on the factors defined by the test, as well as the degree to which the test score demonstrates individual differences in these traits (Cronbach, 1947,

p. 6). “A reliability coefficient demonstrates whether the test designer was correct in expecting a certain collection of items to yield interpretable statements about individual differences”

(Cronbach, 1951, p. 297). Generally, reliability coefficients above .80 are considered adequate for basic research purposes (Nunnally, 1978). The SAAS test scores exhibited satisfactory evidence of reliability with this sample of students. The reliability estimates of all four subscale scores were .85 or above. Table 5 reports the Cronbach alpha reliability estimates for each of the four factors in both the initial and cross-validation studies.

Conclusion

This study cross-validated an instrument to assess secondary students on four factors that may be correlated with academic underachievement. The SAAS appeared to demonstrate evidence of adequate validity and reliability for use as a research instrument on a population of secondary students. This cross-validation study lends additional credence to the construct validity of the four-factor model. The only area of concern is the high correlation between the motivation / self-regulation and the academic self-perception factors.

Future research should investigate the relationship between student scores on the four subscales of the SAAS and academic achievement. For example, in future studies, administering the SAAS to a group of high achieving students and a group of underachieving students could help determine whether high achievers and underachievers actually differ on these four constructs. Such research could also provide evidence of the criterion-related validity of the SAAS. If underachievers' scores are significantly different from those of high achievers, the SAAS may

provide a fast, relatively non-intrusive way to diagnose students who are at risk of underachieving in secondary school. Isolating factors that contribute to the academic underachievement of adolescents is the first step towards reversing adolescent underachievement. Any instrument that can help educators to combat these problems merits further exploration and development.

Table 1

Content Validation Definitions

Definitions of the four categories of interest:

1. Academic Self-perceptions:

This construct includes academic self-concept and academic self-efficacy.

Academic Self-Concept: Feelings of personal worth and success; a composite view of one's self that is presumed to be formed through direct experience and evaluations adopted from significant others (Bandura, 1997).

Academic Self-Efficacy: Judgements of personal capability in the academic domain. "Efficacy beliefs influence how people think, motivate themselves, and behave" (Bandura, 1993, p. 118). These two separate, but related concepts form the academic self-perceptions category.

2. Factor 2: Attitude towards school:

The intensity of positive or negative affect for or against school and objects associated with school. Includes attitude towards school in general, as well as attitude toward teachers.

3. Factor 3: Peer Attitudes:

Within the context of this instrument, how a student views his or her friends' attitudes toward school.

4. Factor 4: Motivation and Self-Regulation:

Self-regulation refers to the self-generated thoughts, feelings, and actions, which are systematically oriented toward the attainment of goal (Schunk & Zimmerman, 1994).

Includes self-control, strong organizational skills, and determination to meet one's goals (high conscientious), self-motivation, task commitment, conscientiousness, persistence, work ethic, will to achieve.

A student with high motivation / self-regulation should exhibit self-control, strong organizational skills, and determination to attain goals.

Table 2

Comparison of the Standardized Regression Weights on the Initial Validation and CrossValidation of the SAAS

| Item Stems | <u>Initial Standardized Regression Weight</u> | <u>Cross-Validation Standardized Regression Weight</u> |
|--|---|--|
| <u>Factor 1: Academic Self-Perceptions</u> | | |
| 5. I am confident in my scholastic abilities. | .79 | .79 |
| 13. I do well in school. | .80 | .79 |
| 31. I am successful. | .80 | .76 |
| 34. I am confident in my ability to succeed in school. | .82 | .83 |
| <u>Factor 2: Attitude Towards School</u> | | |
| 2. This is a good school. | .65 | .69 |
| 6. I am glad that I go to this school. | .66 | .69 |
| 14. I like my teachers. | .68 | .68 |
| 16. My teachers make learning interesting. | .68 | .67 |
| 19. I like school. | .87 | .78 |
| 24. School is interesting. | .84 | .86 |
| <u>Factor 3: Peer Attitudes</u> | | |
| 11. My friends take school seriously. | .75 | .73 |
| 18. Most of my friends are planning to go to college. | .62 | .61 |
| 22. My friends are good students. | .79 | .86 |
| 27. My friends achieve well in school. | .80 | .82 |
| 30. My friends study hard. | .79 | .73 |
| <u>Factor 4: Motivation and Self-Regulation</u> | | |
| 33. I work hard at school. | .78 | .84 |
| 35. I concentrate on my schoolwork. | .72 | .82 |
| 38. I am a responsible student. | .75 | .78 |
| 42. I complete my schoolwork regularly. | .76 | .75 |

Table 3

Intercorrelations Among the Four Factors on the SAAS (Cross validation Sample)

| | Academic Self-Perceptions | Attitude Towards School | Peer Attitudes | Motivation / Self-Regulation |
|------------------------------|---------------------------|-------------------------|----------------|------------------------------|
| Academic Self-Perceptions | 1.0 | | | |
| Attitude Towards School | .72 | 1.0 | | |
| Peer Attitudes | .64 | .68 | 1.0 | |
| Motivation / Self-regulation | .86 | .66 | .77 | 1.0 |

Table 4a

Comparison of Competing Models

| Model | χ^2 | df | p-value | CFI | TLI |
|--|----------|-----|---------|-----|-----|
| Null Model | 10978.7 | 190 | | | |
| Three Factor Model with 5 pairs of correlated errors | 869.2 | 163 | <.001 | .93 | .92 |
| Four Factor Model (no correlated errors) | 1064.2 | 164 | <.001 | .92 | .90 |
| Four Factor Model with 5 pairs of correlated errors | 686.2 | 159 | <.001 | .95 | .94 |

Table 4b

Chi-square difference tests for the competing models

| Model | ΔX^2 | Δdf | p-value | Conclusion |
|---|--------------|-------------|---------|--|
| Three Factor Model with correlated errors vs. 4 Factor Model with correlated errors | 195 | 1 | <.001 | Three factor model is significantly worse than 4 factor model |
| Four Factor Model (no correlated errors) vs. Model with Correlated errors | 378 | 5 | <.001 | Four factor model with no correlated errors is significantly worse than model with 5 pairs of correlated errors. |

Table 5

Reliability Values for the Four Factors in the SAAS

| Factor | Questions | <u>Cronbach's Alpha (Initial study)</u> | <u>Cronbach's Alpha (Cross validation)</u> |
|------------------------------|----------------------|---|--|
| Academic Self-Perceptions | 5, 13, 23, 31, 34 | .87 | .87 |
| Attitude towards school | 2, 6, 14, 16, 19, 24 | .89 | .89 |
| Peer attitudes | 11, 18, 22, 27, 30 | .86 | .85 |
| Self-regulation / motivation | 33, 35, 38, 42 | .86 | .88 |

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Appendix I: Pilot SAAS Instrument

School Attitude Assessment Survey

Instructions: Thank you for agreeing to participate in the pilot research study of the SAAS. By completing this survey, you will be helping us to try to improve the school experience for students across the country. This survey is anonymous. Please do NOT write your name on the survey. This survey should take approximately 10-15 minutes to complete.

Part I: Please rate how strongly you agree or disagree with the following statements. In answering each question, use a range from (1) to (7) where (7) stands for **strongly agree** and (1) stands for **strongly disagree**. Please circle only one response choice per question.

| <u>Statement</u> | Strongly Disagree | Disagree | Slightly Disagree | Neither agree nor disagree | Slightly Agree | Agree | Strongly Agree |
|--|----------------------|----------|----------------------|-------------------------------|-------------------|-------|-------------------|
| 1. I am intelligent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. This is a good school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. If I find a problem difficult, I work harder to solve it. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. My friends think that I do well in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. I am confident in my scholastic abilities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. I am glad that I go to this school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Teachers deserve respect. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. I have specific goals that I want to accomplish within the next year. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. My friends think that I am intelligent. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. I am a good math student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. My friends take school seriously. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. I am capable of doing well on tests. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. I do well in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. I like my teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. School is important to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. My teachers make learning interesting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. I am an achiever. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Most of my friends are planning to go to college. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

| <u>Statement</u> | Strongly Disagree | Disagree | Slightly Disagree | Neither agree nor disagree | Slightly Agree | Agree | Strongly Agree |
|---|----------------------|----------|----------------------|-------------------------------|-------------------|-------|-------------------|
| 19. I like school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. I am a good reader. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21. I enjoy working hard. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22. My friends are good students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23. I learn new concepts quickly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24. School is interesting. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25. I can learn anything that I want to learn. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26. School is boring. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 27. My friends achieve well in school | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28. My friends have career goals. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29. I am an underachiever. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30. My friends study hard. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. I am successful. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. Time management skills are important for academic success. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. I work hard at school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. I am confident in my ability to succeed in school | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35. I concentrate on my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. I enjoy participating in extracurricular activities. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37. I enjoy learning new things in school. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38. I am a responsible student. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39. Hard work will help me to get ahead. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 40. I am capable of getting good grades. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41. My friends think school is important. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42. I complete my schoolwork regularly. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43. I start to work on long term projects shortly after they are assigned. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 44. I am organized about my schoolwork. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45. I use a variety of strategies to learn new material. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

PART II: Please answer the following questions as accurately as possible. Please choose only one response choice per question.

1. What is your cumulative GPA (grade point average)?

- 4.0 or higher (All A's) 2.0 to 2.49 (More C's than B's)
 3.75 to 3.99 (Mostly A's) 1.5 to 1.99 (More C's than D's)
 3.5 to 3.74 (More A's than B's) 1.0 to 1.49 (More D's than C's)
 3.0 to 3.49 (More B's than A's) less than 1.0 (Mostly D's and F's)
 2.5 to 2.99 (More B's than C's)

2. Age: 10 11 12 13 14

15 16 17 18 19

3. Sex: Male Female

4. Grade: 6 7 8 9 10 11 12

5. What are your educational goals / plans? (Please select only one response.)

- I do not plan to complete high school.
 I plan to complete high school, but I do not plan to complete any further education.
 I plan to complete training at a vocational and / or technical institution.
 I plan to complete a two-year degree at a community college or junior college
 I plan to complete a four-year degree at a college or university.
 I plan to complete graduate school. (Master's Degree, Doctorate, MD, JD, etc.)
 I have not decided on any educational goals/plans.

6. How many honors or AP classes are you taking this year?

0 2 4

1 3 5 Code:



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