1994

Hitting with two strikes: Cognitive intervention to promote academic achievement for minority students

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HITTING WITH TWO STRIKES: COGNITIVE INTERVENTION TO PROMOTE ACADEMIC ACHIEVEMENT FOR MINORITY STUDENTS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education: English as a Second Language

by
Edward John Foster
June 1994
HITTING WITH TWO STRIKES: COGNITIVE INTERVENTION TO
PROMOTE ACADEMIC ACHIEVEMENT FOR MINORITY STUDENTS

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6-20-94
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ABSTRACT

The purpose of this research is to identify those behaviors of successful minority students that are responsible for high academic achievement in the hope that this knowledge can be applied to changing the behavior of unsuccessful minority students (low academic achievers). Questions addressed by the project were the following: Do high-achieving minority students have certain attitudes and behaviors that help them to achieve? If so, can these behaviors be put into a framework to help low-achieving minority students?

Prior research was examined to find attitudes and behaviors of successful minority students. The successful attitudes and behaviors were categorized and calibrated into a framework of task oriented behaviors and goal oriented behaviors exhibited by successful minority students. The framework was incorporated into a survey given to students. A completed survey indicated the extent to which students believed that they incorporated these attitudes and behaviors. If students felt that they lacked the successful attitudes and behaviors, those could be identified and feedback given to the students.

The results indicated that successful minority students exhibited certain attitudes and behaviors that their unsuccessful counterparts did not, or they did not exhibit these to the extent that the successful minority student did.
Those attitudes and behaviors included the following: Efficacy, Positive Appraisals, Positive Attitude, Confidence, Self-empowerment, Practical Choices, Relating to Other High-achievers, Low Anxiety, Initiative, Hard Work, and Over-achievement. The attitudes and behaviors can be put into a framework in order to identify those that are characteristic of the successful individual.

In contrast, the low-achievers scored substantially higher in the areas of Additional Services, Faith in God, and Coping.

The following attitudes and behaviors were found to have no difference in usage between the high-achievers and the low achievers: Love, High Aspirations, Interpersonal Adjustment, Questioning and Leading Strategies, Leadership Roles, Risk taking, Internal Locus of Control, Persistence, Humor and Playfulness, and Creating a Positive Reality.
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CHAPTER ONE: INTRODUCTION

Background to Study

High-achieving individuals from "minority" backgrounds succeed in schools at all levels and make significant contributions to society as doctors, lawyers, scientists, executives and politicians, as well as filling many other positions of prestige and authority.

An individual is considered a "minority" when he or she belongs to a numerically smaller racial group in American society when compared to the white-Anglo majority. Hispanic-Americans, African-Americans, and Asian-Americans are the predominant groups considered in this project. Teachers who have worked with minority students, especially those who have recently immigrated to the United States, seek ways of promoting school achievement in this population. However, many members of minority populations do not succeed in school or do not achieve to their potential. In a society that uses formal education as a barometer for success, the minority individual's future is in jeopardy.

Selected research has been carried out concerning high-achieving minority students in education. Research in this area is essential as the minority drop out rate rises. Specifically, between 40 and 50 percent of Hispanics drop out of school before graduation from high school. Of the total number of Hispanics who attend college, about half
Hispanics drop out of high school at a greater rate than do whites or blacks, and also drop out of college at a greater rate (Clewell, Chu, & Ficklen, 1988). For African-Americans the drop out rate reaches more than 50 percent in some urban metropolitan areas (Geary, 1988). After their schooling, more and more minorities remain on the low rung of the economic ladder and suffer social subordination. Racial minority groups are often mired in a life of under-achievement and under-representation in white collar occupations.

The Problem

Factors leading to the under-achievement and under-representation of minority students have been well documented. Previously researched are factors such as racism, discrimination, low socio-economic status, culture deprivation, unequal opportunity, broken homes, low expectations etc. Although most of the research has been commendable, this research is usually used to explain reasons for student failure, and does not include suggestions for promoting achievement.

There has also been abundant research on "extrinsic" factors that promote success. Extrinsic factors that promote success can be defined as external forces such as luck, fate, or other individuals that influence an individ-
ual's behavior. For the individual affected by extrinsic factors, there is little or no relationship between his or her own behavior and the consequences of that behavior (Banks, 1988); behavior does not affect the outcome. Extrinsic factors include high teacher expectations, family support, integrated schools etc. Although this research has contributed to the understanding of external factors, these are reasons for student success (or lack there of) that lie outside of the person's control.

Individuals have personal reasons for high achievement. These are "intrinsic" reasons, such as "incentive to work for one's own satisfaction versus working to please the teacher and get good grades" (Harter, 1981. p. 301). Many people have the incentive to do well but their behaviors are not ideal for the specific goal. Successful minority students' incentive to achieve is implemented and realized as they act out key behaviors in certain situations that enable them to achieve their goal.

The focus of the research will be these attitudes and behaviors that promote academic achievement. This research will profile the minority students who succeed despite the strikes against them. Success in this research is academic achievement for minorities at all age levels.

This research will target the behavior tendencies of the successful minority individual in an "at-risk" environment, specifically those individuals who sustain high levels of
achievement motivation and performance, despite the presence of stressful events and conditions that place them at risk of doing poorly in school and, ultimately, dropping out of school. Thus, an at-risk environment is defined as one that places students at risk of academic underachievement. It includes a number of socio-cultural variables including the educational and occupational attainment of parents, family income and composition, ethnic minority status, and the amount of learning materials in the home (Alva, 1991).

Once successful attitudes and behaviors (collectively called behavior tendencies) are discovered in the successful minority student, other minority students may be able to make a concerted effort to apply positive, proven behavior tendencies and orient themselves better towards a goal "success" (achievement in academics).

Research Questions

Research questions asked are the following:

1. Do high-achieving minority students have certain attitudes and behaviors that contribute to success?

2. Can these successful behavior tendencies be put into a framework enabling teachers to isolate and teach necessary behaviors to other students in the same at-risk environment?
CHAPTER TWO: LITERATURE REVIEW

Introduction

The literature review is divided into two respective sections. The first section is entitled, "Behaviors and Attitudes of Successful Minority Students." This section will focus on the literature regarding these behaviors and attitudes. The second section is entitled, "Cognitive Behavioral Modification." This section will encompass the research reviewed on the individual behavior modifications needed for the minority student to gain the successful behaviors and attitudes not utilized in his or her everyday life.

Behavior Tendencies of Successful Minority Students

Why do some minorities succeed despite strikes against them? Specifically, what behavior tendencies do certain minority students have and use that help them to succeed in their schooling? This chapter will address and summarize the prior research that discusses behavior tendencies which lead to minority success in education.

Research indicates two distinct types of rationales (motives) for behaviors on the part of the successful minority individual. The two rationales exhibited by the individual are the individual's: orientation towards the
goal and their orientation towards a task. Within each of these rationales, there are specific behavior tendencies (see fig. 1). For a successful minority student, "orientation towards a goal" can be defined as, "the adjustments make toward an end that the individual strives to attain." A successful minority individual's "orientation towards the task" is defined as "adjustments made to complete a certain piece of work." This distinction (goal v. task) contrasts the overall mind set in the process of gaining an end (goals) versus specific performance objectives in day-to-day tasks. These adjustments are the behaviors exhibited by successful minority individuals, either toward a task in particular or towards a goal.
Table 1.

Successful Minority Behavior Profile

Orientation Towards Goal (overall mind set).

I. Positive View
   a. Positive View of Self.
   b. Efficacy.
   c. Positive Attitude.
   d. Love.
   e. Confidence.
   f. Positive Appraisals.

II. High Aspirations

III. Self Empowerment
   a. Practical Choices.
      1. Additional Services
   b. Interpersonal Choices.
      1. Interpersonal Adjustment
      2. Relating to Other Higher Achievers
      3. Faith in God
   c. Risk Taking.
      1. Taking a Chance
      2. Low Anxiety
      3. Question and Leading Strategies
   d. Coping.
      1. Creating a Positive Reality
      2. Seeing Things in a New Way
      3. Protective Resources

Orientation Towards Task (specific performance objectives)

I. Locus of Control
   a. Internal Locus of Control.
   b. Leadership Roles.

II. Hard Work
   a. Persistence.
   b. Initiative
   c. Over-achievement.
   d. Humor and Playfulness.

III. Cognitive Factors
   b. Cognitive Ability.
"Behavior" is defined as either overt acts or cognitive mediation leading towards overt acts. The literature review will discuss behaviors within the goal and task rationales that have been found to promote success for each respectively. First, literature will be discussed to make explicit the category, "orientation towards a goal," those behaviors that promote success such as Positive Attitude, High Aspirations and Self-empowerment. These are behaviors shown by successful minorities that help them strive to attain an end. Second, the review will explore "orientation towards task," those behaviors used by successful minority individuals as they perform specific tasks. These are Locus of Control, Hard Work, and Cognitive Factors. These task behaviors are shown by successful minority students as they complete a short-term piece of work.

There are a variety of secondary factors underlying the main behaviors under each rationale that will be discussed in detail as well.

The "orientation towards goal" behaviors that will be discussed first may be viewed as "long term" factors: those broad behaviors that are key for the successful individual's overall mind set towards success in achieving their goals in education. The "orientation towards task" behaviors that will be discussed later, can be viewed as specific behaviors used to successfully complete tasks in everyday life on the way to fulfilling goals. Successful
task completion can be thought of as means to fulfill the end (goals).

Orientation Towards Goal

Orientation towards goal consists fundamentally of the following behaviors; Positive View of Self, High Aspirations, Self-empowerment. There are mediators (internal behaviors) that can be categorized within each fundamental behavior that orient the successful minority student to be in a position to achieve a goal.

Positive View

Positive View of Self. There has been major evidence that a positive self-view is a main factor in the success of minority (and majority) goal fulfillment. Several researchers had explored the "view of one's self" and how it positively affects the minority student.

Haynes (1990) created a program to positively impact achievement by enhancing one's view of oneself. The program provided support to a group's self-esteem through addressing students' personal-emotional needs, as well as their cognitive-academic needs (i.e. creating a positive view). Program and non-program students were later tested and the results showed that program students were superior to their non-program peers on measures of the goals of learning, motivation, and attitude. Specifically, program
students viewed themselves more positively in terms of behavior, intellect, school-related accomplishments and abilities. They gained a positive self view which in turn affected their learning. The students who participated in Haynes' program were more successful students because of enhanced positive self-view.

**Efficacy.** Feelings of efficacy can be defined as a student's tendency to feel effective. Feeling effective seems to affect achievement. In his study of Black adolescents, Brown (1976) states that it may very well be that perceptions of competency and effectiveness that play a vital role in academic and social achievement. Feelings of competency and effectiveness help minority students perceive themselves as competent in fulfilling society's demands and play a vital role in academic and social achievement (Brown, 1976).

In a study observing urban minority students who achieve academic excellence, Woodward (1992) found that successful urban minority students have an awareness that they are competent, smart, and able. He asserts that having this positive awareness of effectiveness, the urban minority student possesses an identity as an intellectual and maintains a need to excel.

**Positive Attitude.** The tendency of a successful minority student to have a positive attitude seems to be a factor in success. Geary (1988) surveyed Black inner-city 10th
and 11th grade college prep students who generally agree with their teachers that a good attitude is needed for academic success. Students did not let their at-risk background get in the way. These students knew and indicated that it took inner drive, motivation, and self-discipline to succeed. Consequently, they had a positive attitude to do it (the latter) on their own terms and despite their at-risk backgrounds (Geary, 1988).

In a study involving high-achieving female Mexican-American students, "Chicanas," Gandara (1982) found that successful Chicana students found school a rewarding activity (i.e. they had a positive attitude about school). School was a place where they could be good students; they could interact with the majority culture; they could have an opportunity to test their abilities against an objective standard, and they could act out the hard-work ethic that they had inherited from their parents. Having this positive attitude about school as a rewarding activity was crucial because it encouraged them to excel. The women in Gandara's study received less encouragement from outside of the family even though they had been consistently better students than the men. Thus, they needed a positive attitude because they had so little else supporting them to achieve.

Haynes (1990) found that in his program designed to provide experiences that facilitate students' personal and
academic growth, students felt significantly more positive about education than minority students who weren't labeled high-achievers. They also were generally superior to their non-program peers on measures of self-concept. They viewed themselves more positively in terms of their behavior as well as their intellectual and school-related accomplishments and abilities. They considered themselves significantly happier and more satisfied with themselves than their non-program peers. The program student's positive feelings about education and their level of motivation with regard to school influenced positively their school experience which may indicate that the program students in the sample (because of their positive attitude) are internalizing the value of education to a larger degree than are their non-program peers and that they may be more intrinsically motivated to study and learn.

Furthermore, Woodward (1992) found that urban minority students who achieve academic excellence have an optimistic outlook (i.e. positive attitude) that is not limited by ethnic stereotypes. He goes on to say that they find joy and excitement in learning new things—a natural high. The students have an obvious zest for life: enjoyment of work, play, people, nature, etc.

Love. Discussing a construct similar to "positive attitude," Woodward (1992) mentions that high-achieving, goal-oriented, urban students who achieve academic excel-
lence in urban schools (in which minorities have a majority proportion) have a capacity to love and be loved. A positive attitude opens yourself up to the world and puts you in a position to love or be loved. The result is youngsters who say in effect, "I am good, and I love myself." This conviction supplies the force, motive, energy and self-discipline required for high-achievement.

Reiterating this point, Broadkey and Shore (1976) found that high-achieving second language students had a sensitivity in personal relationships.

Confidence. A positive view of one's self and a positive attitude maintains the confidence shown by successful minority individuals in achieving goals. Broadkey and Shore, (1976) found that second language learners who showed confidence in themselves to succeed got an 'A' for a grade. In another study, Long and Farr (1991) note that self-confidence must be a persistent ally against the day to day evidence of many lost dreams, negative self-images characteristic of minorities. The minority students need self-confidence if they are to attain financial and familial goals (success).

On the other hand, there has been some studies that have questioned the idea that a "positive self-esteem" affects achievement positively. Thrachtman (1975) found that positive self-esteem did not emerge as a significant predictor of final grades as other characteristics were
more significant. Similarly, Allen and Wallace (1988) found that as self-concept increases, grade point average decreases. Self-concept, although not significant in grade point average, was found to positively relate to integration into campus life. Thus, there is still some uncertainty about the actual role self-concept has on academic achievement for minorities or the majority.

**Positive Appraisals.** How does one develop perceptions of competence (the positive view of self) needed for academic achievement? Alva (1991) indicates that successful students use positive appraisals (positive interpretations and positive reactions) when exposed to potentially stressful situations and social interactions. Individual appraisal of a stressful situation determines the subsequent coping responses and behaviors of the students. A positive appraisal of a situation is more apt to elicit success. If a minority his view of himself thus lowering chance for success.

**High Aspirations (Ambition)**

A minority student's intrinsic aspirations (ambition) can affect success and has been shown to play a major role in goal achievement. An example of this is when researchers found that the National Hispanic Scholar Award semifinalists had very high educational aspirations compared with the pools of Hispanic or white SAT-takers (Clewell, Chu, &
Also Ortiz (1983) suggests that Mexican-American women remain in universities because of their own personal ambitions and fortitude. These qualities help them to remain in the university system to complete it.

In another study, Kerr, Colangelo, Maxey, and Christensen (1992) paint a picture of an ambitious group of academically talented minority students. High aspirations help them achieve despite the societal stereotypes and racial barriers (Kerr, et al. 1992). Long and Farr (1991) found that six Black adult males from occupationally successful families had aspired to live the life of an unsung decent person who strove amid the tumult of media heroes, drug dealers, and other street people who seemed readily to obtain wealth and self-satisfaction. All of the Black men in this study could not be considered successful by the standards of this study, "attaining financial and familial goals," study but their aspirations helped them to overcome the odds of an at-risk environment. Finally, Allen and Wallace (1988), when studying Black students in higher education, found that occupational aspirations are highest for students who have higher college and high school grade point averages. This might show a reciprocal effect, that educational aspirations increase grade point averages as well as grade point averages increasing educational aspirations. With a premise that high educational achievement is essential for success in today's society, high aspirations
are integral to enhance the high school grade point average needed to succeed in society.

Self-empowerment

Previous investigations indicate that empowered students assume greater control over setting their own learning goals. With this self control over learning goals, students are generators of their own knowledge. The students are therefore responsible for gaining knowledge. Students are actively involved in expressing, sharing and amplifying their experiences within the classroom (Cummins, 1991). This empowerment allows them to feel confident enough to risk getting involved in the learning process. They are empowered to make school and life rewarding (Gandara, 1982). They empower themselves in four ways: Practical Choices, Interpersonal Choices, Risk-taking, and Coping.

Practical Choices. In a study by Alva (1991) that used higher education as a basis for success, practical choices made by the minority student in deciding on a college major proved to be a strong behavior tendency. These choices made by successful minorities helped them to achieve their goals. In a study by Kerr, Colangelo, Maxey, and Christensen (1991) a group of academically talented minority students seemed concerned about making practical choices of college majors. In addition to practical choices of a
college major, they had expressed desires to choose support services and special academic programs that would increase their chances of success as well as their chances of a rich educational experience. To further elaborate, minority students tend to choose "Additional Services" in their education, Kerr et al. (1990) found that ethnic minority high-scoring students expressed somewhat higher degrees of preference for various services and special programs than did the majority (White) students. Minority students' choosing these programs was essential to help them fulfill their goals. Asian-American students scored higher than did any other ethnic group in their desires for both educational and career counseling and personal counseling. Their desires for independent study and honors courses were somewhat higher than were those for other groups.

Interpersonal Choices. "Interpersonal Adjustment" in relations between Black students and the majority (White students) is positively related to grade point average for black students. Choices that are even more significant and are positively related to grade point average are good relations with faculty and the feeling that one has chosen the right school (Allen & Wallace, 1988). As relations with white students improve and feelings that one chose the right school increase, students' integration into campus life increases, eventually leading to a positive self-concept which (as shown in the latter) possibly leads to
academic achievement.

Choice of companions is also included in the profile of high-achieving minority individuals. Because of minority high-achievers' identity as intellectuals and their need to excel, they tend to "Relate to Other High Achievers," sometimes crossing social class or ethnic lines (Woodward, 1992). This was found as a trait associated with urban students who achieve academic excellence. Simultaneously, to maintain an image of an intellectual with the need to excel Woodward (1992) found that high-achieving urban minority students relate to other high achievers in achieving academic excellence eventually achieving academic success.

Woodward (1992) tells of a "Faith in God" as a tendency (choice) that urban minority students who achieve academic excellence exhibit. Reiterating this, Spuck and Stout (1969) found that those minorities who choose to believe in the existence of God, who consider themselves to be religious and who prefer the company of religious people, tend to be those who obtained higher grade point averages. Spuck and Stout (1969) also found those who are skeptical of traditional religious beliefs and are inclined to reject most of them are those who received lower grade point averages.

Risk-taking. Spuck and Stout (1969) studied those minority youths who have an experimental and flexible
orientation. They would rather "take a chance" and tend to view themselves as being more successful. Students who are independent in their thinking and who also view themselves as having a flexible and experimental approach to problems are the students who feel that they are succeeding most. This positive feeling of efficacy (as shown in this paper) can influence success.

Risk-taking, buttressed by a "Low Anxiety" has shown to affect achievement. Haynes (1990) found that his high-achieving program students were significantly less anxious. This is a crucial factor because it relates to a student's ability to attend, concentrate, and perform well. In a sense, anxiety can be related to motivation, as Woodward (1992) found. He discovered by observation that a crisis that could elicit anxiety represents a challenge rather than a threat for high-achieving students.

Included with risk-taking, research has shown that successful minority students are more likely to "Question and Lead" in realizing their goal. Cuellar (1991) found that self minority students who are successful "question and then lead." Students who succeed question their teachers, their parents, their family members, and anybody who provides a venue for fulfilling their interests. High achievers may view questioning as an efficient learning tool. The student is empowered when they question.
Coping. Students cope with existing circumstances by being creative. Although poverty has been interpreted by some as causing failure, people can empower themselves and decide early that adversity builds character, and that the crisis of being an orphan (in the educational system) is a challenge to excel. If one projects an outlook of hope and faith, one can "Creating a Positive Reality."

Coping also entails "Seeing Things in a New Way" as well as the act of study and reflection (Woodward, 1992). Spuck & Stout (1969) found that the one who is independent in his thinking and who also views himself as having a flexible and experimental approach to problems is the student who feels that he is succeeding most in the program and who is in fact receiving higher grades than his counterpart, who views himself as dependent and uncomfortable in new situations. Specifically in Spuck & Stout's study, students who had diverse interests in artistic matters and activities tend to rate themselves higher in overall performance than other class members.

Alva (1991) says that successful students use "Protective Resources" such as a positive self-evaluation and sense of control. These are assets that help insulate the individual from failure. These include characteristics that are typically evident among academically successful students. These resources promote academic success on the

To summarize briefly, the research on behaviors shown by minorities (Positive View of Self, High Aspiration, and a variety of Self-empowerment factors) has shown successful achievement for the minority individual.

Orientation Towards Task

A second set of rationales exhibited by successful minority individuals is the orientation towards a task. This has three main components: Internal Locus of Control, Hard Work, and a third group of Cognitive Factors.

Locus of Control

Internal Locus of Control. Locus of control is related to individual perceptions of the relationship between their action and its consequences in completing a task. Individuals who believe that consequences are a direct result of their actions are said to have an internal locus of control or "internality." Researchers have found that internality is positively related to academic achievement of tasks. Students who believe that their behavior can determine consequences tend to achieve at higher levels than students who believe that their behavior is determined by "external forces" such as luck, fate, or other individual (Banks, 1988). Thus it is the child who enjoys the mastery pro-
cess, is curious, and prefers to figure out things independently who also feels competent about her or his cognitive ability. Such a child also manifests greater actual competence than does the extrinsically oriented pupil as assessed by achievement test scores. In addition, the intrinsically oriented child reports a greater knowledge of what factors control the successes and failures in his or her life and is apt to report that this source is internal (Harter, 1981).

Research has been carried out about locus of control specifically for minority students. For Puerto Rican children locus of control in motivational orientation differed for higher/lower achievers, with higher-achievers adopting a more intrinsic orientation and lower-achievers a more extrinsic orientation (Soto 1989).

Internal motivation is also an important determinant of school performance for Black and Hispanic as well as for the more frequently studied Anglo-American children, although different motivational factors affect the groups differently (Willig, Harnisch, Hill, & Maehr 1983). Those who were motivated and preferred a challenge had more positive perceptions of their scholastic ability. This finding suggests that the intrinsically motivated individual pursuing challenging activities may have more positive feelings about school learning (Marchant, 1991). Thus, they achieved more in school. Trachtman's (1975) findings
suggested that the desirability of strengthening the student's sense of personal fate control was a decisive factor in scholastic achievement. In a program for highly motivated minority academic achievers, Haynes (1990) found that program students were more intrinsically motivated to study, learn and achieve than the non-program minority students. Newsome and Foxworth (1979) found that as educational level increases, internality increases. When ethnic groups were examined by groups of internal locus and external locus of control, and the frequencies computed, those completing versus those dropping out in each ethnic group, the results revealed a greater percent of internal Mexican-American and Black subjects completed than did externals of the same ethnic groups (Newsom and Foxworth, 1979).

Finally, high achieving language students exhibited a rejection of strict "Puritanical" constraints (Broadkey and Shore, 1976) thus adhering to the internal locus of control idea.

Broadkey and Shore (1976), in researching high-achieving minority students ('A' grade) in English as a second language, found 'A' students seemed to exhibit an enjoyment in writing for its own sake, as well as an enjoyment of solitary work. This reiterates the fact that an internal feeling of control can enhance a student's achievement.

Finally, Woodward (1992) states that urban minority students who achieve academic excellence have an internal
locus of control. They believe their future is in their own hands to an extent. They might be inspired by the last line of William E. Henley poem, "I am the master of my fate; I am the captain of my soul."

Leadership Roles. Hand in hand with locus of control is leadership roles. Cuellar (1991) discusses "leadership roles" as another aspect of high achieving intrinsically motivated students. They are able to explain problems to their peers or friends, therefore confirming their own academic success (Cuellar, 1991). Upon observing urban high schools and universities, Woodward (1992) developed a profile of the minority student who achieves academic excellence. One of the main aspects of this profile was self-leadership (how one leads himself in completing tasks). According to Woodward the term "self-leadership" includes ten components (see Table 2).
Table 2
Woodward's Leadership Scale

1. Thinking for oneself.
2. Responding appropriately according to core values.
3. Valuing time and not wasting it.
4. Favoring of long range goals.
6. Not setting oneself up to lose.
7. Enjoying solitude.
8. Knowing intuitively that college is a desirable goal.
10. Having an uncomfortable, almost alienated relationship to the ghetto.

Although a lot of the latter characteristics can go into a few other sections, they all have to do with Internal Locus of Control or as Woodward (1992) calls it "self-leadership." Self-leadership "can be likened to a radar system that constantly scans for danger, and an intuitive ability to take quick, effective avoidance action" (Woodward, 1992). It helps urban youngsters avoid high risk behavior, dangerous circumstances, or events likely to cause them harm to eventually achieve academic excellence (Woodward, 1992).
Hard Work

Another aspect of task orientation is Hard Work. Subjects (Mexican-Americans 40 years or less) rated hard work in themselves as a characteristic which they considered to be substantially more important than their own ability (Gandara, 1980). In another study, a minority high school's college prep students (Black inner-city 10th and 11th graders) generally agreed with their teachers that a ... "diligent effort is needed for academic success" (Geary, 1980). In student surveys, Geary (1988) found that students strongly believed that diligent effort, laced with inner drive, motivation, and self-discipline is crucial for success in school.

Persistence. "If first you don't succeed, try, try again." Connected to hard work in a task is the persistence of the individual with the hard work. This is a personal characteristic that Mexican-American woman, 40 years or less, felt was critically important for their academic success. Of the top three characteristics cited, persistence was number one (Gandara, 1980). Persistence was found to be very important in Gandara's (1980) study because the women received less encouragement form outside of the family even though they had been consistently better students than the men. They had to be persistent or they would fail.
Over-achievement. For some minorities "hard work" to the extent of over-achievement can prove to be substantial in their success. In general, Asian Americans approach socioeconomic parity with whites because of their over-achievement in educational attainment (Hirschman, 1976),

Humor and Playfulness. Interestingly enough, humor is often related to hard work, Woodward (1992) found in his observations that humor and playfulness can sometimes make work seem like a type of play on the minority student's road to success.

Cognitive Factors.

Cognitive Style. Various cognitive factors influence task orientation. A student's cognitive style has been found to be an intrinsic factor that dictates a student's success in school and the job place especially with day to day tasks. Evidence of this was found by school grades attained in mathematics classes. In a sample of 700 Mexican American and Anglo students who were identified as having superior math ability, "Cognitive Style" was the only variable that proved to be a significant factor in determining differences in grades among the sample (Gemmill, L. 1982). The implication was that "field dependent" learners plan to take fewer math courses than "field independent" learners.
Further, "field dependent" females plan to take fewer number of math classes than any other category. Both findings suggest that cognitive style may be a crucial factor in the decision to avoid or persist in mathematics (Gemmill, 1982).

**Cognitive Ability.** Also, to center on the personal, intrinsic, cognitive characteristics of the student, Gandara (1980) states that subjects mentioned that "cognitive ability" was one of the top three characteristics for academic success in 45 Mexican-American invulnerable (Mexican-American achievers) who were 40 years old or less. Not only is cognitive style a factor in student success but students "think" it is.

However, some research contradicts the latter. In discussing cognitive ability, Spuck and Stout (1969), indicate that cognitive measures such as those in the ability clusters are highly questionable predictors of future college success in minority populations.

To summarize, it seems that an Intrinsic Locus of Control, Hard Work, and Cognitive Factors can help successfully orient a student to a task and more importantly can insure success in the said task.

**Cognitive-Behavioral Modification**

The first part of the literature review delineated what behaviors are elicited by successful minorities. The next
task is to review the literature for research that would suggest a method to expand these behaviors to the rest of the population in order to help others succeed. Why reinvent the wheel? Specific, proven functional behaviors used by successful minority individuals have been well documented. Certain behavior tendencies of high-achieving minorities have worked to bring success to this group of minorities. The challenge is to apply these behaviors to other minorities. If these behaviors can be expanded to other minority individuals who are struggling to succeed, then we can do a great justice to those who want to succeed but do not know how. A whole new framework of 'thinking' is needed for low-achieving minorities, a new paradigm. This paradigm must incorporate the behaviors needed for success into the thus far unsuccessful minority individual's repertoire.

These individuals can be taught "what" behaviors they need to know and "how" they can learn them by Cognitive-Behavioral Modification (CBM). Cognitive-behavioral modification teaches individuals how and what to 'think' before they act out a behavior. Low-achieving, at-risk minority individuals need to know how to modify (or change) their behavior. The minority individual needs to focus on and incorporate the above goal-oriented and task-oriented behaviors displayed by high-achieving minority individuals. Unwanted behaviors or non-behaviors have to be replaced by
behaviors shown by the above subjects as "successful."

Although there has been an abundance of research on CBM, there has not been much done related to CBM for minority individuals per se. Thus, I will analyze studies which show successful CBM in different circumstances and eventually design a plan to be used by minority individuals.

In order to learn, there must be teaching geared to the child's existing cognitive level. A supportive teacher will find that level and attempt, via the interactive context, to extend the child's ability, knowledge or skill. Appropriate support will be context- and content-dependent but will permit the child to maintain responsibility for the regulation, monitoring and maintenance of their behavior (the desired "successful" behavior). Once the child has realized the strategic importance of the task-specific behaviors he or she can utilize them subsequently in new contexts (Garton, 1992).

Vygotsky (1962) and Luria (1961,1969) have suggested that a child is socialized by means of internalizing the interpersonal instructions and communications of others (Kendall and Hollon, 1979). A stage model was proposed to describe the sequence by which children abbreviate and transform interpersonal instructions into covert intrapersonal speech, which in turn comes to guide and control the child's behavior (Kendall and Hollon, 1969). This means talking one's self through a task.
To summarize, the children transform interpersonal speech into thought. They use intrapersonal verbal directions (of this interpersonal speech) to guide behavior. This is the cornerstone of cognitive-behavioral modification research. It suggests that an instructor can teach children self control (the ability to modify or sustain one's behavior), or the ability to think before they act. Researchers have used many frameworks to guide interpersonal speech in turn teaching children self control.

To teach eventual "self-instruction," Palkes, Stewart, & Kahana, (1968) used a study to enhance the self-control of impulsive and hyperactive children by teaching the children to "stop, look, and listen," to think before they act. The cognitive modeling and rehearsal procedures were designed to teach the children stratagems of what to say to themselves prior to performing some task (Kendall and Hollon, 1979). Douglas, Parry, Marton, and Garson (1976) used this general outline for conducting think-aloud training programs for a variety of performance-relevant skills; (a) problem identification and definition or self-interrogation skills ("What is it I have to do?"); (b) focusing attention, and response guidance which is usually the answer to the self-inquiry ("Now, carefully stop and repeat the instructions"); (c) self-reinforcement involving standard-setting and self-evaluation ("Good, I'm doing
fine."); and (d) coping skills and error-correction options
("That's okay....Even if I make an error I can go
slowly."). Such cognitive training is conducted across
various tasks, settings, and people (trainer, teacher,
parent) in order to ensure that children do not develop
task-specific response sets but, instead, develop general-
ized stratagems (Kendall and Hollan, 1979).

Effectiveness of training regimens such as the latter
has been positive. Three studies will be described where
CBM can be seen in action, and its results.

Using procedures on modeling of cognitive strategies
and concentrating on developing answers to four basic
questions ("What is my problem?" "What is my plan?
"Am I using my plan?" and "How did I do?"). Camp, Blom, He-
bert, and van Doorninck (1977) found that aggressive 6-8
year old boys improved in pro-social behaviors and changes
in the pattern of performance. on a battery of cognitive
tests.

Palkes, Stewart, and Kahana (1968) in a study of 9
year old hyperactive boys, looked at the relationship
between training in self-directed verbal commands and
overall performance on the Porteus Maze Test. The re-
searchers used verbal commands such as "Before each task
you must 'stop' whatever you are doing, then you must
'listen to my directions, and then you must 'look' and
'think' before you make any answer or do what I tell you to
do." The researcher went through the procedure verbally with each subject until he knew what was required of him. There was a significant improvement of the boys' scores in the Porteus Maze Test. The research showed that improvement was due to a more prudent approach to the solution of the problem, rather than to a change in the actual intelligence level. These results showed that the process of verbalization, appropriately directed, becomes a means for increasing the degree of behavioral integration.

Douglas, Parry, Marton and Garson used modeling, self-verbalization, and self-reinforcement techniques to train hyperactive children in more effective and less impulsive strategies for approaching cognitive tasks, academic problems, and social situations. The trainers talked themselves through tasks and encouraged the same from the students. The group that was trained showed significantly greater improvement on several of the measures tested both at the post test and the follow-up.

In reviewing some of these CBM strategies, one similar to Camp et al. (1977) would be most adaptable to modifying the behavior of low-achieving minority students. Minority students learning how to be successful ask themselves the following: "What is my behavior in this situation?" "What is my planned behavior?" "Am I using my planned behavior?" "How did I do behavior-wise?" These "think aloud" questions would eventually be internalized as internal speech
that the minority individual could use it in a variety of situations.

Newsom and Foxworth (1979) state that if an external can be taught more productive behavior of internality, then that individual may be able to use this new behavior. This is the essence of cognitive modification. Then Baker (1972) adds (cited in Newsom and Foxworth, 1979), "A student begins to move toward internality when he overcomes obstacles, builds a pattern of success, and receives rewards in a controlled manner. By including students in the planning of educational programs, the teacher helps build concepts of control into their lives."

To summarize, the latter review of the cognitive-behavioral modification literature gives the student and the teacher a tool to teach low-achievers the needed behaviors and attitudes (found in section one of the literature review) enabling them to become high-achievers.
CHAPTER THREE: METHODOLOGY

Rationale

The main goal of the study is to test the applicability of a survey made to help minority students in achievement. Specifically, the survey was composed to explore if the subjects possessed certain behavior tendencies found in the review of literature to be behaviors exhibited by high-achieving minority students. Successful behaviors were inherent incorporated in the statements posed to the subjects on the survey. If the survey is valid, the high-achieving students should score the highest and the low-achieving students should score the lowest on the survey. If the survey scores the high achievers the highest, and the low achievers the lowest, then high-achievers possess certain behavior tendencies that low-achievers do not, and those behaviors can be pinpointed using the survey as a guide. The survey could then be used as a guide to determine which behaviors an individual needs to improve on in order to become successful.

Subjects

The study consisted of 11 participants. There were 28 students enrolled in an eighth grade, sheltered, intermediate class with U.S. History as the content area. The 28 students of the class all resided in southern California.
The principal’s permission was needed and obtained. Ultimately, 22 subjects volunteered with parental permission, a prerequisite to participating in the survey. There were 6 minority students who did not receive parental permission to take part in the study and were therefore excluded. Of the 22 remaining subjects there were 11 subjects who would be considered minority students and were used for the study. The remaining 11 Anglo-American students took the survey but their data was not used for this study.

Subjects ranged from low to middle socio-economic status. Of the 11 participants, 6 were girls and 5 were boys, all ranging between the ages of 14 and 15 years of age.

The ethnicity of the participants represented five major groups. There were six Mexican-Americans, two Vietnamese-Americans, one Korean-American, one Filipino-American and one Honduran-American.

The participants’ achievement level was attained. The achievement level was determined as that participant’s grade for the second semester of the class for that year. There were four A’s, one B, two C’s, one D, and three F’s. The high-achievers were considered the five A and B students. They were labeled in the study as H1, H2, H3, H4, and H5. The low-achievers were considered the six C, D and F students. They were labeled as L1, L2, L3, L4, L5 and L6.
Instrument

The instrument (survey) consisted of twenty four statements. The subject would answer the statement posed to the extent which they agreed with the item (This is like me) or to the extent to which the subject disagreed with the item (This is not like me). A numerical value was placed on the extent to which the subject thought that they exhibited the implied behavior. If the subject whole-heartedly agreed with the statement (behavior) and marked on the survey accordingly, they were given the numerical value of 100—they agreed one hundred percent with the behavior implied. If the subject whole-heartedly disagreed with the implied behavior and marked the survey accordingly, they were given the numerical value of 0—they agreed zero percent with the behavior implied. Any student mark falling in between whole-heartedly agree and whole-heartedly disagree was marked accordingly with the values between 1 and 99, using a scale calibrated to coincide with the range indicated on paper (see appendix). Cognitive style and ability were not added to the survey because these factors cannot be taught as behaviors. The behaviors examined and the statements posed were as follows:
### Table 3

**Behavior and Statement Table**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Statement Posed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy</td>
<td>I do most things well.</td>
</tr>
<tr>
<td>Positive Appraisals</td>
<td>I do well in school.</td>
</tr>
<tr>
<td>Positive Attitude</td>
<td>I enjoy school.</td>
</tr>
<tr>
<td>Love</td>
<td>I am a loving person.</td>
</tr>
<tr>
<td>Confidence</td>
<td>I am sure I can succeed.</td>
</tr>
<tr>
<td>Hard Work</td>
<td>I am a hard worker.</td>
</tr>
<tr>
<td>High Aspirations</td>
<td>I aspire to great things.</td>
</tr>
<tr>
<td>Practical Choices</td>
<td>My career goals are realistic.</td>
</tr>
<tr>
<td>Additional Services</td>
<td>I take advantage of special programs that help me to succeed.</td>
</tr>
<tr>
<td>Interpersonal Adjustment</td>
<td>I choose friends from a variety of ethnic groups.</td>
</tr>
<tr>
<td>Relating to High Achievers</td>
<td>My friends are high achievers.</td>
</tr>
<tr>
<td>Faith in God</td>
<td>I go to church regularly.</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>I take an experimental approach to life.</td>
</tr>
<tr>
<td>Low Anxiety</td>
<td>I'm a low-anxiety type</td>
</tr>
<tr>
<td>Questioning and Leading</td>
<td>It is my nature to ask a lot of questions.</td>
</tr>
<tr>
<td>Coping</td>
<td>I can cope with failure.</td>
</tr>
<tr>
<td>Creating Positive Reality</td>
<td>I like to create new ways to see things.</td>
</tr>
<tr>
<td>Seeing Things in New Way</td>
<td>I like to create new ways to see things.</td>
</tr>
<tr>
<td>Internal Locus of Control</td>
<td>I believe that my success will be a direct result of my own effort.</td>
</tr>
<tr>
<td>Initiative</td>
<td>I am a self-starter.</td>
</tr>
<tr>
<td>Leadership Roles</td>
<td>If someone would ask, &quot;Are you the leader here?&quot; I would say, &quot;Yes.&quot;</td>
</tr>
<tr>
<td>Persistence</td>
<td>I'm like a bulldog- I do not give up easily.</td>
</tr>
<tr>
<td>Over-achievement</td>
<td>I work even harder than I really need to.</td>
</tr>
<tr>
<td>Humor and Playfulness</td>
<td>I like to crack jokes to make hard work seem easier.</td>
</tr>
</tbody>
</table>
Procedure

The survey was briefly previewed with the subjects in the classroom to insure full understanding of all statements. Subjects were instructed to complete the survey individually.

At a later date the survey subjects were interviewed individually and videotaped. The classroom teacher wrote remarks on the survey to convey knowledge of that student's performance in the school environment. Aspects such as social bonds, grades, moods, interests, etc. were written down by the teacher to help the interviewer have a starting point when interviewing the subject.

The interviewer examined the subject's finished survey looking for any contradictions in the data from the subject and the teacher's entries. She then inquired about certain responses made by the subject on the survey to further enhance the researcher's conception of certain entries made by the subject, in order to make the relationship between the responses and the meaning behind the responses given by the subject. Each videotaped interview lasted approximately 20 minutes. These interviews provided further validation for the specific questions.
CHAPTER FOUR: RESULTS

No quantitative comparison of group scores was performed because of the low numbers in the study. However, the data can be used descriptively as a trend indicator.

High-achievers averaged 18 or more points higher than the low-achievers on eleven specific behavior tendencies while low-achievers scored 10 or more points higher than the high-achievers on three behavior tendencies. There was little or no difference between the high-achievers and the low achievers in ten behavior tendencies.

The high-achievers exhibited the successful behaviors tendencies of: Efficacy, Positive Appraisal, Positive Attitude, Confidence, Self-empowerment, Practical Choices, Relating to Other High-Achievers, Low Anxiety, Initiative, Hard Work, and Over-achievement (see table 4).

The low-achievers scored substantially higher in the areas of Additional Services, Faith in God, and Coping (see table 4).

The high-achievers and low-achievers were not substantially different in the behaviors of Love, High Aspirations, Interpersonal Adjustment, Questioning and Leading Strategies, Leadership, Risk-taking, Internal Locus of Control, Persistence, Humor and Playfulness, and Creating a Positive Reality (see table 4).

Overall, the average response was sixty four percent. This indicates that students in general and/or the ques-
tionnaire had a positive bias (see table 5).

The individual ratings exhibited the top five achievers holding three out of the five top total survey scoring positions (see table 6).

Table 4

**Behavior Survey Profile and Results**

<table>
<thead>
<tr>
<th>Question</th>
<th>Scoring</th>
<th>0</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>Av.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 - Efficacy</td>
<td></td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
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<td>80</td>
<td>90</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>L5</td>
<td>H5</td>
<td>H3</td>
<td>H2</td>
<td>H1,4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2 - Positive Appraisal</td>
<td></td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
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<tr>
<td></td>
<td></td>
<td>L5, L4</td>
<td>H5</td>
<td>H3</td>
<td>H2</td>
<td>H1</td>
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<td></td>
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<tr>
<td>Q3 - Coping</td>
<td></td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
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<td>90</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>L4</td>
<td>H5</td>
<td>H3</td>
<td>H1,2</td>
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<td></td>
<td></td>
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<tr>
<td>Q4 - Positive Attitude</td>
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<td></td>
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<td>L6</td>
<td>L5</td>
<td>L4</td>
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<td>30</td>
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<td></td>
<td>L5</td>
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<td>L3</td>
<td>L1</td>
<td>L2</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6 - Confidence</td>
<td></td>
<td>0</td>
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<td>20</td>
<td>30</td>
<td>40</td>
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<td>L1,6</td>
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<td></td>
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</tr>
</tbody>
</table>
Q7 - High Aspirations
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H2  H1  H5,4,3 89
  L5

Q8 - Self-empowerment
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H3  H4  H2,1,5 89
  L5  L3  L4  L1  L2  L6  61

Q9 - Practical Choices
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H1-5 100
  L5

Q10 - Additional Services
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H2,1  H5  H3  H4  28
  L5  L3  L1  L4  L2  L6  49

Q11 - Relating to Other High-achievers
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H3,2  H5  H1  H4  75
  L5  L3  L1  L4  L2  L6,3,1  57

Q12 - Interpersonal Adjustment
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H2 100
  L5

Q13 - Faith in God
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H2,4,5  H1  H3  36
  L5  L3  L1,2,4,6  78

Q14 - Questioning and Leading Strategies
Scoring
0 10 20 30 40 50 60 70 80 90 100 Av.
  H2  H5  H1  H4  H3  46
  L3,6,4  L5  L1  L2  33

42
Q15 - Leadership Roles

Scoring

0 10 20 30 40
H2 H5 L4,1 L3 L6 L5 H3,4 H1 Av. 40

Q16 - Risk-taking

Scoring

0 10 20 30 40
H2 H4,1 H5 L4 L6 L3 L2,1,5 Av. 70

Q17 - Low Anxiety

Scoring

0 10 20 30 40
H4 H3,2 H5 H1 L6 L3,2 L1 L5 Av. 60

Q18 - Internal Locus of Control

Scoring

0 10 20 30 40
H5 L2 L4,5 L3 L1,6 Av. 82

Q19 - Initiative

Scoring

0 10 20 30 40
H4 H2 H3 H5 H1 L5 L4,6 Av. 66

Q20 - Hard Work

Scoring

0 10 20 30 40
H2 H5 H1H4 H3 L6,4 L2 L3 L1 Av. 82

Q21 - Persistence

Scoring

0 10 20 30 40
H2 H4 H1 H5 H3 L4,5 L3 L2 L6 L1 Av. 79

Q22 - Over-achievement

Scoring

0 10 20 30 40
H1 H3,5 H4,2 L4,5,1,3 L2 L6 Av. 13
### Humor and Playfulness

**Scoring**

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<thead>
<tr>
<th></th>
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<th>20</th>
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<tr>
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<tr>
<td>H3</td>
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<td>90</td>
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<td>40</td>
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</tbody>
</table>

### Creating a Positive Reality

**Scoring**

<table>
<thead>
<tr>
<th></th>
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<th>10</th>
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<th>30</th>
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<th>60</th>
<th>70</th>
<th>80</th>
<th>90</th>
<th>100</th>
<th>Avg.</th>
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</thead>
<tbody>
<tr>
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<td>L2</td>
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<td>80</td>
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### Table 5

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CHAPTER FIVE: DISCUSSION

According to the literature, the high-achievers should have scored higher on all behavior tendency questions than the low-achievers. This was not the case.

Therefore, high-achiever versus low-achiever scores on the survey must be looked at with regard to the validity of the questions on the survey and the validity of the student answers on the survey.

The validity of the question as a representation of the behavior tendency is examined upon looking at how the behavior was posed in the question. Does the question posed measure what it was supposed to measure (the behavior tendency)?

The validity of the student answers are examined by looking at student backgrounds, personality, and how their answers on some behavior tendency questions affected their answers on other behavior tendency questions.

The latter two validity perspectives (question validity and student answer validity) were examined and results interpreted.

Validity of Questions

Does the question posed measure the behavior tendency sought? Specifically, the question should measure the behavior tendency concisely and specifically.

Results show that were are eleven specific behavior
tendencies that higher achievers exhibit that lower achievers do not or at least not to the same extent. The eleven specific tendencies that higher achievers exhibited are the following: Efficacy, Positive Appraisal, Positive Attitude, Confidence, Self-empowerment, Practical Choices, Relating to Other High-achievers, Low Anxiety, Initiative, Hard Work, and Over-achievement. The high-achievers consistently scored higher than their low-achiever counterparts in these areas therefore these core behaviors can be thought of as valid questions and integral to the high-achiever's success. Any instrument to be used to measure high-achiever behaviors should have these top eleven behaviors in it's questions. The successful behaviors (and statements that elicited the behavior response) are the following:

The survey statement "I do well in school" which measured the subject's sense of Efficacy was a strong attribute with the high-achievers. There was a 21 point difference between the average of the high-achievers and the low-achievers. The statement and scoring of the statement proved to have a strong relationship to high-achievers and can be thought of as a valid behavior (and question) to address in a survey when measuring successful minority behaviors.

The next behavior measured showed a strong high-achiever slant. That behavior was Positive Appraisals. The posi-
tive appraisal behavior was elicited by the statement "I am a hard worker." The high-achievers scored on the average of 38 points higher than the low-achievers. Although the statement was not very content specific, it proved to be a valid statement to show how the student appraise their all-around work habits. This behavior seems to be key in high-achievers therefore it is important to have this statement included on any survey of this type.

The next behavior measured was that of Positive Attitude. The positive attitude of subjects was sought after with the statement "I enjoy school." This question was very content specific as it shows the individuals positive attitude in an academic sense. The high-achievers scored on the average of 20 points higher on this behavior than the low-achievers. This strong high-achieving score shows it to be a valid statement and behavior on the survey.

The next behavior measured was Confidence. This behavior was measured with the question "I am sure I can succeed." High-achievers scored relatively better than the low-achievers but not substantially. I think if the question was more specific the high-achievers would have scored even higher. One can be sure they can succeed in many facets of life not just in education. In order for this behavior to score higher in high-achievers, the statement needs to be academically based. The confidence statement will then become a more effective measuring tool for seek-
Self-empowerment proved to be a significant factor in high-achiever success when compared with low-achievers; the high-achievers averaged 28 points higher than the low-achievers. This factor is essential to any survey used to measure high-achievement and seems to be a consistent behavioral tendency associated with academic success.

The category of Practical Choices was measured with the statement "My career goals are realistic." The high-achievers average was twenty-six points higher than the low achievers. Most high-achiever's career goals were for the most part attainable, when considering their achievement in school. For the low-achievers, some of the professional jobs desired (e.g. a "vet" or a lawyer) was not consistent to their current achievement level; therefore, not practical. This seems to be a valid statement to include on a survey, as it pin-points another behavior than could be enhanced for the low-achiever.

"My friends are high achievers" was the statement which measured the tendency of Relating to Other High-achievers. The high-achievers scored 18 points better on this behavior than the low achievers. This scoring difference is substantial enough to show that relating to other high-achievers is a behavior conducive to high-achieving. A behavior survey should include this behavior as one of the means for
identifying successful behaviors.

Low-anxiety was a desired behavioral tendency for high-achievers. Low-anxiety was measured by the marking of the statement "I am a low-anxiety type." The high-achievers scored 23 points higher than the low-achievers on this statement. Having low-anxiety in situations does seem to be a behavior conducive to high-achievers and therefore valid in this questionnaire. Any survey made to measure high-achieving minority behaviors would have to include a measure for anxiety levels.

Initiative proved to be a significant factor in high-achiever behaviors. The high-achievers scored 33 points higher than the low-achievers in this category.

The behavior tendency of Hard Work was shown by the high-achievers. The high-achievers scored 29 points better than the low-achievers on this behavior tendency. This behavior is important to the high-achievers profile to maintain success and is important to include in this survey.

Over-achievement was measured with the statement, "I work harder than I really need to." The high-achievers outscored the low-achievers by a score of 30 points on this statement. The high-achievers scored an average of 43 points and the low-achievers scored an average of 13 points. Although the high-achievers' total points was not very high, there was a substantial difference of scores
between the high-achievers and the low-achievers, and one can see that "over-achievement" is very specific to high-achieving. The over-achievement statement, then, is an important statement to include on a survey to measure successful behavioral tendencies when compared with low achievers.

Surprisingly, low achievers scored at least ten point higher than the high achievers in the following areas: Additional Services, Faith in God, and Coping. There can be a variety of reasons for this anomaly but the following can be thought of as valid behavior tendencies that show what high-achievers do not exhibit.

Additional Services was measured with the statement "I take advantage of special programs that help me to succeed." The low-achievers outscored the high-achievers by a score of 49 to 28. The reason for this fact may be that the low-achievers had been a part of resource classes and or youth groups that really do not focus on high-achievement (at least at a level which is comparable to the high-achievers). A rephrasing of the question to make it more specific to "programs that help you achieve high grades in school" would probably make the score more conducive and valid to high-achievers and a better statement for the survey. Another possible explanation may be that high-achievers do not need help from special programs.

Faith in God was measured with the statement "I go the
church regularly." Surprisingly, the low-achievers scored 37 points higher than the high-achievers. It would seem that faith in God is not an indicator that pinpoints high-achieving individuals. A new behavior statement may have to be formulated to inquire into one's faith that does not measure the action of "going to church."

Coping was measured by the statement, "I can cope with failure." The low-achievers outscored the high-achievers by 11 points. Coping with failure would not seem to be a desirable quality for high-achievers to have. Why should high-achievers need to cope with failing? Further research needs to be done to see if "coping with failure" is a wanted behavior on a survey that is supposed to measure high-achievers. At this point, coping with failure is a behavior associated with low-achieving minorities not high achieving minorities. This question (behavior tendency) seems to be somewhat predicting of a low-achiever's response.

Finally, there were fourteen behavior tendencies that showed no difference in preference between the high-achievers and the low achievers. They were the following: Love, High Aspirations, Interpersonal Choices, Questioning and Leading Strategies, Leadership Roles, Risk-taking, Internal Locus of Control, Persistence, Humor and Playfulness, and Creating a Positive Reality. Again, there can be a variety of reasons for this, but a closer look at the
question's validity could be the main factor for the lack of difference.

A student's capacity to Love was measured as a positive behavior with high-achievers. It was measured with the statement of "I am a loving person." High-achievers and low-achievers scored relatively the same score on the love statement. This score shows that this behavior is not high-achiever specific and therefore not a good behavior to be measured on the survey. Reasons for this discrepancy is probably the fact that the concept of love is very vague. One person's love is very different from another's. One can love a mate, or a sport, or a movie. This question would probably have to get specific to truly see if the subject was indeed a loving person or not. Possibly, the survey-taker might be presented with a situation with a response that would be considered loving or not loving. This technique would more readily show a person's ability to love.

The behavior category of High Aspirations was measured with the statement of "I aspire to great things." High-achievers and low achievers scored about the same on this behavior. The high-achievers averaged 90 and the low achievers averaged 89. The age of the participant could have been a factor with the two high behavior scores. At this age children do aspire to great things because most do not know the effort they must put in to achieve some high
aspirations. Although there is no doubt that high achievers do have high aspirations, most other people have high aspirations also. This category seems not to be specific to high achievers.

An individual's Interpersonal Adjustment to our multi-ethnic society was measured with the statement "I choose friends from a variety of ethnic groups." The high-achievers scored a little higher than the low-achievers. The high-achievers' scores averaged to 91 while the low-achievers' scores averaged to 78. This item showed that there was more tolerance for other ethnic groups for high-achievers. This item seems to have a place on the survey, although the scoring difference is not substantial enough to just be high-achiever specific.

Questioning and Leading was measured with the behavior statement of "It is my nature to ask a lot of questions." The high-achievers scored slightly better (4 points better) than the low-achievers. It would not seem that questioning and leading is a behavior conducive to high-achieving. It is possible that this behavior could be further explored by rephrasing the statement. The statement, "It is my nature to ask a lot of questions" could hold true outside of the classroom in the individual's social world. If the statement was made classroom specific, different scores by the high-achievers and the low-achievers may have resulted.

As far as Leadership Roles go, the high-achievers and
low-achievers scored relatively the same. The statement posed was, "If someone would ask, 'Are you the leader here'? You would say, "Yes." This behavior does not seem to be conducive to high-achievers, especially when the answer contradicts the earlier high "relating to other high-achievers" score by the high-achiever. If the high-achievers are relating to other high-achievers, there can be only one leader, so it is not necessary for the high-achievers to be leaders. A rephrasing of the question to an academic area could enhance the validity of the question.

**Risk-taking** was measured with the statement of "I take an experimental approach to life." The high-achievers scored slightly less than the low achievers on this statement: the score was 73 to 70. It seems that risk-taking is not a behavior that is conducive to high-achieving; therefore not a good gauge to measure high-achieving individuals and not a good behavior tendency to be measuring on this survey.

**Internal Locus of Control** was measured by the statement "I believe that success will be a direct result of my own effort." The high-achievers outscored the low-achievers by a score of 82 to 71. Although the high-achievers did outscore the low-achievers, the difference does not seem substantial enough to show that internal locus of control is high-achiever-specific. A rephrasing of the statement
to a statement more specific and school-related may be called for to get a valid reading of the locus of control category.

Persistence was measured with the statement "I'm like a bulldog - I do not give up easily." The high-achievers bested the low-achievers by a score of 79 - 72. This score is not substantial enough to show that persistence is a high-achieving specific behavior. Perhaps if the statement was schoolwork specific, it would be more valid to use on a survey used to measure high-achieving individuals.

Humor and Playfulness was measured with the statement "I like to crack jokes to make hard work easier." The high-achievers barely outscored the low-achievers by a score of 68 - 63. This close score makes humor and playfulness a poor behavior tendency to be measured as a successful minority high-achieving behavior.

Creating a Positive Reality was measured by the statement, "I like to create new ways to see things." The low-achievers outscored the high-achievers by a score of 67 to 64. It would seem that creating a positive reality is not a high-achieving-specific behavior tendency. Possibly one creates a positive reality out of a negative reality which does not help to make the reality more positive. Creating a positive reality does not seem to be a behavior that is high-achieving specific.
Student Answer Validity

A careful analysis of the results in the individual surveys showed some discrepancies between the teacher perspective (description) of the student, how the individual student answered the questionnaire (results), and the scores high-achievers and low-achievers should have scored according to their achievement category (discrepancies).

The student's background, personality, and some answers possibly influencing other answers seem to have affected the validity of their answers on the survey. Each individual student was examined in this way.

Dan (H1)

Description/Academic Profile

Dan is a Mexican-American boy. He would be considered a quiet student inside and outside of the classroom. His parents are both professionals and check up on his graders periodically. He is a superb athlete and has many friends. Dan was by far the best student (high-achiever) of the entire study. His lowest grade in history for the second semester was a 90% on a test. Throughout the year he had completed 100% of his homework. He plans to attend college. With his grades and athletic prowess he would seem like the ultimate student-athlete.
Results

As expected, Dan scored very high on most parts of the survey. Specifically, he scored high on the statements that elicited responses showing him to have a Positive View of Self, Efficacy, Positive Attitude, Confidence, Internal Locus of Control, High Aspirations, Practical Choices, Relating to Other High-achievers, Interpersonal Adjustment, Faith in God, Leadership Roles, Risk-taking, Low Anxiety, Persistence, Positive Appraisals, and Humor and Playfulness.

Unexpectedly, Dan scored himself low in the behavioral areas of Coping, Love, Additional Services, Questioning and Leading Strategies, Over-achievement, and Creating a Positive Reality.

Discrepancies/Discussion

Dan's low Coping score could be because of his parents high expectations of him, and their interest in his academics. Their constant interest and stressing of his grades could make any satisfaction (or coping) by Dan with failure in academics an unwanted (possibly dishonorable) characteristic.

Dan's low score on Questioning and Leading Strategies as well as Additional Services could be a normal response when considering his high score on internal locus of control. If he believes that his success is due because of his effort then why would he question another or seek the help
of others?

Finally, a contradiction lies in the fact that Dan scored low on the Over-achievement behavior yet he believes that success is due to his own effort. If academic success is so important to him and his family, then one would think that he would over-achieve all the time to become academically successful; unless, of course, success for him in academics does not require him to put in a monumental effort at all times.

Sara (H2)

Description/Academic Profile

Sara is Vietnamese-American girl. She is a very quiet and respectful individual inside and outside of the classroom. Her parents come into the school periodically to check on her progress in school via a translator. She had a few friends that she associates with. For the most part they were Asian like her. Sara wants to go to college to be a X-ray technician.

Sara was a solid B student throughout the year. Her assignments were always completed neatly and efficiently. She excelled at individual projects. She would reluctantly participate in the classroom discussion and when she did participate, her verbal responses were always elicited by the teacher and the responses were always in a soft tone.
Results

Sara scored high on the survey with certain successful behaviors. They were Positive Attitude, Confidence, Internal Locus of Control, and Practical Choices.


Discrepancies/Discussion

Sara scored that she doesn't have High Ambitions, yet she scored high on the Confidence and Practical Choices items. Someone who has confidence and is practical but does not have high ambitions probably would not plan to go to college to be a X-ray technician. Possibly college and this occupation are not high ambitions to her and within her realm of choices. Another possibility is that she might feel confident and make practical choices in the day-to-day activities of school but she probably does not feel so confident of achieving career goals.

She also scored low on Efficacy but her work was always efficient although not always correct. This score may result in the idea that B work is not efficient therefore
she is not efficient.

Finally, Sara scored high on Internal Locus of Control but she scored low on Questioning and Leading as well as Additional Services. It seems her shyness (or culture) may hamper Sara in using her internal locus of control to its full extent. She could utilize her Internal Locus of Control by taking control of a situation or problem, exhibit the lacking behaviors (Questioning, Leading and Additional Services) and achieve her goal in a higher-achieving fashion.

Valerie (H3)

Description/Academic Profile

Valerie is a Mexican-American girl. She is relatively quiet in the classroom but social outside of the classroom. She has many friends. She stated that someday she would like to be a "successful person" and eventually plans to go to college. She is a very down-to-earth, positive individual.

Results

Valerie scored high on the behaviors of Efficacy, Love, Confidence, High Aspirations, Practical Choices, Interpersonal Adjustment, Faith in God, Questioning and Leading, Internal Locus of Control, Positive Appraisals, and Persistence.

She scored low on the behaviors of Positive View of

Discrepancies/Discussion

Valerie scored that she was Persistent, but not an Over-achiever. A persistent person might work as hard as she could as long as she could to get the best grade possible. Her constant grade of a B does not show persistency taken to great lengths. It seems that her low score in Over-achievement tempers this persistency to a B instead of an A. These scores seem to contradict each other.

Valerie also scored low in Positive View of Self but high in Efficacy. It would seem that her high score in Efficacy and her B average would include a Positive View of Self. Her low view of self is probably attained from non-school activities.

Finally, Valerie scored high on Questioning and Leading Strategies but she hardly ever asked the teacher questions in the classroom. Her questioning might have been to other students, parents, or other adults not in authority. This is all too typical in intermediate schools for students not to ask questions of the teacher because they might seem inferior in front of their classmates.
Ed (H4)

Description/Academic Profile

Ed is a Mexican-American boy. He has many friends in and outside of the classroom. He plays many sports and has a warm personality. He likes to be outside and like many boys his age, he stated that someday he would like to be a professional basketball or hockey player. His parents have been very supportive and protective of him. They have been in contact with his teacher systematically throughout the year.

Ed has maintained a solid A throughout the year. He is very bright in picking up abstract concepts and participates in classroom discussions when he wants to. Although he has maintained an A average throughout the year he does not work as hard as he could in homework and some projects.

Results

Ed scored himself high in the following behaviors; Positive View of Self, Positive Attitude, Love, Confidence, High Aspirations, Internal Locus of Control, Practical Choices, Relating to Other High-achievers, Interpersonal Adjustment, Risk-taking, Positive Appraisal, Persistence, Humor and Playfulness, and Creating a Positive Reality.

Ed scored himself Low in Efficacy, Coping, Additional Services, Faith in God, Questioning and Leading Strategies, Leadership, Low-anxiety, and Over-achievement.
Discrepancies/Discussion

The most glaring discrepancy is his high scoring of Practical Choices and his desire to be a professional sports player which considering the odds is not very practical. However, other highly scored behaviors of Ed may account for this discrepancy. Specifically, his high scoring of Ambition and Creating a Positive Reality could account for the discrepancy.

Also, while his low scoring in Over-achievement may account for his sometimes lackadaisical performance in the classroom, his low score in Efficacy contradicts his solid A grade in history. Obviously his low score in Efficacy may be related to another facet of his life other than school or sports.

Finally, Ed’s low score in Coping and Low-anxiety may be due to his parent’s role in his life. They stress academics first. Any letdown of Ed in school may result in a High-anxiety situation for him at home, whereby making situations such as bad report cards uncomfortable and not a situation where coping with a bad report card is a smart and comfortable thing to do.

Don (H5)

Description/Academic Profile

Dan is a Vietnamese-American boy. Don is street-smart and mature for his age. He has peers 2-3 years older than
he. He is a leader in the social life at the school but not so much in the classroom academically. He enjoys sports and would like someday to become a professional snowboarder or a professional motorcross rider. After high school he plans to be a mechanic.

In the classroom Don gets involved in class discussions and debates. He is a medium B student and does enough work to maintain his B. There is little parental involvement in Don's school activities.

Results


Don scored low on his survey on Efficacy, Confidence, Additional Services, Belief in God, Questioning, Leadership, Internal Locus of Control, and Over-achievement.

Discrepancies/Discussion

Don indeed high aspirations shown by his desire to be a professional snowboarder or motorcross rider but his means of achieving this goal are flawed when what he wants to do when he gets out of high school is to be a mechanic. His low score in Additional Services and Questioning and Leading Strategies may constitute this discrepancy between the ends and means as Don does not know how to achieve this
ambition. Specifically he doesn't know where to go for the services or whom to ask.

As far a snowboarding and motorcross riding being his "high ambitions" other than something more academic, Da-
vid's low scoring on Efficacy and Confidence in school may be the reason for his non-academic career choice.

Don's low score in leadership is surprising as he is a leader among in classmates outside of school. Don may feel that leadership qualities are inherently academic. His high scores on Relating with Other High-achievers possibly makes Don feel he is not a leader when in reality he is albeit outside of the classroom.

Maria (L1)

Description/Academic Profile

Maria is a Mexican-American girl. She has many friends and is very social in and outside of the classroom. She is very talkative and a leader among her friends. She has a tough demeanor and will not be pushed around by any student or teacher. She is a good athlete. She plans to attend college and wants to be a lawyer some day.

In school Maria is a D student. She seldom passes in homework and her projects are usually of poor quality. She can be loud in the classroom at inappropriate times. She does excel at debating historical issues in the classroom and is very opinionated.
Results

The survey showed that Maria believed she had the high-achieving behaviors of Coping, Confidence, High Aspirations, Internal Locus of Control, Practical Choices, Interpersonal Adjustment, Faith in God, Risk-taking, Positive Appraisals, Persistence, and Seeing Things in a New Way.

Alternatively, Maria’s responses on the survey showed that she thought she lacked certain successful behaviors such as; Positive View of Self, Positive Attitude, Love, use of Additional Services, Relating to High-achievers, Leadership qualities, Low-anxiety, Over-achievement, and Humor and Playfulness.

Discrepancies/Discussion

One glaring discrepancy is the fact that Maria appraises situations positively yet she is failing in school. This is a bad character trait to have for a low achiever who is positive about a D average. Perhaps the Positive Appraisal is something outside of the academic realm.

Also, Maria scored high on Coping. Again this may be a bad character trait to have when one copes with failure and does not feel the stress to improve on the failure, therefore failing again.

Finally, Maria scored high on Confidence and Persistence but low on Positive View of Self and Positive Attitude. It would seem that Confidence and Persistence go hand in hand
with self view; but if she is confident and persistent in something other than school, she would score high in those categories. Specifically, one can feel confident and persistent in one's life and still have a low self concept in academic areas.

Jack (L2)

Description/Academic Profile

Jack is a Korean-American student. He likes to joke around inside and out of the classroom. He has many friends. His parents had talked to the teachers at the school sporadically. Jack enjoys rollerblading and hanging around with his friends. He one day wants to go to college and eventually become a computer technician.

Jack has averaged a D throughout his eighth grade experience. He is talkative in class and likes to fool around with classmates. He passes in little homework and usually his class work is of poor quality.

Results

Jack scored high on the survey in the following behaviors; Positive View of Self, Coping, Love, High Aspirations, Practical Choices, Relating with High-achievers, Faith in God, Leadership Qualities, Risk-taking, Humor and Playfulness, and Creating a Positive Reality.

Jack scored low on the survey in the following behaviors; Efficacy, Positive Attitude, Confidence, Interper-
sonal Adjustment, Low-anxiety, Internal Locus of Control, Positive Appraisals, and Over-achievement.

Discrepancies/Discussion

Jack scored high on High Aspirations which shows in his want to go to college and work with computers. He also scored high on Practical Choices. This ambition of Jack's to go to college is not practical due to his failing grades in school. Therefore there is a discrepancy between Jack's grades and his ambitions and practicality. This probably comes about by Jack's lack of knowledge about how one goes about getting into college and becoming computer technician.

Jack scored high on Leadership Roles but he is a follower in the classroom. Perhaps his desire to be a leader affected the score that he put.

Jack's high scores in Humor and Playfulness as well as Creating a Positive Reality seem to be detrimental to success in the classroom, as he certainly fools around too much and does not seem to be affected by the reality of failing grades.

Finally, Jack's high scores in Positive Self View and Coping in the midst of failing grades seem to make John invulnerable in his failing ways, as he is not affected as a person and can cope with failure effectively.
Donna (L3)

Description/Academic Profile

Donna is from Guam. She has a few close friends. She is a very quiet and nervous individual. She does not seem to have much self confidence. She says that she wants to go to college and become "a vet."

Results

Donna scored high on the following behaviors: Coping, Confidence, High Aspirations, Practical Choices, Interpersonal Adjustment, Risk-taking, Internal Locus of Control, Positive Appraisals, and Humor and Playfulness.

Donna scored low on the following behaviors: Positive View of Self, Efficacy, Love, Additional Services, Relating to High-achievers, Faith in God, Questioning and Leading Strategies, Leadership, Low Anxiety, Persistence, Over-achievement and Creating a Positive Reality.

Discrepancies/Discussion

Donna's high Coping score when compared with her low achievement would indicate that she has probably failed most of her life and has learned to cope with it.

Her high score in Confidence again would not reflect her low-achievement. She may be confident in other ways but upon observation of her during interaction with other students and teachers, Donna seems to lack confidence despite her high score in that area.
Donna's low achievement would make her High Aspirations and Practical Choices of going to college to become a vet seem improbable although she probably wants to succeed in these areas.

Finally, Donna's Positive Appraisals of her school work would show someone thinks it is all right to fail and probably feels positive about it.

Carla (L4)

Description/Academic Profile

Carla is a Mexican-American girl. She was a limited-English-speaking girl who began her transition into the sheltered class at the beginning of the year. She is a very quiet individual inside and outside of the classroom. She has some friends who are all limited English speaking. Someday she wants to be a probation officer.

Carla has failed throughout the year. She has passed in little homework and never participates in the classroom activities unless she has to. There has been no parent contact during the year.

Results

Carla has scored high in the behaviors of High Aspirations, Interpersonal Adjustment, Faith in God, Low-anxiety, and Seeing Things in a New Way.

Carla has scored low in the behaviors of Positive Self View, Efficacy, Coping, Love, Confidence, Internal Locus of
Control, Practical Choices, Seeking Additional Services, Relating to High Achievers, Questioning and Leading Strategies, Leadership, Risk-taking, Positive Appraisals, Persistence, Over-achievement, and Humor and Playfulness.

Discrepancies/Discussion

Christina scored that she had High Aspirations, but she wants to be a probation officer. This desired occupation of Christina is probably thought of as a high goal due to her failure in school and her low Positive Self View, Efficacy, and Confidence.

Her high Low-anxiety score probably perpetuates her failure in school by her not getting upset and stressed about poor grades and continuing a downward spiral undaunted.

Finally, Carla’s high score in Seeing Things in a New Way may be a curse to her because while everybody else sees school as important and something to try hard at, Carla may see education in a different way and not try as hard at it.

Elena (L5)

Description/Academic Profile

Elena is a Mexican-American girl. She has a tight group of friends who are mostly Mexican-American. She is very mature for her age and street-smart. She has a quick temper and will not be told what to do. Her parents don’t seem to have much control over her.
Elena has consistently failed throughout the year. She was often absent from school, suspended or placed in alternative class placement. When in school she never did homework and did sporadic class work. At times she excelled at debating in the classroom but only when she was interested. She states that her only friend is herself, and she someday wants to be a court recorder or a secretary.

Results

Elena's only high score on the survey was the Behavior of Risk-taking.


Discrepancies/Discussion

Elena's only high score was in Risk-taking. This high score was probably a non-academic score where she takes risks as far as cutting class, skipping school, or other activities. Her risk-taking behavior would probably not be conducive to academics.
Jose (L6)

Description/Academic Profile

Jose is originally from Honduras. He has a some friends in the classroom and around campus. He wants to be a professional soccer player someday and wants to play soccer in college.

Jose does little or no work in school. He has consistently failed throughout the year. He likes to have fun with his friends in class.

Results

Jose scored high in the following behaviors: Positive View of Self, Love, Confidence, High Aspirations, Internal Locus of Control, Practical Choices, Additional Services, Relating to High-achievers, Interpersonal Adjustment, Faith in God, Persistence, and Humor and Playfulness.

Jose scored low in the following behaviors: Efficacy, Coping, Positive Attitude, Questioning, Risk-taking, Low Anxiety, Positive Appraisals, Over-achievement, Creating a Positive Reality.

Discrepancies/Discussion

Jose’s high score in Confidence is probably not the best trait to have when he is failing in school. He is probably confident in his soccer skills.

His high score in Practical Choices does not match well with his desire to play professional soccer via college.
If he wants to play soccer in college he should thinking about raising his grades.

Finally, his high score in Persistence is questionable because of his poor effort put into grades in school. Many times Jose never finished class work during class time and failed to finish it for homework. This leaves the mark of a not-so-persistent person.

Another aspect of the survey was the positive bias of the answers. Both high-achievers and low-achievers averaged out to a sixty four percent on there answers. The average should have been fifty percent. A small sample sized could be one reason for this high bias. Another reason for this bias is the fact that at the age level of these students (14-15) they are probably going to answer the question more favorably than they think they are expected to answer.

Finally, the results showed that of the top five achievers, only three of them held a position in the top five of the survey. Again, a small survey could be the reason but more likely it was individual, family and social differences for the discrepancies, their survey scores, and ultimately their final rating.
CHAPTER SIX: CONCLUSIONS

As a whole, the survey did not fulfill the expectations of the study. The survey did not sufficiently differentiate high-achieving subjects from low-achieving subjects on the basis of high survey scores and low survey scores. Therefore, the survey as a whole was not an effective means in locating problem areas to see what behaviors low-achieving individuals need to become successful.

Limitations of the study could have enhanced error in the findings and effected validity. A small sample size keeps the study from being generalized to a larger population. Participant age level may have positively effected the scoring. Specifically the age level has the factors of low maturity, peer pressure, answering to make one feel good, etc. Validity of the survey could have also affected results. Specifically, some questions possibly did not sufficiently measure the behavior and could have affected validity. Individual differences could have altered the validity of the results. Finally, some behavior tendencies seemed to have affected other behavior tendencies.

However, the contradictions, limitations of the study, and the questions of validity do not necessarily indicate that all of these certain successful behaviors are not more frequently used specifically by high achievers. On the contrary, in attaining high-achiever behaviors for future surveys we can begin with the eleven successful behaviors.
used by high-achievers in this study: Efficacy, Positive Appraisal, Positive Attitude, Confidence, Self-empowerment, Practical Choices, Relating to Other High-achievers, Low Anxiety, Initiative, Hard Work, and Over-achieving.

From there we must take into account the other thirteen behavior tendencies not found to be high-achiever specific and why they were not. The behavior tendencies were the following: Additional Services, Coping, Faith in God, Love, High Aspirations, Interpersonal Choices, Questioning and Leading Strategies, Leadership Roles, Risk-taking, Internal Locus of Control, Persistence, Humor and Playfulness, and Creating a Positive Reality). Further research that has these limitations dealt with effectively may indeed be able to identify more high-achiever behavior tendencies without regard to the inherent issues of student and question validity found in this study.

Knowing the reasons that the latter did not show to be high-achiever specific (because of questions of validity) we can now begin to extract enough data from the survey to show that there was a difference between the high-achievers' and the low-achievers' score and we can possible upgrade the survey to make it a better instrument in measuring all successful behavior tendencies effectively.

Finally, with regard to the research questions asked: Do high achieving minority students have certain behaviors that contribute to success? If yes, can these behaviors be
put into a framework to isolate certain behaviors needed to help low achievers? The study has shown successful minority students do indeed have certain behaviors that contribute to success. Specifically these behaviors are the following: Efficacy, Positive Appraisal, Positive Attitude, Practical Choices, Low Anxiety, Over-achievement, Self-empowerment, Confidence, Initiative, Hard Work and Relating to Other High-achievers. Also, successful minority students seem to not require Additional Services, do not have as strong a Faith in God as their low achieving peers and do not excel in Coping as well as their low-achieving peers.

Having eleven out of twenty four behaviors measure differences between the high-achievers and the low-achievers indicates that high-achieving minority students do indeed exhibit certain behaviors that their low-achieving peers do not. Consequently, these behaviors can be put into a framework to identify certain behaviors needed to help low-achievers. This survey may be indicative of the type of survey that should be used.

Further research in this area of identifying successful behaviors to help under-achievers is crucial to the success of the American people. If we can continue to locate the successful behaviors of high-achievers, we can pinpoint those behavior tendencies lacking in low-achievers and begin to incorporate those behaviors into the low-
achiever's education.

We will be able to help the underachieving minorities to be able to succeed in society by looking at the behavioral tendencies of those who are succeeding now—the people who are "hitting with two strikes".
APPENDIX

Behavioral Tendencies

Draw a line on each scale to show your agreement or disagreement with the statement. There are no right or wrong answers.

Agree  ---------------------------------------- Disagree
(This is like me) (This is not like me)

I do most things well.

I do well in school.

I can cope with failure.

I enjoy school.

I am a loving person.

I am sure I can succeed.

I aspire to great things.

I set my own goals.

My career goals are realistic.

I take advantage of special programs that help me succeed.
Agree  ------------------------------------------ Disagree
(This is like me)                       (This is not like me)

My friends are high achievers.

I choose friends from a variety of ethnic groups.

I go to church regularly.

It is my nature to ask a lot of questions.

If someone would ask, "Are you the leader here?" I would say, "Yes."

I take an experimental approach to life.

On the whole, I'm a low-anxiety type.

I believe that my success in life will be a direct result of my own effort, rather than due to luck or chance.

I am a self-starter.

I am a hard worker.
Agree  -------------------------------Disagree
(This is like me)  (This is not like me)

I'm like a bulldog— I do not give up easily.

I work even harder than I really need to.

I like to crack jokes to make hard work seem easier.

I like to create new ways to see things.
Interest Survey

Complete each statement with an indication of your preference:

My favorite food is ____________________________________________.

After school, I like to ____________________________________________.

My closest friend ____________________________________________.

Someday I'd like to be ____________________________________________.

After high school, I plan to ____________________________________________.

On Saturday, I like to ____________________________________________.

My favorite subject in school is ____________________________________________.

I like to read ____________________________________________.

My favorite T. V. show is ____________________________________________.
REFERENCES


