A STUDY OF THE ADVANCEMENT VIA INDIVIDUAL DETERMINATION

(AVID) PROGRAM AND STUDENT SELF-EFFICACY AND

ACADEMIC ACHIEVEMENT: AN EXPLORATION WITH

MIDDLE AND HIGH SCHOOL STUDENTS

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Kimberly S. Monachino

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Dissertation

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ABSTRACT

This research study examined the impact of the Advancement Via Individual Determination (AVID) program on students' self-efficacy and academic achievement outcome measures at the middle and high school level. AVID is a college readiness system designed to prepare at-risk students in the fourth through 12th grade for college. The main focus of this study was to determine if there was a difference in students' self-efficacy based on the number of years in the AVID program and if there was a difference in AVID students' academic achievement outcome measures between seventh and eighth grade in reading and math.

Participants included seventh through 11th grade AVID students in one suburban school district within northeast Ohio (N = 239). These students reported perceptions of their self-efficacy on the My Voice Survey (QISA, 2010). Student achievement data were obtained from the 2010-2011 Ohio Department of Education Local Report Card.

Through multivariate analysis of variance (MANOVA) the data were analyzed. Findings from this study indicated that there were statistically significant differences in students' self-efficacy based on the number of years in the AVID program and statistically significant differences in academic achievement outcome measures between seventh and eighth grade for AVID students in reading and math. AVID students'

active engagement was statistically significant in year 1 of the AVID program when

compared to year 2, year 3 or more. Seventh grade AVID students' math scores had a

statistically significant higher mean score (414.66) than did eighth grade AVID students'

math scores (403.02). These results suggested that AVID students' self-efficacy and

academic achievement outcomes did not increase as they progressed through the

program. The data showed that perhaps the AVID program may not be the answer to the

problem that was posed in this study and that the AVID program alone may not be the

reason for the findings of the study. The results may be attributed to other variables

beyond the AVID program, such as high quality instruction from teachers, mentoring

from tutors, support from guidance counselors, or encouragement from family members.

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CHAPTER I

INTRODUCTION

The term "at-risk" youth denotes many different connotations especially at the

middle and high school levels. The at-risk label has been associated with students who

experience academic and behavioral problems, poor school performance, grade retention,

and not graduating from school (Alexander, Entwisle, & Kabbani, 2001; Hickman,

Bartholomew, Mathwig, & Heinrich, 2008; Hickman & Garvey, 2006; Hickman &

Wright, 2011). At-risk students experience certain environmental conditions that create

risk: poverty, lack of family guidance and support, violence, drug abuse, and negative

peer pressure (Alexander et al., 2001; Hickman & Garvey, 2006; Thornburg, Hoffman, &

Remeika, 1991). Given such environmental experiences, these students tend to be less

likely to graduate and may drop-out of school without the necessary skills to obtain or

maintain employment (Alexander et al., 2001; Hickman & Garvey, 2006).

Other studies suggested at-risk students who do remain in high school are less

likely to enroll in college preparatory coursework due to lack of resources and remain

content in lower level comprehensive courses (Alfassi, 2004; Fashola & Slavin, 1998).

Students labeled as at risk may have the aspirations of attending college but become

easily defeated when faced with the academic demands and challenges of a rigorous high

school curriculum. They may lack motivation, determination, and self-efficacy. Several studies have shown that these students are unprepared academically and socially for the college experience (Choy, 2001; Horn, Nunez, & Bobbitt, 2000; Lohfink & Paulsen, 2005). As a result, these students are at the greatest risk for not pursuing higher education despite their intellectual capabilities.

To address this concern, a program was developed that provides students the academic and social support needed to be successful in higher-level classes and eventually to be prepared for college admission. The Advancement Via Individual Determination (AVID) is a college readiness system designed to prepare students in the fourth through 12th grade who are recognized as being at risk for not attending college. These students are typically academically average and who have the potential for higher academic achievement. In general, students who choose to participate in AVID must meet the criteria of being from low-income families, having ethnic or linguistic minority backgrounds, and will be the first in their families to attend college (Black, Little, McCoach, Purcell, & Siegle, 2008). These students show the potential to be academically successful in honors and advanced placement courses but often go unnoticed in lower-level comprehensive classes. The AVID program provides students access and support to a rigorous curriculum to prepare them for college. As AVID students transition from lower level classes to rigorous classes, they may experience doubt in their abilities to be successful. Through the support and "safety net" of AVID elective teachers and tutors, these students develop increased self-efficacy to be successful in challenging curriculum.

Statement of the Problem

Although the AVID program has been implemented in over 4,500 schools in 45 states and 16 countries (Hooker & Brand, 2009), the research has focused primarily on the program's effectiveness in assisting students gain entrance to college (Datnow, Hubbard, & Mehan, 2002; Guthrie & Guthrie, 1999; Mehan, Hubbard, & Villanueva, 1994; Watt, Powell, Mendiola, & Cossio, 2006). A considerable amount of research has been conducted at the middle and high school level documenting the positive achievement outcomes minority students received from participating in the AVID program (Guthrie & Guthrie, 2000, 2002; Mehan, Villanueva, Hubbard, & Lintz, 1996; Watt, Powell, & Mendiola, 2004; Watt, Yanez, & Cossio, 2002). Further qualitative research conducted by Watt, Johnston, Huerta, Mendiola, and Alkan (2008) suggested that students who felt nurtured and established personal bonds with the AVID teachers remained in AVID during their high school career. Several other studies examined the positive effects of professional development on increasing teacher leadership (Huerta, Watt, & Alkan, 2008; Watt, Huerta, & Mills, 2010).

However, the literature is lacking research that has been conducted at the middle or high school level that examined the impact of the AVID program on students' self-efficacy and academic achievement. This is an important area of research to examine because studies have shown that students who are self-determined and intrinsically motivated experience positive results at school in the form of higher achievement, greater persistency to learn, and overall social and emotional well-being (Fortier, Vallerand, & Guay, 1995; Grolnick, Ryan, & Deci, 1991; Guay, Ratelle, & Chanal, 2008; Miserandino, 1996). As AVID students experience the outcomes of higher achievement, they will be

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better prepared for college. Based upon these findings, there is a need for a quantitative study to investigate AVID students' self-efficacy and academic achievement.

As a result of this void in the literature, this study investigated the impact of the AVID program on students' self-efficacy and academic achievement. To examine self-efficacy, AVID student data were used from the My Voice Survey (Quaglia Institute for Student Aspirations, 2010). Ohio Achievement Assessments in reading and math were also used to determine the impact of AVID on student academic achievement outcome measures.

Statement of the Purpose

AVID is a school-wide reform initiative whose primary purpose is to increase the enrollment of historically underrepresented and economically disadvantaged students into college. This goal is achieved through the middle and high school AVID program by providing these students access with assistance to honor and advanced placement classes. As a result, these students are challenged with rigorous college preparatory curriculum and are better prepared for college. AVID also provides the structure and design that affords staff the opportunities to help support the development of self-efficacy to these underserved students. Through the support of the AVID program, students learn how their level of motivation, determination, and self-efficacy impacts their academic achievement.

The goal of AVID, beyond academic achievement for students in the program, is to create or develop a college-going culture at the school that supports high expectations and levels of achievement for all students. This occurs as the school environment is

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transformed and AVID instructional strategies are evident school-wide. Studies have shown that AVID schools have improved ratings on state achievement assessments, as well as increased student performance among disaggregated groups of students when compared to non-AVID schools (Watt et al., 2004; Watt et al., 2006). Given this rationale, the purpose of this study was to examine the impact of the AVID program on students' self-efficacy and academic achievement outcome measures.

Motivation

To reach their academic potential, AVID students must demonstrate effort, willingness to work hard, and possess the belief that they are capable of succeeding when confronted with challenging curriculum. The academic success of students in the AVID program is driven by their motivation, determination, and self-efficacy. Specifically, aspects of motivation, including determination and self-efficacy provided the foundation relevant to the study with self-determination theory (Deci & Ryan, 1985) and self-efficacy theory (Bandura, 1986) being the most important.

Motivation is a multidimensional phenomenon that has been defined in many ways. The concept of motivation is used to understand what drives people to do certain activities. Some theorists have described the characteristics of people who are motivated as persistent, driven, purposeful, and determined (Maehr & Meyer, 1997; Weiner, 1990). Others have referred to motivation as the level of effort an individual is willing to expend toward the achievement of a certain goal (Weiner, 1990). All of these descriptions imply that motivation comes from within a person and most researchers would agree that motivation is about understanding the following key components (Miskel, 1982):

- Why people decide to do something.

- How long they are willing to sustain the activity.

- The amount of effort they use to engage in the activity.

Historical Perspective of Motivation

The following section provides a brief overview of early theorists of motivation and their contributions to the research. Then, a discussion of motivational cognitive theories and the impact of these theories on student motivation is provided. In particular, a discussion of the theoretical implications of two prominent motivational theories, self-determination theory (Deci & Ryan, 1985) and self-efficacy theory (Bandura, 1986) is presented.

During the 20th century, several different theories were prevalent in the field of motivational research. Some early researchers viewed motivation as mechanistic and suggested that behaviors occurred in response to physiological need such as hunger or thirst. Others suggested that all behaviors must be observed and measured. These theorists contended that through conditioning a connection is made between a behavior and a consequence for that behavior (Weiner, 1990); whereas, other theorists were more interested in how humans' thoughts and beliefs lead to specific behaviors (Ames & Archer, 1988). In general, they were concerned with how individuals think, learn, remember, and process information (Weiner, 1990).

These theorists, recognized as cognivists, were believed to provide a better understanding about student motivation since they use unobservable factors that are closely related to learning (Weiner, 1990). Such factors as effort, persistency,

perseverance, self-determination, and self-efficacy were all associated with learning. Most recently, there have been several cognitive motivational theories that have been applied in the educational context including goal orientation theory (Ames, 1992; Dweck & Leggett, 1988), attribution theory (Weiner, 1992), self-efficacy theory (Bandura, 1986), and self-determination theory (Ryan & Deci, 1989).

Goal orientation theory (Ames, 1992; Dweck & Leggett, 1988) examined the reasons why students engage in their academic work, and attribution theory (Weiner, 1992) investigated students' beliefs about their successes and failures. Bandura's (1986) self-efficacy theory emphasized beliefs in one's capabilities to perform specific tasks. Self-determination theory (Ryan & Deci, 1989) examined the motivation behind the choices that an individual makes without any external influence or interference and on the degree to which an individual's behavior is self-motivated and self-determined (Deci & Ryan, 2002). Their theory suggested that humans have three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan 1985). Based upon these brief descriptions, it is clear that each theory provided a different perspective in the way constructs are handled and no one single theory can account for all that researchers know about the motivation of behavior (Weiner, 1990).

Whether emphasizing the role of goals, self-efficacy, determination, or that of attributions collectively, cognitive theories have provided valuable implications for education. These theories explored how students think about specific tasks and reasons for their successes and failures. Furthermore, cognitive theories examined the relation between students' motivation to learn and students' goals, values, and feelings of competence. The work of these theorists has guided psychologists and educators to

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recognize the importance of promoting motivation to learn since motivation to learn plays an essential role in becoming engaged academically, achieving academic success, and sustaining a life-long commitment to learning (McCombs & Whisler, 1997).

Student motivation has been related to the use of learning strategies and goals, preference for challenge, attitude toward class, and choice for new learning activities (Ames & Archer, 1988; Deci, 1995; Garcia & Pintrich, 1996). Concepts such as autonomy support (deCharms, 1976; Deci, Schwartz, Sheinman, & Ryan, 1981; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004), teacher-student relationships (Connell & Wellborn, 1991; Goodenow, 1993; Martin & Dowson, 2009; Pianta, 1999), and achievement goal orientation (Ames, 1992; Dweck, 1986) have all been connected with student motivation. These concepts are embedded within the AVID program.

The construct of autonomy support or an autonomy supportive teaching style referred to teachers who facilitate learning by encouraging their students to be active participants. Teachers with an autonomy supportive teaching style want their students to feel empowered and part of the decision-making process. Several research studies have shown that students taught by teachers with autonomy supportive approaches showed high levels of competence, autonomy, and intrinsic motivation (Grolnick & Ryan, 1987; Reeve, Bolt, & Cai, 1999; Vansteenkiste et al., 2004).

The concept of teacher-student relationships implied that positive interactions between the teacher and student are important and contribute to improved academic achievement (Pianta, 1999). When students experience feelings of connectedness to their teacher, they become more actively engaged in the classroom environment and are more intrinsically motivated (Ryan & Grolnick, 1986). Furthermore, students who experience

supportive, positive relationships with their teachers have more positive attitudes toward school (Connell & Wellborn, 1991; Wentzel, 1994).

Achievement goal orientation suggested that students make choices based on their emotions, beliefs, and attributions, which account for the different reasons why students choose to engage in academic tasks (Ames, 1992; Eccles & Wigfield, 2002; Linnenbrink & Pintrich, 2002; Wentzel, 1999). Two distinct types of achievement goal orientation that have been identified in the literature are mastery goal orientation and performance goal orientation (Ames, 1992; Dweck, 1986). Students with mastery goal orientations strive to understand academic content, increase their academic competence, and develop new skills (Ames, 1992; Dweck, 1986), whereas students who adopt performance goal orientations are concerned with their ability and performance relative to others (Dweck, 1986).

Theoretical Framework

Several empirical studies have shown that increased student motivation leads to higher levels of academic achievement (Brossard & Garrison, 2004; Fortier et al., 1995; Grolnick et al., 1991; Lodewyk & Winne, 2005; Miserandino, 1996; Skaalvik & Skaalvik, 2004; Winne & Nesbit, 2010). Based upon this research, the theoretical framework for this study included self-determination theory (Ryan & Deci, 1989) and self-efficacy theory (Bandura, 1986). The tenets of each of these theories, coupled with the philosophical principles of AVID, unite to form a cohesive, logical structure for this study. Figure 1 depicts the theoretical framework for this study and shows how student motivation is linked to student achievement. As a result, this study investigated the

impact of the AVID program on students' self-efficacy and academic achievement outcome measures.
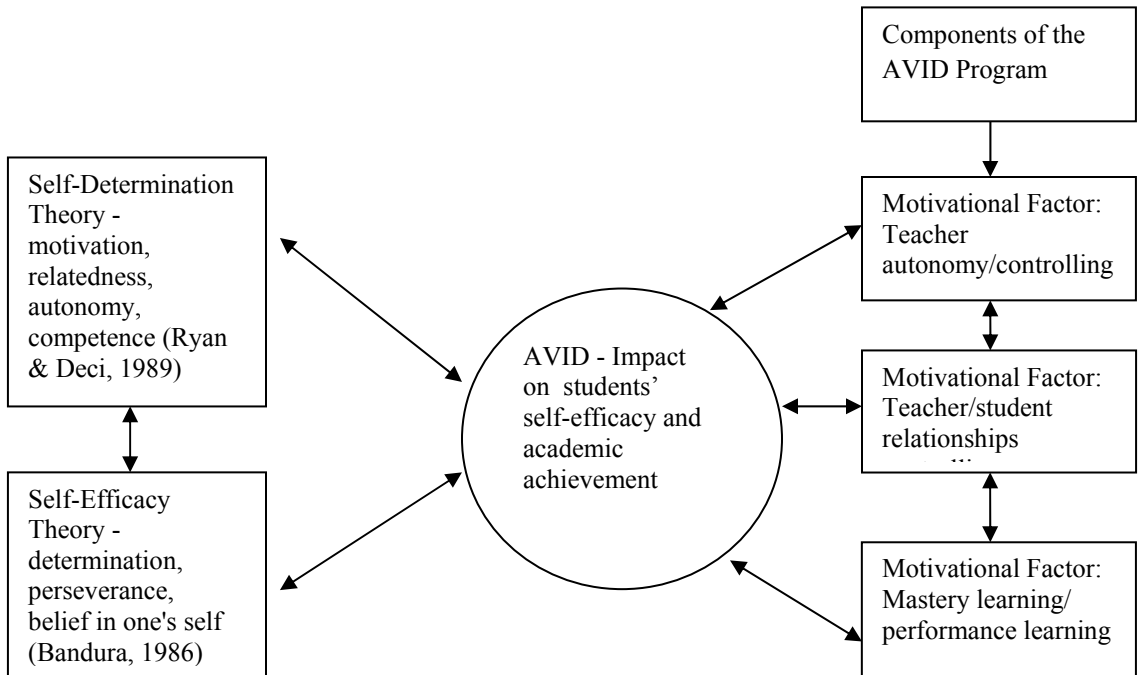
Figure 1.1. Theoretical framework.

The left side of the framework illustrates the components of self-determination theory (Ryan & Deci, 1989), and self-efficacy theory (Bandura, 1986). The right side suggests components of the AVID program that contribute to student motivation. The middle of the framework exemplifies how the interactions between theory and components of the AVID program impact AVID students' self-efficacy and academic achievement. For purpose of this study, the theories on the left side of the framework, along with the impact of the AVID program on students' self-efficacy and academic achievement were investigated. The right side of the framework is briefly discussed through the review of literature in Chapter II. It is important to provide an overview of

the components of the AVID program since studies pertaining to these areas may have

implications for future research.

After a thorough review of motivation theories (Ames, 1992; Bandura, 1977;

Covington, 1984; deCharms, 1968; Deci & Ryan, 1985; Dweck & Leggett, 1988; Eccles

& Wigfield, 1995; Maslow, 1943; Weiner, 1992; White, 1959), the theoretical framework

for this study was built from two motivational theories, self-determination theory (Deci &

Ryan, 1985) and self-efficacy theory (Bandura, 1977). The rationale for the selection of

each theory is described in the next section along with empirical studies that supported

increased self-efficacy and academic achievement.

Self-determination theory was selected for this study because it offers a different

perspective on human motivation. The primary purpose of self-determination theory is to

examine the motivation behind the choices that individuals make without any external

influence or interference. The theory focuses on the degree to which an individual's

behavior is self-motivated and self-determined (Deci & Ryan, 2002). The theory

suggests that to foster high quality forms of motivation individuals must experience

autonomy, competence, and relatedness (Deci & Ryan, 1985). As a result, self-

determination theory makes certain predictions about motivational consequences.

Researchers have found that self-determined or autonomous motivation varies as a

function of one's feelings of competence and self-determination (Fortier et al., 1995).

When students experience a high level of academic competence and feel self-determined,

their autonomous academic motivation should be maintained or increased.

Within the self-determination framework, several studies have shown improved

academic performance and achievement (Gottfried, 1985, 1990; Grolnick et al., 1991).

Other studies suggested reduced school drop-out (Daoust, Vallerand, & Blais, 1988; Vallerand & Bissonnette, 1992) and greater conceptual learning (Benware & Deci, 1984; Grolnick & Ryan, 1987). In fact, in a study conducted by Guay et al. (2008), students experienced positive results at school in the form of higher achievement, greater persistency to learn, and overall social and emotional well-being.

Bandura's (1977) theory of self-efficacy was the second theory selected as the theoretical framework for this study. The theory suggested that individuals pursue and complete activities and situations in which they feel competent and avoid situations in which they doubt their capability to succeed. Self-efficacy is more about self-perception of competence rather than actual level of competence. Bandura (1997) defined self-efficacy as "Beliefs in one's own capabilities to organize and execute courses of action required to produce given attainments" (p. 3). In other words, self-efficacy is a person's judgment about being able to perform a certain task and is influenced by the amount of effort and perseverance that one is willing to put forth on a task when confronted with challenges (Bandura, 1997; Schunk, 1984, 1990, 1991; Skaalvik & Skaalvik, 2007).

Within the self-efficacy theory framework, several studies suggested a positive correlation between academic self-efficacy beliefs and academic achievement (Greene, Miller, Crowson, Duke, & Akey, 2004; Pajares & Miller, 1994; Pintrich & DeGroot, 1990; Shell, Colvin, & Bruning, 1995; Usher, 2009). Students' beliefs about their academic capabilities or self-efficacy beliefs can be predictors of their academic achievement. Additionally, students' motivational beliefs affect their approach to learning activities, strategy use, and academic outcomes (Linnenbrink & Pintrich, 2003; Seifert, 2004).

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Self-determination theory and self-efficacy theory provided empirically supported frameworks that explain student approaches to learning, as well as, behavioral reactions to learning experiences based on motivation orientation (Deci, Eghrari, Patrick, & Leone, 1994; Fortier et al., 1995; Newman & Schwager, 1995). Evidence supported connections between motivation orientation and achievement, self-efficacy, and cognitive engagement for students (Garcia & Pintrich, 1996; Grolnick et al., 1991; Midgley, Anderman, & Hicks, 1995). Together, these two theories provided the underpinning for this study.

Limitations and Assumptions

Limitations of the study included the following: This study was conducted in one middle school and high school within Northeastern United States. Given the sample size and demographics, generalizing these results to other areas of the country may be difficult. Also, the Likert scale for the My Voice Survey instrument consisted of a 5-point scale (1 = *strongly disagree*, 3 = *undecided*, 5 = *strongly agree*) with the "3" not being identified as an interval. The construction of the scale permits subjects to answer statements as "undecided". This may have implications when interpreting the results of the study. The participants may have interpreted the questions and have a tendency to rate themselves more favorably which could make the results unreliable. Lastly, I am the District Director of the AVID program and assumes the role and responsibility of coordinating professional development, visiting classrooms to monitor fidelity of the program, and organizing monthly AVID team meetings. Given my relationship with the AVID program and my role as the researcher for this study, it is important for me to acknowledge and recognize my biases toward the AVID program. I have been affiliated

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with the AVID program for the last five years and have provided the leadership to expand the program to assist more students. I have also worked collaboratively with the building teams to determine the strengths and challenges of the program and have offered suggestions to improve the continuity of the program district-wide.

Several assumptions underlie the study. First, students accurately reported the number of years they have been in the AVID program. Second, all students have taken the Ohio Achievement Assessment in reading and mathematics. However, given the high mobility rate of students entering and exiting the district, the researcher may not have access to all data.

Research Questions

1. What is the relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy?

2. Is there a statistically significant difference of student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My Voice Survey among students who participated in the AVID program in year 1, year 2, year 3 or more?

3. Is there a statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program?

Definition of Terms

Advanced Placement – A set of rigorous, college-level high school courses and exams designed by the College Board. Students are able to earn college credits by passing Advanced Placement exams (College Board, 2010).

Advancement Via Individual Determination (AVID) – A college preparation program that targets students in the academic middle who are historically underrepresented in college and will typically be the first in their family to attend college (Black et al., 2008).

AVID Students – Students who currently participate in the AVID program. Students have to voluntarily apply to the program and then be selected through a comprehensive process that includes a written application, personal interview, and teacher recommendation (Black et al., 2008).

Certificate Self-Study – A requirement of AVID schools in which they score themselves on the 11 AVID Essentials based on a rubric of evidence that measure program fidelity. This is completed in the second semester of the academic school year by the AVID site team (Black et al., 2008).

My Voice Survey – A survey for students in grades 3-12 that reveals what motivates students to achieve on multiple levels (academically, personally, socially) and how effectively schools are fostering student goals (Quaglia Institute for Student Aspirations, 2010).

Self-determination Theory – A theory of motivation that proposes that people's psychological needs are the basis for their motivation. In particular, the needs for

autonomy, competence, and relatedness are believed essential for enhancing motivation (Deci & Ryan, 1985).

Self-efficacy Theory – The belief in one's capabilities and confidence to perform a given task or initiate a course of action in reference to a particular goal (Bandura, 1997).

Summary

Students labeled as "at-risk" are less likely to enroll in rigorous college preparatory coursework during their high school years. As a result, they are at a disadvantage for pursuing and being accepted into college. The AVID program places promising at-risk students in higher-level classes with enough assistance for them to be successful. AVID provides disadvantaged students with the skills, knowledge, and college preparation needed to enter and succeed in college. However, to be academically successful, the AVID student must demonstrate determination and self-efficacy.

Chapter I presented an introduction to the study along with a description of the AVID program. This was followed by the statement of the problem, statement of the purpose, and a review of motivational theories. Based upon the discussion of motivational theories, the theoretical implications of two prominent motivational theories, self-determination theory (Deci & Ryan, 1985) and self-efficacy theory (Bandura, 1986), were presented. The theoretical framework for the study was developed based upon these theories. The framework illustrated the interactions between theory and the AVID program's impact on students' self-efficacy and academic achievement. Lastly,

assumptions, limitations, research questions, and definition of terms of the study were

discussed.

CHAPTER II

REVIEW OF LITERATURE

The purpose of the study was to examine the impact of the AVID program on students' self-efficacy and academic achievement outcome measures. This chapter examines the theories that constitute the theoretical framework of the study and reviews the literature that is most pertinent to the proposed study. The chapter is divided into four major sections. The first section includes the history of the AVID program and a review of empirical research studies that have been conducted on AVID. The next section is an overview of specific components of the AVID program. Even though these components are not the major focus of the current research, they contribute to student motivation and are embedded within the AVID program. The factors include teacher's level of autonomy, teacher and student relationships, and achievement goal orientation. It is important to provide an overview of the components of the AVID program since studies pertaining to these areas may have implications for future research. The third section of this chapter is devoted to the theories of human motivation that form the theoretical framework of the study: self-determination theory (Deci & Ryan, 1985) and self-efficacy theory (Bandura, 1977). These theories are important to the study because they suggest that increased student motivation and self-efficacy lead to higher levels of

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academic achievement (Fortier et al., 1995; Grolnick et al., 1991; Miserandino, 1996; Shell et al., 1995; Skaalvik & Skaalvik, 2004; Usher, 2009; Winne & Nesbit, 2010). The last section of this chapter includes the origin of the My Voice Survey and several research studies (Connelly, 2010; Gardner-Kitt, 2005; Matthews, 2010) that have used the My Voice Survey instrument. The history and research studies pertaining to the My Voice Survey are valuable to the study and demonstrate how the survey was developed and refined over time. The research studies provide evidence of how the My Voice Survey instrument was used in each study and what the My Voice Survey was used to measure in each study.

History of Advancement Via Individual Determination (AVID)

In 1980, a high school English teacher from San Diego, California started a program that gave students who had little hope of going to college or students who would be the first one in their families to have a chance at a college education. Mary Catherine Swanson taught at Clairemont High School, a predominantly white, middle class school in San Diego, California (Black et al., 2008). During this time, the San Diego Schools were under a court-ordered desegregation decree mandating that minority students from Southeast San Diego be bused and integrated into Clairemont High School. As a result, 500 students from the poorest urban neighborhoods, most of them Hispanic or African American, would become part of the student body. Many faculty members were demoralized by the shifting demographics of their school and believed that based upon these students' backgrounds and experiences, they would be unable to meet the high academic demands of their classrooms. Staff was convinced that these students should be

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tracked into low-level comprehensive classes for remediation of skills (Mehan, Hubbard, & Villanueva, 1994).

Swanson, however, believed these low-income African-American and Latino students were capable of being accelerated in rigorous college preparation classes if they had a support system in place. To support these students, Swanson and fellow teacher, Jim Grove, decided to create a new program during a 50-minute class period with the support of student tutors, a small budget, and assistance from University of California San Diego Outreach Program (Mehan et al., 1994). Out of the 500 students, Swanson and Grove focused on 30 middle-level students (those having average grades) who probably would not have the opportunity to go to college.

Swanson and Grove, being English teachers, created a name for their pilot program based on the Latin word "Avidus" meaning "eager for knowledge." This word seemed to aspire their philosophical beliefs and what they wished to accomplish. Based on that one word, they called the program AVID, which stands for "Advancement Via Individual Determination" (Freedman, 2000).

Instead of a study hall, these 30 students were now in a class called the AVID elective. The teachers saw their students during this class and taught them fundamental skills such as note-taking, test-taking, study skills, time management, library research skills, and preparation for SAT/ACT and other college placement exams (Walker, Jurich, & Estes, 2001). Developing these skills would help prepare and support the students for the rigor of their college preparation coursework and Advanced Placement classes. These students would learn that perseverance, hard work, and as the AVID name suggested, individual determination would be the foundation needed to pursue

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postsecondary education. The AVID elective offered peer and college tutoring, opportunities to visit different colleges, and the emotional support and encouragement to succeed in challenging coursework.

Out of that first AVID elective class, 28 out of the 30 students went on to college (Mehan et al., 1996). In the next several years, the program grew within the school and by 1986 expanded beyond Clairemont High School. Swanson was recruited by the San Diego County Office of Education to implement the model county-wide. In the spring of 1987, the San Diego City Schools Board of Education mandated AVID in every high school.

By the 1990s, the structure and components of the AVID high school program was in place and students were experiencing the rigor of college preparatory coursework with the safety net of the AVID elective. Given this accomplishment, the program was expanded beyond the high school and extended into the middle grades. The purpose of the expansion was to identify potential AVID students sooner and cultivate a college going culture.

Components of an AVID District

A district that embraces the AVID program has the ultimate goal of creating a district-wide, comprehensive college readiness system. The AVID Elementary is the foundation of this effort. The goal of this school-wide initiative is to teach students the prerequisite skills needed for middle school. Key components of the elementary program include organization, student success skills, writing to learn, inquiry, collaboration, reading to learn, and partnerships. AVID Elementary is not another "add-on" program

but offers embedded sequential academic skills within the curriculum for non-elective, multi-subject, or self-contained fourth through sixth grade classrooms (McAndrews, 2008).

Whereas the elementary AVID includes all fourth through sixth grade students, middle and high school AVID programs identify students through a recruitment and selection process based on specific criteria. The students selected for middle and high school AVID meet the criteria of being from low-income families, having ethnic or linguistic minority backgrounds, being the first in their family to attend college, having average to high achievement test scores and maintaining average grades (Black et al., 2008). The AVID program works with students who demonstrate college-bound potential through course work, test scores, or teacher recommendation (Black et al., 2008).

The students in the middle and high school AVID receive daily support from an AVID elective teacher who assists them with the transition from low-level classes to rigorous college prep classes. Twice a week in the AVID elective class, students receive tutoring from college students. Before the tutors begin in the program, they must participate in a one-day training called "tutorology." The workshop teaches the tutors how to facilitate and guide the students in solving their problems by using an inquiry-based methodology. The tutors serve as both tutors and role models to the students.

According to Swanson (1996), AVID requires determination, hard work, and desire from the student to want to go to college. Therefore, the program is effective only if participation is voluntary. Students at the middle and high school level are required to sign a contract to enroll in AVID. Students at the high school level commit to at least

three years or until they complete high school. The contract includes their commitment to enroll in rigorous college preparatory classes, attended AVID elective classes, and participate in tutorial groups.

Parents of participating students must sign an agreement to support all AVID academic requirements. Parents must agree to encourage and support their child's academic efforts. Parents must also commit to attending evening family workshops on specific topics (i.e., study skills, college application process, scholarships, financial aid, etc.).

In an AVID district, all elementary teachers and content teachers in middle and high school receive professional development in AVID instructional strategies. The goal is to eventually have all teachers within a district trained in AVID methodologies. The purpose is to transform the AVID culture from the classroom to the district level to improve the academic performance and college readiness for all students (Hubbard & Mehan, 1999; Watt et al., 2004, 2006).

Finally, and very importantly to measure if AVID is successful in a building, all AVID buildings must complete an Initial Self-Study (ISS) at the beginning of the school year and a Certification Self-Study (CSS) at the end of the school year documenting the AVID 11 essentials. In order for a school to become a certified AVID site, the following 11 essentials of the program must be successfully implemented (Black et al., 2008).

1. Students are selected from the middle range (GPA and test scores), with academic potential, which would benefit from AVID support to improve their academic record and begin college preparation.

2. Student and teacher participation is voluntary.

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3. The school is committed to full implementation of AVID, with the AVID elective class available within the regular academic school day.

4. AVID students are enrolled in a rigorous course of study that will enable them to begin a college preparatory course sequence (including algebra or equivalent) when they enter high school.

5. A strong, relevant writing and reading curriculum provides a basis for instruction in the AVID elective class.

6. Inquiry is used as a basis for instruction in the AVID classroom.

7. Collaboration is used as a basis for instruction in the AVID classroom.

8. Trained tutors facilitate student access to rigorous curriculum using AVID methodologies.

9. Program implementation and student progress are monitored through the AVID Data System and results are analyzed to ensure success.

10. The school or district identifies resources for program costs, supports the essentials, participates in certification, and commits to ongoing professional development.

11. Active, interdisciplinary site team collaborates on issues of student access to and success in rigorous college preparatory courses.

AVID Research

College preparedness of students in high school is a major factor in determining if students attend college or not. The rigor of courses taken in high school is the most powerful predictor of academic achievement, high school graduation, and enrollment in

postsecondary education (Adelman, 1999). Therefore, the academic preparation that students receive during those high school years is critical to their college success. Adelman (1999) suggested that students who have taken Advanced Placement courses and mathematics classes beyond Algebra II at the high school level are better prepared to meet the demands of a four-year college. Students who take this rigorous content in high school are better prepared with information and skills that colleges would expect of them prior to entrance. Students of ethnic minorities and lower social economic status have historically had less access or success at this rigorous education (Leonard, Black, Dilgen, & Till, 2003). AVID is a school-wide reform effort that has the potential to offer the support to increase access and achievement of students taking these classes.

A considerable amount of research, completed by several agencies associated with AVID, has been conducted at the middle and high school level to determine the effectiveness of AVID increasing student achievement and college preparedness for minorities and low-income students (Datnow et al., 2002; Guthrie & Guthrie, 1999; Watt, Huerta, & Lozano, 2007; Watt et al., 2004, 2006). In addition to studies conducted by the AVID Center and affiliates, the program has been thoroughly researched by a variety of entities, including private foundations, and federal and state agencies (Cunningham, Redmond, & Merisotis, 2003; Hooker & Brand, 2009; Martinez & Klopott, 2005). Cunningham et al. (2003) reviewed 17 intervention programs including AVID in 12 states using the criteria of examining each program's structure and services to students. The researchers concluded that AVID is an effective college preparatory intervention program and AVID students are more likely to attend college, complete a college preparation curriculum, and are less likely to drop out (Cunningham et al., 2003).

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Similar outcomes were reported by Hooker and Brand (2009) in their evaluation of 23 different college readiness programs. Overall, Hooker and Brand (2009) noted that AVID students had higher scores on end-of-course exams and state assessments and enrolled in more advanced course than non-AVID students. Further investigations by Martinez and Klopott (2005) supported that AVID purposefully addresses the predictors of college readiness behaviors and uses college entrance and completion as benchmarks of the program's success.

In addition to the research conducted at the high school level, Guthrie and Guthrie (2000) conducted an extensive longitudinal study to evaluate the impact of AVID programming on middle school students transitioning to high school. In the middle grades, the focus of AVID is on college awareness, literacy, and math skills. The goal of the middle school program is to create a "college going mind-set" to successfully transition the AVID student into a rigorous high school curricular path that will lead to college.

Guthrie and Guthrie (2000) followed over 1,000 middle school AVID students' transition to high school. The researchers measured the success of middle school AVID students in high school by examining their high school grade point average, credits earned, SAT-9 standardized test scores, and the number of AP courses taken compared to non-AVID students. Findings indicated that middle school AVID has a positive impact on student achievement at the high school level, especially for AVID students who took algebra during their middle school years (Guthrie & Guthrie, 2000). Students who took algebra in middle schools earned higher GPAs in high school, accumulated more credits, and scored higher on standardized tests. Students who participated in two years of

middle school AVID enrolled in more AP classes than students who had just one year of AVID. This suggests that enrollment in two years of middle school AVID provides students with the necessary early preparation to place them on track for gaining admission to four-year colleges and universities (Guthrie & Guthrie, 2000).

AVID is a proven academic intervention initiative that targets average achieving minority and economically disadvantaged students (Black et al., 2008). AVID's approach to college preparation includes placing students in advanced curriculum so that they will graduate with the requirements for entrance into a four-year college. The program reflects a belief that if students are given strong academic and social support, they can complete higher-level course work.

Components of the AVID Program

Along with history of the AVID program and research studies conducted on the program pertaining to the study, it is important to present a brief overview of the specific components of the AVID program. Although these components are not the major focus of the current research, they are related to student motivation and are embedded within the AVID program. These components include teacher's level of autonomy (Deci et al., 1981; Vansteenkiste et al., 2004), teacher-student relationships (Connell & Wellborn, 1991; Goodenow, 1993; Martin & Dowson, 2009; Pianta, 1999), and achievement goal orientation (Ames, 1992; Dweck, 1986).

Level of Autonomy

The first component associated with the AVID program is the teacher's level of autonomy within the classroom (Deci et al., 1981; Grolnick & Ryan, 1987; Vansteenkiste

et al., 2004). For example, some classroom teachers encourage students to be active participants in their learning and embrace his or her students' ideas concerning how the classroom should be operated. These teachers facilitate learning and want their students to feel empowered and part of the decision-making process. Teachers such as these are characterized as having an *autonomy supportive* teaching style as evident by the practices that are in place in his or her classrooms (Deci & Ryan, 1985).

Other classroom teachers support a more controlling or authoritarian classroom environment that offers few opportunities for the students to express their views or opinions about learning activities. These teachers use power to influence and control their students' behavior. They demand compliance and conformity from their students and are described as having a *control orientation* teaching style (Deci & Ryan, 1985).

Several studies have investigated how student motivation and engagement can be impacted by the teacher's level of autonomy versus his or her level of control within the classroom environment (Deci et al., 1981; Grolnick & Ryan, 1987; Reeve et al., 1999; Vansteenkiste et al., 2004). Throughout the review of literature, most studies described a teacher's motivating style as either autonomy supportive or controlling (Grolnick & Ryan, 1987; Guay & Vallerand, 1997; Vansteenkiste et al., 2004). However, some studies suggested that a teacher's motivating style varies along a continuum that ranges from highly controlling to highly autonomy supportive (Deci et al., 1981; Reeve et al., 1999).

In fact, Reeve et al. (1999) conducted a study with 32 teachers in kindergarten through sixth grade and 14 high school teachers in grades 9 through 12. Each participant was given the Teacher Orientation Questionnaire, the How I Teach and Motivate a

Disengaged Student Questionnaire, and a demographic survey. The How I Teach and Motivate a Disengaged Student Questionnaire was a one-page instrument that prompted the participant to describe an actual classroom experience in which he or she attempted to teach and motivate a disengaged student. The participants were then asked to answer the following questions: "*How did you approach and interact with the student? What did you do? What did you say?* and *What did you try to accomplish?*"

Each teacher's written essay was scored by a trained rater on six dimensions of an autonomy supportive style. The dimensions included *student centered, encouraged initiative, nurtured competence,* and *relied on a noncontrolling communication*. These dimensions became the dependent variable "supported intrinsic motivation". The second dependent variable "supported internalization" included the dimensions of *provided rationale* and *promoted a valuing of the task*. Results from this correlational study showed that an autonomy supportive teaching style significantly correlated with both dependent variables (supported intrinsic motivation and supported internalization). Findings suggested that actual teachers who scored as autonomy supportive on the Teacher Orientation Questionnaire distinguished themselves by self-reporting that they teach and motivate by supporting students' intrinsic motivation.

Guay and Vallerand (1997) approached their research by developing a motivational process model of academic achievement. The researchers hypothesized that when parents, teachers, and school administration support students' autonomy, there is a positive influence on students' perceived competence and autonomy. The researchers posited that perceived competence and autonomy would positively affect the student's self-determined motivation and influence academic achievement.

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To test these theories, the researchers conducted two studies. The purpose of the first study was to test the adequacy of the motivational process model of academic achievement. A total of 1,623 ninth grade French Canadian students completed a three-part questionnaire. Part one of the questionnaire assessed the students' perceptions of parental, teachers, and school administration's autonomy support. The second part included two scales that assessed perceived competence and autonomy. Sample items included: *"I consider myself to be a good student."* and *"In school I am free to do the things I want."* In the third section, students completed the Academic Motivation Scale which assessed students' motivational orientation toward education. Researchers also collected the students' grades in French, mathematics, and geography at the end of the school year. Based on these data, Guay and Vallerand (1997) developed and tested the proposed model using structural equation modeling (SEM). Results supported the proposed motivational model of academic achievement and suggested that students' perceptions of parental, teachers, and school administration autonomy support positively influence perceived autonomy. Furthermore, perceived autonomy was the strongest predictor of self-determined motivation. Finally, a student's self-determined motivation influenced achievement.

In the second study, the participants included 1,098 tenth-grade students. The purpose of Study 2 was to corroborate findings obtained from Study 1 using a different sample of students while controlling for participants' prior achievement. As in the first study, students completed the three section questionnaire. Students' current grades in French, English, and history courses and their final grades of ninth-grade French and mathematics courses were added in the model to control for participants' prior

achievement. Results indicated that all paths, factor loadings, and model estimates were similar to those of Study 1 even when controlling for students' prior achievement. These conclusions supported the proposed motivational model of academic achievement.

Findings from both studies supported the positive influence of self-determined motivation on achievement. In fact, results of Study 1 showed that motivation positively affected academic achievement, whereas outcomes from Study 2 revealed that this relationship existed even when controlling for prior achievement. Results of both studies indicated that perceived autonomy has a greater impact on self-determined motivation than competence. More importantly, both studies supported that students taught by an autonomy supportive teacher showed higher levels of competence, autonomy, and intrinsic motivation. Fittingly, this is embedded within the AVID program.

Similar findings were reported by Tsai, Kunter, Ludtke, Trautwein, and Ryan (2008) who assessed 261 seventh grade students' motivation in three school subjects using data obtained from student surveys. Multilevel modeling results showed that students' motivation was enhanced for lessons in which teachers were autonomy supportive, whereas students' motivation was diminished for lessons in which teachers were controlling. These findings suggested that autonomy supportive environments enhance intrinsic motivation and that controlling environments undermine intrinsic motivation.

Teacher and Student Relationships

Another factor connected to the AVID program and contributing to students' motivation is the quality of students' relationship with their teacher. A teacher is often

the first adult, other than a parent or family member, who has the opportunity to build a trusting and supportive relationship with a child. Several studies have characterized supportive teachers as showing empathy, warmth, mutual acceptance, understanding, trust, respect, and genuine caring for their students' well being (Baker, 1999; Good & Brophy, 2005; Motshining-Pitrik, Figl, Cornelius-White, Hoey, & Cornelius-White, 2004). They are described as demonstrating a willingness to listen and will often go that extra mile to provide emotional and academic support for their students. These teachers have a positive impact on students by providing encouragement, acting as role models, and offering support and guidance to their students.

The AVID program provides students an opportunity to develop a nurturing and positive relationship with their AVID teacher. Numerous studies have shown that supportive teacher-student relationships yield many positive effects (Connell & Wellborn, 1991; Goodenow, 1993; Martin & Dowson, 2009; Pianta, 1999). These social interactions and positive relationships teach students about themselves and how to function effectively in particular environments. Through interpersonal relationships, students begin to internalize the beliefs and expectations valued by others (Martin & Dowson, 2009; Wentzel, 1999). These beliefs and expectations direct the students' behavior in the form of greater persistence, self-determined motivation, and self-regulation (Martin & Dowson, 2009). For example, when a teacher shows respect for his or her students, believes that they are capable of learning, and promotes high expectations for academic achievement, the students begin to adopt and internalize these beliefs. As a result, the students work harder for their teacher, become more determined to pursue social and academic goals, and have a positive attitude toward school (Wentzel, 1994).

When students experience feelings of connectedness to their teachers, they become more actively engaged in the classroom environment (Pianta, Stuhlman, & Hamre, 2002). Evidence has shown that when students view their teachers as supportive, they tend to put forth more effort in class and show improved academic achievement (Pianta, 1999; Teven & McCroskey, 1997). Similar conclusions were revealed by Ryan and Grolnick (1986) who found that students who experienced their teachers as warm and supportive were more likely to be intrinsically motivated. Furthermore, children who experience supportive, encouraging relationships with their teachers have more positive attitudes toward school (Connell & Wellborn, 1991; Goodenow, 1993; Wentzel, 1994). Students who have these attitudes and relationships attend school more regularly (Goodenow, 2000). Evidence has shown that meaningful teacher-student relationships increased the likelihood of students remaining in school and not dropping out (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004).

Teacher-student relationships become particularly important during the middle school years, as students transition from the supportive, protective elementary school environment to the middle school environment. The middle school setting tends to be less personalized with students having more teachers and more transitions in their school day. These obstacles provide fewer opportunities for students to develop relationships with their teachers (Midgley, Feldlaufer, & Eccles, 1988; Pianta, 1999).

Goodenow (1993) investigated the positive influences of classroom belonging and support on academic motivation, effort, and achievement among middle school students. A sample of 353 sixth, seventh, and eighth graders completed the School Opinion Questionnaire and the Class Belonging and Support Scale. Four versions of the School

Opinion Questionnaire were administrated that dealt with students' attitudes and experiences in English, social studies, science, or math class. The Class Belonging and Support Scale was used to assess students' personal sense of being liked and respected in a particular classroom. This scale included twenty-eight 5-point Likert-type items with sample statements that included, *"My science teacher is interested in what I have to say."* and *"The teacher enjoys talking with students."* Final course grades and effort ratings were obtained. Several statistical tests using correlations and multiple regression analyses revealed that students' sense of support (e.g., being liked, respected, and valued by the teacher) predicted their expectancies for success and valuing of subject matter. These findings suggested that personalized, positive support from the teacher is an influential factor in students' motivation and achievement which is the purpose of the AVID program.

Several studies have linked interpersonal relationships between teacher and students to motivational outcomes (Martin, Marsh, McInerney, Green, & Dowson, 2007; Ryan, Stiller, & Lynch, 1994). Martin et al. (2007) examined the effects of teacher-student and parent-child relationships in high school students' achievement motivation and self-esteem. The participants included 3,450 high students in ninth through 12th grade from six Australian high schools. The students completed scales that assessed their interpersonal relationships, academic motivation and engagement, academic self-concept, and general self-esteem. Confirmatory factor analysis and structural equation modeling were the primary methods used to test the psychometric properties of the relationship scale. The results indicated that teacher-student relationships were statistically significant on the academic domain of academic motivation, engagement, and academic

self-concept of the student. These findings suggested that teacher-student relationships are highly prominent in the development of students' achievement motivation and self-esteem. Given these conclusions, it becomes critical for school administrators to work with teachers to identify ways to build interpersonal relationships.

Further investigation by Wentzel (1997) verified the importance of a supportive teacher-student relationship in a study with 375 eighth grade students. A subset of 248 of these students was included in the longitudinal sample and was followed from sixth grade to eighth grade. The purpose of the study was to examine to what extent students' perceptions of caring from teachers predicted efforts to achieve positive social and academic outcomes at school. Students in sixth and again in eighth grade completed surveys that assessed their perceived caring from teachers, social goals, prosocial behaviors, and academic efforts.

Correlations indicated that perceived caring from teachers was related significantly and positively to students' pursuit of prosocial and social goals and to students' academic effort. Additionally, sixth grade students' efforts to achieve academically, as well as socially, were related significantly to their eighth grade academic efforts and social goals. The results of this study provided evidence that teacher-student relationships do matter and students are more motivated to engage in classroom activities if they feel supported and valued. Specifically, the AVID program embraces the importance of positive teacher-student relationships to develop students' academic motivation and performance.

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Achievement Goal Orientation

The third important component of the AVID program is achievement goal orientation. According to several researchers, achievement goal orientation refers to the choices that students make based on their emotions, beliefs, and attributions, which account for the different reasons why students choose to engage in academic tasks (Ames, 1992; Eccles & Wigfield, 2002; Linnenbrink & Pintrich, 2002; Wentzel, 1999). In the AVID program, students are confronted with the challenge of being placed in rigorous college prep classes for the first time in their school career and how they approach this challenge contributes to their academic success.

Two distinct types of achievement goal orientations that have been identified in the literature are mastery goal orientations and performance goal orientations (Ames, 1992; Dweck, 1986). Students with mastery goal orientations strive to understand academic content, increase their academic competence, and develop new skills (Ames, 1992; Dweck, 1986). Students with this type of orientation believe that achievements are based on one's own efforts. They view obstacles as challenges and show greater perseverance despite setbacks (Ames, 1992). These students are more focused on developing their understanding and are less concerned with demonstrating their knowledge. These students show a willingness to seek help when it is needed, pursue opportunities for continuous improvement, and gain satisfaction from learning. They are focused on task completion, problem solving, and oneself as a learner (Ryan, Hicks, & Midgeley, 1997). Specifically, students with mastery goal orientations, also described as task orientations or learning goals, aim to acquire new knowledge, value learning, and use their ability to achieve (Ames, 1992; Elliot & Harackiewicz, 1996; Middleton &

Midgely, 1997; Nicholls, 1984). Researchers have found that students who adopt mastery goal orientations tend to have higher self-efficacy, positive patterns of learning (i.e., more focused in class and utilized deeper processing strategies), and higher achievement (Middleton & Midgley, 1997; Midgley & Urdan, 1995; Pajares, Britner, & Valiante, 2000).

Students who adopt performance goal orientations are concerned with their ability and performance relative to others (Dweck, 1986). These students are more focused on their level of intelligence and are concerned about looking smart in front of their peers (Dweck, 1986). They tend to attribute success and failure to more external factors such as luck and task difficulty (Dweck, 1986). Students with performance goal orientations also identified as ego-involved goals (Nicholls, 1984) or ability goals (Ames, 1992) want to be perceived as competent by their peers and teachers. The mindset or goal of these students is to get a better grade and to perform better than most of the other students in the class. These students view themselves as having high ability and like to outperform others to gain approval. Such an orientation has been found to relate to and predict several maladaptive learning outcomes. For instance, these students are willing to accept less challenging work to avoid making mistakes or appearing unintelligent (Dweck & Leggett, 1988). They are less persistent at tasks and will attribute their failure to lack of ability (Elliott & Dweck, 1988). They tend to have more negative attitudes toward school (Ames & Archer, 1988) and use more surface learning strategies such as memorization to acquire the knowledge (Elliot, McGregor & Gable, 1999; Meece, Blumenfeld, & Hoyle, 1988).

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Urdan and Turner (2005) suggested that mastery goals have a more positive relationship with motivation and learning outcomes than performance goals. Several studies have suggested that students who hold a mastery goal approach to learning use more intrinsic motivational strategies (Ames, 1992; Ames & Archer, 1988; Patrick, Anderman, Ryan, Edelin, & Midgley, 2001). Researchers have generally concurred that mastery orientation is the preferred approach to academic achievement and that classrooms should be structured to facilitate and support such a learning environment (Ames, 1992; Maher & Midgley, 1991; Midgley & Urdan, 1992).

Teachers then have a critical and salient role in developing mastery goal orientations in their students by creating classrooms that promote positive achievement outcomes. Ames (1992) used the term *goal structure* to define the messages that students receive from their teachers about goals. In a study conducted by Patrick et al. (2001), student survey data were used to gather information about perceptions of the classroom mastery and performance goal structures from 223 fifth grade students in 10 classes. These data were analyzed using analyses of variance (ANOVA) and four classrooms were selected from the pool of 10 and were identified as perceived high mastery structure, low mastery structure, perceived high performance goal structure, and low performance goal structure. Observational data were collected in those classrooms using running records and included approximately 990 hours of observations during the first three weeks of school. As a follow up, three additional observations were conducted during spring semester. The observational data were then coded and organized around the following categories that described teachers' talk and practices regarding tasks,

authority, recognition, grouping, evaluation, time, social interactions, and help-seeking behaviors.

Findings indicated that teachers who were perceived differently in terms of classroom goal structure also showed different patterns of classroom communication and practice. The teachers who were perceived as promoting mastery goals in their classrooms encouraged and expected all students to participate in academic activities and spoke about learning as an active process. In fact, these mastery goal-oriented teachers told their students, *"There are three ways to learn: from seeing, hearing, doing-I will try to use all of those ways."* and *"I don't have a problem when you talk. You are learning while you are discussing."* These teachers' emphasized effort and encouraged student interaction, while teachers who were perceived as performance goal-oriented focused on task completion and did not expect all students to participate. Teachers who were perceived as promoting a mastery orientation were also perceived as enthusiastic and seemed to enjoy engaging with the students in classroom activities. They described learning as an interactive process where students learned from mistakes and where understanding was the focus of learning. In contrast, performance goal-oriented teachers focused on task accomplish and emphasized getting correct answers as the goal of learning.

When teachers promote mastery goal structures and emphasize a mastery goal orientation, their students develop a deeper understanding of the content and show greater perseverance when confronted with challenges. Teachers who are focused on the ability of all students to learn, who emphasize the importance of understanding, and who encourage students to acquire new knowledge are more likely to be perceived by their

students as more mastery oriented (Turner & Patrick, 2004). These students are more intrinsically motivated to learn and believe that achievements are based on one's own efforts (Ames, 1992; Dweck, 1986), which is an important outcome of the AVID program.

Early Theorists of Human Motivation

Motivation is the driving force behind the actions of an individual to affect his or her environment. An individual's needs, desires, and ambitions have a strong impact on the direction of his or her behavior. Early theorists of human motivation contended that individuals possess the basic need to be competent in controlling their environment (Maehr & Meyer, 1997; Weiner, 1990). These researchers recognized that healthy human beings need to perceive that they can influence and interact effectively with the environment.

Collectively, these theorists laid the groundwork for understanding human motivation and influenced the later work of Bandura (1997) and Deci and Ryan (1985). Although each of these theorists focused their studies on different aspects of human motivation, the tenets of Bandura's (1997) self-efficacy theory and Deci and Ryan's (1985) self-determination theory are most relevant to the AVID program. For example, Bandura's (1997) self-efficacy theory suggested that individuals carry out activities and situations in which they feel competent and avoid situations in which they doubt their capability to perform successfully, whereas Deci and Ryan (1985) contended that intrinsic motivation is sustained by the satisfaction of the basic psychological needs for

autonomy, competence, and relatedness. Fittingly, these theories became the theoretical framework for the study.

Self-Determination Theory

A question that has always been asked by educators is: "Why doesn't this student do what I want him to do?" A theory introduced over 25 years ago by two University of Rochester professors hoped to shed some light on finding the answer to this question. Deci and Ryan (1985) presented and detailed the basic concepts of their theory, self determination theory (SDT).

According to Deci and Ryan (1985), self-determination is an organismic meta-theory that attempts to explain how and why individuals self-regulate behavior. Their theory suggested that humans have three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985). The researchers contended that human needs drive motivation and referred to these needs as "innate psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being" (Deci & Ryan, 2000, p. 229). Furthermore, Deci and Ryan (2000) proposed that as long as the extent of the needs is satisfying, individuals would develop and function effectively. If, however, for some reason one's needs are not satisfied, then the person's overall well-being would be affected.

Self-determination theory posits that intrinsic motivation is sustained by satisfaction of the basic psychological needs for autonomy, competence, and relatedness. The first basic need, autonomy, referred to the degree to which learners regard their experience of behavior as being of a conscientious personal choice that is done with

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deliberate intentions. The tasks become self-initiated, free of external controls, and restraints (deCharms, 1968; Deci & Ryan, 2002; Ryan & Connell, 1989; Ryan & Deci, 2006). The need for autonomy refers to the learners' need to feel self-determined and to be the source of their own actions (deCharms, 1976). As a result, learners feel autonomous and intrinsically motivated when they have a sense of choice and control over specific tasks.

The need for competence occurs when one can effectively produce desired outcomes (Deci & Ryan, 1985; Harter, 1978; White, 1959). A sense of competence is achieved when one possesses the ability to perform duties accurately with sufficient knowledge and skills. Bandura's (1997) theory of self-efficacy suggested that individuals pursue and complete activities and situations in which they feel competent and avoid situations in which they doubt their capability to succeed. In other words, the more competent learners perceive themselves to be, the more intrinsically motivated they become to engage in given activities (Ames, 1992; Lavigne, Vallerand, & Miquelon, 2007; Linnenbrink & Pintrich, 2002).

The need to strive for a feeling of relatedness refers to the connectedness and sense of belonging with others (Connell & Wellborn, 1991; Deci & Ryan, 1985). This connectedness and belonging provides the necessary emotional support that one needs to interpret and understand day-to-day interactions and events. Relatedness is satisfied through the support and nurturing of others (Baumeister & Leary, 1995; Frodi, Bridges, & Grolnick, 1985). From an educational perspective, the degree of interest and emotional support shown by the teacher to the student creates a sense of relatedness. The

development of relatedness fosters and encourages students to confront their challenges, set goals, and develop high expectations that extend and motivate them.

Furthermore, Deci and Ryan (2000) suggested that the satisfaction of these psychological needs in an individual increases intrinsic motivation, internalization of extrinsic behavioral regulation, and emotional well being. The authors contended that the satisfaction of one's needs is systemically related to behavioral regulation. In fact, Deci and Ryan (1985) conceptualized self-determination as a motivational process in which one's self-regulated actions are dependent on the degree of one's needs satisfaction. For instance, one's level of motivation can vary (how much motivation), in addition to the orientation of that motivation (what type of motivation). The orientation of motivation focuses on one's attitudes and goals that drive the action and also considers the why of the action (Ryan & Deci, 2000). A distinction can be made between different types of motivation and the various reasons that drive that action. As a result, motivated behavior can be differentiated into amotivation, extrinsic motivation, and intrinsic motivation.

Deci and Ryan (1985) illustrated these types of motivation on a self-determination continuum ranging from amotivation on the left through the four categories of extrinsic motivation to intrinsic motivation on the far right side. The four categories of extrinsic motivation included external regulation, introjected regulation, identified regulation, and integrated regulation. Each type is listed in order of their degree of internalization and self-regulation. Figure 2.1 illustrates an adaptation of the self-determination continuum (Ryan & Deci, 2000).

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Less Self-Determined ——————————————→ Self-Determined

| Amotivation | | Extrinsic Motivation | | Intrinsic Motivation |

| Non-Regulation | | External | Introjected | Identified | Integrated | Intrinsic Regulation |

Non-Internalized ——————————————→ Internalized
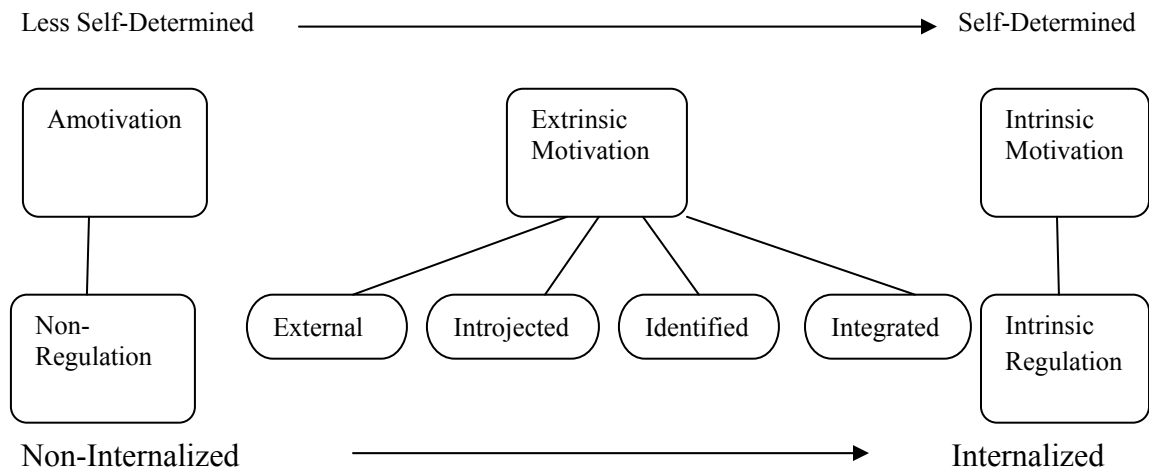
Figure 2.1. Self-determination continuum depicting types of motivation with their regulatory styles (adapted from Ryan & Deci, 2000).

Extrinsic Motivation, Intrinsic Motivation, and Amotivation

The following section describes extrinsic motivation, intrinsic motivation, and amotivation using the self-determination continuum. This continuum is important to the study because it shows the progression from regulated, controlled activities to autonomous and self-regulated behavior on the part of the learner (Deci & Ryan, 1985; Vygotsky, 1978). The implication being, through the AVID program, student motivation and academic achievement will be increased.

Some students require a sufficient amount of external motivation. These students need grades, reward systems, incentive plans, or punishment to boost their efforts to achieve. These students can be categorized as extrinsically motivated which necessitates externally controlled regulation and reinforcement for desired behavior (Deci & Ryan, 1985, 1987).

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Within SDT, Deci and Ryan (1985) developed a subtheory called organismic integration theory (OIT) to explain the different ways in which extrinsically motivated behavior is regulated. Organismic integration theory detailed the important process of internalization and integration that occurs from the four different types of extrinsic motivations: external regulation, introjected regulation, identified regulation, and integrated regulation (Deci & Ryan, 1985). The first type, external regulation behavior is prompted by external contingencies, such as rewards or punishments and is characterized by a sense of compliance. In this case, the reason for performing the behavior has not been internalized and continues to be controlled by external forces and is represented by an external perceived locus of causality (deCharms, 1968). For example, a student who works to earn an "A" in math to receive a reward from his parents is externally regulated.

In the case of introjected regulation, a second type of extrinsic motivation, an individual will engage in the activity to comply with internal pressure to avoid guilt, humiliation, or shame (Deci et al., 1994; Deci, Vallerand, Pelletier, & Ryan, 1991). For instance, a student who gets to school on time to avoid feeling guilty is regulated by introjected behavior. This student's self-regulated behavior is based on compliance or coercion rather than an internal desire or a willingness to comply. This form of extrinsic motivation, although considered within the individual, is not part of the integrated self and is not considered to be self-determined.

Moving along the continuum, but still part of extrinsic motivation, identification is the first form of self-determined motivation. The behavior becomes identified when an individual consciously performs the task because he or she believes it is valuable and important (Deci & Ryan, 1985; Heider, 1958). With identification, the regulatory process

has become part of one's personal identity and the individual feels a sense of choice (Gagne & Deci, 2005). For example, a student who is willing to stay after school for extra tutoring to improve at Spanish is making this choice because he or she believes it is important and will lead to future outcomes, rather than for self-fulfilling interests. This behavior is considered somewhat self-determined since the student is self-directed to go to tutoring and is not being forced by external forces.

Finally, integrated regulation represents the most internalized type of behavior. This type of extrinsic motivation reflects internal control and a connection with one's self, values, and goals (Deci & Ryan, 1985). Integrated regulation is characterized by the activity or task being personally important for a valued outcome. Even though integrated regulation shares many of the same qualities with intrinsic motivation, they differ in that intrinsic is characterized by interest in the activity itself, whereas integrated regulation is distinguished by the attainment of separate outcomes independent from the activity.

Therefore, the basic principle of OIT suggested that individuals have an innate tendency to want to move toward the internalization of an experience (Deci & Ryan, 1985). As a result, individuals will actively look for ways to change from extrinsic or external regulation into more internalized types of self-regulation. This progression represents a change from regulated, controlled activities to autonomous and self-regulated behavior on the part of the student (Deci & Ryan, 1985).

In contrast, some students appear motivated from within by interests, natural curiosities, and passion for learning. These intrinsically motivated students perceive their behavior as being caused by their own choice and are able to sustain enthusiasm, excitement, and effort for a task without external rewards or incentives. These students

embrace their work and take a genuine interest in the activity for no apparent reward except the activity itself (Deci, 1972). When an individual is intrinsically motivated, the perceived locus of causality for that behavior is located within the person (Heider, 1958).

Ryan and Deci (2000) described intrinsic motivation as a positive wonder of human nature and "the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" (p. 70). Intrinsic motivation is based on the satisfaction of the basic psychological needs for competence, autonomy, and relatedness. These intrinsically motivated behaviors emanate from within and represent the model of self-determination. SDT suggested that individuals are born with certain innate, natural abilities and are inherently curious about their surroundings, interested in learning, and want to develop knowledge (Niemiec & Ryan, 2009). Based upon this assumption, when students are determined and their environment supports competence, autonomy, and relatedness needs, they are more likely to be on the intrinsic motivation end of the self-determination continuum (Ryan & Deci, 2000). Fittingly, these specific needs are supported in the AVID classroom environment.

However, when individuals are not determined and have perceived feelings of incompetence in achieving their desired outcomes (Bandura, 1977), they are categorized as amotivation (Deci & Ryan, 1985). This type of motivation is very similar to the concept of learned helplessness (Elliott & Dweck, 1988). This category of motivation is described as being a non-regulating behavior and shows absence of motivation. For example, in the classroom a student may not value the assigned task or may feel helpless to complete the task. As a result, the student may not participate in the task or participate minimally without intent (Ryan & Deci, 2000).

Educational Research Studies Using the SDT Framework

Researchers have found that self-determined or autonomous motivation varies as a function of one's feelings of competence and self-determination (Fortier et al., 1995). When students experience a high level of academic competence and feel self-determined, their autonomous academic motivation should be maintained or increased. Thus, when students feel incompetent, constrained, and controlled in school settings, their autonomous academic motivation will be diminished.

As a result, self-determination theory makes certain predictions about motivational consequences. According to this theory, self-determined or autonomous motivation is related to positive academic and emotional outcomes (Fortier et al., 1995; Grolnick et al., 1991; Miserandino, 1996), whereas a decline or lack of self-determined motivation is related to negative outcomes (Deci et al., 1991; Fortier et al., 1995; Guay et al., 2008). The more students endorse autonomous forms of motivation, the more likely they will experience higher academic achievement and positive feelings about school (Fortier et al., 1995). Table 2.1 summarizes several educational research studies that have used self-determination theory and the findings from those studies.

Table 2.1

Self-Determination Theory Studies

Research Study	Summary	Findings
Fortier et al. (1995)	This study examined the structural motivational model of school performance based on Deci and Ryan's self-determination theory (1985). A total of 264 ninth grade students completed several scales that measured academic motivation, perceived competence, and perceived academic self-determination. In addition, their final grades for the year were collected.	Researchers found that self-determined or autonomous motivation varies as a function of one's feelings of competence and self-determination. When students experience a high level of academic competence and feel self-determined, their autonomous academic motivation should be maintained or increased.
Grolnick et al. (1991)	This study investigated a process model of the relations among children's perceptions of their parents, their motivation, and school performance.	Findings suggested that three motivation variables: control understanding, perceived competence, and relative autonomy predicted students' performance.
Guay et al. (2008)	This study examined the connection between motivation types and students' behavioral, cognitive, and affective outcomes in school. The researchers proposed that depending on where a student falls on the motivation continuum, the outcomes can lead to either positive or negative school success.	Findings suggested that as students move further right on the motivational continuum they experience positive results at school in the form of higher achievement, greater persistency to learn, and overall social and emotional well-being.

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Table 2.1

Self-Determination Theory Studies (continued)

Research Study	Summary	Findings
Miserandino (1996)	The Stanford Achievement Test scores of 77 high performing third and fourth grade students were examined to determine the impact of perceived competence and autonomy on performance in school.	Findings showed students that perceived themselves as high ability and autonomous demonstrated higher achievement. Students who reported experiencing a lack of competence and autonomy reported negative feelings toward school.

Self-Efficacy Theory

Bandura's (1977) theory of self-efficacy suggested that individuals pursue and complete activities and situations in which they feel competent, as is the purpose of the AVID program, and avoid situations in which they doubt their capability to succeed. Self-efficacy is more about self-perception of competence rather than actual level of competence. Bandura (1997) defined self-efficacy as "Beliefs, in one's own capabilities to organize and execute courses of action required to produce given attainments" (p. 3). In other words, self-efficacy is a person's judgment about being able to perform a certain task and is influenced by the amount of effort and perseverance that one is willing to put forth on a task when confronted with challenges (Bandura, 1997; Schunk, 1984; Skaalvik & Skaalvik, 2007).

Self-efficacy is grounded in the theoretical framework of social cognitive theory which emphasized the development of human agency (Bandura, 1997). The idea of human agency contended that individuals have some influence or control over what they can accomplish (Bandura, 1997). The logic follows that individuals form intentions, set goals, anticipate possible results, monitor and regulate actions, and reflect on their personal efficacy (Bandura, 1997). This creates an interaction among cognition, behaviors, and environmental circumstances which affects how a person's goals and behaviors are influenced by factors in the environment. For example, one's efficacy beliefs determine how different environmental opportunities and challenges are perceived, how much effort one will spend on a particular activity, and how long one will persevere when confronted with barriers.

Sources of Self-Efficacy

According to Bandura (1997), individuals assess their ability by gathering information from internal and external sources. As a result, they form their self-efficacy beliefs by interpreting information. This information is obtained from four sources: mastery experiences, vicarious experiences, verbal persuasion, and physiological reactions which are the major principles of the theory.

Mastery experience is the experience of success in overcoming obstacles and is considered the most impactful source of self-efficacy since it is based on real experiences (Bandura, 1997; Bong & Skaalvik, 2003). For example, as students show effort and persistence in achieving a goal, they begin to feel capable of attaining success, which results in positive experiences. As students experience academic successes, they are

motivated to engage in more challenging academic tasks. As students experience more successes, a stronger sense of self-efficacy develops (Bandura, 1997).

Vicarious experiences such as modeling and social comparison of one's competence with others' accomplishments is another source of information related to self-efficacy beliefs (Bandura, 1997). When a person observes others pursuing and succeeding at a particular task, then the person may gain more confidence in his or her ability to achieve the task. The more closely the observer identifies with the model, the greater the impact on efficacy. When the observer identifies the model as performing positively, the observer's efficacy is increased. When the model performs poorly, the observer's efficacy expectations are lowered.

The third source, verbal persuasion, operates in the form of social encouragement, feedback, and praise (Bandura, 1997). People who are persuaded verbally have the capabilities to maintain greater effort and persist longer at tasks. Verbal persuasion can contribute and lead to the initiation of a task, willingness to attempt new tasks, and the persistence to try harder to succeed. The power of the persuasion depends on the creditability, trustworthiness, and expertise of the persuader (Bandura, 1997).

A fourth source of self-efficacy relates to physiological reactions such as anxiety, stress, excitement, and fatigue. Physiological reactions may be experienced before, during, and after a specific task. Most individuals who experience a successful situation react in a positive way. However, individuals who experience high anxiety or stressful situations are more likely to react negatively causing a decline in performance. This decline in performance increases the probability of a poor outcome, thereby contributing to lower self-efficacy (Bandura, 1977; Margolis & McCabe, 2006). Experiencing high

levels of anxiety or stress may cause dysfunction, which will influence self-efficacy and motivation (Bandura, 1977).

Research on Self-Efficacy

Students' motivational beliefs affect their approach to learning activities, strategy use, and academic outcomes. Self-efficacy is considered one of the major motivational constructs affecting students' engagement in activities and learning (Linnenbrink & Pintrich, 2003). The implication being, through the AVID program, student self-efficacy will be increased. Seifert (2004) noted that self-efficacy is correlated with achievement-related behaviors, and students who are efficacious "are more likely to be self-regulating, strategic, and metacognitive than students who do not feel efficacious" (p. 137).

Similarly, Bandura (1997) suggested individuals with a high level of self-efficacy believe they are capable and confident in their abilities to perform a task with positive outcomes. They put forth more effort to be successful and display adaptive mastery behaviors (Dweck, 1986); whereas individuals with low self-efficacy believe they have little control over a given task and will blame extraneous circumstances as the cause for their defeat. Low self-efficacy causes motivational problems leading students to feel they lack the ability to succeed (Bandura, 1997). Fittingly, Tollefson (2000) concluded that individuals tend to avoid situations or tasks that they believe they are not capable of achieving and tend to pursue activities they perceive as attainable.

Students' beliefs about their academic capabilities or self-efficacy beliefs can be predictors of their academic achievement, hence the purpose of the study. In fact, several studies suggested a positive correlation between academic self-efficacy beliefs and

academic achievement (Greene et al., 2004; Multon, Brown, & Lent, 1991; Pajares &

Miller, 1994; Pintrich & DeGroot, 1990; Shell et al., 1995; Usher, 2009). These studies

are summarized in Table 2.2.

Table 2.2

Self-Efficacy Theory Studies

Research Study	Summary	Findings
Greene et al. (2004)	Study examined the relationship between perceived self-efficacy and academic achievement among 220 high school students using a self-reported questionnaire and achievement outcomes in English classes.	Findings of the path analysis revealed that self-efficacy had the strongest direct effect on students' academic achievement.
Multon, Brown, & Lent (1991)	Study presented a meta-analyses of 36 studies conducted between 1981 and 1988 that examined the relations of self-efficacy beliefs to academic performance and persistence.	Findings confirmed a positive correlation between academic self-efficacy beliefs to academic performance and persistence outcomes across a variety of subjects, designs, and methodologies.
Pajares & Miller (1994)	Study examined the role of students' self-efficacy beliefs in solving math problems and how self-efficacy mediated the effect of gender and prior experience on math problem solving.	Path analysis suggested that students' math self-efficacy was more predictive of problem solving than was math self-concept, perceived usefulness of math, prior experience with math or gender. These findings

Table 2.2

Self-Efficacy Theory Studies (continued)

Research Study	Summary	Findings
		supported Bandura's (1986) social cognitive theory.
Pintrich & DeGroot (1990)	Study included 173 seventh grade students and examined the correlation between students' motivational orientations (self-efficacy beliefs, intrinsic value, and test anxiety), self-regulated learning strategies use (cognitive, metacognitive, and effort management strategies), and academic performance in science and English classrooms.	Findings suggested that high self-efficacy beliefs lead to more diverse use of cognitive and self-regulative strategies.
Shell et al. (1995)	A total of 364 students in fourth, seventh, and tenth grade from reading and writing classes responded to a questionnaire measuring self-efficacy beliefs, outcome expectancy, and causal attributions. In addition, students completed a writing task and their scores on the California Achievement Test (CAT) were used to measure reading and writing achievement.	Multivariate analyses of variance and canonical correlation analyses revealed that higher achievement was strongly correlated with self-efficacy regardless of grade. Students from all three grade levels who self-reported high self-efficacy demonstrated high achievement.
Usher (2009)	This qualitative study investigated how middle school students select and interpret information related to their math self-efficacy.	Findings from semistructured interviews revealed that students with high math self-efficacy reported

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Table 2.2

Self-Efficacy Theory Studies (continued)

Research Study	Summary	Findings
		having higher levels of achievement in math and students with low self-described their poor performance and struggles.

The Origin of the My Voice Survey

The My Voice Survey was developed by Dr. Russell Quaglia from the Quaglia

Institute for Student Aspirations and adapted from the Student Aspirations Survey

(Plucker & Quaglia, 1998). Quaglia Institute for Student Aspirations has spent more than

20 years researching student aspirations and the conditions that promote best practices in

schools to advance student aspirations (Bundick, 2010). The original Student Aspirations

Survey (Plucker & Quaglia, 1998) was constructed to assess student perceptions of

various intrapersonal, interpersonal, and school environmental factors that support

student aspirations. Plucker and Quaglia (1998) conceptualized aspirations as having two

different dimensions, specifically inspiration and ambitions. Inspiration was defined as

the person's willingness to engage in activities for both their value and future worth,

whereas ambitions were defined as the person's ability to identify and set goals for the

future. The researchers then identified eight conditions that supported the development

of high levels of inspiration and ambitions in students. These conditions include

achievement, belonging, curiosity, empowerment, excitement, mentoring, risk taking, and self-confidence (Plucker & Quaglia, 1998).

Student Aspirations Survey consisted of 98 items with 13 scales: 3 aspirations scales (inspiration, ambition, separation), 2 self-perception scales (achievement motivation, general enjoyment), and 8 conditions scales (achievement, belonging, curiosity, empowerment, excitement, mentoring, risk taking, self-confidence). The survey was administered to 1,674 students in eighth grade through 12th grade from four New England high schools representing both rural and suburban areas. Students responded to each item on the survey using a Likert scale ranging from 1 *(strongly agree)* to 4 *(strongly disagree)*. Each scale was scored by averaging the items within scales. Sixteen items were reverse coded in the separation and general enjoyment of life scales.

A variety of statistical procedures were used to analyze the data: calculation of measures of central tendency and departure from normality to analyze scale score distributions; estimates of internal consistency through Cronbach's alpha; two sets of confirmatory factor analyses to gather evidence of construct validity; and a regression of scale scores on student age to investigate the relationship between student age and scale means. Results indicated evidence of adequate internal consistency. Cronbach's alpha was calculated as an estimate of internal consistency for scores on each of the 13 scales. Alpha ranged from .69 (ambition) to .84 (enjoyment of life). Overall, scores for enjoyment for life (.84) and mentoring (.84) had the largest alpha values, and scores for ambition (.69) had the smallest alpha values. Results provided evidence that reliability and validity of the instrument were addressed (Plucker & Quaglia, 1998).

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My Voice Survey

The Student Aspirations Survey was refined and renamed the My Voice Survey based on the research from Dr. Russell Quaglia, an internationally known expert in the study of student aspirations (Bundick, 2010). Dr. Quaglia is affiliated with the National Center for Student Aspirations and is recognized for his extensive research (Breen & Quaglia, 1991; Cobb & Quaglia, 1994; McNulty & Quaglia, 2007; Plucker & Quaglia, 1998; Quaglia, 1989, 2000; Quaglia & Brown, 1994; Quaglia & Cobb, 1996; Quaglia & Perry, 1995; Quay & Quaglia, 2005). Based upon Dr. Quaglia's expertise in the field of aspirations, the knowledge of other researchers at the National Center for Student Aspirations, and scholarly literature, several changes were made to the My Voice Survey (Bundick, 2010).

The original Student Aspiration Survey contained 98 items and the My Voice Survey was reduced to 63 items. This difference in length allowed the survey to be completed in approximately 15 minutes. The Likert scale for the Student Aspirations Survey consisted of a 4-point scale 1 *(strongly agree)* to 4 *(strongly disagree)*. The Likert scale for the My Voice Survey was based on a 5-point scale (1 = *strongly disagree*, 3 = *undecided,* 5 = *strongly agree*).

The My Voice Survey (QISA, 2010) was constructed with a focus on the intrapersonal dimensions of student aspirations using three guiding principles: purpose, active engagement, and self-worth. The definition of the purpose scale included students who are goal-directed, apply themselves in their classes, and are motivated to do their best in school. These students believe in their own abilities to become confident, responsible, and to overcome obstacles. The active engagement scale was defined as

students who are deeply involved in the learning process as characterized by enthusiasm and desire to learn. The self-worth scale included students who feel accepted at school and believe they are valued members of the school community.

Using items from the My Voice Survey, scales were created that focused on the three guiding principles (Bundick, 2010). The survey consisted of 63 items and was administered in the spring of 2010 to 19,444 students in grades 6-12 from 43 different schools in six different states (from the South, Midwest, and Northeast regions of the United States). All participants took the survey online during school hours in a supervised setting and rated each item on a 5-point Likert scale (1 = *strongly disagree,* 3 = *undecided,* 5 = *strongly agree)*. Six items were reverse coded and included: *I have difficulty fitting in at school. I have never been recognized for something positive at school. I give up when schoolwork is difficult. School is boring. I am afraid to try something if I think I may fail.* and *I think bullying is a problem in my school.* In order to score the My Voice Survey, items were averaged within scales.

Based on the administration of the survey, scales to measure the three guiding principles of purpose, active engagement, and self-worth were developed (Bundick, 2010). The purpose scale contained 10 items and examples of various items that formulated this scale included: *I put forth my best effort at school. I push myself to do better academically.* and *I believe I can be successful.* The active engagement scale consisted of six items with reverse coding on one item. Some of the items included: *I enjoy being at school. I enjoy participating in my classes. I learn new things that are interesting to me at school.* and *School is boring.* The third scale, self-worth was comprised of six statements and examples of statements were: *I feel accepted for who I*

am at school. I feel comfortable asking questions in class. and *Other students see me as a leader.* A total of 22 items from the 63-item survey were used to develop the three scales. These items were selected based on the factor loading using confirmatory factor analysis. Table 2.3 illustrates the confirmatory factor analysis of the three scales factor loadings and the corresponding survey item.

Table 2.3

Confirmatory Factor Analysis of the Three Scales Factor Loadings

Purpose	Active engagement	Self-worth	My Voice Survey Item
.77			I work hard to reach my goals.
.77			Getting good grades is important to me.
.76			I put forth my best effort at school.
.74			I think it is important to set high goals.
.66			I push myself to do better academically.
.72			I am excited about my future.
.55			I want to do my best at school.
.63			I believe I can be successful.
.67			What I learn in school will benefit my future.
	.67		I enjoy being at school.
	.74		Learning can be fun.
	-.53		School is boring.
	.77		I enjoy participating in my classes.
	.76		I learn new things that are interesting to me at school.
	.76		I enjoy learning new things.
		.69	I feel accepted for who I am at school.
		-.38	I have difficulty fitting in at school.
		.53	Other students see me as a leader.
		.61	I am a valued member of my school community.
		.53	I feel comfortable asking questions in class.
		.46	I enjoy working on projects with other students.

History of My Voice Instrument Used in Research

The My Voice Survey has been used in several research studies (Connelly, 2010; Gardner-Kitt, 2005; Matthews, 2010). Table 2.4 describes each study and shows how the instrument was used and what the instrument measured.

Table 2.4

Research Studies

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Author	Title of study	How was My Voice Survey used in the study	What was My Voice Survey used to measure in the study?

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Author	Title of study	How was My Voice Survey used in the study	What was My Voice Survey used to measure in the study?
Connelly, B. (2010)	Are New Hampshire 8th grade middle school students' perceptions of school climate related to their performance on state assessment tests?	The survey was administrated to students as part of a statewide initiative called *Follow the Child.* A total of 39 schools were included in the study. The data from the three subscales (purpose, active engagement, and self-worth) were used to obtain an average school score.	The My Voice Survey was designed to assess students' perceptions of what motivated them to work hard in school, be self-determined, and persevere when confronted with challenges. The survey permitted students to share their perceptions about school and their sense of self-efficacy.
Gardner-Kitt, D. (2005)	Black student achievement: The influence of racial identity, ethnic identity, perception of school climate, and self-reported behavior.	The survey was administrated to 114 students in 8th and 9th grade. The items within each subscale were averaged to obtain mean scores.	The survey provided students the opportunity to share their perceptions about the school climate and their sense of self-efficacy.

Table 2.4

Research Studies (continued)

_____

Author	Title of study	How was My Voice Survey used in the study	What was My Voice Survey used to measure in the study?

_____

Author	Title of study	How was My Voice Survey used in the study	What was My Voice Survey used to measure in the study?
Matthews, S. (2010)	The relationship between student voice and perceptions of motivation, attachment, achievement, and school climate in Davidson and Rutherford Counties.	A total of 292 students in 10th grade were included in the study. The data from the subscales were obtained using a mean score.	The survey allowed students to voice their perceptions about the school climate, their sense of belonging and their overall sense of efficacy.

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In addition to these studies, the instrument has been used in several large scale studies. During the 2005-2006 academic year, 65,517 students completed the My Voice Survey (QISA, 2006). These students represented 88 schools from 22 states ranging in size and socioeconomic status. Another study using the My Voice Survey was conducted in fall of 2006 through spring of 2008 (QISA, 2008). This study included 414,243 students in grades 6-12 from 569 schools in 32 states. Recently, a large scale study that included 19,444 students in grades 6-12 from 43 schools in six different states was conducted during the spring for 2010 (QISA, 2010).

Summary

Chapter II provided a review of the literature on AVID, several of its components, and two theories of motivation relevant to the study. The first section included the history of the AVID program and research studies related to the program. The second

section presented components of the AVID program and the research on student motivation. Although the components of the AVID program are not the focus of the current research, the studies may have implications for future research, which are discussed in Chapter V. The third section provided the research of two theories of motivation, self-determination theory and self-efficacy theory which are related to the purpose of the AVID program. The last section included the origin of the My Voice Survey and several research studies (Connelly, 2010; Gardner-Kitt, 2005; Matthews, 2010) that have used the My Voice Survey instrument.

CHAPTER III

METHODOLOGY

Introduction

This chapter discusses the research methodology utilized to examine the impact of the AVID program on students' self-efficacy and academic achievement outcome measures. The chapter presents the research questions, hypotheses, null hypotheses, and the research design. Next, the chapter includes a detailed description of the AVID program, data collection procedures, and participants. The chapter focuses on instruments, variable list, data analysis procedures, and limitations. The chapter concludes with a summary.

The study examined the impact of AVID on students' self-efficacy and academic achievement outcome measures. The study explored the impact of AVID on seventh through 11th grade AVID students' self-efficacy. The study investigated the impact of AVID on students' academic achievement outcomes as measured by the Ohio Achievement Assessments (OAA) in reading and math.

In order to investigate AVID students' self-efficacy, the three subscales (purpose, active engagement, and self-worth) of the My Voice Survey (Bundick, 2010) were used. The students were divided into cohorts depending on the number of years they have been

in the AVID program. For example, cohort one = one year, cohort two = two years, cohort three = three or more years. For purposes of this study, self-efficacy has been operationalized as having the capabilities or "the belief in oneself" to persevere and be self-determined when confronted with challenges (Bandura, 1997). The three subscales of the My Voice Survey contribute to the definition of self-efficacy by including statements that focus on goals, motivation to do well in school, beliefs in one's abilities to become confident, desire to learn, and the importance of becoming a valued member of the school community.

The study investigated the impact of AVID on students' academic achievement outcomes as measured by the Ohio Achievement Assessments (OAA) in reading and math. Specifically, difference of student academic achievement on the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program was examined. The seventh and eighth grade OAA reading and math scores from spring 2011 were used.

Research Questions, Hypotheses, and Null Hypotheses

Based on this purpose, the following research questions, hypotheses, and null hypotheses were generated.

The research questions include:

1. What is the relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy?

2. Is there a statistically significant difference of student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth)

on the My Voice Survey among students who participated in the AVID

program in year 1, year 2, year 3 or more?

3. Is there a statistically significant difference of student academic achievement

as measured by the Ohio Achievement Assessments in reading and math

between seventh and eighth grade students who participated in the AVID

program?

The hypotheses are as follows:

Hypothesis 1. There is a statistically significant relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy.

Hypothesis 2. There is a statistically significant difference of student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My Voice Survey among students who participated in the AVID program in year 1, year 2, year 3 or more.

Hypothesis 3. There is a statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program.

The null hypotheses are as follows:

1. There is no statistically significant relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy.

2. There is no statistically significant difference of student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My Voice Survey among students who participated in the AVID program in year 1, year 2, year 3 or more.

3. There is no statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program.

Research Design

The research design utilized in this study was a cross-sectional research method. Additional components of causal-comparative method and causal-comparative ex post facto research design were used. A cross-sectional research method examines changes in a population over time by collecting data at one point in time (Gall, Gall, & Borg, 2006). In this study, students' self-efficacy differences were measured at one particular time from a sample that varies in the number of years that students have been in the AVID program.

Wiersma and Jurs (2005) defined causal-comparative research as a means to explore effects between variables in a nonexperimental setting and as a tool in which to analyze research data. In this study, some of the data was collected by an external evaluation agency for other research purposes. I used the seventh grade AVID student datum collected by the outside agency. I administrated and collected survey data from 8th, 9th, 10th, and 11th grade AVID students.

The second component, causal-comparative ex post facto design was used because of the systematic inquiry nature of the design and since the researcher did not have direct control of the independent variables. I used AVID students' Ohio Achievement Assessments in reading and math that was collected for other evaluation purposes. There are three types of ex post facto research design. The first type of ex post facto research design, also known as exploratory, does not use hypotheses and has the potential to be misleading due to its lack of internal validity. The second type of ex post facto research, those with hypotheses, test previously stated hypothetical relationships and can be misleading to the researcher. The third type includes both stated hypotheses

and also considers alternate hypotheses. The alternative hypotheses propose additional explanations for the researcher to consider. These explanations are alternative hypotheses to the ones the research is attempting to confirm.

The three major weaknesses of ex post facto research include the inability to manipulate independent variables, the inability to randomize variables, and the risk of inaccurate interpretation due to the inability to manipulate independent variables (Newman & Newman, 1994). Although ex post facto research can result in low internal validity, the size of the sample used in the study makes the external validity relatively high. Ex post facto research cannot infer causation; however, it can infer relationships (Creswell, 2003).

This study utilized the third type of ex post facto research design where hypotheses and alternate hypotheses are tested. Given the purpose of this study, the third type was used because it allows the researcher to examine stated hypotheses and consider alternate hypotheses. These alternative hypotheses propose different explanations for the researcher to consider. These alternative explanations provide competing hypotheses to the ones that the researcher is actually interested in verifying. The third type is appropriate for this study since it is considered to be the most stable of the three types of design (Newman & Newman, 1994).

AVID Program in Study

The AVID program was implemented in the 2007-2008 school year at a middle school and high school within a first ring suburban school district located in the Northeastern United States. The program was implemented as a result of a steady decline

in test scores and in the number of students pursing postsecondary education. Since the 2006-2007, the district has gone from 80% of students enrolling in college to 66% enrolling in college. The district became increasingly concerned and investigated the results of the AVID program in other school districts.

The organizational structure of the AVID program within this district includes a District Director, Site Team Coordinators, AVID elective teachers, and trained content teachers. The District Director position is held by a central office administrator with the role and responsibility of coordinating professional development, visiting classrooms to monitor fidelity of the program, and organizing monthly AVID team meetings. The AVID Site Team Coordinators oversee the program at each building. The Site Team Coordinator positions are held by the principal of each building. The Site Team Coordinators work closely with the AVID elective teachers and content teachers to ensure that AVID strategies are being implemented throughout all classrooms. The Site Team Coordinators and the AVID elective teachers are actively involved in the recruitment process to ensure that the selection criteria for student identification are followed.

The recruitment process to select students for the AVID program began with 50 students, 25 students in eighth grade and 25 students in ninth grade. During the first year of implementation, eight content teachers (language arts, math, science, and social studies), two counselors, two AVID elective teachers, and two administrators were provided AVID professional development. Each year, the district has been committed to expanding the program and by the fall of 2011, the number of trained AVID staff had risen to 60 with 272 students in grades 7 through 12 participating in the program. The

district implemented AVID Elementary in the 2008-2009 school year. AVID Elementary is a school-wide program that serves over 900 students in fourth through sixth grade.

Recruitment of Students for the AVID Program

Students are recruited for the AVID program each spring. The Site Team Coordinator and the AVID elective teacher work with the sending school's principal, teachers, and counselor to determine potential AVID students. The AVID profile for student membership in the program is the following:

Students with academic potential:

- Average to high test scores

- 2.0-3.5 GPA

- College potential with support

- Desire and determination

Students who meet one or more of the following criteria:

- First to attend college

- Historically underserved in 4-year colleges

- Low income

- Special circumstances (foster care student)

The Site Team Coordinator and AVID elective teacher review student applications, letters of recommendations from the teachers, and conduct student interviews. Before a student is accepted into the program they are required to sign a contract to enroll in rigorous college preparatory classes, attend AVID elective classes, and participate in tutorial groups. The same Site Team Coordinator and AVID elective

teacher have been involved in the recruitment process to ensure that appropriate students are accepted into the program. The District Director reviews student applications, letters of recommendations from the teachers, and student profile forms.

The recruitment process utilized by the school district has evolved over the last five years. During the first and second year of implementation, the Site Team Coordinator and AVID elective teacher lacked experience in selecting students for the program. As a result, some students were inappropriately placed in the program. Over time, the Site Team Coordinator and AVID elective teacher have gained a better understanding and familiarity with the AVID student profile and refined the recruitment process. These changes have improved the fidelity of the program. For purposes of this study, AVID students who entered the program during the third year of implementation were selected to ensure the reliability of the selection process.

The focus of the AVID intervention program is to increase students' self-efficacy and academic achievement. The focus of the intervention in the AVID elective classroom is to teach students that they have the capabilities to be successful in rigorous classes and that the AVID teachers will be a "safety net" to ensure they excel in these classes. For many of the AVID students, this was the first time in their school career that they will be placed in honors and AP classes. Even though AVID students have the ability to perform well in higher level classes, they are often intimidated by the demands of the teacher and may lack organizational skills, study skills, and academic prerequisites for the class. Many of the students have been served in lower level or comprehensive classes and believe that they are incapable of passing the challenging classes. They may lack the self-confidence and self-determination to enroll in college preparatory classes.

Some students may even believe that they are not smart enough to be in higher level classes. Finally, since they are typically the first person in their family to pursue college, these students lack the skills and experiences of how to select appropriate high school course work to gain access to a college.

To increase their self-efficacy and academic achievement, AVID students attend an AVID elective class one period per day. The AVID elective class teaches students that they have the abilities to achieve good grades; however, they must work hard, be self-determined, and persevere when confronted with challenging curriculum. AVID teaches students time management skills, organizational skills, and academic instructional strategies so that they can have the tools and confidence to flourish academically.

The AVID elective class began in 2007-08 with two sections or class periods of AVID at the eighth and ninth grade. Table 3.1 illustrates the number of sections of AVID elective from the 2007-08 school year to present. Over five years, the AVID elective class has grown from 2 periods to 13 periods.

Table 3.1

Expansion of the AVID Elective Classrooms

_____

School Year	Middle School	High School
2007-08	1 AVID Elective teacher 1 section – 8th grade	1 AVID Elective teacher 1 section – 9th grade
2008-09	1 AVID Elective teacher 2 sections – 7th grade 2 sections – 8th grade	2 AVID Elective teachers 2 sections – 9th grade 1 section – 10th grade
2009-10	2 AVID Elective teachers 2 sections – 7th grade 2 sections – 8th grade	3 AVID Elective teachers 2 sections – 9th grade 2 sections – 10th grade 1 section – 11th grade
2010-11	2 AVID Elective teachers 2 sections – 7th grade 2 sections – 8th grade	3 AVID Elective teachers 2 sections – 9th grade 2 sections – 10th grade 2 sections -11th grade 1 section – 12th grade
2011-12	3 AVID Elective teachers 3 Sections – 7th grade 3 Sections – 8th grade	4 AVID Elective teachers 2 sections – 9th grade 2 sections – 10th grade 2 sections – 11th grade 1 section – 12th grade

_____

The AVID elective teacher provides academic and emotional support for the

students through direct instruction, tutorials, guest speakers, and college field trips.

Twice a week in the AVID elective class, students receive tutoring from college students.

The role of the tutor is to teach students how to develop problem-solving skills using an

inquiry-based methodology. The tutors also serve as role models and coaches for the

students. They teach the students to believe in their abilities, to be persistent, and not to give up when the work becomes difficult.

The AVID elective teacher is a key component of the program's success. In fact, AVID requires that teacher participation to teach the AVID elective be voluntary. When the AVID program was implemented in 2007-08, two teachers volunteered to be the AVID elective teachers. These teachers have remained in the program for the last five years. The following table depicts the AVID elective teachers' subject area, years of experience in the district, number of years as an AVID elective teacher, and their AVID professional development. Along with summer professional development, AVID Program Managers visit the schools three times a year to monitor the fidelity of the program. Table 3.2 is important to include because it shows the teachers' longevity in the school district, their commitment to volunteering to be an AVID elective teacher, and their allegiance to AVID professional development.

Table 3.2

AVID Elective Teachers

Teacher	Subject area	Number of years teaching experience in district	Number of years as AVID elective teacher	AVID pro. dev.
AVID Elective teacher #1	Career Technology	15 years	5 years	5 years
AVID Elective teacher #2	Language Arts	12 years	5 years	5 years
AVID Elective teacher #3	Language Arts	12 years	4 years	4 years
AVID Elective teacher #4	Language Arts	10 years	2 years	2 years
AVID Elective teacher #5	German	14 years	2 years	2 years
AVID Elective teacher #6	Math	8 years	1 year	3 years

Data Collection Procedures

Data for this study were collected in several different ways. Part of the data for this study (seventh grade AVID students) was collected by an external evaluation agency for other research purposes. This researcher is using part of the data for causal-comparative analysis. Additional data (8th, 9th, 10th, and 11th grade AVID students) were collected by the researcher. Lastly, achievement data were obtained from the Ohio

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Department of Education Local Report Card. The spring 2011, seventh and eighth grade

Ohio Reading and Math Achievement Assessments for seventh and eighth grade AVID

students were collected.

In partnership with the Ohio Department of Education and the Quaglia Institute of

Student Aspirations, the school district surveyed students in grades 3 through 12 using

the My Voice Survey. The school district was selected as one of six demonstration sites

in Ohio to participate in a three-year pilot project. The My Voice Survey provides school

staff with information for understanding what motivates and inspires students to achieve

and how well students believe their school is meeting those objectives.

Elementary students in grades 3-6 completed a computer generated 50-item

survey instrument in the computer lab. Due to technology difficulties, middle and high

school students were asked to complete a paper copy of the 63-item survey instrument in

the Performing Arts Center at the high school and in the library at the middle school. At

the high school, two researchers from the Quaglia Institute of Student Aspirations

conducted nine student assemblies in the Performing Arts Center. Students were directed

to report to the Performing Arts Center during their assigned math class. Each assembly

ranged from 150 to 220 students and was appropriately 45 minutes long. During the first

20 minutes of the assembly, the researchers described the purpose of the My Voice

Survey. The researchers emphasized to the students that their responses would remain

confidential. After this explanation, the survey was distributed to the students. The

researchers explained how to complete the survey and gave special instructions for

question three. For question three, students were asked to identify extracurricular

activities, such as band, choir, sports, and other. The students were instructed to check "other" if they participated in AVID.

The same procedures were followed at the middle school. The researchers conducted seven assemblies in the library. The students reported to the library instead of their regularly assigned social studies class. There were approximately 100 students in each assembly. The researchers followed the same protocol for administrating the survey that was conducted at the high school.

My Voice Survey Data Recollected for Grades 8, 9, 10, 11

In addition to the My Voice Survey data collected by the external evaluation agency, the My Voice Survey was administered again in the spring of 2011 to 8th, 9th, 10th, and 11th grade AVID students. The purpose for administrating the survey again was to gather data on the number of years that students have participated in the AVID program. To proceed with the study and administrate the survey, an application to conduct research was submitted to the Institutional Review Board, along with a parent consent letter and student attainment letter.

Permission was granted from the Institutional Review Board (Appendix A) and a parent consent letter (Appendix B) was mailed home. The student attainment letter (Appendix C) was given to the AVID students prior to conducting the survey. The survey was administered to the students during the first 15 minutes of their AVID elective class. The AVID elective teacher administered the survey and asked the students to code the survey using 1-4 to identify the number of years they have been in the AVID

program. After the students completed the survey, the teacher collected the survey and returned them to the office.

<div align="center">**Participants**</div>

A total of 2,061 students from one middle school (grades 7-8) and one high school (grades 9-12) participated in the My Voice Survey. This included 572 students at the middle school and 1,489 students at the high school. From the total population of students, this study focused on 239 students in the AVID program at 7th, 8th, 9th, 10th, and 11th grade. This included 42% (N = 100) male students and 55% (N = 132) female students. Seven students did not report their gender. The participants of the current study were of the following racial groups: 153 African/Black (64%); 6 Asian/Pacific Islander (2%); 41 Caucasian/White (17%); 2 Hispanic/Latino (1%); 1 Native Hawaiian (1%); 1 Other Pacific (1%) and 6 Other/Multi-racial (2%). A total of 29 students did not report their racial group. Table 3.3 describes the participants by grade level and gender.

Table 3.3

AVID Students by Grade and Gender

Grade	AVID	Males	Females	Not Reported
7th grade	71	30	38	3
8th grade	65	23	39	3
9th grade	30	12	18	
10th grade	36	16	19	1
11th grade	37	19	18	

Instruments

Two instruments were used in this study to examine the impact of the AVID program on students' self-efficacy and academic achievement outcome measures. The My Voice Survey (Appendix D) consisted of 63 items; for purposes of this study 22 items from the subscales (purpose, active engagement, and self-worth) were used to examine AVID students' perceptions of self-efficacy. The other 41 items from the survey were not used in this study because those items focused on other conditions within the school environment.

The second instrument, the Ohio Achievement Assessments (OAA) in reading and math, was used to measure AVID students' academic achievement outcomes. The history of the development of the OAA in reading and math is described. This is followed by an explanation of how the assessments are constructed and scored.

Validity

The development of the My Voice Survey is important to this study to confirm validity and reliability of the instrument. The *Standards for Educational and Psychological Testing* (AERA et al., 1999) was used as a validation framework to assess sources of validity evidence. The first source of validity evidence was test content. This source of validity evidence was determined through expert judgment of the connection between components of the test and the construct (AERA et al., 1999). The My Voice Survey was developed by Dr. Russell Quaglia and a team of researchers at the National Center for Student Aspirations (Bundick, 2010). The items on the instrument were

refined based upon the researchers' expertise in the field of aspirations and scholarly literature.

The second type of validity evidence was internal structure. Through exploratory factor analysis (EFA) and confirmatory factor analysis (CFA), the internal structure of the My Voice Survey scales were supported. The CFA suggested that all loadings were significant at the $p < .05$ level. These results indicated that the three subscales were highly intercorrelated (Bundick, 2010).

Reliability

Reliability refers to the consistency of the instrument and demonstrates that items on an instrument consistently produce the same test results for a respondent (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). The Cronbach's alpha statistic of internal reliability for the My Voice scales indicated that internal consistencies met acceptable levels (purpose-factor 1: $\alpha = .89$, active engagement- factor 2: $\alpha = .81$, self-worth-factor 3: $\alpha = .68$). The content of the items comprising each scale assisted to inform the following scales labels: factor 1 = purpose, factor 2 = active engagement, factor 3 = self-worth (Bundick, 2010). CFA also suggested that all loadings were significant at the $p < .05$ level. The fit statistics suggested that the model was a reasonably acceptable fit to the data. These results indicated that the three guiding principles scales are moderately related: there was a statistically significant correlation between purpose and active engagement ($r = .78, p < .001$), and purpose and self-worth ($r = .66, p < .001$), and active engagement and self-worth ($r = .78, p < .001$). These results indicated that

measures are common, yet they still have separate traits. Table 3.4 depicts the

Cronbach's alpha for internal consistency and correlation coefficients.

Table 3.4

Cronbach's Alpha and Correlation Coefficients

Scales	Cronbach's alpha	Correlation coefficients
Purpose	.89	
Active engagement	.81	
Self-worth	.68	
Purpose and Active engagement		$r = .78$
Purpose and Self-worth		$r = .66$
Active engagement and Self-worth		$r = .78$

Ohio Achievement Assessment Data

In addition to the My Voice Survey, achievement data were obtained from the

Ohio Department of Education Local Report Card. The study relied on data collected by

the Ohio Department of Education (ODE) in the spring of 2011. The seventh and eighth

grade students' Ohio Reading and Math Achievement Assessments were collected.

According to federal No Child Left Behind of 2001 (NCLB), states are required to

establish academic standards and to test all students in grades 3-8 annually in reading and

mathematics. In accordance, the Ohio Reading and Mathematics Achievement

Assessments are annual tests given to students in grades 3-8 to measure how well they

have learned reading and math concepts. The results of the assessments are used to

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identify districts, schools, and students that may require additional assistance and resources to meet expected performance levels.

The Ohio Achievement Assessment reading score is calculated by the Ohio Department of Education. The Ohio Department of Education reports a scaled score for the overall achievement and raw score points for each of the standards in reading (Office of Assessment, Ohio Department of Education, 2011). The reading standards that are assessed included: acquisition of vocabulary, reading process, informational text, and literary text (Office of Assessment, Ohio Department of Education, 2011). The questions in each standard are calculated by taking the raw scores and converting them to scaled scores. The seventh grade reading test is comprised of 36 items (29 multiple choice items, 5 short answer choices, 2 extended response, and field test items) for a total of 47 points (ODE, Office of Assessment, 2005). The eighth grade reading test contains 38 items (32 multiple choice items, 4 short answer choices, 2 extended response, and field test items) for a total of 48 points (ODE, Office of Assessment, 2005). Students must demonstrate performance at the proficient level or above (scaled score ≥ 400). Table 3.5 illustrates the proficiency levels, raw scores, and scaled scores for seventh and eighth grade reading (Office of Assessment, ODE, 2011).

Table 3.5

Reading Proficiency Levels, Raw Scores, and Scaled Scores

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Grade	Score	Limited	Basic	Proficient	Accelerated	Advanced
7th	Raw	<14	14	21	31	38
	Scaled	<379	379	400	432	452
8th						
	Raw	<15	15	23	34	40
	Scaled	<378	378	400	428	451

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_____

The assessment of the math OAA score is reported as a scaled score for the

overall achievement and raw score points for each of the standards in math (Office of

Assessment, Ohio Department of Education, 2011). The math standards included:

measurement, number and number sense, operations, patterns, functions, and algebra,

data analysis and probability, geometry and spatial sense. The seventh grade math test

consists of 39 items (32 multiple choice questions, 5 short answer, and 2 extended

response) for a total of 50 points (Office of Assessment, and Office of Curriculum and

Instruction Mathematics Team, ODE, 2004). The eighth grade math test has 38 items (32

multiple choice questions, 5 short answer, and 1 extended response) for a total of 46

points (Office of Assessment, and Office of Curriculum and Instruction Mathematics

Team, ODE, 2004). To be considered "proficient," students must demonstrate a

performance level of 400 or higher.

Table 3.6 illustrates the proficiency levels, raw scores, and scaled scores for

seventh and eighth grade math (Office of Assessment, ODE, 2011).

Table 3.6

Math Proficiency Levels, Raw Scores, and Scaled Scores

Grade	Score	Limited	Basic	Proficient	Accelerated	Advanced
7th	Raw	<10	10	17	30	37
	Scaled	<378	378	400	436	458
8th						
	Raw	<10	10	16	28	36
	Scaled	<379	379	400	432	459

Data Analysis Procedures

The sample for this study consisted of 239 AVID students at a middle school and high school within a first ring suburban school district located in the Northeastern United States. There were four factors to be considered when seeking statistical power: sample size, level of significance, directionality, and effect size (Gall et al., 2006). A Type I error is the risk of rejecting the null hypothesis when it is true (Salkind, 2000). For this study, the alpha level was set at .05 to control for Type I error because the risk of rejecting the null hypotheses was not considered serious enough to warrant a more restrictive alpha level. With an alpha level at .05, the researcher is 95% confident that, if a significant difference is found between the groups, it will not be due to chance (Salkind, 2004).

A Type II error is affected by the sample size and how closely the sample characteristics match that of the larger population (Salkind, 2004). Type II error is more difficult to control due to the sensitive to the number of subjects in the sample (Gall et al.,

2006; Salkind, 2004). As the sample size increases and more closely matches the

population, Type II error decreases the likelihood of accepting a false null hypothesis

(Gall et al., 2006; Salkind, 2004). The participation of 239 respondents helped to

minimize the possibility of a Type II error (Stevens, 1996).

According to Salkind (2004), "the effect size is a measure of how different two

groups are from one another-it's a measure of the magnitude of the treatment" (p. 168).

Cohen (1992) estimated a low effect size as less than 0.15, a medium effect size as 0.20,

while a high effect size was estimated as larger than 0.35. An effect size can be

interpreted in terms of the percent of nonoverlap of the participant group scores with

those of the nonparticipant group scores (Salkind, 2004).

Statistical Treatment

Data in the study were collected from the three subscales (purpose, active

engagement, and self-worth) of the My Voice Survey and seventh grade and eighth grade

OAA reading and math scores. The two statistical tests used in this study were chosen

based on the three research questions and three hypotheses posed. Statistical tests have

provided the tools for analyzing data for purposes of determining implications of the

research questions, and offering data for use in future research studies.

Hypothesis one was tested using the Pearson product-moment correlation. This is

a relationship hypothesis which is nondirectional. Therefore, a two-tailed correlation

coefficient is the test used to examine the relationship between two continuous variables.

The alpha level set for hypothesis one was at a probability equal to or less than .05, which

is most common and widely accepted in social science research (Salkind, 2004).

Assumptions made for correlation coefficients are that the relationship between the variables is linear, the variables are normally distributed, and the variables are independent of each other (Salkind, 2004).

Hypotheses two and three were tested using multivariate analysis of variance (MANOVA). The focus of the MANOVA statistical analysis is on the pattern of mean differences on the dependent variables across categories of the independent variables (Mertler & Vannatta, 2005). The MANOVA statistical procedure was used for hypothesis two as a test to examine if there was a statistically significant difference in student self-efficacy the longer they participated in AVID (1 year, 2 years, or 3 or more years) as measured by the dependent variables (purpose, active engagement, and self-worth). For hypothesis three, the MANOVA was utilized as a test to investigate if there were statistically significant academic achievement differences between the independent variable (seventh grade and eighth grade AVID students) and the dependent variables (seventh grade reading, seventh grade math, eighth grade reading and eighth grade math).

Assumptions and Limitations

When conducting a multivariate analysis of variance, Mertler and Vannatta (2005) suggested that the observations within each sample must be random and independent of each other. This assumption is primarily a design issue. Second, the populations from which the samples were obtained must be normally distributed or approximately normally distributed. However, the MANOVA has a robust quality that allows the results to be valid even when the data are skewed. Third, covariances of the populations must be equal; this is also known as the assumption of

homoscedasticity. In this study, the Box's Test revealed equal variance can be assumed and the assumption of homoscedasticity was not violated. Lastly, the relationship among all pairs of dependent variables in the data matrix must be linear.

Limitations of the study included only the responses of students enrolled in a single first ring, suburban middle school and high school in Northeast United States. Also, the Likert scale for the My Voice Survey instrument consisted of a 5-point scale (1 = *strongly disagree*, 3 = *undecided*, 5 = *strongly agree*) with the "3" not being identified as an interval. The construction of the scale permits subjects to answer statements as "undecided." This may have implications when interpreting the results of the study. The AVID elective teachers read the coding instructions to the AVID students before they completed the survey. As a result, students may not have accurately reported the information and since the responses were self-reported, there is no way to verify accuracy. Lastly, it is important to acknowledge and recognize my role as the District Director of the AVID program and my role as the researcher for this study. Given my five-year relationship with the AVID program, it is critical that I recognize my biases toward the program and note this as a limitation to the study.

Summary

The purpose of this chapter was to describe the cross-sectional research design used in this study, along with the additional components of casual-comparative method and casual-comparative ex post facto research design. This chapter outlined the research study featuring several key areas. The chapter began with the research questions, hypotheses, null hypotheses, and the research design for this study. In the section that

followed, a detailed description of the AVID program was provided along with data

collection procedures and participants. Lastly, instruments, variable list, data analysis

procedures, statistical treatments, limitations, and chapter summary were presented.

Findings from the study will help to provide data regarding the impact of

the AVID program on students' self-efficacy and academic achievement outcome

measures. This information may be useful in providing a better understanding of how the

AVID program supports student self-efficacy and academic achievement outcomes. The

information of this study will add to the body of research that can be useful in future

studies, especially given the fact that there is little quantitative research in the area of

student self-efficacy and academic achievement outcome measures on the AVID

program.

CHAPTER IV

RESULTS

Introduction

This chapter presents the results of investigating the impact of the AVID program

on students' self-efficacy and academic achievement outcome measures. This chapter

includes both the descriptive statistics and the results of the statistical analyses of the

data. The outcomes of these tests are discussed in detail throughout the chapter. The

SPSS for Windows 20.0 statistical software was used to conduct the analyses. The

following hypotheses were tested.

Hypothesis 1. There is a statistically significant relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy.

Hypothesis 2. There is a statistically significant difference of student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My Voice Survey among students who participated in the AVID program in year 1, year 2, year 3 or more.

Hypothesis 3. There is a statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program.

Results of Hypothesis 1

The test used for investigating hypothesis one was a Pearson product-moment

correlation coefficient (Pearson correlation coefficient) to determine if a statistically

significant correlation exists among the three subscales (purpose, active engagement,

and self-worth) as measures of self-efficacy. Table 4.1 reports the correlations between them.

Table 4.1

Correlations Between My Voice Survey Subscales Measures of Self-Efficacy

		Purpose	Active Engagement	Self-Worth
Purpose	r		.741(**)	.523(**)
Active engagement	r			.518(**)

Note. N = 239. **Correlation is significant at the 0.01 level (2-tailed).

As Table 4.1 illustrates, there is a statistically significant correlation between purpose and active engagement *(r = .741, p < .01)*, active engagement and self-worth *(r = .518, p < .01)* and self-worth and purpose *(r = .523, p < .01)*. These results indicate that purpose, active engagement, and self-worth are moderately to strongly related. These results show that measures are common, yet they still have separate traits. The statistically significant correlations fall within the moderate to strong range (Salkind, 2004). Therefore, the null hypothesis is rejected for Hypothesis one, and there is a statistically significant correlation among purpose, active engagement, and self-worth as measures of self-efficacy.

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Variable List

Following is how the variables were coded in the present study. The independent variables are:

- Years in AVID (1 = 1 year, 2 = 2 years, 3 = 3 or more years)

- Grade in AVID (0 = 7th grade, 1 = 8th grade)

The dependent variables are:

- My Voice Survey purpose subscale (mean score)

- My Voice Survey active engagement subscale (mean score)

- My Voice Survey self-worth subscale (mean score)

- 7th grade OAA reading score (mean score)

- 7th grade OAA math score (mean score)

- 8th grade OAA reading score (mean score)

- 8th grade OAA math score (mean score)

The study specifically focused on the effects that the independent variables of number of years in AVID on the dependent variables of the My Voice Survey subscales of purpose, active engagement, and self-worth. The study focused on the effects that the independent variables of participating in AVID (seventh grade and eighth grade) on the dependent variables of seventh grade OAA reading score, seventh grade OAA math score, eighth grade OAA reading score, and eighth grade OAA math score.

Descriptive Statistics for Hypothesis 2

Descriptive statistics were generated for the three subscales of the My Voice instrument. Table 4.2 displays this information. The mean score and standard deviation for each subscale are listed. Skewness, which is a measure of the lopsidedness of the distribution, and kurtosis, which is a measure of how flat or peaked a distribution appears (Salkind, 2004) are presented. The skewness is within the acceptable range of -1 and 1 for each subscale.

Table 4.2

My Voice Subscales

My Voice Subscales	Numbers of years in AVID	N	Mean	Std. dev.	Skewness	Kurtosis
Purpose	1.0	119	3.85	.46	-.192	-.810
	2.0	58	3.77	.52	.148	3.850
	3.0 or more	62	3.85	.54	.095	4.069
Active engagement	1.0	119	4.06	.54	-.418	-.025
	2.0	58	3.82	.59	-.108	-.735
	3.0 or more	62	3.85	.57	-.037	-.593
Self-worth	1.0	119	3.72	.64	.051	-.517
	2.0	58	3.80	.61	-.386	-.507
	3.0 or more	62	3.93	.70	-.429	-.439

Note. N = 239.

Results of Hypothesis 2

The test used for investigating the hypothesis was a multivariate analysis of variance (MANOVA) to determine the effect of the number of years (year 1, year 2, year

3 or more) that students have participated in the AVID program on the three dependent variables of purpose, active engagement, and self-worth as a measure of self-efficacy. The independent variables, years in AVID were coded (1 = 1 year, 2 = 2 years, 3 = 3 or more years). The dependent variables were the mean scores of My Voice Survey subscales of purpose, active engagement, and self-worth. The My Voice Survey consisted of a 5-point Likert scale (1 = *strongly disagree*, 3 = *undecided*, 5 = *strongly agree*) with the "3" not being identified as an interval. The construction of the scale permits subjects to answer statements as "undecided". This may have implications when interpreting the results of the study. The overall significance level was set at .50 and data were not transformed to eliminate any outliers. The Box's Test revealed that equal variances can be assumed and the assumption of homoscedasticity was not violated, $F(12, 143216.413) = .578, p = .862$; therefore, Wilks' Lambda was used as the test statistic. The Wilks' Lambda criteria indicated statistically significant group differences in the number of years in AVID with respect to the combined dependent variables of purpose, active engagement, and self-worth, Wilks $\Lambda = .883, F(6, 468) = 5.01, p < .05$, multivariate $\eta^2 = .060$.

Results indicated that the main effect of years in AVID (independent variable) had statistically significant differences on the dependent variables (Wilks' Lambda = .883, F (2, 236) = 1.888, $p < .05$). Table 4.3 summarizes results of the MANOVA.

Table 4.3

The Effects of the Number of Years in AVID on the Three Subscales of the My Voice

Survey as Measures of Self-Efficacy

Effect	Wilks' Lambda value	F	Significance
Years in AVID	.883	5.01	.000

Univariate analysis of variance (ANOVA) was also conducted on each dependent variable significantly affected by the independent variable as a follow-up test to MANOVA. ANOVA results revealed that years in AVID was not statistically significant for purpose (F(2, 236) = .739, p = .479, partial η^2 = .006). Whereas, the number of years in AVID was statistically significant for active engagement (F(2, 236) = 5.030, $p < .05$, partial η^2 = .041). The number of years in AVID had no statistically significant effect on self-worth (F(2, 236 = .2095, p = .125, partial η^2 = .017). Table 4.4 shows the results of the ANOVA.

Table 4.4

The Effects of the Number of Years in AVID on Each Subscale of the My Voice Survey

Effect years in AVID	F	Significance	Partial η^2
Purpose	.739	$p = .479$	.006
Active engagement	5.030	$p < .05$	.041
Self-worth	.209	$p = .125$	.017

The Bonferroni post hoc analysis indicated active engagement was statistically significant for year 1 and year 2 ($p < .05$). Those with 1 year of AVID had a mean score of 4.06, while those with 2 years of AVID had a mean score of 3.82. The effect size was calculated to determine the magnitude of the difference between the groups (Cohen 1992; Salkind, 2004). A medium effect size of .21 was calculated between those with 1 year of AVID and those with 2 years of AVID. Results indicated a statistically significant difference between those with 1 year of AVID (4.06 mean score) and those with 3 years or more of AVID (3.85 mean score). A small effect size of .18 was observed between those with 1 year of AVID and those with 3 years or more of AVID. There was no statistically significant difference between year 3 or more and year 2 ($p = 1.00$). Table 4.5 presents the group means and mean differences of the dependent variable active engagement and the number of years in AVID. These findings suggest that students who have been in the AVID program for one year agree that they are active participants and engaged. Therefore, the null hypothesis is rejected for the second hypothesis.

Table 4.5

The Effect of the Number of Years in AVID on the Subscale of Active Engagement

Years in AVID	Mean	Mean difference	Sign.
Year 1	4.06		
Year 2	3.82		
Year 3 or more	3.85		
Year 1 and Year 2		.24	.021
Year 1 and Year 3 or more		.21	.045
Year 3 or more and Year 2		.02	1.00

Descriptive Statistics for Hypothesis 3

Descriptive statistics were calculated for seventh and eighth grade AVID students' reading and math OAA scores. Table 4.6 displays this information. The mean score, standard deviation, skewness, and kurtosis for each OAA score are listed.

Table 4.6

Seventh and Eighth Grade AVID Students' OAA Scores

OAA scores by grade	N	Mean	Std. dev.	Skewness	Kurtosis
7th grade	45				
Reading		428.80	15.66	-.484	-.014
Math		414.66	15.48	-.154	.033
8th grade	43				
Reading		429.69	15.48	-.465	.921
Math		403.02	16.32	-.342	.074

Note. N = 88.

Results of Hypothesis 3

The test used for investigating the hypothesis was a multivariate analysis of variance (MANOVA) to determine differences in student academic achievement between seventh grade and eighth grade students in the AVID program on the four dependent variables of seventh grade reading score, seventh grade math score, eighth grade reading score, and eighth grade math score. The independent variables, grade in AVID was coded ($0 = 7^{th}$ grade, $1 = 8^{th}$ grade). The overall significance level was set at .05 and data were not transformed to eliminate any outliers. The Box's Test revealed that equal variances can be assumed and the assumption of homoscedasticity was not violated, $F(3, 1428175.317) = .326$, $p = .807$; therefore, Wilks' Lambda was used as the test statistic. The Wilks' Lambda criteria indicates statistically significant differences in academic achievement between seventh grade AVID students and eighth grade AVID students with respect to the combined dependent variables of seventh grade reading score, seventh grade math score, eighth grade reading score, and eighth grade math score. Wilks $\Lambda = .865$, $F(2, 85) = 6.652$, $p < .05$, multivariate $\eta^2 = .135$.

Results indicated that the main effect of academic achievement between seventh grade and eighth grade AVID students (independent variable) had statistically significant effects on the dependent variables (Wilks' Lambda = .885, $F(2, 85) = 6.652$, $p = .00$). Table 4.7 summarizes results of the MANOVA.

Table 4.7

The Effect of Academic Achievement Between Seventh and Eighth Grade AVID

Students on the Ohio Achievement Assessments in Reading and Math

Effect	Wilks' Lambda value	F	Significance
7th grade/8th grade	.885	6.652	.00

Univariate analysis of variance (ANOVA) was also conducted on each dependent variable that was statistically significantly affected by the independent variables as a follow-up test to MANOVA. ANOVA results revealed that grade category differences were statistically significant for math, ($F(1, 86) = 11.792$, $p < .05$, partial $\eta^2 = .121$). The seventh grade AVID students' math scores had a mean score of 414.66, while eighth grade AVID students' math scores had a mean score of 403.02. There was a medium effect size of .34 between seventh grade math scores and eighth grade math scores, whereas, grade category had no statistically significant effect on reading, ($F(1, 86) = .069$, $p = .794$, partial $\eta^2 = .001$). The results indicate that seventh grade AVID students' OAA math score was higher than eighth grade AVID students' OAA math score. Table 4.8 illustrates results of the ANOVA.

Table 4.8

The Effect of Grade Category on the Ohio Achievement Assessment for Math and

Reading

Effect grade category	F	Significance	Partial η^2
Math	11.792	$p < .05$	.121
Reading	.069	$p = .794$	.001

Therefore, the null hypothesis is rejected as a result of the statistical analyses performed.

Summary

In summary, the results of this study showed statistically significant correlations among purpose, active engagement, and self-worth as measures of self-efficacy. Hypothesis one stated that there is a statistically significant relationship among the three subscales (purpose, active engagement, and self-worth) as measures of self-efficacy. Test results supported hypothesis one with statistically significant correlations between purpose and active engagement, active engagement and self-worth, and self-worth and purpose. These results indicated that purpose, active engagement, and self-worth are moderately to strongly related. These results showed that the measures are common and together represent measures of self-efficacy. Yet, they still have separate traits.

Hypothesis two examined AVID students' self-efficacy. This hypothesis stated that there is a statistically significant difference of AVID students' self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My

Voice Survey among students who participated in the AVID program in year 1, year 2, year 3 or more. The results supported this hypothesis and showed differences in self-efficacy the longer AVID students were in the program.

Hypothesis three focused on AVID students' academic achievement. This hypothesis stated that there is a statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program. The results supported this hypothesis and indicated statistically significant differences of student academic achievement between seventh grade AVID students and eighth grade AVID students on Ohio Achievement Assessments in reading and math scores.

CHAPTER V

SUMMARY AND DISCUSSION

Introduction

The chapter is divided into three sections: a summary of the study, conclusions

drawn from the study, and implications of the study including suggestions for further

research. The first section, the summary includes a review of the problem investigated,

the procedures used for investigation, and the specific hypotheses. Section two provides

each general hypothesis, the major findings for each hypothesis, and discusses the

conclusions. The conclusions note major findings of the study drawing connections to

the review of literature and research. Section three, implications of the study, discusses

the significance of the research findings, and the final section offers suggestions for

future research.

Summary

This research study investigated the impact of the AVID program on students'

self-efficacy and academic achievement outcomes. At the core of this study is the fact

that at-risk youth have been found to be unprepared academically and socially for the

college experience (Choy, 2001; Horn et al., 2000; Lohfink & Paulsen, 2005). Students

labeled as at risk may have the aspirations of attending college but become easily

defeated when faced with the academic demands and challenges of a rigorous high school

curriculum. These students may lack motivation, determination, and self-efficacy. AVID is posited to provide the academic and social emotional support these students need to be prepared for college.

Several research studies have shown that increased student motivation leads to higher levels of academic achievement (Brossard & Garrison, 2004; Fortier et al., 1995; Grolnick et al., 1991; Lodewyk & Winne, 2005; Miserandino, 1996; Skaalvik & Skaalvik, 2004; Winne & Nesbit, 2010). Based upon this research, the theoretical framework supporting this study includes: self-determination theory (Ryan & Deci, 1989) and self-efficacy theory (Bandura, 1986). Self-determination theory contends that intrinsic motivation is sustained by satisfaction of the basic psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 1989). Bandura's (1977) theory of self-efficacy suggests that individuals pursue and complete activities and situations in which they feel competent and avoid situations in which they doubt their capability to succeed. Together, these theories link the importance of students experiencing both high self-efficacy and self-determination to produce increased academic achievement outcomes. The main focus of the current study was to determine if there was a difference in students' self-efficacy based on the number of years in the AVID program and if there was a difference in AVID students' academic achievement between seventh and eighth grade in reading and math.

Statement of the Procedures

The study as designed utilized a cross-sectional research method. Additional components of causal-comparative method and causal-comparative ex post facto research

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design were used. The data consisted of the My Voice Survey (QISA, 2010) subscales

scores of purpose, active engagement, and self-worth and seventh and eighth grade Ohio

Achievement Assessment scores in reading and math. The two variables, number of

years in AVID and grade level in AVID, were included in this study.

Participants consisted of seventh through 11th grade AVID students in one

suburban school district within northeast Ohio (N = 239). These students reported

perceptions of their self-efficacy on the My Voice Survey (QISA, 2010). Achievement

data were obtained from the 2010-2011 Ohio Department of Education Local Report

Card. The seventh and eighth grade Ohio Reading and Math Achievement Assessments

for seventh and eighth grade AVID students were collected.

The hypotheses for the study were derived through a review of the motivational

literature. Two statistical tests were completed. A Pearson correlation coefficient was

used to yield results related to specific relationships between variables (purpose, active

engagement, and self-worth) as measures of self-efficacy. Multivariate analysis of

variance (MANOVA) was utilized to determine group differences among several

dependent variables. In particular, the difference in student self-efficacy and student

academic achievement was measured.

The specific hypotheses tested for the purpose of this study were as follows:

Hypothesis 1. There is a statistically significant relationship among the three
subscales (purpose, active engagement, and self-worth) as measures of self-
efficacy.

Hypothesis 2. There is a statistically significant difference of student self-efficacy
as measured by the three subscales (purpose, active engagement, and self-worth)
on the My Voice Survey among students who participated in the AVID program
in year 1, year 2, year 3 or more.

Hypothesis 3. There is a statistically significant difference of student academic achievement as measured by the Ohio Achievement Assessments in reading and math between seventh and eighth grade students who participated in the AVID program.

Results of the statistical analyses led to the acceptance of all three hypotheses (null hypotheses were rejected).

Findings From Hypotheses 1 and 2

Research hypothesis 1 investigated the correlation among the subscales of purpose, active engagement, and self-worth as measures of self-efficacy. It is evident that there is a statistically significant correlation between purpose and active engagement $(r = .741, p < .01)$, active engagement and self-worth $(r = .518, p < .01)$, and self-worth and purpose $(r = .523, p < .01)$. Statistical results showed the correlation among purpose, active engagement, and self-worth as measures of self-efficacy. These results are consistent with the results of Bundick's (2010) previous study.

For research hypothesis 2, statistical analysis indicated that there is statistically significant difference on student self-efficacy as measured by the three subscales (purpose, active engagement, and self-worth) on the My Voice Survey among the number of years students participated in the AVID program. In particular, AVID students' active engagement in year 1 had a statistically significant higher mean score (4.06) than did those with 2 years of AVID (3.82) indicating a medium effect size of .21. Additional findings revealed AVID students' active engagement in year 1 had a statistically significant higher mean score (4.06) than did those with 3 or more years (3.85) demonstrating a small effect size of .18.

These results suggest that AVID students' self-efficacy did not increase as they progressed through the program. These findings may suggest that it could be difficult to measure students' self-efficacy growth in year 2, year 3 or more when the mean score for year 1 was 4.06. These results may suggest that it might be challenging to show growth given the regression toward the mean and since the My Voice Survey statements are based on a 5-point Likert scale. Even though there was a slight decline in self-efficacy as the AVID students progressed beyond year 1, the students' mean scores were in a consistent range of 3.72 to 3.93. These results may imply that AVID students' self-efficacy began to stabilize as they progressed through the program. This perhaps could be related to the AVID students gaining confidence and believing that they are capable of academic achievement in higher level classes.

This researcher wanted to compare these findings to other AVID studies to gain a better understanding of their conclusions. However, no other studies could be found. The results from this study could perhaps be used as exploratory baseline data for future research.

In general, these findings support the work of Bandura's (1977) theory of self-efficacy who defined self-efficacy as "Beliefs in one's own capabilities to organize and execute courses of action required to produce given attainments" (p. 3). In other words, self-efficacy is a person's judgment about being able to perform a certain task and is influenced by the amount of effort and perseverance that one is willing to put forth on a task when confronted with challenges (Bandura, 1997; Schunk, 1984; Skaalvik & Skaalvik, 2007). The AVID program may help to provide the academic and emotional support that students need as they transition from lower level classes to rigorous classes.

The support of AVID elective teachers may also be related to these students developing confidence and increased competencies to perform in higher level coursework.

The results of this study report that AVID students did demonstrate differences in self-efficacy based on the number of years in the program. This is important to note given that several research studies concurred that student self-efficacy beliefs can be predictors of their academic achievement (Greene et al., 2004; Pajares & Miller, 1994; Pintrich & DeGroot, 1990; Shell et al., 1995; Usher, 2009). These studies also revealed a positive correlation between academic self-efficacy beliefs and academic achievement. In particular, Multon et al. (1991) who conducted a meta-analysis of 36 studies between 1981 and 1988 confirmed a positive correlation between academic self-efficacy beliefs to academic performance and persistence outcomes across a variety of subjects, designs, and methodologies. Similarly, Greene et al. (2004) noted a statistically significant relationship between perceived self-efficacy and academic achievement. In this study, 220 high school students were given a self-reported questionnaire that measured their self-beliefs and achievement outcomes in English classes. Findings of the path analysis revealed that self-efficacy had the strongest direct effect on students' academic achievement compared to other variables. The results of this study found that AVID students did experience differences in self-efficacy.

Furthermore, results of this study suggest that AVID students' active engagement is higher in year 1 of the AVID program when compared to year 2, year 3 or more. These results could be attributed to many variables. One factor related to these results may be the AVID elective class. The daily elective class provides AVID students' academic and emotional support from an AVID elective teacher, as well as two periods

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per week of tutoring from college students. Pianta et al. (2002) suggested that when students experience feelings of connectedness to their teachers, they become more actively engaged in the classroom environment. Other researchers agreed that when students view their teachers as supportive, they tend to put forth more effort in class and show improved academic achievement (Pianta, 1999; Teven & McCroskey, 1997). The combination of ongoing support from the AVID elective teacher and tutors may be factors related to the AVID students' increased active engagement during that first year.

These findings are particularly important when comparing the AVID program to other college readiness programs. Cunningham et al. (2003) reviewed 17 intervention programs including AVID in 12 states using the criteria of examining each program's structure and services to students. The researchers concluded that AVID is the only college preparatory program to offer a daily elective class. Findings from this study suggest that the AVID elective class and the support of the AVID elective teacher may have contributed to differences in AVID students' self-efficacy.

Another variable associated with AVID students' active engagement could be related to the individualized attention that the students receive from the AVID teacher and tutors. As students transition from the elementary school environment to the middle school environment, the middle school setting tends to be less personalized with students having more teachers and more transitions in their school day. These obstacles provide fewer opportunities for students to develop relationships with their teachers (Midgley et al., 1988; Pianta, 1999). Goodenow (1993) investigated the positive influences of classroom belonging and support on academic motivation, effort, and achievement among middle school students. Findings suggested that personalized, positive support

from the teacher was an influential factor in students' motivation and achievement. Similarly, the variable of quality attention from the AVID teacher may perhaps contribute to active engagement.

There is also a hidden variable contributing to AVID students' active engagement which may be the AVID teacher's level of autonomy within the classroom. For example, some classroom teachers encourage students to be active participants in their learning and want their students to feel empowered and part of the decision-making process. These teachers are characterized as having an autonomy supportive teaching style as evident by the practices that are in place in his or her classrooms (Deci & Ryan, 1985), whereas other classroom teachers support a more controlling or authoritarian classroom environment that offers few opportunities for the students to express their views or opinions about learning activities. Several studies contended that student motivation and engagement can be impacted by the teacher's level of autonomy versus his or her level of control within the classroom environment (Deci et al., 1981; Grolnick & Ryan, 1987; Reeve et al., 1999; Vansteenkiste et al., 2004). This may suggest that students within the AVID program could be experiencing teachers who demonstrate autonomy supportive teaching styles that perhaps support students' active engagement.

In addition to the teaching style of the AVID teacher, another relevant variable which may add to students' active engagement could be related to the type of achievement goal orientation that AVID teachers promote and encourage from their students. Dweck (1986) described two distinct types of achievement goal orientations: mastery goal orientation and performance goal orientation. Students with mastery goal orientations are more focused on developing their understanding and are less concerned

with demonstrating their knowledge. Students with performance goal orientations are concerned with their ability and performance relative to others (Dweck, 1986). Within the AVID elective classroom, the AVID teachers may promote classroom environments that actively engage the students and emphasize a mastery goal orientation. Turner and Patrick (2004) contended that when teachers promote a mastery goal orientation, their students develop a deeper understanding of the content and show greater perseverance when confronted with challenges. Others have suggested that students of teachers that promote mastery are more self-determined, more engaged, and believe that achievements are based on one's own efforts (Ames, 1992; Dweck, 1986). This implies that perhaps the AVID teachers' emphasis on endorsing a mastery goal orientation with their students may contribute to their students' active engagement within the classroom.

Another relevant variable which may appear to be part of students' active engagement is that teacher participation in the AVID program is voluntary (Black et al., 2008). This is an important criterion of the program and provides school districts with opportunities to recruit teachers that possess a certain commitment and passion to want to work with at-risk students. As a result, the teachers applying to be AVID teachers may demonstrate a strong desire to want to have a positive impact on at-risk students by providing encouragement, acting as role models, and offering support and guidance. Thus, the quality of the AVID teacher may be another factor to students' active engagement.

Findings From Hypothesis 3

Hypothesis 3 indicated a significant difference of academic achievement between seventh and eighth grade AVID students on reading and math Ohio Achievement Assessments. The seventh grade AVID students' math scores had a statistically significant higher mean score (414.66) than did eighth grade AVID students' math scores (403.02), and there was a medium effect size of .34. Students need a scaled score ranging from 400 to 435 on the seventh grade math achievement assessment and from 400 to 427 on the eighth grade math achievement assessment to pass and be considered proficient.

Broadly, schools and districts are held accountable by state and federal law to ensure that students pass the math and reading achievement assessments at a certain passage rate. The specific passage rate for the math and reading was set at 75% by the state. This means that at least 75% of the students must reach proficient or above on the math and reading assessments in order for schools to earn a passing score for achievement on their accountability report card. Generally, when the seventh grade AVID students' math passage rate of 89% (N = 45) was compared to the state's passage rate of 75% (N = 131,757) and the school's passage rate of 64% (N = 413) (success.ode.state.oh.us), the results suggest that seventh grade AVID students' passage rate was higher than the state and school passage rates.

The findings suggest that eighth grade AVID students' math scores were not statistically significant when compared to the seventh grade AVID students' math scores. In general, eighth grade AVID students' math passage rate was at 63% (N = 43) when compared to the state's passage rate of 74% (N = 130,470) and the school's passage rate

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of 57% (N = 335) (success.ode.state.oh.us). The results indicate that the eighth grade

AVID students' passage rate was higher than the school's passage rate.

The AVID students' seventh and eighth grade reading scores were also compared

to the state and school's passage rates. Generally, seventh grade AVID students' reading

passage rate was at 93% (N = 45) when compared to the state's passage rate of 77% (N =

131, 902) and the school's passage rate of 76% (N =323). The AVID students' eighth

grade reading score was at 95% (N = 43) when compared to the state's passage rate of

86% (N = 130, 222) and the school's passage rate of 86% (N = 335)

(success.ode.state.oh.us). Broadly, these findings may suggest that the AVID experience

does improve students' approach to schooling and their academic achievement.

These general findings support Deci and Ryan's (1985) self-determination theory,

which contended that to foster high quality forms of motivation individuals must

experience autonomy, competence, and relatedness. Furthermore, the theory suggested

that when students are determined and their environment supports competence,

autonomy, and relatedness, their level of motivation becomes more internalized (Ryan &

Deci, 2000). As students continue to move further along the self-determination

continuum and show increased intrinsic motivation, they experience improved academic

achievement (Ryan & Deci, 2000). It appears that the AVID program provides students a

support system that fosters self-determination and develops academic achievement.

Several studies suggested that as students become more self-determined (i.e.,

developing autonomy, competence, and relatedness), they experience positive results at

school in the form of higher achievement and greater persistency to learn (Deci & Ryan,

1985; Fortier et al., 1995; Guay et al., 2008; Guay & Vallerand, 1997). These findings

further support research by Guay et al. (2008) who conducted an extensive review of educational studies that were guided by self-determination theory. The researchers examined studies that showed the connection between motivation types and students' behavioral, cognitive, and affective outcomes in school. Some examples of students' behavioral outcomes included persistence and achievement in completing schoolwork and staying in school. Cognitive outcomes focused on learning and creativity, whereas affective outcomes centered on emotional well-being. As a result of the reviewed studies, Guay et al. (2008) concluded that as students move up the self-determination continuum, they experience positive results at school in the form of higher achievement, greater persistency to learn, and overall social and emotional well-being. The general results of this study, when considered in light of other studies, support the findings that when students are determined and their environment supports competence, autonomy, and relatedness needs, they demonstrate increased academic achievement (Deci & Ryan, 1985; Fortier et al., 1995; Guay & Vallerand, 1997).

Given the general findings of this study, the data suggested that perhaps the AVID program may not be the answer to the problem that was posed in chapters I and II. The AVID program alone may not be the reason for the findings of the study. This is important to acknowledge and recognize since students' self-efficacy goals and academic achievement can be accomplished in a number of other ways. The results may be attributed to other variables beyond the AVID program, such as high quality instruction from teachers, mentoring from tutors, support from guidance counselors, or encouragement from family members.

Implications

This section contains the implications of the research. This study investigated the impact of the AVID program on student self-efficacy and academic achievement outcomes. Based on a review of the literature, the hypotheses for this study were defined. Results of the investigation showed that AVID students reported differences in self-efficacy the longer they were in the program and demonstrated differences in academic achievement between seventh and eighth grade for reading and math. The results of this study should be of interest to state and local educational agencies that are looking for ways to better prepare middle and high school students who are at-risk academically and socially for the college experience. At the building level, the findings from this study should appeal to schools struggling to increase the achievement of minority and disadvantaged students to meet the requirements of state and federal accountability mandates.

Implications for Self-Efficacy

Self-efficacy is considered one of the major motivational constructs affecting students' engagement in activities and learning (Linnenbrink & Pintrich, 2003). According to Bandura (1997), individuals assess their ability by gathering information from internal and external sources. As a result, they form their self-efficacy beliefs by interpreting information. Bandura (1997) suggested the most impactful source of self-efficacy is obtained through mastery experiences. As individuals feel more confident in their abilities and experience success, they gain self-efficacy. This study demonstrated that the longer students were enrolled in the AVID program differences in reported self-

efficacy were present. The implications of these findings may suggest that these students felt more encouraged, confident, and motivated to continue to take college preparatory courses as a result of participating in the AVID program.

Implications for Academic Achievement

As AVID students experience self-efficacy and continue to take college preparatory courses, this leads to another important implication for academic achievement. Researchers have found that students' success in high school is enhanced by the intensity of students' coursework (Adelman, 1999; Leonard et al., 2003). This study focused primarily on the subgroups of African American and economically disadvantaged students and their seventh and eighth grade OAA reading and math scores. Leonard et al. (2003) stated that students of ethnic minorities and lower social economic status have historically had less access or success at a rigorous education. Similar results were found by the Center for American Progress (Boser & Rosenthal, 2012) which concurred that students from disadvantaged backgrounds and students from certain minorities groups (i.e., African American, Hispanic, Native American, and Alaskan Native) are less likely to have access to more rigorous learning opportunities. Other key findings suggested that many students reported that their school work is too easy (Boser & Rosenthal, 2012). In fact, 29% of eighth-grade math students reported that their math work is often or always too easy (Boser & Rosenthal, 2012). Further findings concluded that students might not be engaged in rigorous, challenging learning activities, that they may not always understand their teachers' questions, and they always do not feel like they are learning (Boser & Rosenthal, 2012). The purpose of the AVID program is to

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provide students access and support to a rigorous curriculum to prepare them for college (Black et al., 2008).

Through the AVID program, these students were removed from lower level comprehensive classes and placed in higher level classes with support. Thus, it may be inferred that by focusing on improving the academic performance of this select group of students and placing them in college preparatory classes with support, they will continue on the college preparation track. By placing these students in the college preparatory track, the AVID program also has the potential to raise school-wide and district-wide accountability ratings and adequate yearly progress measures.

As mandated by No Child Left Behind (2001), federal law requires districts and schools to make adequate yearly progress toward meeting state standards. Adequate yearly progress is measured by sorting test results by various subgroups of students based upon their race, disability, limited English proficiency, and economic disadvantage. If a district or school continually fails to make adequate yearly progress, consequences ranging from a loss of funding to complete restructuring of the school district are enforced. This study has implications that demonstrate the AVID program has the potential to improve the achievement scores of subgroups of students on high-stakes assessments. This is not only important for accountability purposes however; AVID has the possibility to offer the support to increase access and achievement for these students.

Suggestions for Future Research

Additional research is warranted to better understand the differences of AVID students' self-efficacy and academic achievement over a longer period of time. In this

study, a cross-sectional research method was used to measure differences in self-efficacy and academic achievement at one particular time from a sample that varies in the number of years that students have been in the AVID program. A longitudinal study could include collecting data on the same AVID students through their middle and high school career to gain more insight into their self-efficacy and academic achievement. There may be value in considering a different self-efficacy scale that is based on an interval scale instead of the scale that was used in this study. This extended study would provide a greater understanding of AVID students' self-efficacy and academic achievement over time.

Although this study specifically investigated the linkages between theory and the AVID program's impact on students' self-efficacy and academic achievement, there is a need for further research on the specific components of the AVID program. The components include teacher's level of autonomy, teacher and student relationships, and achievement goal orientation. These components are important to study since they are related to student motivation and embedded within the AVID program. A brief overview of each component was presented in Chapter II.

Investigating the components of teacher's level of autonomy, teacher and student relationships, and achievement goal orientation is a valuable area of future research for several reasons. First, studies have shown that students taught by teachers who use autonomy supportive approaches showed high levels of competence, autonomy, and intrinsic motivation (Grolnick & Ryan, 1987; Reeve et al., 1999; Vansteenkiste et al., 2004). Second, several studies suggested that when students view their teachers as supportive, they tend to put forth more effort in class and show improved academic

achievement (Pianta, 1999; Teven & McCroskey, 1997). Lastly, other studies found that students who have an achievement goal orientation that is mastery goal driven tend to have higher self-efficacy, positive patterns of learning (i.e., more focused in class and utilized deeper processing strategies), and higher achievement (Middleton & Midgley, 1997; Midgley & Urdan, 1995; Pajares et al., 2000).

Given these research findings, a qualitative research study could offer suggestions on how the components contribute to AVID students' motivation, determination, and self-efficacy. A qualitative study may provide a different perspective into teacher and students' interactions in the AVID elective classroom as well as content classrooms. Classroom observations, interviews, and focus groups would allow the researcher to explore a more in-depth and comprehensive view of the AVID program.

Future research related to how the components of the AVID program adds to AVID students' motivation, determination, and self-efficacy, it would be beneficial to investigate how another area of research, called grit (Duckworth, Peterson, Matthews, & Kelly, 2007) may contribute to the AVID program. Grit, as defined in the literature, is a character trait of perseverance and passion to achieve long-term goals when confronted with difficult and challenging circumstances (Duckworth et al., 2007). Research studies that have investigated grit suggested that the achievement of difficult goals requires not only ability, but also the sustained practice and application of the skill overtime (Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2010; Duckworth et al., 2007). Grit involves working persistently toward challenges, while maintaining effort and interest over time despite failures and adversity, to make progress toward that goal (Duckworth et al., 2010).

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Given this brief overview of grit, there may be value in exploring a mixed methods research study that would examine if AVID students possess grit. As part of quantitative research, AVID students could be administrated the Short Grit-Scale which measures trait-level perseverance and passion for long-term goals (Duckworth & Quinn, 2009). The qualitative components of the study could include structured interviews and focus groups with AVID students. This is an important area of research to consider because by gaining a thorough view of the AVID students' grit, teachers may be able to provide a more comprehensive academic and emotional support system to prepare them for college. The results of a mixed methods study may contribute to the current body of literature by providing a better understanding of AVID students' grit.

Practical Implications

Findings from this study report that AVID students did demonstrate differences in self-efficacy based on the number of years in the program and difference in academic outcome measures between the seventh and eighth grade in the reading and math Ohio Achievement Assessments. These results suggested that AVID students' self-efficacy and academic achievement outcomes did not increase as they progressed through the program. Data suggested that perhaps the AVID program alone may not be the reason for the findings of the study. As the District Director of the AVID program, it is important to acknowledge and recognize that there are many variables in a school setting that attribute to students' self-efficacy goals and academic achievement. The AVID program may be only one piece of a school district's system of interventions and supports that foster and develop students' self-efficacy and academic success.

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As a district administrator of the AVID program, this study was limited to seventh and eighth grade AVID students' OAA outcomes. The results of this study could be considered as exploratory research and additional data collection, such as the AVID students' grade point average, ACT/SAT scores, number of AP courses taken through high school may be investigated. In the area of student self-efficacy, it may be helpful to consider another scale that is based on an interval scale so that mean scores represent a true value such as "strongly agree" or "agree" instead of "undecided".

Given my role as the District Director for the AVID program for the last five years, I was excited to begin my research on the program. The AVID program is something that I am passionate about and over the years, I have observed the progress that students have made academically and socially. As I am still very passionate about this program, after completing my dissertation and studying the results, I would be remiss as the director and to my school system not to suggest that future research is needed to investigate other variables that may attribute to the success of these students.

Summary

Chapter V began with a summary of the purpose and restatement of the problem. It was found that there were differences in students' self-efficacy based on the number of years in the AVID program and differences in academic achievement between seventh and eighth grade for AVID students in reading and math. Implications from this study suggested that students in the AVID program might have felt more encouraged, confident, and motivated to continue to take college preparatory courses as a result of participating in the AVID program. Other implications from this study inferred that the

AVID program has the potential to improve the achievement scores of subgroups of students on high-stakes assessments. Further research recommendations included a longitudinal study with the same AVID students through their middle and high school career to gain more insight into their self-efficacy and academic achievement over time. A qualitative study may be valuable to gain a deeper understanding of how the components of the AVID program contribute to AVID students' motivation, determination, and self-efficacy. A mixed methods research study was suggested to investigate how another area of research, called grit (Duckworth et al., 2007), may contribute to the AVID program. Lastly, practical implications related to the AVID program were presented.

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APPENDICES

APPENDIX A

IRB LETTER OF APPROVAL

NOTICE OF APPROVAL

January 17, 2012

Kim Monachino
2345 Sandalwood Court
Twinsburg, Ohio 44087

From: Sharon McWhorter, IRB Administrator

Re: IRB Number 20120107 *"The Effect of the Advancement via Individual Determination (AVID) Program on Student Self-Efficacy and Academic Achievement"*

Thank you for submitting an IRB Application for Review of Research Involving Human Subjects for the referenced project. Your protocol represents minimal risk to subjects and has been approved under Expedited Category #7.

Approval Date:	January 17, 2012
Expiration Date:	January 17, 2013
Continuation Application Due:	January 3, 2013

In addition, the following is/are approved:

☐ Waiver of documentation of consent
☐ Waiver or alteration of consent
☒ Research involving children
☐ Research involving prisoners

Please adhere to the following IRB policies:

- IRB approval is given for not more than 12 months. If your project will be active for longer than one year, it is your responsibility to submit a continuation application prior to the expiration date. We request submission two weeks prior to expiration to insure sufficient time for review.
- A copy of the approved consent form must be submitted with any continuation application.
- If you plan to make any changes to the approved protocol you must submit a continuation application for change and it must be approved by the IRB before being implemented.
- Any adverse reactions/incidents must be reported immediately to the IRB.
- If this research is being conducted for a master's thesis or doctoral dissertation, you must file a copy of this letter with the thesis or dissertation.
- When your project terminates you must submit a Final Report Form in order to close your IRB file.

Additional information and all IRB forms can be accessed on the IRB web site at:
http://www.uakron.edu/research/orssp/compliance/IRBHome.php

Cc: Sharon Kruse – Advisor   ☒ Approved consent form/s enclosed
Cc: Stephanie Woods – IRB Chair

Office of Research Services and Sponsored Programs
Akron, OH 44325-2102
330-972-7666 • 330-972-6281 Fax

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APPENDIX B

PARENTAL CONSENT FORM

Dear Parent:

My name is Kim Monachino, and I am a doctoral student at The University of Akron. I am currently conducting a study entitled "The Effect of the Advancement Via Individual Determination (AVID) Program on Student Self-Efficacy and Academic Achievement." I am studying what middle and high school students in the AVID program think about themselves and their academics. As a result, I am requesting your child's participation in this research study which involves completing a survey and gathering achievement data. This study will include approximately 200 middle and high school AVID students. The 63-item survey, called the My Voice Survey should take no longer than 15 minutes to complete and will be completed in the AVID classroom. The academic record information will include 7th and 8th grade Ohio Achievement data in reading and math.

There are no known physical or emotional risks to your child by completing this survey. Valuable information can be obtained by conducting this research on middle and high school students' perceptions of the AVID program. We will ensure that utmost privacy and anonymity of all survey responses and personal demographic information of all participants. The survey will be coded and the academic record information will be linked by the code and not include identifying information, so that the researcher will not be able to link student name to the record. Therefore, your child will be instructed to not write his or her name on the survey. Your child's individual responses will not be made available to anyone to protect their anonymity. All identifying information will be retained in a locked filing cabinet. The data collected will be destroyed upon completion of the project. As your child's participation is strictly voluntary, if at any time he or she feels uncomfortable with any portion of this research, he or she has the right to withdraw at any time without any consequences.

For any further information regarding this research study, please feel free to contact me, Kim Monachino at (216) 691-2020 or my advisor, Dr. Sharon Kruse at (330) 972-7770.

Additionally, if you have any questions about your child's rights as a research subject, you can contact the University of Akron's Institutional Review Board in Akron, Ohio at (330) 972-7666.

Please sign and return this parental consent form if you do not wish for your child to participate in this study.

_____   _____

Parent's Signature   Date

Sincerely,
Kim Monachino

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APPENDIX C

STUDENT ASSENT

Dear Student:

My name is Mrs. Kim Monachino, and I am a doctoral student in the Department of Educational Foundations and Leadership at the University of Akron. I am asking you to take part in a research study because I am trying to learn more about what middle and high school students in the AVID program think about themselves and their academics. If you agree to be in this study, you will be asked to complete a survey. The survey will take about 15 minutes to complete.

There are no known physical or emotional risks to you if you complete this survey. Please talk this over with your parents before you decide whether or not to participate. I will also ask your parents to give their permission for you to take part in this study. But even if your parents say "yes" you can still decide not to do this. If you don't want to be in this study, you don't have to participate. Remember, being in this study is up to you and no one will be upset if you don't want to participate or even if you change your mind later and want to stop.
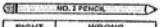
You can ask any questions that you have about the study. If you have a question later that you don't think of now, you can call me at (216) 691-2020. Signing your name at the bottom means that you agree to be in this study. You will be given a copy of this form to keep.

_____   _____
Name of Subject   Age

_____   _____
Signature   Date

APPENDIX D

MY VOICE SURVEY

Section I. Demographics

1. Age			2. Grade		3. In which cocurricular activities do you participate? (Choose as many as apply.)	
☐ 9	☐ 13	☐ 17	☐ 6th	☐ 10th	☐ Music	☐ Student Council
☐ 10	☐ 14	☐ 18	☐ 7th	☐ 11th	☐ Theater	☐ Other
☐ 11	☐ 15	☐ 19	☐ 8th	☐ 12th	☐ Sports	☐ Not involved in activities
☐ 12	☐ 16	☐ Other	☐ 9th		☐ Academic Clubs	

4. Gender	5. Do you plan to go to college after high school?	6. Race/Ethnicity (You may select more than one.)		
☐ Male	☐ Yes	☐ White	☐ Asian	☐ Other Pacific Islander
	☐ No	☐ Black or African Amer.	☐ Native Hawaiian	☐ Other _____
☐ Female	☐ Undecided	☐ Hispanic, Latino	☐ American Indian or Alaska Native	

Section II. On a scale of 1 to 5, indicate whether you disagree or agree with each statement. 5 indicates strong agreement and 1 indicates strong disagreement.

	5 Strongly Agree	4 Agree	3 Undecided	2 Disagree	1 Strongly Disagree
7. School is a welcoming and friendly place.	☐	☐	☐	☐	☐
8. Students respect teachers.	☐	☐	☐	☐	☐
9. I am encouraged to practice good citizenship at school.	☐	☐	☐	☐	☐
10. I enjoy being at school.	☐	☐	☐	☐	☐
11. I feel comfortable asking questions in class.	☐	☐	☐	☐	☐
12. I like challenging assignments.	☐	☐	☐	☐	☐
13. Students have a voice in decision making at school.	☐	☐	☐	☐	☐
14. I believe I can be successful.	☐	☐	☐	☐	☐
15. My parents care about my education.	☐	☐	☐	☐	☐
16. I feel accepted for who I am at school.	☐	☐	☐	☐	☐
17. I have a teacher who is a positive role model for me.	☐	☐	☐	☐	☐
18. Teachers recognize students who are kind and helpful.	☐	☐	☐	☐	☐
19. Teachers enjoy working with students.	☐	☐	☐	☐	☐
20. My teachers present lessons in different ways.	☐	☐	☐	☐	☐
21. I push myself to do better academically.	☐	☐	☐	☐	☐
22. I see myself as a leader.	☐	☐	☐	☐	☐
23. I believe I can make a difference in this world.	☐	☐	☐	☐	☐
24. Teachers make an effort to get to know me.	☐	☐	☐	☐	☐
25. I have difficulty fitting in at school.	☐	☐	☐	☐	☐
26. Teachers care about me as an individual.	☐	☐	☐	☐	☐
27. I have never been recognized for something positive at school.	☐	☐	☐	☐	☐

Section II. (cont.) On a scale of 1 to 5, indicate whether you disagree or agree with each statement. 5 indicates strong agreement and 1 indicates strong disagreement.	5 Strongly Agree	4 Agree	3 Undecided	2 Disagree	1 Strongly Disagree
28. Teachers make school an exciting place to learn.	▭	▭	▭	▭	▭
29. At school I am encouraged to be creative.	▭	▭	▭	▭	▭
30. Students are supportive of each other.	▭	▭	▭	▭	▭
31. Other students see me as a leader.	▭	▭	▭	▭	▭
32. Teachers believe in me and expect me to be successful.	▭	▭	▭	▭	▭
33. I enjoy working on projects with other students.	▭	▭	▭	▭	▭
34. Teachers care about my problems and feelings.	▭	▭	▭	▭	▭
35. Teachers care if I am absent from school.	▭	▭	▭	▭	▭
36. I give up when schoolwork is difficult.	▭	▭	▭	▭	▭
37. School is boring.	▭	▭	▭	▭	▭
38. My classes help me understand what is happening in my everyday life.	▭	▭	▭	▭	▭
39. I am afraid to try something if I think I may fail.	▭	▭	▭	▭	▭
40. Teachers encourage students to make decisions.	▭	▭	▭	▭	▭
41. Going to college is important for my future.	▭	▭	▭	▭	▭
42. School inspires me to learn.	▭	▭	▭	▭	▭
43. I am proud of my school.	▭	▭	▭	▭	▭
44. If I have a problem, I have a teacher with whom I can talk.	▭	▭	▭	▭	▭
45. Teachers recognize me when I try my best.	▭	▭	▭	▭	▭
46. I enjoy participating in my classes.	▭	▭	▭	▭	▭
47. I enjoy learning new things.	▭	▭	▭	▭	▭
48. Teachers help me learn from my mistakes.	▭	▭	▭	▭	▭
49. Teachers are willing to learn from students.	▭	▭	▭	▭	▭
50. I work hard to reach my goals.	▭	▭	▭	▭	▭
51. Teachers let my parents know what I do well.	▭	▭	▭	▭	▭
52. I am a valued member of my school community.	▭	▭	▭	▭	▭
53. Teachers respect students.	▭	▭	▭	▭	▭
54. I put forth my best effort at school.	▭	▭	▭	▭	▭
55. Teachers have fun at school.	▭	▭	▭	▭	▭
56. I learn new things that are interesting to me at school.	▭	▭	▭	▭	▭

Section II. (cont.) On a scale of 1 to 5, indicate whether you disagree or agree with each statement. 5 indicates strong agreement and 1 indicates strong disagreement.	5 Strongly Agree	4 Agree	3 Undecided	2 Disagree	1 Strongly Disagree
57. I want to do my best at school.	▢	▢	▢	▢	▢
58. I am a good decision maker.	▢	▢	▢	▢	▢
59. I am excited about my future.	▢	▢	▢	▢	▢
60. I think it is important to set high goals.	▢	▢	▢	▢	▢
61. I know the kind of person I want to become.	▢	▢	▢	▢	▢
62. I think bullying is a problem at my school.	▢	▢	▢	▢	▢
63. Students respect each other.	▢	▢	▢	▢	▢
64. Getting good grades is important to me.	▢	▢	▢	▢	▢
65. Learning can be fun.	▢	▢	▢	▢	▢
66. What I learn in school will benefit my future.	▢	▢	▢	▢	▢
67. I am excited to tell my friends when I get good grades.	▢	▢	▢	▢	▢
68. I know the goals my school is working on this year.	▢	▢	▢	▢	▢
69. School is preparing me well for my future.	▢	▢	▢	▢	▢

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