

University of Memphis

## University of Memphis Digital Commons

---

Electronic Theses and Dissertations

---

11-28-2011

### KIPP Student Perceptions and Achievement Goal Orientations

Donna R. Gray

Follow this and additional works at: <https://digitalcommons.memphis.edu/etd>

---

#### Recommended Citation

Gray, Donna R., "KIPP Student Perceptions and Achievement Goal Orientations" (2011). *Electronic Theses and Dissertations*. 354.

<https://digitalcommons.memphis.edu/etd/354>

This Thesis is brought to you for free and open access by University of Memphis Digital Commons. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of University of Memphis Digital Commons. For more information, please contact [khhgerty@memphis.edu](mailto:khhgerty@memphis.edu).

KIPP STUDENT PERCEPTIONS AND ACHIEVEMENT GOAL ORIENTATIONS

by

Donna R. Gray

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Science

Major: Educational Psychology and Research

The University of Memphis

December 2011

## ACKNOWLEDGMENTS

It is with great privilege that I have this opportunity to thank everyone that has been instrumental in helping me fulfill this endeavor. I would like to thank God for giving me the fortitude to complete such a challenging task. I would also like to thank my mother, whose words of encouragement helped me to see this project to fruition.

I especially would like to thank Batesville Middle School and the Knowledge Is Power Program for partnering with me and assisting me with my data collection, as well as for showing keen interests in my study.

I would like to give a special thanks to Dr. Yeh Hsueh, who began this journey with me and offered expertise and guidance that helped propel me further.

This educational endeavor, however, would not have been possible without the countless hours and mentoring provided to me by my advisor, Dr. Christian E. Mueller, who vigorously walked me through this process and so fluently explained the various statistical procedures that increased my understanding of data analysis. The constructive feedback and the knowledge that has been imparted to me has not only strengthened my knowledge base but has helped to prepare me to undertake more challenging pursuits.

Finally, I would like to thank my graduate committee members, Dr. Martin Jones and others, who have offered their time and assistance to help me finalize this project.

## ABSTRACT

Gray, Donna Reena, M.S. The University of Memphis. December 2011. Student Perceptions and Achievement Goal Orientations. Major Professor: Christian E. Mueller, Ph.D.

Despite decades of research on achievement goals, little research evaluates achievement goal orientations in African American students, particularly African American males.

This study, therefore, examines the relationship between students' achievement goal orientations and students' academic self-efficacy. A social cognitive framework describes this association, and the relationship between students' achievement goal orientations and students' perceptions of the classroom goal structures. In addition, the relationship between students' achievement goal orientations and students' beliefs about the relevance of school for future success was analyzed. Participants were eighth-grade students ( $N = 70$ ) enrolled in a charter school in the Knowledge is Power Program. Results of the investigation revealed that the males and females do not differ in their goal orientations. The results also indicated that mastery goal orientations and academic self-efficacy are positively correlated; however, performance-approach, and performance-avoidance were not related to academic self-efficacy. Results indicated that all three goal orientations of students were positively correlated with their respective classroom goal structures. Finally, as hypothesized, regression analyses revealed that mastery goal orientations, performance-approach goal orientations, and academic self-efficacy were found to be significant predictors for students' educational aspirations and students' beliefs about the relevance of school for future success.

## TABLE OF CONTENTS

LIST OF TABLES	v
Chapter	
1 Introduction	
Introduction/Literature Review	1
Achievement Goals	2
Individual Factors	3
Academic Self-Efficacy	6
Classroom Goal Structures	7
School Relevance and Aspirations	9
Theoretical Framework	10
Statement of Purpose	11
Research Questions	12
2 Method	16
Participants	16
Measures	17
Procedures	20
3 Results	22
Descriptive Analyses	24
<i>t</i> -tests	25
Correlational Analyses	26
Regression Analyses	28
4 Discussion	32
Interpretations of Findings	33
Implications	38
Significance of Study	40
Limitations	40
Conclusion	41
References	43
Appendices	
A. Informed Consent	52
B. Student Achievement Survey	54

## LIST OF TABLES

Table	Page
1. Participants Educational Goal Aspirations	23
2. Participants Occupational Aspirations	24
3. Means and Standard Deviations of Goal Orientations, Classroom Goal Structures, School Relevance, and Academic Efficacy	25
4. Crosstabs Frequencies of Goal Orientations by Gender	25
5. Independent Samples <i>t</i> -Test	26
6. Correlations Among Study Variables	27
7. Multiple Regression Model on School Relevance	29
8. Multiple Regression Model on Educational Aspirations	30

## CHAPTER 1: INTRODUCTION

### Introduction to Study

Achievement goal theory is one of the dominant motivational frameworks currently used to explain why some students engage in learning and achievement-related behavior (Ames, 1992; Dweck, 1986; Elliot, 1999; Harackiewicz, Barron, Pintrich, Elliot & Thrash, 2002). Although most researchers agree that achievement goal theory is important, there is an ongoing debate about how many types of achievement goals exist and which types of achievement goals are more beneficial for students to pursue. Initially, achievement goal theorists made a distinction between two types of achievement goals: mastery goals and performance goals (Ames, 1992; Dweck & Leggett, 1988). Later, theorists separated performance goals into two components including performance-approach and performance-avoidance goals. As a result, achievement goals were then examined in the context of a trichotomous framework including mastery, performance-approach, and performance-avoidance goals (Elliot & Church, 1997; Elliot & Harackiewicz, 1996). Finally, Elliot and McGregor (2001) proposed a 2 x 2 framework that consisted of four goals: mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance. Current research indicates that of these four goal types, only mastery-approach, performance-approach, and performance-avoidance goals are the most operative goals used in the classroom (Elliot & McGregor, 2001; Thrash & Elliot, 2002). These three goal types were the focus of the current investigation.

## **Achievement Goals in the Classroom**

The three achievement goals have different manifestations associated with different cognitions, behaviors, and outcomes. Students exhibiting mastery-approach goals are concerned with self-improvement (Ames, 1992; Dweck & Leggett, 1988). Students who adopt mastery-approach goal orientations focus on developing skills and evaluating their performance through self reference standards (Ames, 1992; Dweck, 1986; Nicholls, 1984). In contrast, students displaying more performance-approach goals focus on demonstrating competence in comparison to others. Finally, students manifesting performance-avoidance goals focus on avoiding looking incompetent or less able in front of others (Ames, 1992; Dweck, 1986; Nicholls, 1984). Each of these goals activates different cognitions and leads to different achievement outcomes and associated affect (Dweck & Leggett, 1988; Elliot, 2005).

### **Consequences of Different Achievement Goals**

**Mastery-approach goals.** Mastery-approach goals promote deeper levels of processing, (Pintrich & DeGroot, 1990; Elliot, McGregor, & Gable, 1999) cognitive engagement, and achievement (Ames, 1992). Students who adopt mastery goals report positive affect about themselves and their school (Ames & Archer, 1988; Anderman, 1999; Kaplan & Maehr, 1999). As a way to measure their performance, mastery oriented students use their prior experiences as a point of reference for future improvements (Butler, 1989).

**Performance-approach goals.** Performance-approach goals promote more surface level processing, such as rehearsal and memorization (Elliot, McGregor, & Gable, 1999), and as a consequence, performance-approach goals are associated with

both adaptive and maladaptive outcomes (Elliot, 1999). For example, performance-approach goals are adaptive in terms of achievement, but less adaptive in terms of affect and strategy use (Dweck & Leggett, 1988; Harackiewicz et al., 1998). Performance-approach oriented students use other students as points of comparisons to measure their performance rather than focus on themselves (Butler, 1989).

**Performance-avoidance goals.** Performance-avoidance goals are typically associated with maladaptive outcomes. Students who display these goals become overly concerned about appearing or looking incompetent, which can lead to avoidance-related outcomes, such as self-handicapping, (Ames, 1992; Ames & Ames, 1984; Midgley, Kaplan, & Middleton, 2001), procrastination, and less self-regulated learning (Elliot, 1999). Research also shows that performance-avoidance goals may evoke feelings of apprehension as students are more focused on trying to avoid looking incompetent in the presence of others (Meece, Blumenfeld, & Hoyle, 1988). These salient consequences of achievement goals have led numerous researchers to try and discern the causes of the differential adoption of achievement goals.

### **The Adoption of Achievement Goals**

Research on achievement goal development typically involves looking for differences between students who display different goals. This research indicates that there are several factors, both individual and contextual, that influence student adoption of achievement goals.

**Individual factors.** Some researchers have shown that gender, ethnicity, and self-efficacy differences exist in the adoption of achievement goal orientations (Meece & Holt, 1993; Midgley et al., 2001; Nolen, 1988; Skaalvik, 1997), while other researchers

have found contrary results (Abrahamsen, Robert, & Pensgaard, 2007; McInerney, Hinkley, Dowson, & Van Etten, 1998; Phan, 2008; Turner et al., 1998). These often conflicted results are discussed next.

**Gender.** Some research indicates that adolescent girls are more mastery oriented than adolescent boys (Anderman & Midgley, 1997; Pajares, Britner, & Valiante, 2000) and that adolescent girls reported higher levels of cognitive engagement and mastery motivation than adolescent boys (Wolters & Pintrich, 1998). Wolters and Pintrich (1998) found that boys were more likely to engage in self-handicapping strategies than girls, and that this likelihood was related to the adoption of a performance-avoidance goal orientation. In another study, Brdar, Rijavec, and Loncaric (2006) found that males engaged in more work avoidance behaviors related to performance-avoidance goals than females. Alternatively, Ablard and Lipschultz (1998) and others (e.g., Meece & Holt, 1993; Niemivirta, 1996) found no significant differences in performance goal orientations between male and female students. These mixed results suggest that additional research needs to be conducted on gender differences in achievement goal adoption. The current research adds to this literature.

**Ethnicity.** Research on ethnic differences and the adoption of achievement goal orientations is also inconclusive. Whereas some researchers have suggested that ethnic differences exist in the adoption of achievement goal orientations, others find no differences. For example, Freeman, Gutman, and Midgley (2002) reported that African American students are more mastery oriented and pursue more extrinsic goals than their White counterparts. In addition, other researchers (e.g., Midgley et al., 2001; Middleton & Midgley, 1997) found that African American males tend to adopt more performance

goals as compared to Caucasian students. Other researchers find no evidence of differences between ethnic groups in the adoption of achievement goals (McInerney et al., 1998). Additional research is needed as African American students continue to fare worse than White students (U. S. Department of Education, 2006). For instance, throughout elementary, secondary, and postsecondary education, African American males lag behind their White counterparts (Jackson & Moore, 2006; Moore, Flowers, Guion, Zhang, & Staten, 2004). In addition, African American males are more likely to be placed in special education classes and are more likely to be classified as having a learning disability or being emotionally disturbed (Holzman, 2006; Thernstrom & Thernstrom, 2003). Likewise, graduation rates for African American males are much lower compared to White males, with only 45% of African American male students graduating in 2004 compared to 70% of White males. Furthermore, African American students account for 14.7% of all dropouts, nearly twice the rate of White students (U. S. Department of Education, 2006).

**Ethnicity and educational outcomes.** In terms of African American student motivation, researchers found that African American students report wanting to succeed; however, because of prior experiences researchers have found that African American students may disidentify with school if they do not believe it will lead to future positive outcomes (Steele, 1997). Other research suggests that African American male students differ very little in comparison to their White male counterparts in terms of their educational aspirations; however, African American males were found to be the least likely of students to attain their educational aspirations (Bateman & Kennedy, 1997). Further, Graham (1994) contended that in order to understand what motivates African

American students more emphasis needs to focus on students' beliefs about their underachievement. The current research will add to the literature on achievement goals in an African American population and determine if other individual variables (e.g., self-efficacy) are important in the adoption of achievement goals in this group.

**Academic self-efficacy.** Academic self-efficacy is considered an individual factor relating to achievement goal adoption, and can effect whether a student persists with a task in the face of difficulty (Pintrich & Schunk, 2002). Academic self-efficacy is the “belief in one’s capability to organize and execute a course of action required to produce given attainments” (Bandura, 1997, p. 3). Many researchers suggest that a student’s academic self-efficacy is a good predictor of academic achievement and motivation (Graham & Weiner, 1996; Pajares, 2003; Pintrich & DeGroot, 1990; Pintrich & Schunk, 1995). Pintrich and Schunk (2002) found that when students have positive academic self-efficacy beliefs, they are more likely to work harder and persist with an activity. However, students with a low sense of academic self-efficacy are more susceptible to developing maladaptive goal patterns (Elliot & Dweck, 1988).

In terms of student adoption of achievement goals, research suggests that students’ academic self-efficacy is a strong predictor of behavior and motivation (Maddux, Norton, & Stoltenberg, 1986). Indeed, some researchers find a positive association between mastery goals and academic self-efficacy (Middleton & Midgley, 1997; Pajares et al., 2000; Skaalvik, 1997). However, the link between performance-approach goals, performance-avoidance goals, and academic self-efficacy remains unclear. Whereas some researchers report a positive association between performance-approach goals and academic self-efficacy (Bong, 2001; Skaalvik, 1997), other

researchers report no relationship between performance-approach goals and academic self-efficacy (Middleton & Midgley, 1997; Turner et al., 1998). For instance, Bong (2001) found that performance-approach goals were positively correlated with academic self-efficacy, task value, and task goal orientations. However, Turner et al. (1998) reported that performance goals have an indirect negative effect on students' academic self-efficacy after students experience failure. Finally, Roeser et al. (1996) found performance-approach goals were not predictive of academic self-efficacy. Given these mixed results, it remains unclear how performance-approach goals relate to patterns of learning. Similarly, the relationship between performance-avoidance goals and academic self-efficacy remains unclear. Some researchers report performance-avoidance goals and academic self-efficacy as negatively related (Middleton & Midgley, 1997; Elliot & Church, 1997), and others report no significant relationship between the variables (Skaalvik, 1997). The current investigation explored the relationship between students' academic self-efficacy and goal adoption. In addition, it explored the association between students' goal patterns and individual and contextual factors.

**Contextual Factors.** At the contextual level, researchers have shown that the manner in which the classroom is structured has a strong influence on student adoption of achievement goals. How teachers structure assignments and respond to students in the classroom can affect how students perceive the importance of learning (Ames, 1992; Blumenfeld, 1992).

**Classroom goal structures.** Some theorists stress how various structures in the classroom environment may influence students' perceptions of the classroom goal structures (Ames, 1992; Blumenfeld, 1992; Meece, 1991). Classroom goal structure

refers to the way teachers establish routines, set up rules, assign tasks, and evaluate students (Ames, 1992; Blumenfeld, 1992; Meece, 1991). Classroom goal structure is often categorized into six dimensions: task design, distribution of authority, recognition of students, grouping arrangements, evaluation practices, and time allocation (Ames, 1992; Epstein, 1988). When teachers introduce these dynamics into the classroom, they are better able to promote a mastery or performance-approach to learning (Ames, 1992; Epstein, 1988). For instance, when teachers provide students with a variety of learning tasks, place emphasis on autonomy, and praise students for improvement, they are better able to promote a mastery structured environment (Ames, 1992; Epstein, 1988). In contrast, a performance-oriented classroom structure is promoted when competition is encouraged among students (Ames, 1992; Epstein, 1988).

How students perceive their teachers organize the classroom in terms of learning activities, task design, distribution of authority, recognition of students, grouping arrangements, evaluation practices, and allocation of time are all found to impact student adoption of achievement goals (Ames, 1992; Epstein, 1988). Anderman (2003) found that when students report feeling respected and welcomed in their school environment, they are more likely to perceive the learning environment as supporting a mastery approach, and they are more likely to adopt a mastery orientation. Additionally, Anderman and Anderman (1999) found that when students do not perceive the classroom environment as being a warm and safe place, then students become more focused on external factors, such as social comparison and competition which makes performance goal orientations more prevalent in the classroom.

**School relevance and aspirations.** Teachers or the way teachers engage students in the learning process can impact how a student perceives the relevance of school for their future success. In order for students to excel in school, they must see the relevance or usefulness of school and believe that they possess the skills needed to achieve in order to fully engage in the learning process. Researchers advocate that teachers can make learning more relevant by relating the coursework towards students' needs, experiences, and goals (McCombs & Pope, 1994; Wlodkowski & James, 1990). Hootstein (1994) suggests that educators should allow students to make choices about the type of assignment they complete and allow students to demonstrate what they have learned. These kinds of choices are believed to increase students' interest and involvement in the learning process (Hootstein, 1994; McCombs & Pope, 1994; Wlodkowski & James, 1990).

### **Consequences of Contextual Factors**

In general, researchers found that students tend to embrace the achievement goal constructs emphasized in the classroom. For instance, Ames and Archer (1988) found that when students perceived their class as emphasizing mastery goals, they reported using more learning strategies, preferred tasks that offered challenge, and had a more positive attitude toward their class. In the same study, Ames and Archer found that when students perceived the classroom as emphasizing performance-avoidance goals, they were found to be negatively related to attitudes and self perceptions of ability. Others have found similar patterns, noting that students tend to embrace similar goal orientations that they perceive in their classroom (e.g., Wolters, 2004; Young, 1997). However, not all students perceive the classroom in the same manner. Further research is warranted to

examine how individual students perceive and give meaning to their classroom experiences. The current investigation adds to this literature in an African American sample.

### **Theoretical Framework**

According to the social cognitive theory (Bandura, 1986), there are three components that work interactively to influence student motivation: cognitive/personal factors, environmental factors, and behavior factors. Each of these components, according to the social cognitive theory, influences the other in a reciprocal manner. For instance, a student's cognition can affect how a student perceives their ability. The environment, such as a classroom environment or the way a classroom is structured, can influence a student's behavior. In like manner, a student's behavior can influence the environment. For example, the way in which the instructional environment is structured can affect how a student learns, and the way a student performs can affect how the instructor responds to the student's behavior. The instructor can decide to alter the instructional approach to meet the student's level of understanding or continue to teach in the same manner.

In essence, student behavior influences the environment and student cognition by way of performance. To illustrate this point, consider what occurs when a student persists with a task and begins to show improvement. The student may become more confident and begin to perceive their ability more favorably. The actions performed or the behavior influenced how the student perceived their ability. When a student perceives their ability more favorably, they may be willing to spend more time and effort learning new material. Subsequently, student cognition may begin to affect the student's behavior.

Cognitions can not only affect how students perceive their abilities but also how they engage in learning. According to social cognitive theory, the behaviors exhibited by students can affect the students' perception of their ability and how educators respond to the students' behaviors. Graham (1994) contended that in order to understand what motivates African American students, educators need to examine students' beliefs and emotions. This, according to Graham, includes examining students' beliefs and expectations for success. Graham (1994) further contended that because of the disproportionate number of African American students in special education and remedial classes, more emphasis needs to focus on students' thoughts about their underachievement.

### **Statement of Purpose**

The purpose of the current study is to examine the achievement goal orientations of African American students. One objective is to determine if gender differences exists amongst African American students on their mastery, performance-approach, and performance-avoidance goal orientations. Prior research suggests that gender differences may develop as students reach adolescence and begin to evaluate who they are (Shim, Ryan, & Anderson, 2008). Using *t*-test analysis, Shim and colleagues (2008) found that African American males adopt more performance-approach goals as compared to other students.

Another objective of the current research is to examine whether a relationship exists amongst African American students' goal orientations (mastery, performance-approach, performance-avoidance) and their reported academic self-efficacy. In prior studies, researchers found a positive association between mastery goals and academic-

self efficacy (Middleton & Midgley, 1997; Pajares et al., 2000; Skaalvik, 1997).

However, the link between performance-approach goals and academic self-efficacy remains unclear. Some researchers found a positive association between performance-approach goals and academic self-efficacy (Bong, 2001; Pajares et al., 2000; Skaalvik, 1997), whereas others found no relation between performance-approach goals and academic self-efficacy (Middleton & Midgley, 1997). This is tested in the present study through correlational analysis.

Another purpose of this study is to examine the relationship between students' goal orientations and their perceptions of classroom goal structures. Although prior research has demonstrated that students often adopt the goal patterns that are reflected in the classroom, because of the many educational disparities that many African American male students experience in the learning environment, this study sought to add to the literature in an African American population.

Another purpose of the current investigation is to determine the predictive link between the relevance of school for future success on mastery goal orientations, performance-approach goal orientations, and academic self-efficacy in an African American population. This is tested in the present study through regression analysis.

### **Research Questions and Hypotheses**

This empirical study employed a quantitative correlational and predictive research methodology to data analysis in order to answer the following research questions.

**Research Question 1.** Among eighth grade African American students, are there gender differences between students' goal orientations?

***Hypothesis 1a.*** It is hypothesized that eighth grade African American male and female students will differ in their rates of self-reported mastery goals.

***Hypothesis 1b.*** It is hypothesized that eighth grade African American male and female students will differ in their rates of self-reported performance-approach goals.

***Hypothesis 1c.*** It is hypothesized that eighth grade African American male and female students will differ in their rates of self-reported performance-avoidance goals.

**Research Question 2.** Among eighth grade African American students, is there a relationship between students' achievement goal orientation and their academic self-efficacy?

***Hypothesis 2a.*** It is hypothesized that African American students who adopt a high mastery goal orientation will have high academic self-efficacy.

***Hypothesis 2b.*** It is hypothesized that African American students who adopt a high performance-approach goal orientation will have high academic self-efficacy.

***Hypothesis 2c.*** It is hypothesized that African American students who adopt a high performance-avoidance goal orientation will have no significant relationship with their academic self-efficacy.

**Research Question 3.** Among African American students, is there a relationship between students' perceptions of the classroom goal structures and their goal affiliations?

***Hypothesis 3.*** It is hypothesized that students' perceptions of the classroom goal structures would be related to their goal orientations.

**Research Question 4.** Is there a predictive relationship amongst mastery goals, performance-approach goals, academic self-efficacy, and students' beliefs about the relevance of school for future success?

***Hypothesis 4.*** It is hypothesized that students' mastery goals, performance-approach goals, and academic self-efficacy would be a positive predictor for students' beliefs about the relevance of school for future success.

**Research Question 5.** Is there a predictive relationship amongst mastery goals, performance-approach goals, academic self-efficacy, and students' educational aspirations?

***Hypothesis 5.*** It was hypothesized that students' mastery goals, performance-approach goals, and academic self-efficacy would be a positive predictor of students' educational aspirations.

## **Summary**

Research in achievement goal theory is essential because it explains the reasons why students engage in achievement behaviors (Ames, 1992; Dweck; 1986; Elliot, 1999). More specifically, it explains why some students adopt more adaptive coping responses to learning while others adopt less effective coping strategies. Using achievement goal framework researchers are able to predict which students will adopt certain achievement goals and the associated consequences of goals. Researchers have found that a large number of students, particularly African American male students, adopt goal patterns that often result in a number of maladaptive outcomes that can lead to a decline in academic

motivation and engagement in the learning process. As a consequence, understanding how individual and contextual factors influence student goal adoption is critical to providing a deeper understanding about the role of gender, ethnicity, and the classroom context on student behavior.

The literature review provided an overview on achievement goal adoption, consequences of goal orientations, and the relationship between students' academic self-efficacy, classroom goal structures, and beliefs about the relevance of school for future success. The purpose of the current study is to investigate African American students' goal orientations using a social cognitive framework to provide information on how cognitive, behavioral, and environmental factors influence students' achievement behavior. The methodology proposed for the current investigation is presented in the next chapter.

## CHAPTER 2: METHOD

### Introduction

This chapter provides an overview of how the research was conducted and what instruments and procedures were utilized to examine the achievement goal orientations of African American students. One purpose of the current investigation was to determine if gender differences existed amongst African American students in regard to their achievement goal orientations. Another purpose was to determine whether a relationship existed amongst African American students' goal orientations and their academic efficacy. In prior studies, researchers found a positive association between mastery goals and academic efficacy (Middleton & Midgley, 1997; Pajares et al., 2000; Skaalvik, 1997). However, the link between performance-approach goals and academic self-efficacy remains unclear. Some researchers found a positive association between performance-approach goals and academic self-efficacy (Bong, 2001; Pajares et al., 2000; Skaalvik, 1997), whereas others found no relation between performance-approach goals and academic self-efficacy (Middleton & Midgley, 1997).

### Participants

Participants for the present study were eighth-grade students ( $N = 70$ ) enrolled in a charter school from the Knowledge is Power Program (KIPP). The KIPP school is a voluntary college preparatory school. Students are not assigned or required to attend. However, if a student decides to attend a KIPP school, they are required to sign a written commitment, agreeing to uphold KIPP's commitment to excellence and to study and work hard. Parents and educators are also required to sign a written commitment to uphold high standards of excellence. KIPP is an open-enrollment charter school where

incoming fifth graders are admitted regardless of their test scores. KIPP has extended school hours, an extended school year, and numerous opportunities for students to engage in diverse extra curricular experiences to enhance social development. The KIPP program has more control over the school budget and personnel hiring. This allows KIPP administrators to have more control to make changes in its curriculum and fiscal decisions. Students who attend a KIPP school can continue their education throughout middle school before having to enroll in another school setting.

The sample for this study comprised predominantly of African Americans (92.9%); other participants included Caucasians (1.4%), Americans of Hispanic/Latino origin (1.4%), and “other” (4.3%) who attend a KIPP school. Of the participants, 45.7% lived in single-parent households, and 50% lived in two-parent households; the remaining participants (4.3%) lived with relatives or friends. The reported mean age of participants was 13.14 years, ranging in age from 13 years to 15 years ( $SD = 0.46$  months). Over 80% of KIPP students qualify for federal free and reduced-price meal programs.

## **Measures**

**The Patterns of Adaptive Learning Scale (PALS).** The Patterns of Adaptive Learning Scale (PALS) (Midgley et al., 2000) was used to explore the differing associations that exist and contribute to the formation of achievement goals and to identify the type of achievement goals that are most operative among African American students. The three types of achievement goals used in this study were mastery goals, performance-approach goals, and performance-avoidance goals. All of the reliability scores below are based on Midgley et al. (2000).

***Mastery goal orientation.*** Mastery goal orientation was measured using a 5-item scale (Midgley et al., 2000). A sample question of a mastery goal orientation is “I do the work in class because I like to understand what I am learning.” Responses were coded on a 5-point Likert scale, with higher responses indicating a mastery goal orientation. Cronbach’s alpha coefficient yielded an alpha level,  $\alpha = 0.77$ .

***Performance-Approach goal orientation.*** Performance-approach goal orientation was measured using a 5-item scale (Midgley et al., 2000). This scale included such items as “I do the work in class because I want to show that I know more than my classmates.” Responses were coded on a 5-point Likert scale, with higher values indicating adoption of a performance-approach goal. Cronbach’s alpha coefficient yielded an alpha level,  $\alpha = 0.81$ .

***Performance-Avoidance goal orientation.*** Performance-avoidance goal orientation was measured using a 4-item scale (Midgley et al., 2000). This scale contained items that referred to how students would feel or what students would want when doing class work, for example, “I do the work in class because I do not want others to think I know less than they do.” Responses were coded on a 5-point Likert scale, with higher responses indicating an adoption of a performance-avoidance goal orientation. Cronbach's alpha coefficient yielded an alpha of level,  $\alpha = 0.68$ .

***Academic self-efficacy.*** Academic self-efficacy was measured using a 5-item scale. A sample question of academic efficacy is “I’m certain I can figure out how to do the most difficult class work.” Responses were coded on a 5-point Likert scale, with 1 being “not at all true” and 5 being “very true.” Cronbach’s alpha coefficient yielded an alpha level,  $\alpha = 0.74$ , with higher responses indicating higher academic self-efficacy.

**Perception of classroom goal structures.** Perception of classroom goal structures refers to students' perceptions of the goals that their teachers emphasize in the classroom. A sample question of perceptions of classroom goal structures is "In our class, really understanding the material is the main goal." A 2-item scale was used to measure students' perceptions of the goals that their teacher emphasize in the classroom, as identified by Midgley et al. (2000). Classroom mastery goal structure used a 6-item scale,  $\alpha = 0.75$  and classroom performance-approach goal structure used a 3-item scale,  $\alpha = 0.75$ .

**Relevance of school for future success.** Relevance of school for future success was measured using a 6-item scale. A sample question of skepticism of school relevance is "My chances of succeeding later in life don't depend on doing well in school." Each item on the PALS was rated on a 5-point Likert scale with 1 being "not at all true" and 5 being "very true." Six of the items regarding skepticism about school relevance were reverse-scored so that all of the items on the PALS are positively correlated. For instance, the above sample question would be changed to read "My chances of succeeding later in life do depend on doing well in school." Cronbach's alpha coefficient yielded an alpha level,  $\alpha = 0.75$ .

**Educational aspirations.** To measure students' educational aspirations, participants were asked to rate the highest level of education they expected to complete. The scale ranged from 1 to 6, with 1 being less than high school, 2 being some high school completed or GED, 3 being trade or vocational school, 4 being some college or Associate's degree, 5 being college completion, and 6 being graduate school (M.A.,

Ph.D., M.D.). The scales ranged from 1 to 6 to gauge students' commitment to pursue higher education.

### **Procedure**

Once approval was obtained from the Institutional Review Board at The University of Memphis, participants were recruited during class and provided with a survey package. Participants were administered informed consent forms. Data was collected during the fall semester of 2009. Participation was voluntary and confidential. Participants received no economic or other incentives for participation. During class time, teachers administered the survey and read the instructions to participants. Participants were told the overall purpose of the study. Participants were further told that the survey is not a test and to be as honest as possible in their responses. To ensure that the participants understood the question, it was explained that similar sounding questions would be asked in order to measure the information accurately and to understand what is being said. Participants were assured of the confidentiality of their responses and that no one at home or at school would see their responses. Data was collected during participants' homeroom class. The procedure took approximately 30 minutes. One participant's survey was removed due to the same answer being marked throughout the survey. After all data collection procedures had been administered, the data was entered into the Statistical Package for Social Science (SPSS) software.

## **Data Analysis Plan**

Scores on the questionnaire were entered and tabulated into SPSS. Descriptive analyses consisting of frequencies, means, and standard deviations for the study variables were conducted. Inferential analyses consisted of *t*-tests, correlations, and multiple regression analyses.

In order to address Research Question 1, a series of *t*-tests were conducted to determine if gender differences between goal orientations existed. For Research Questions 2 and 3, a Pearson Product Moment Correlation analysis was conducted to determine value, direction, and significance of relationships between achievement goal orientation scores, academic self-efficacy, student's perceptions of classroom goal structures, and goal affiliation scores.

In order to address Research Questions 4 and 5, a series of multiple regression analyses were conducted to explore the link between (1) the relevance of school for future success, (2) mastery goals orientations, (3) performance-approach goal orientations, and (4) academic efficacy. The dependent variable in Research Question 4 was the relevance of school for future success, and educational aspirations in Research Question 5. The independent variables were mastery goal orientations, performance-approach goal orientations, and academic efficacy. The three predictor variables were entered simultaneously into both analyses for research questions four and five.

In conclusion, this study employed a quantitative research methodology to data analysis. In addition, it explored the goal affiliations of African American students to understand why some students adopt more adaptive goal orientations than others.

## **CHAPTER 3: RESULTS**

### **Restatement of Purpose**

The purpose of the current study was to examine achievement goal orientations in an African American population. One objective was to determine if there are differences between the genders on their mastery, performance-approach, and performance-avoidance goal orientations. Another objective was to examine whether a relationship exists between goal orientation (mastery, performance-approach, performance-avoidance) and reported academic self-efficacy. Another purpose of this study was to examine the relationship between students' goal orientations and their perceptions of classroom goal structures. Although prior research has demonstrated that students often adopt the goal patterns that are reflected in the classroom, because of many educational disparities that many African American male students experience in the learning environment, this study sought to add to the literature in an African American population. A final objective of the study was to determine if there was a predictive link between the relevance of school for future success variable on mastery goal orientations, performance-approach goal orientations, and academic efficacy in a new population of African American eighth-grade students.

### **Information on Study Participants**

Participants in this study were 70 students, (31 males and 39 females), ranging in age from 13 to 15 years old with a mean age of 13.14 years old. Each participant was asked to give a self report about their future educational aspirations (Table 1). The majority of participants reported that they planned to complete college and attend

graduate school. The lower percentage of students reported that they planned to complete less than high school (7.2%) or high school (7.2%).

Table 1  
*Participants Educational Goal Aspirations*

Level of Education	Frequency	Percent	Cumulative Percent
Less than high school	5	7.2	7.2
High School completion/GED/Certificate	5	7.2	14.5
Some College/Associates	8	11.6	26.1
Complete College	24	34.8	60.9
Graduates School (MA, Phd, MD)	27	39.1	100.0

The participants were also asked to report their future occupational goals and aspirations (Table 2). The largest percentage of subjects reported that they aspired to be in business as a manager or owner. The lowest percentage of subjects reported that they aspired to be a laborer, farmer, housewife (1.4%), and service worker (1.4%).

Table 2  
*Participants Occupational Aspirations*

Occupational Aspirations	Frequency	Percent	Cumulative Percent
Laborer, farmer or housewife	1	1.4	1.4
Service Worker	1	1.4	2.9
Craftsperson, military, police, security	5	7.2	10.1
Technician/semi-professional	2	2.9	13.0
Business, manager, business owner	22	31.9	44.9
Administrator/semi-professional	3	4.3	49.3
High executive professional	14	20.3	69.6
Other	21	30.4	100.0

### **Descriptive Analyses**

The means and standard deviations of goal orientation variables, classroom goal structures, school relevance and efficacy variables are presented in Table 3, and a crosstabs frequency chart of goal orientations by gender was calculated and is presented in Table 4.

Table 3  
*Means and Standard Deviations of Goal Orientations, Classroom Goal Structures, School Relevance, and Academic Efficacy*

Study Variable	<i>M</i>	<i>SD</i>
School relevance	1.90	0.883
Mastery goals	4.61	0.412
Performance-approach goals	3.04	1.019
Performance-avoidance goals	2.77	1.076
Academic efficacy	4.3	0.560
Classroom Mastery	4.3	.599
Classroom performance-approach	3.61	.870

Table 4  
*Crosstabs Frequencies of Goal Orientations by Gender*

	Male	Female
Mastery goals	30	39
Performance-approach goals	30	39
Performance-avoidance goals	30	39
Total	90	117

### Main Analyses

The current investigation posed five research questions. *T*-test, correlation, and regression analyses were conducted to address the research questions and hypotheses.

**Research Question 1.** Research question 1 asked if there are significant gender differences between male and female students on goal orientations in African American eighth-grade students. To answer this question, a series of independent samples *t*-tests were performed to determine if there were statistically significant differences between

male and females on the three goal orientations. In this analysis, no significant differences were found between male and female students' employment of mastery goals,  $t(67) = 0.771, p < .44$ ; performance-approach goals,  $t(67) = 1.77, p < .08$ ; or performance-avoidance goal orientations,  $t(67) = 0.85, p < .40$  (Table 5).

Table 5  
*Independent Samples t-Test*

Gender	N	Mean	<i>t</i>	<i>p</i>
<b>Mastery Goal</b>				
Male	30	4.65	.771	.444
Female	39	4.57	.786	.435
<b>Performance Approach</b>				
Male	30	3.28	1.765	.082
Female	39	2.85	1.795	.077
<b>Performance Avoidance</b>				
Male	30	2.88	.852	.397
Female	39	2.62	.852	.392

**Research Question 2.** Research question 2 asked if there was a relationship between students' achievement goal orientations and their academic self-efficacy. In order to address question 2, a Pearson Product Moment correlation analysis was conducted. In terms of the relationship between achievement goals and academic self-efficacy, the correlation analysis showed mastery goal orientations to be positively and significantly associated with academic self-efficacy  $r(67) = .38, p < .01$  (Table 6), meaning that students who had a high mastery goal orientation tended to have high

academic self-efficacy. Cohen's (1988) guidelines show the effect size of  $r = .38$  as being medium or typical.

No statistically significant correlation was found between performance-approach goals and academic self-efficacy  $r(67) = .23, p > .05$  indicating that performance-approach goal score and academic self-efficacy ratings are not related. Similarly, no statistically significant correlation was found between performance-avoidance goals and academic self-efficacy  $r(67) = .12, p < .34$ , indicating that performance-avoidance goal score and academic self-efficacy ratings are not related (Table 6).

**Table 6**  
*Correlations among Study Variables*

Score	1	2	3	4	5	6	7	8
1. Mastery goals								
2. Perf. approach	.08							
3. Perf. avoidance	.06	.77						
4. Academic efficacy	.38	.23	.12					
5. School relevance	.35	.10	-.03	.30				
6. Classroom Mastery	.67	.23	.23	.28	.28			
7. Classroom Perf/appr.	.06	.32	.32	.038	.04	.25		
8. Educ. Aspirations.	.29	-0.22	-.12	.05	-.02	.23	-.06	

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Research Question 3.** Research question 3 asked if there was a relationship between students' perceptions of the classroom goal structures and their adoption of a mastery, performance-approach, or performance-avoidance goal orientation. The data revealed that mastery goal orientations were shown to be positively associated with classroom mastery goal structures  $r(67) = .67, p < .01$ , meaning that students who adopted a mastery approach to learning also perceived the classroom as being more mastery-oriented. The effect size of  $r = .67$  is considered large.

A performance-approach goal orientation and classroom performance-approach goal structures were also found to be positively correlated and showed a medium effect size,  $r(67) = .32, p < .01$ . The relationship between performance-approach goal orientations and performance-avoidance goal orientations revealed a positive correlation  $r(67) = .77, p < .01$  and a large effect size (Table 6).

**Research Question 4.** Research question 4 asked if mastery goals, performance-approach goals, and academic self-efficacy were the best predictors of students' beliefs about the relevance of school for future success. In order to address this question a regression analysis was conducted. Results indicated that as hypothesized when the combination of variables to predict students' beliefs about the relevance of school for future success included mastery goals, performance-approach goals, and academic self-efficacy, then  $F(3, 65) = 4.05, p < .05$ .

However, a very high multicollinearity was found when conducting the regression analysis and performance-approach goals and performance-avoidance goals showed high intercorrelation (.77) and shared substantial covariance with the dependent variable. As a result, the performance-avoidance goal was removed from the regression.

The beta coefficients are presented in Table 7. Note that mastery goals significantly predict expectations for success when all three variables (mastery goals, performance-approach goals, and academic self-efficacy) are included. The adjusted  $R^2$  value was 0.119. This indicates that approximately 12% of the variance for expectations for success was accounted for in the model. According to Cohen (1988), this is a small effect size.

Table 7  
*Multiple Regression Model on School Relevance*

Variable	<i>B</i>	<i>SE B</i>	<i>Beta</i>	<i>Sig.</i>
School relevance	0.668	2.074	0.312	.748
Mastery goals	1.147	0.457	0.312	.015*
Performance-approach goals	-0.358	0.176	-0.24	.046*
Academic efficacy	-0.023	0.344	-0.008	.947

\*Correlation is significant at the .05 level.

**Research Question 5.** Research question 5 asked if mastery goals, performance-approach goals, and academic self-efficacy were the best predictors for educational aspirations. A multiple regression analysis was conducted to investigate the best predictors of educational aspirations. When the combination of independent variables to predict educational aspirations included mastery goals, performance-approach goals, and academic self- efficacy, then  $F(65, 68) = 3.58, p < .05$ .

The beta coefficients are presented in Table 8. The results revealed, that as hypothesized, mastery goals, performance-approach goals, and academic self-efficacy significantly predicted educational aspirations when all three variables are included. The adjusted  $R^2$  value was 0.102. This indicates that approximately 10% of the variance in

educational aspirations was accounted for by the model. According to Cohen (1988), this is a small effect size.

Table 8  
*Multiple Regression Model on Educational Aspirations*

Variable	<i>B</i>	<i>SE B</i>	<i>Beta</i>	<i>Sig</i>
Educational aspirations	-0.009	1.197		.994
Mastery goals	0.604	0.263	0.282	.025*
Performance-approach goals	0.027	0.101	0.031	.795
Academic efficacy	0.29	0.198	0.184	.149

\*Correlation is significant at the .05 level.

### Summary

Data from 70 African American eighth-grade students were analyzed to investigate the differences between the genders on their mastery, performance-approach, and performance-avoidance goal orientations. The results indicate that contrary to the hypothesis, there are no gender differences on goal orientations in this sample. In terms of the relationship between achievement goals and academic self-efficacy, in accord with the hypothesis, the correlation analysis showed mastery goal orientations to be positively and significantly associated with reported academic self-efficacy, indicating that students who had a high mastery goal orientation tended to have high academic self-efficacy. The other two goal orientations (performance-approach, performance-avoidance); however, were not associated with academic self-efficacy. When the relationship between students' goal orientations and classroom goal structures were analyzed, results indicated that, as hypothesized mastery goal orientations were shown to be positively associated with classroom mastery goal structures, meaning that students who adopted a mastery approach to learning also perceived the classroom as being more mastery-oriented. Also

as hypothesized, a performance-approach goal orientation and classroom performance-approach goal structures were found to be positively correlated, as was the relationship between performance-approach goal orientations and performance-avoidance goal orientations. Finally, it was predicted that there would be a predictive link between the relevance of school for future success and educational aspiration variables on mastery goal orientations, performance-approach goal orientations, and academic self-efficacy. The results indicated that mastery goals, performance-approach goals, and academic self-efficacy significantly predicted educational aspirations when all three variables were included; and that mastery goals, performance-approach goals, and academic self-efficacy significantly predicted educational aspirations when all three variables were included. The implications of these results are discussed in the next chapter.

## CHAPTER 4: DISCUSSION

### Restatement of Purpose

The aim of the present study was to explore the differences between male and female African American eighth-grade students on mastery, performance-approach, and performance-avoidance goal orientations. Results of the investigation indicated that the males and females in the current sample do not differ in their goal orientations as hypothesized. There were several significant correlations obtained in the current research and having a mastery goal orientation was shown to be positively related to reported academic self-efficacy; however, performance-approach, and performance-avoidance were not related to academic self-efficacy. Results indicated that as hypothesized mastery goal orientations were positively correlated with classroom mastery goal structures, and that performance-approach goal orientation and classroom performance-approach goal structures were also positively correlated, as was the relationship between performance-approach goal orientations and performance-avoidance goal orientations. Finally, as hypothesized, regression analyses revealed that mastery goals, performance-approach goals, and academic self-efficacy significantly predicted educational aspirations when all three variables were included: and that mastery goals, performance-approach goals, and academic self-efficacy significantly predicted educational aspirations when all three variables were included.

The current investigation collected data from 70 African American eighth grade students enrolled in a charter school from the Knowledge is Power Program (KIPP). Participants completed the Patterns of Adaptive Learning Scale (PALS) and variables of goal orientations, academic self-efficacy, perception of classroom goal structure,

relevance of school for future success, and educational aspirations were measured. A quantitative research methodology and approach were used to examine the main effect of gender on goal orientation, and the correlational and predictive relationships between the study variables.

### **Interpretation of Findings**

**Research Question 1.** The first research question asked is there a difference among African American male and female students in achievement goal orientations. An independent sample *t*-test was used to explore these differences. It was predicted that significant gender differences would exist between males and females on goal orientation. Contrary to the hypothesis, the results indicated no gender differences in the goal orientations of the students. These results are inconsistent with some previous literature that indicated that girls and boys approach schoolwork differently, with girls being more mastery-oriented and less performance-oriented than boys (Ablard & Lipschultz, 1998; Meece & Holt, 1993; Nolen, 1988). However, the current results do support the research of Patrick, Ryan, and Pintrich, (1999) and Ryan and Pintrich, (1997) who reported no significant sex differences in the endorsement of mastery goals.

One possible explanation for the lack of significant gender differences may have to do with the type of academic program these students were enrolled in, and the type of parents that elect to send their children to participate in a voluntary academic school with extended school hours and requiring a high level of engagement from students, parents, and teachers. Study participants were enrolled in the KIPP program. The mission of KIPP is to instill in each student a commitment to teamwork, respect, excellence, humility, and responsibility. Each morning students are required to recite a daily affirmation such as,

“If you believe it, you can achieve it,” speaking the goal into present reality. A growing body of theoretical and empirical literature supports the view that when students’ perceptions of personal control in the learning situation increase, so does their motivation to learn (Alderman, 1990; Ames, 1990; Deci & Ryan, 1991). As a consequence, the males in the current sample may have reported more mastery orientations as a function of the school program. By finding no differences in the goal orientations of male and female students, it is suggested that male students are just as capable as female students of excelling in academics when placed in an environment that fosters learning such as in KIPP schools. Additional research comparing African American males from different school programs on their mastery goal orientations may be helpful in elucidating this relationship further.

**Research Question 2.** The second research question asked if there is a relationship between students’ achievement goal orientations and their academic self-efficacy. A significant and positive relationship was hypothesized, and the data analysis supported the hypothesis. That is, in the current investigation, students’ achievement goal orientation was significantly and positively related to their academic self-efficacy. Specifically, the data indicated that students who exhibited high mastery goals also tended to have high academic self-efficacy. The current finding supports prior research findings (Pintrich, 2000), that indicated that mastery goals lead to persistence in face of difficulty. This suggests that mastery goal-oriented students may persist more with a challenge, and that this increases the opportunities they have to build academic self-efficacy (i.e., the more energy the students spend on learning and developing skills, the more likely the students are to build self-confidence in their beliefs about their abilities

and have more faith in what they can accomplish). Simply telling a student that he or she can learn to perform a skill may not be as effective as the direct experience of successfully performing the task. This idea has ramifications for the learning environment, and possibly suggests that teachers should set goals for students that are challenging yet attainable. This research may also indicate that when students have high academic self-efficacy, their faith in their abilities are stronger, and this may enable them to adopt more adaptive goal orientations. Additional research should be conducted on the nuances of this significant relationship.

Although the relationship between academic self-efficacy and mastery goal orientations was significant, contrary to the hypothesis the results showed no relationship between academic self-efficacy and performance-approach goals. This finding was unexpected as prior research has shown performance-approach goals to be related to academic self-efficacy (Bong, 2001; Skaalvik, 1997). It is possible that students were driven by performance and therefore utilized more superficial processing that did not impact their academic self-efficacy. Learning may have occurred; however, it may not have been internalized as meaningful. This may explain why the significance levels for academic self-efficacy and performance-approach goals tethered on borderline. In relation to performance-avoidance goals and academic self-efficacy, no significant relationship was found as supported by previous research (Skaalvik, 1997).

**Research Question 3.** The third research question asked if there is a positive relationship between students' mastery goals and their perceptions of the classroom goal structure. As hypothesized this relationship was found to be significant and in the positive direction. That is, when students believed that their teachers emphasized mastery of

learning tasks and a deep understanding of class work, even more than grades, they tended to embrace similar beliefs towards learning and espouse a mastery orientation.

The data from the Patterns of Adaptive Learning Scale showed that students who believed their teachers supported a mastery approach reported that in their class trying hard was very important. This finding emphasizes the importance of exerting effort regardless of outcome. Students also strongly agreed that in their class, understanding the material is the main goal and by understanding the material students are better able to apply the information they have learned. Students also agreed that how much you improve is really important and when students make improvements in their studies, they are better able to build efficacy. This finding in the current research has implications for teaching strategies.

The results of the current investigation also demonstrated some correlation between performance-approach goals and classroom performance goal structures. This finding suggests that when teachers adopt performance-approach goals, students tended to adopt performance-approach goals as well. In some academic settings, the use of performance-approach goals can be beneficial to students when they are engaging in tasks that are competitive in nature (e.g., college entry exams), as cited by Midgley et al. (2001); however, the long-term benefits of adopting performance-approach goals remains debatable. Additional research needs to be conducted so appropriate teacher training strategies can be recommended.

**Research Question 4.** The fourth research asked if there is a predictive relationship between mastery goals, performance-approach goals, and academic self-efficacy on students' beliefs about the relevance of school for future success. A series of

multiple regression analyses were conducted to examine the associations between students' beliefs about the relevance of school for future success. These analyses showed that as predicted, the adoption of mastery goals, performance-approach goals, and academic self-efficacy predicted a student's expectations for future success. Because there is no research on this relationship, literature comparisons cannot be made.

This is of importance in terms of being able to identify those students who have higher levels of confidence in their abilities versus those with lower levels of confidence. The implications are that by identifying those students who display low academic self-efficacy beliefs, educators will be better able to provide feedback to students that will help them alter their beliefs and develop more positive attributions about their ability, as well as place more emphasis on more adaptive goal structures in the classroom. For African American male students, in particular, who experience higher rates of school failure, their efficacy beliefs and goal adoption can have significant consequences in terms of how they perceive the relevance of school for their future success. Therefore, additional research in other populations may be warranted as this finding is the first of its kind.

**Research Question 5.** The fifth research asked if there is a predictive relationship between mastery goals, performance-approach goals, and academic self-efficacy on students' educational aspirations. Analysis showed that as predicted, the adoption of mastery goals, performance-approach goals, and academic self-efficacy were also predictors for educational aspirations.

A closer look at students self reports about their future aspirations indicated that of the KIPP students, at least 60% aspire to graduate from college and more than 40%

aspire to pursue more challenging occupational endeavors. This suggests that students' goal adoption and efficacy beliefs can have an influence on students' educational aspirations and whether a student elects to register for more advanced coursework or pursue higher education.

### **Implications**

The current investigation examined goal orientations in an African American population. The findings from this study add to the literature as an investigation of this nature in this population had not yet been conducted. Some of the current findings support the previous literature on students from different populations; however, some of the findings do not. African American male students were often found to be lagging behind their female counterparts in academics, disengaging in the learning process, and disproportionately placed in lower academic track programs. This study, however, suggests that there are no male-female differences in goal orientations. It is possible that there are ways to reduce gender disparities in an African American population that may have to do with the type of school and learning environment they are engaged in and additional research should be conducted on this topic.

The results also indicate that teachers who are perceived by their students as adopting a mastery or performance promoting classroom structure have students who adopt a similar goal orientation. Of the three goal types, mastery goals are believed to be the most beneficial for all students across cognitive and achievement outcomes (Kaplan & Middleton, 2002; Midgley et al., 2001). Therefore, information on this important finding needs to be disseminated to educators as there are numerous beneficial outcomes associated with the adoption of a mastery goal orientation.

## **Implications for Educators**

Information concerning student's perceptions of their teacher's classroom structure and this relationship with a student's goal orientation needs to be communicated. First, educators need to be more cognizant of the effect that students' attributional beliefs can have on their achievement goal orientations. Second, the learning environment needs to provide more preventive wraparound services to children that are developing maladaptive goal patterns of behavior. Third, educators need to take into account how students' cognitions and affect shape students' achievement outcomes. Finally, educators need to identify ways to increase students' academic efficacy to counteract any avoidance behavior that may inhibit persistence and a commitment to future endeavors. Educators should also help develop more innovative programs centered on heightening the level of conscious awareness of African American males so that they can see themselves as academically and socially competent and not defined by labels. Although educators are on the front line of interacting with students, the dissemination of study findings seems appropriate for teacher training programs as well.

## **Implications for Schools**

The classroom goal structures also appear to play a vital role in the type of achievement goals that students employ. Schools should modify or change the nature of students' experiences in the learning environment to include more mastery-driven instruction. This would increase opportunities for students to develop more meaningful learning and a deeper level of processing that can help students develop the cognitive skills needed to evaluate and improve their learning. Finally, policy-makers and administrators should examine the frameworks of other school models that have proven

to be effective in helping African American males achieve. It is also recommended that school administrators allow educators ample time to utilize different instructional approaches when providing instruction to students that are experiencing educational difficulties.

### **Significance of Study**

The current investigation adds to the literature on achievement motivation and its correlates in an African American population. This information can be used by teachers or school personnel. Teachers can impact how a student perceives the relevance of school for their future success. In other words, teachers play an integral role in motivating students. Teachers can help students understand the relevance and significance of school by how they relay the class material or content to meet the students' needs and goals. Higbee (1996) suggested that educators should encourage students to investigate their own attitudes and beliefs concerning their motivation to learn, as well as their own goals related to higher education. The end result is that learning is impacted when students take more ownership and personal responsibility for their learning.

### **Limitations**

The current study is limited by a homogenous sample and the use of data that was collected at a single point in time. Due to the small sample size, a factorial analysis was not conducted. In addition, because the participants attended a college preparatory program through KIPP, the dynamics of the school curriculum differ from other public school systems. This difference in curriculum prevents the researcher from being able to make generalizations for other school programs. By not having access to student grades, the researcher was unable to make any comparisons between students' achievement and

was unable to determine the students' level of improvement in the college-preparatory program prior to them enrolling in the program. Finally, because the majority of the participants were African American, the researcher is unable to make generalizations about the goal orientations of other minority students who participate in a college-preparatory program.

### **Conclusion**

The current study supports prior research findings in that mastery goals appear to be more facilitative in promoting learning and can be better predictor variables for education attainment and future expectations for success. Since no differences were found in the goal orientations of male and female students, this research suggests that male students are indeed capable of adopting adaptive goal orientations that promote academic achievement. When mastery orientations are promoted in the classroom, students' academic self-efficacy can increase along with students' expectations for success. For the students who espouse more performance-approach-oriented goals, educators should continue to support their achievement but help them attribute their successes to effort and effective strategies and attribute their failures to low effort and ineffective strategies, modeling and structuring instruction around a mastery orientation.

Further research should include a longitudinal study to assess whether students' goal orientations change as they advance through school or if their goal orientations change over time. It would also be advantageous to see if the college-preparatory students who participated in this study continued their educations to pursue higher degrees, which would allow some insight into the effectiveness of the school program and the use of

adaptive goal orientations. It may also be informative to compare the goal orientations of African American students participating in different types of educational programs.

Additional research on African American students' attributional beliefs should be evaluated more in-depth to fully understand the engagement process and the reasons why students approach and engage in learning from their own points of view. It may also be advantageous to learn whether students adopt similar goal patterns to their parents in order to identify ways parents can provide more educational support for their children. The findings from the current investigation add to the literature on this important topic and can help educators learn more about the achievement goal patterns of African American students.

## References

- Ablard, K. E., & Lipschultz, R. E. (1998). Self-regulated learning in high-achieving students: Relations to advanced reasoning achievement goals, and sex. *Journal of Educational Psychology, 90*(1), 94–101.
- Abrahamsen, F. E., Robert, G. C., & Pensgaard, A. M., (2007). Achievement goals and gender effects on multidimensional anxiety in national elite sport. *Psychology Sport Exercise, 9*, 449-464.
- Alderman, M. K. (1990). Motivation for at-risk students. *Educational Leadership, 48*(1), 27–30.
- Ames, C. (1990). Motivation: What teachers need to know. *Teachers College Record, 91*(3), 409–421.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*(3), 261–271.
- Ames, C., & Ames, R. (1984). Systems of student and teacher motivation: Toward a qualitative definition. *Journal of Educational Psychology, 76*, 535-556.
- Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*(3), 260–267.
- Anderman, L. H. (1999). Expanding the discussion of social perceptions and academic outcomes: mechanisms and contextual influences. In T. Urdan, M. Maehr, & P. R. Pintrich, (Eds.), *Advances in motivation and achievement*, Volume II, pp. 303-336.

- Anderman, L. H. (2003). Academic and social perceptions as predictors of change in middle school students' sense of school belonging. *Journal of Experimental Education, 72*, 5-22.
- Anderman, L. H., & Anderman, E. M. (1999). Social predictors of changes in students' achievement goal orientations. *Contemporary Educational Psychology, 25*, 21-37.
- Anderman, E. M., & Midgley, C. (1997). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology, 22*(3), 269–298.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bandura, A., Barbaranelli, C., Caprara, V., & Pastorelli, C. (1986). Multifaceted impact of self efficacy beliefs on academic functioning. *Child Development, 67*(3), 1206–1222.
- Bateman, M., & Kennedy, E. (1997). Male African Americans, single parent homes, and educational plans: Implications for educators and policy makers. *Journal of Education for Students Placed at Risk, 2*, 229-250.
- Blumenfeld, P. C. (1992). Classroom learning and motivation: Clarifying and expanding goal theory. *Journal of Educational Psychology, 84*, 272-281.
- Bong, M. (2001). Between and within-domain relations of academic motivation among middle and high school students: Self-efficacy, task value, and achievement goals. *Journal of Educational Psychology, 93*, 23–34.

- Brdar, I., Rijavec, M., & Loncaric, D. (2006). Goal orientation, coping with school failure and school achievement, *European Journal of Psychology of Education*, *21*, 53-70.
- Butler, R. (1989). Mastery versus ability appraisals: A developmental study of children's observations of peer's work. *Child Development*, *60*, 1350-1361.
- Cohen, D. K. (1988). Teaching practice: Plus que ca change. In P. W. Jackson (Ed.), *Contributing to educational change: Perspectives on research and practice* (pp. 27-84). Berkeley, CA: McCutchan.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, *41*(10), 1040–1048.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, *95*(2), 256–273.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, *34*, 169-189.
- Elliot, A. J. (2005). A conceptual history of the achievement goal construct. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52-72). New York, NY: Guilford Press.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, *72*, 218–232.
- Elliot, A. J., & Harackiewicz, J. M. (1996). Approach and avoidance achievement goals

- and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 70, 461–475.
- Elliot, A. J., & McGregor, H.A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501–519.
- Elliot, A. J., McGregor, H. A., & Gable, S. L. (1999). Achievement goals, study strategies, and exam performance: A mediational analysis. *Journal of Educational Psychology*, 91, 549-563.
- Elliot, E. S., & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology*, 54(1), 5–12.
- Epstein, J. L. (1988). Effective schools or effective students: Dealing with diversity. In R. Haskins & D. MacRae (Eds.), *Policies for America's public schools: Teachers, equity, and indicators* (pp. 89–126). Norwood, NJ: Ablex.
- Freeman, K. E., Gutman, L. M., & Midgley, C. (2002). Can achievement goal theory enhance our understanding of the motivation and performance of African American young adolescents? In C. Midgley (Ed.), *Goals, goal structures and patterns of adaptive learning* (pp. 175-204). Mahwah, NJ: Lawrence Erlbaum Associates.
- Garibaldi, A. M. (1992). Educating and motivating African American males to succeed. *Journal of Negro Education*, 61, 4-11.
- Graham, S. (1994). Motivation in African Americans. *Review of Educational Research*, 64(1), 55–117.
- Graham, S., & Weiner, B. (1996). Theories and principles of motivation. In D. Berliner &

- R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 63–84). New York, NY: Macmillan.
- Harackiewicz, J. M., Barron, K. E., & Elliot, A. J. (1998). Rethinking achievement goals: When are they adaptive for college students and why? *Educational Psychologist, 33*, 1-21.
- Harackiewicz, J. M., Barron, K. E., Pintrich, P. R., Elliot, A. J., & Thrash, T. M. (2002). Revision of achievement goal theory: Necessary and illuminating source. *Journal of Educational Psychology, 94*, 638-645.
- Holzman, M. (2006). *Public education and Black male students: The 2006 state report card*. Schott Educational Inequity Index. Cambridge, MA: Schott Foundation for Public Education.
- Hoosain, E. W. (1994). Enhancing student motivation: Make learning interesting and relevant. *Education, 114* (3), 457-480.
- Jackson, J. F. L., & Moore, J. L., III. (2006). African American males in education: Endangered or ignored. *Teachers College Record, 108*, 201-205.
- Kaplan, A., & Maehr, M. (1999). Achievement goals and student well-being. *Contemporary Educational Psychology, 24*, 330-358.
- Maddux, J. E., Norton, L. W., & Stoltenberg, C. D. (1986). Self-efficacy expectancy, outcome expectancy, and outcome value: Relative effects on behavioral intentions. *Journal of Personality and Social Psychology, 51*, 783-789.
- McCombs, B. L., & Pope, J. E. (1994). *Motivating hard to reach students*. Washington, DC: American Psychological Association.

- McInerney, D. M., Hinkley, J., Dowson, M., & Van Etten, S. (1998). Aboriginal, Anglo, and immigrant Australian students' motivation beliefs about personal academic success: Are there cultural differences? *Journal of Educational Psychology, 90* (4), 621-629.
- Meece, J., & Holt, K. (1993). A pattern analysis of students' achievement goals. *Journal of Educational Psychology, 85*(4), 582-590.
- Meece, J. L. (1991). The classroom context and students' motivational goals. In M. L. Maehr & P. R. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 7, pp. 261-286). Greenwich, CT: JAI Press.
- Meece, J. L., Blumenfeld, P. C., & Hoyle, R.H. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology, 80*(4), 514-523.
- Middleton, M. J., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An underexplored aspect of goal theory. *Journal of Educational Psychology, 89*(4), 710-718.
- Midgley, C., Kaplan, A., & Middleton, M. (2001). Performance-approach goals: Good for what, for whom, under what circumstances, and at what cost? *Journal of Educational Psychology, 93*(1), 77-86.
- Midgley, C., Maehr, M. L., Hruda, L. Z., Anderman, E., Anderman, L., Freeman, K. E., Gheen, M., Kaplan, A., Kumar, R., Middleton, M. J., Nelson, J., Roeser, R., & Urdu, T., (2000). *Manual for the Patterns of Adaptive Learning Scales (PALS)*. Ann Arbor, MI: University of Michigan.

- Flowers, L. A., Guion, L. A., Moore, J. L., III., Zhang, Y., & Staten, D. L. (2004). Improving the experiences of non-persistent African American males in engineering programs; Implication for success. *National Association of Student Affairs Professionals Journal*, 7, 105-120.
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91(3), 328–346.
- Niemivirta, M. (1998). Individual differences in motivation and cognitive factors affecting self regulated learning – A pattern-oriented approach. In P. Nennering, R. S. Jager, A. Frey, & M. Wosnitza (Eds.), *Advances in Motivation* (pp. 23-42) Landau: Verlag Empirische Padagogik.
- Nolen, S. B. (1988). Reasons for studying: Motivational orientations and study strategies. *Cognition and Instruction*, 5, 269–287.
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading and Writing Quarterly*, 19, 139–158.
- Pajares, F., Britner, S. L., & Valiante, G. (2000). Relation between achievement goals and self-beliefs of middle school students in writing and science. *Contemporary Educational Psychology*, 25, 406-422.
- Patrick, H., Ryan, A. M., & Pintrich, P. R. (1999). The differential impact of extrinsic and mastery goal orientations on males' and females' self-regulated learning. *Learning and Individual Differences*, 11, 153-171.
- Phan, H. P., 2008. Multiple regression analysis of epistemological beliefs, learning approaches, and self regulated learning. *Elect. J. Res. Educ. Psychology*, 6, 157-184.

- Pintrich, P. R. (2000). Multiple goals, multiple pathways: The role of goal orientation in learning and achievement. *Journal of Educational Psychology, 92*, 544-555.
- Pintrich, P., & DeGroot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology, 82*(1), 33–40.
- Pintrich, P. R., & Schunk, D. H. (1995). *Motivation in education: Theory research and applications*. Englewood Cliffs, NJ: Prentice Hall.
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: Theory research and applications*. Englewood Cliffs, NJ: Prentice Hall.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology, 88*(1), 408–422.
- Ryan, A., & Pintrich, P. (1997). Should I ask for help?: The role of motivation and attitudes in adolescents' help seeking in math class. *Journal of Educational Psychology, 89*, 329–341.
- Shim, S., Ryan, A. M., & Anderson, C. J. (2008). Achievement goals and achievement during early adolescence: Examining time-varying predictor and outcome variables in growth-curve analysis. *Journal of Educational Psychology, 3*, 655-671.
- Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self perceptions, and anxiety. *Journal of Educational Psychology, 89*(1), 71–81.

- Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychology, 52*(6), 613–629.
- Thernstrom, A., & Thernstrom, S. (2003). No excuses: Closing the racial gap in learning. New York, NY: Simon & Schuster Paperbacks.
- Thrash, T. M., & Elliot, A. J. (2002). Implicit and self-attributed achievement motives: Concordance and predictive validity. *Journal of Personality, 70*(5), 729–755.
- Turner, J. C., Meyer, D. K., Cox, K. C., Logan, C., DiCintio, M., & Thomas, C. T. (1998). Creating contexts for involvement in mathematics. *Journal of Educational Psychology, 90*, 730-745.
- U. S. Department of Education. (2006). *The condition of education 2006* (NCES 2006-071). National Center for Education Statistics. Washington, DC: U. S. Government Printing Office.
- Wlodkowski, R. J., & Jaynes, J. H. (1990). Eager to learn. San Francisco, CA: Jossey-Bass
- Wolters, C. A. (2004). Advancing achievement goal theory: Using goal structures and goal orientations to predict students' motivation, cognition, and achievement. *Journal of Educational Psychology, 96*, 236-250.
- Wolters, C. A., & Pintrich, P. R. (1998). Contextual differences in student motivation and self regulated learning in Mathematics, English, and Social Studies classrooms. *Instructional Science, 26*, 27-47.
- Young, A. (1997). I think therefore I'm motivated: The relations among cognitive strategy use, motivational orientation and classroom perceptions over time. *Learning and Individual Differences, 9*, 249-283.

## **University of Memphis Informed Consent Form Students' Perceptions and Their Impact on Achievement Goals**

Your child is invited to participate in a research study conducted by Donna Gray, a graduate student from the UNIVERSITY of MEMPHIS. The purpose of this study is to examine why some students are very motivated to learn and why others appear to be less interested in learning. Your child has been selected as a possible participant in this study because he or she can give a student's perspective about the school environment and their reasons for wanting to learn.

If you decide to allow your child to participate, your child will be given a survey to fill out. It will take approximately 30 minutes during school hours.

There are no risks to participating in this study, as the questions are non-controversial. There are no direct benefits to the students. The aim is to heighten educators' awareness in how students' beliefs and expectations influence learning. I hope that significant implications can be learned to help students develop goals that will enhance learning.

The data will be analyzed to see if there is a relationship between students' perceptions and the way they formulate achievement goals. The data will be coded and transferred from the survey into a computer file, using a correlation statistical test to describe and measure the relationship between students' perceptions and achievement goals. The data will be interpreted and conclusions will be drawn from the results.

Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained and data gathered will remain private. Your child will be given a code number. The key to the code will be kept in a separate, locked file from the data. The consent form will be kept in a locked file from the data. Only the researcher will have access to the files. Participant's name and other facts will not appear when this study is presented. The data will be stored for 3 years and then destroyed.

Your child's participation is voluntary and no compensation will be offered. Your decision whether or not to allow your child to participate will not affect your or your child's relationship with the school. If you decide to allow your child to participate, you and your child are free to withdraw your consent and discontinue participation at any time without penalty.

If you have any questions, concerns or comments about the study, please feel free to contact me or my advisor.

Thank you  
Donna Gray

4320 Loral Cove  
Memphis, TN 38109  
(901) 859-9918  
[drgray@memphis.edu](mailto:drgray@memphis.edu)

Faculty advisor:  
Dr. Christian Mueller  
100 Ball Hall  
Memphis, TN 38152  
(901) 678-4392  
[cemuellr@memphis.edu](mailto:cemuellr@memphis.edu)

If you have questions regarding your rights as a research participant, please contact the Chair of the Institutional Review Board for the Protection of Human Subjects, Administration 315, The University of Memphis, Memphis, TN 38152, telephone (901) 678-2533.

Your signature indicates that you have read and understand the information provided above, that you willingly agree to allow your child to participate, that you and/or your child may withdraw your consent at any time and discontinue participation without penalty, that you will receive a copy of this form, and that you are not waiving any legal claims.

Two copies will be given to you. One copy you will keep for your record and the other copy will need to be returned to the researcher.

Signature of parent or guardian:

\_\_\_\_\_

Print name:

\_\_\_\_\_

Date: \_\_\_\_\_

Child's assent:

\_\_\_\_\_

Date: \_\_\_\_\_

<b>Student Achievement Survey</b> <b>(Spring 2009)</b>
---

**PLEASE READ ALL DIRECTIONS CAREFULLY AND ANSWER THE QUESTIONS AS HONESTLY AS YOU CAN.**

**Directions:** Here are some questions about you as a student in this class. Please circle the number that best describes what you think.

- |  | 1                    | 2        | 3       | 4     | 5                 |
|--|----------------------|----------|---------|-------|-------------------|
|  | Strongly<br>Disagree | Disagree | Neutral | Agree | Strongly<br>Agree |
| 1. It's important to me that I learn a lot of new concepts this year.                        |                      |          |         |       | 1 2 3 4 5         |
| 2. One of my goals in class is to learn as much as I can.                                    |                      |          |         |       | 1 2 3 4 5         |
| 3. It's important to me that I thoroughly understand my class work.                          |                      |          |         |       | 1 2 3 4 5         |
| 4. One of my goals is to show others that I'm good at my class work.                         |                      |          |         |       | 1 2 3 4 5         |
| 5. One of my goals is to show others that class work is easy for me.                         |                      |          |         |       | 1 2 3 4 5         |
| 6. One of my goals in class is to avoid looking like I have trouble doing the work.          |                      |          |         |       | 1 2 3 4 5         |
| 7. It's important to me that my teacher doesn't think that I know less than others in class. |                      |          |         |       | 1 2 3 4 5         |
| 8. It's important to me that other students in my class think I am good at my class work.    |                      |          |         |       | 1 2 3 4 5         |
| 9. It's important to me that I don't look stupid in class.                                   |                      |          |         |       | 1 2 3 4 5         |
| 10. One of my goals is to master a lot of new skills this year.                              |                      |          |         |       | 1 2 3 4 5         |
| 11. It's important to me that I look smart compared to others in my class.                   |                      |          |         |       | 1 2 3 4 5         |
| 12. One of my goals is to keep others from thinking I'm not smart in class.                  |                      |          |         |       | 1 2 3 4 5         |
| 13. In our class, trying hard is very important.   |                      |          |         |       | 1 2 3 4 5         |
| 14. In our class, really understanding the material is the main goal.                        |                      |          |         |       | 1 2 3 4 5         |

**PLEASE SEE NEXT PAGE!**

Student Achievement Survey

	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
15. My chances of succeeding later in life don't depend on doing well in school.					1 2 3 4 5
16. Even if I do well in school, it will not help me have the kind of life I want when I grow up.					1 2 3 4 5
17. In our class, it's OK to make mistakes as long as you are learning.					1 2 3 4 5
18. Doing well in school doesn't improve my chances of having a good life when I grow up.					1 2 3 4 5
19. I'm certain I can figure out how to do the most difficult class work.					1 2 3 4 5
20. Even if the work is hard, I can learn it.					1 2 3 4 5

Please answer the following demographic questions:

1. Sex:  Male  Female
2. Age: \_\_\_\_\_
3. Which best describes your ethnicity (check one):
  - Asian  Other
  - Black/African-American  White/Caucasian
  - Hispanic/Latino
4. Describe your type of household.
  - Single Parent Household  Two Parent Household  Other
5. What is the highest level of education you ever expect to complete? (Please check only one box)
  - Less than high school  Some College/Associate's Degree
  - High school completion/GED/Certificate  College Completion
  - Trade or Vocational School  Graduate School (MA, PhD, MD)
6. What job or occupation do you plan to have when you are age 30?
  - Laborer, farmer or housewife**
  - Service Worker** (included personal services, customer services, mechanic, repairer, service technicians/skilled operatives/transport operatives)
  - Craftsperson, military, police, security** (Includes craftsmen/protective services, criminal/justice/military)
  - Sales, Clerical** (includes secretaries, receptionists/cashiers, tellers, sales clerks, clerks, data entry/clerical, other/sales/purchasing)
  - Technician/semi-professional** (includes cooks, chefs, bakers, cake decorators, legal support/research assistants, lab technicians/technical workers/computer equipment operators/health, recreation services)
  - Business, manager, business owner** (includes business/financial support services/financial services/medical services/computer systems/computer programmers/performers/artists/midlevel manager/supervisor)

**Administrator/semi-professional** (includes medical licensed professional/  
K-12 educators/human services/editors, writers, reporters)

**High executive/major professional** (includes doctor, lawyer, college educator,  
Engineer, architect, software engineer, scientist)

**Other (please list):** \_\_\_\_\_