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Motivation to Pursue Higher Education

David W. Knutsen
Olivet Nazarene University, drdaveknutsen@gmail.com

MOTIVATION TO PURSUE HIGHER EDUCATION

by

David W. Knutsen

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ABSTRACT

by

David W. Knutsen, Ed.D.
Olivet Nazarene University
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Non-traditional college students now comprise an ever increasing portion of the overall number of college students but little is known about the factors that motivate one to pursue higher education. The purpose of this study was to explore the motivating factors, both extrinsic and intrinsic, that lead U.S. workers to pursue higher education. This research was conducted using 200 students of Robert Morris University and the data were collected using a survey instrument that measures the extent to which various factors influenced one's motivation to pursue higher education. Analysis of the data revealed that overall the most important extrinsic factor rated was "to increase my job opportunities", and the most important intrinsic factor was "to advance my personal growth". Additional analysis also revealed no main effect of gender though some interaction, a significant correlation between the survey items and age, and a main effect of ethnicity of participant and item rated.

TABLE OF CONTENTS

Chapter Page

LIST OF TABLES

CHAPTER I

INTRODUCTION

The years between 1946 and 1964 are considered the baby boom era in the United States and during that time-period 76 million people were born. The number of births during this 19-year period has played a major role in many aspects of our economy over the last 50 years, most notably determining the size and age composition of the labor force for the last 30 years. As aging baby-boomers begin retiring, the effects on the overall economy and on certain occupations and industries will create a need for younger workers to fill the vacated jobs, many of which require relatively high levels of skill (Dohm, 2000). In the post World War II era, the reward for manual labor has declined relative to college educated (white collar) work (Silvia, 2007). Over the last fifteen years growth in the manufacturing sector of the workforce has declined while the service sector employment has been growing, though moderately.

This shift in the makeup of the workforce will influence the type of workers needed in the future. According to Bureau of Labor Statistics (BLS) data, the number of jobs for workers with a bachelor's or higher degree is projected to be 43 million by the year 2016, an increase of 5 million jobs from the 38 million in 2006, or a growth rate of 13%. It is no wonder workers who have a bachelor's degree expect many job opportunities in the future (Liming & Wolf, 2008).

The increase in the projected number of bachelor degrees in the U.S. workforce is due in large part to the change in available jobs. As the manufacturing of tangible products increases overseas, for example LCD TV's and computers, less merchandise

will be produced in the United States which leads to a reduction of the manufacturing workforce (Liming & Wolf, 2008).

The manufacturing segment of the U.S. workforce has traditionally been non-college educated employees with the exception of executive level management. As manufacturing jobs diminish, so too will the need for non-college educated employees. Most of these displaced workers will either be forced to move to other blue collar type work, construction for example, or pursue higher education as a means to increase their chances of employment (Silvia, 2007).

In contrast, as the U.S. moves away from the manufacturing of goods, it becomes more of a service producing workforce. Service sector employment has traditionally required an employee with a higher skill level because of the increased analytical thinking required to perform the service. For example, a worker on a manufacturing assembly line may only be required to install or connect similar components continually throughout the workday (Carlson, 2009). Deductive reasoning or analytical thinking would be utilized less in these types of jobs whereas an employee who performs consulting services would be required to use a higher degree of analytical thinking. Service sector jobs are usually less about repetition and more about individual analysis of separate and often unrelated pieces of information (Dohm & Wyatt, 2002).

As the American economy continues to change, with less emphasis placed on manufacturing jobs due to global market forces, U.S. workers will need to acquire new skills to compete in the global workplace. This change towards higher skill-based employment compared to unskilled work will require more education for U.S. workers to obtain greater job opportunities (Carlson, 2009). As jobs in the United States continue

to shift away from manufacturing and farming towards white collar jobs, college-educated individuals will be in even more demand (Lee & Mather, 2008).

Given the shift in the workforce from manufacturing to service sector jobs, employers are moving towards education as the most important factor when hiring new employees (Silvia, 2007). The workplace has seen the educational upgrading of employees in order to compete in the every increasingly complex global economy. Many employers feel that college-educated workers are more motivated, learn tasks more quickly, are better able to meet deadlines, and have better problem-solving and communication skills compared to non-college educated employees. These factors along with the decreased training time employers need to spend on college educated workers are making college graduates the first choice for employers (Dohm & Wyatt, 2002).

According to the human capital theory, investments in education and training raise the future returns in the labor market. Employers who develop the intellectual capital of their employees create a more productive and skilled workforce (Butler, Deprez, & Smith 2004).

Over the past three decades the percent of U.S. workers who have college degrees or have some college education has doubled. During that same time period those workers with only a high school diploma or less has declined. At the end of 2006, 48% of the U.S. population had educational attainment of a high school diploma or less, 28% had a college degree or higher, and 24% had some college education (Liming & Wolf, 2008).

The increase in the number of students obtaining college degrees, coupled with the tightening labor market, has led many to fear the over-education of college

graduates. Yet, despite the increased numbers of college graduates over the past 30 years, college graduates still enjoy more favorable starting positions than workers with only a high school diploma. One million students earn their bachelor's degree each year and though it does not guarantee finding a dream job, a college education does prepare U.S. workers to be competitive in the workplace and prepare for pursuit of career goals. Having a college degree is one of the best ways to gain and maintain a competitive edge in the workplace. On average, college graduates enjoy advantages from more job opportunities, better salaries, and increased access to healthcare and retirement savings over non-college educated employees (Dohm & Wyatt, 2002).

U.S. workers who earn a college degree will earn almost two-thirds more than workers with only a high school diploma; workers with a master's degree will earn almost twice as much, and U.S. workers who hold a professional degree earn on average more than three times greater than those with only a high school diploma (Jongsma, 2007).

Wages usually increase the fastest for workers who are in the greatest demand, and between 1992 and 2002, real earnings, adjusted for inflation, rose 6% for full-time wage and salary workers aged 25 to 64 who held at least a bachelor's degree. In contrast, real earnings increased only 2% for individuals whose highest level of education was a high school diploma. What is most remarkable though is that wages increased for college educated workers despite a 33% increase in the number of college graduates aged 25 to 64 and working full-time, far surpassing the 4% increase in the number of workers with a high school diploma (Dohm & Wyatt, 2002).

The combination of field of study along with higher levels of educational attainment also affects one's earning power. Physicians, lawyers, and top executives usually command the highest salaries in the workplace, which reflects the additional education that must compliment their work history (Dohm & Wyatt, 2002).

The weekly earnings of an individual with an educational attainment less than a high school diploma was $419 compared to $1,441 for an individual with a Doctoral degree (Liming & Wolf, 2008). Of American households with at least one bachelor's degree, only 3.6% live below the poverty line compared with a staggering 23.8% of households without similar education attainments (Jongsma, 2007).

In addition to increased earnings, college graduates face unemployment less often during their career and for shorter periods of time and have higher incomes than the rest of the labor force (Jongsma, 2007). Among U.S. workers, college educated workers have the lowest unemployment rate compared to workers with only a high school diploma or those who have no high school diploma (Lee & Mather, 2008). Unemployment rates drop dramatically as U.S. workers obtain college degrees. Workers with less than a high school diploma have an unemployment rate of 6.8% compared to 1.4% for workers with a doctoral degree (Liming & Wolf, 2008).

Besides enjoying lower unemployment rates and increased earnings another advantage college educated workers enjoy over workers with only a high school diploma is increased likelihood of being covered by health insurance. Nearly 95% of full-time workers aged 25 to 54 with at least a bachelor's degree have healthcare coverage, and roughly 90% have retirement plans (Carnevale, 2006).

Pursuing a college degree is both time consuming and expensive, but the long-term benefits far exceed the initial investment cost (Dohm & Wyatt, 2002). Most decisions involve some form of costs as well as benefits, and individuals must weigh the costs and benefits to decide if the net benefit is worth it. The most important rule for optimal decision making is deciding to take action only if the marginal benefit is greater than the marginal costs and the same holds true when deciding upon pursuing higher education. With regards to a college degree, the costs are not just those that are paid out in the form of tuition or books. The biggest cost in deciding whether or not to attend college is the earnings a worker could earn from a full-time job while in college. Acquiring a college degree is similar to making an investment whereas the costs are up front and the benefits do not start (at least monetarily) until graduation and full-time employment has begun (Gittins, 2009). Adjusting for inflation, a worker with a college degree will recoup their initial education investment after 14 years of earnings (Jongsma, 2007).

In addition to the costs, there is a tremendous time commitment when entering a program to pursue higher education. Most U.S. workers entering such programs have other responsibilities such as: part-time or full-time employment, family obligations, or other time constraints in general, to name a few (Gittins, 2009). In light of the costs involved with pursuing a higher education, and the tremendous time commitment, one may ask what are the leading factors motivating workers to pursue higher education.

Usually when business cycles decline, workers tend to upgrade and refresh their skills to ensure employment and be prepared when the cycle begins to upturn. This added education prepares workers to seek better job opportunities in the future. During a

recession as unemployment rates increase, there is an even greater motivation for workers to seek ways to enhance their job related skills or enter a new field all together (Carlson, 2009).

There was an 8% increase in college applications during February 2009 which was the largest in eight years. The increasing unemployment rate due to the recession has been credited for this large increase. Much speculation assumed college enrollment would fall as students would be less likely to spend money on classes during the recession. It is clear that many are thinking it is wise to invest in education now in order to be prepared when the recession ends (Woolcock, 2009).

The large increase in college enrollment is also in part due to working adults looking to retrain or enhance their skills. The number of applications from candidates older than 24 increased by 12.6%, which indicates workers are looking to increase their skills during a very difficult time in the job market (Woolcock, 2009).

Nonprofit organizations that help people study for GEDs and other adult education classes are being swamped with requests for assistance. As job losses mount, individuals are seeking to increase their skills, and because of that, GED and other adult education classes are seeing a steady increase in enrollment. California's 9.3% unemployment rate, the highest in 15 years, is in part the cause of the increased number of people taking GED classes. Forty-six thousand candidates took the GED exam in California in 2005 compared to 60,000 in 2008 (Coyne, 2009).

Some people attend college as a quest for self-improvement, while others may attend in order to enter occupations in which a college degree may be preferred or even required for employment. Although it would be impossible to ascertain each student's

individual motivation for attending college, one thing is certain. More U.S. workers are earning college degrees and those degrees have distinct and measurable benefits as it relates to earnings, career opportunities, healthcare, and retirement savings (Dohm & Wyatt, 2002).

Statement of the Problem

The problem addressed in this study is that little is known about the factors that motivate U.S. workers to pursue higher education. The purpose of this study is to explore the motivating factors leading U.S. workers to pursue higher education. Specifically, this study is designed to assess the different motivating factors, both extrinsic and intrinsic, leading U.S. workers to seek higher education. In addition, the study seeks to determine the relationship between gender, age, and ethnicity as it relates to extrinsic and intrinsic factors that motivate U.S. workers' pursuit of higher education.

Significance of the Study

The research and ultimate findings of this study will provide knowledge regarding the motivating factors leading U.S. workers to pursue higher education. The findings should provide institutions of higher education with information for developing degree programs, designing and developing more effective classroom strategies, and creating marketing tools to attract and retain students. Finally, the outcome of this study will provide valuable information to employers who are creating benefit plans to attract and retain employees, as well as encourage additional employee training.

Background

Motivation is a highly complex concept that is influenced by a large number of factors, but can be summarized generally as either extrinsic or intrinsic. Extrinsic refers to external factors and intrinsic refers to internal factors as it relates to an individual. Internal motivators are intrinsic needs that satisfy a person, whereas external motivators are considered environmental factors that motivate an individual (Bassy, 2002).

According to Vallerand (1992) one of the most important concepts in education is motivation, and a scale used to measure motivation in individuals is the self-determination scale. The self-determination scale is composed of 28 items divided into seven subscales assessing three types of intrinsic motivation (intrinsic motivation to know, to accomplish things, and to experience stimulation), three types of extrinsic motivation (external, introjected, and identified regulation), and amotivation (Deci & Ryan, 1991).

In general, intrinsic motivation refers to the fact of doing an activity for itself and the pleasure and satisfaction derived from participation (Deci & Ryan, 1991). Intrinsic motivation to know can be defined as performing an activity for the pleasure and satisfaction that one experiences while learning, exploring, or trying to understand something new. Intrinsic motivation toward accomplishments can be defined as engaging in an activity for the pleasure and satisfaction experienced when one attempts to accomplish or create something. Intrinsic motivation to experience stimulation is operative when someone engages in an activity in order to experience stimulating

sensations (e.g., sensory pleasure, aesthetic experiences, as well as fun and excitement) derived from one's engagement in the activity (Vallerand, 1992).

Contrary to intrinsic motivation, according to Deci and Ryan (1991) extrinsic motivation pertains to a wide variety of behaviors which are engaged in as a means to an end and not for their own sake, and can be ordered along a self-determination continuum from lower to higher levels (Deci, 1975).

According to Deci (1975), individuals are amotivated when they do not perceive contingencies between outcomes and their own actions. They are neither intrinsically nor extrinsically motivated. They perceive their behaviors as caused by forces outside of their own control.

According to Analoui (2000) motivation is an individual drive necessary to direct actions and behavior towards the achievement of a goal. According to Luthans (1995), motivation is the drive to fulfill certain needs and expectations. The strongest motivator, according to Wiley (1997), is something that people value, but lack. So if you are aware of what an individual values, a stimulus can be created to motivate that individual to perform a desired task in a manner which will achieve that perceived value.

Westerman and Donoghue (1989) refer to motivation as a process which energizes a person's behavior and directs him or her towards attaining a goal. In the workplace, according to Bassy (2002), motivation deals with forces that direct and sustain behavior towards the attainment of organizational goals and an individual's willingness to put efforts into his or her work to obtain incentives or rewards for achieving specific goals.

The desire of an individual to perform his/her work well in order to achieve satisfaction is an intrinsic motivation. For example, an individual performs a task in order to achieve a certain type of internal state which he or she experiences as rewarding. Because it is a state of being that the individual is motivated by, intrinsic motivation relates to psychological rewards rather than physical rewards. Deci (1975) referred to intrinsically motivated behavior as behavior that is determined by an individual's need for feeling competent and self-determining.

According to Mullins (1999) extrinsic motivation refers to tangible rewards such as compensation, fringe benefits, work environment, work conditions, and job security. Extrinsic motives cannot be satisfied by the work itself, which means external rewards such as food, money, praise, etc. are the main reason for a person to engage in activities according to Deci (1975).

Individuals may differ in their preferences. Some individuals may prefer economic rewards, while other individuals will favor intrinsic satisfaction and social relationships. Because preferences change over time, motivation needs to be sustained and developed as individual and organizational factors change (Mullins, 1999).

According to Maslow (1943), human needs arrange themselves in hierarchies of pre-potency. In other words, one need usually rests on the prior satisfaction of another more pre-potent need. Maslow’s research lists five basic needs: physiological, safety, love, esteem and self-actualization. And although each of these needs is separate, or different, by definition, no one need should be considered isolated from the rest because every need is related to the state of satisfaction or dissatisfaction of the other needs.

Maslow (1943) described ‘higher’ needs as those that emerge after basic needs are satisfied. An individual may seek to acquire a new car, new home, or higher education if physiological hungers are satisfied, but not before, because the ‘hunger’ for the basic needs would become the primary importance if not satisfied. This order of needs is the hierarchy of basic human needs, according to Maslow.

Maslow (1943) described man as a perpetually wanting animal, and man’s physiological needs are the starting point for his needs. Of the physiological needs, food is the most basic. An individual who lacks food would hunger for food much more strongly than for safety, love, esteem, and self-actualization. Everything else in life, goals, desires, etc., would be defined as unimportant if the need for food is not being satisfied. But once satisfied, one would move into the next level of needs.

The authors above have given this author good insight into an understanding, or maybe a misunderstanding, of U.S. workers’ motivation to pursue higher education. Before researching and reading the aforementioned authors, this author assumed everyone is extrinsically motivated to pursue a higher education because it has been proven that a higher education leads to increased lifetime earnings, better job opportunities, and increased access to healthcare and retirement savings. However, some workers may pursue higher education due to intrinsic motivators such as the desire to learn or the desire to challenge one to reach his or her fullest potential. This author also did not consider that workers who choose not to pursue higher education may be pursuing other basic needs that are unfulfilled in their lives. It may be that increased lifetime earnings would be a motivator for many or most U.S. workers if all of their basic needs were being met. There may be a hunger that exists at another

level that, though satisfied for me, is a ‘hunger’ for them. These authors have presented research to suggest motivation is more than just being goal-orientated by extrinsic motivation versus being lazy (as this author believed to some degree before starting on this academic research.) Maybe all behavior is goal-orientated but the goals are different for different people.

Research Questions

Listed below are the research questions that formed the basis for this research.

1. What are the most important extrinsic factors that motivate U.S. workers to pursue higher education?
2. What are the most important intrinsic factors that motivate U.S. workers to pursue higher education?
3. How do gender, age, and ethnicity relate to extrinsic and intrinsic factors motivating U.S. workers to pursue higher education?

Procedure to Accomplish

The population for this study is U.S. workers who are current non-traditional students of Robert Morris University. Non-traditional students refers to students who generally are older than the 18-24 college-aged student who have delayed beginning or returning to college due to reasons such as not having a high school diploma or working full-time or having family obligations, to name a few. Two-hundred participants were surveyed to gather the data necessary to make a fair assessment as to the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education.

In order to assess the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education, data regarding the actual factors must be gathered. A validated survey instrument that was originally created by a doctoral student at the University of South Dakota is being used as the basis for gathering the data for this research. This survey was reviewed and approved by the Doctoral Committee of the University of South Dakota and the completed dissertation was accepted in partial fulfillment for the requirement of the Doctor of Education degree. The survey, based on Maslow's hierarchy of needs, has a seven-point scale that measures the extent to which various factors influenced one's motivation to pursue higher education. The survey was modified in some respects to more efficiently gather the data needed for this research project (see Appendix A for a copy of the survey instrument).

Surveys were administered to the students in a classroom setting during regularly scheduled class times to ensure the participation goal of two hundred students was met. The data collection process took between ten and fifteen minutes, depending on the size of the class and questions that arose. Upon completion of the surveys, students returned the survey document to the researcher. All surveys were held until the goal of two hundred surveys was met, at which time the data gathered were analyzed.

Upon completion of the data gathering, descriptive statistical analyses were conducted by providing tabular depictions of the data gathered from the survey in terms of measures of central tendency (mean, median, and mode). Each rating in the survey is a dependent variable and was used to draw conclusions about the data gathered as it pertains to extrinsic and intrinsic factors motivating the pursuit of

higher education. In addition to the descriptive statistical analyses, inferential statistical analyses were also conducted. The specific statistical procedure used in these analyses was the mixed-factorial analysis of variance (ANOVA). The between-groups factors for these analyses were the demographic variables collected on the survey (e.g., gender and ethnicity of participant), while the within-subjects factors was comprised of the particular statements rated on the survey (e.g., type of extrinsic or intrinsic motivator). The survey ratings themselves served as the dependent variable for these inferential statistical analyses.

CHAPTER II

REVIEW OF THE LITERATURE

In terms of education, America is changing. More individuals are working towards a college degree as many see the benefits of a college education. According to the National Center for Education Statistics there will be a 15% increase in college students over the age of 25 from 2004 – 2014 (Horine, 2007). Along with the increased number of students, the diversity of the student population will vary greatly. Many factors have contributed to the increased diversity of students in higher education, such as economic (decrease in blue-collar jobs), societal (encouragement of minorities, women and those with lower socioeconomic status to attend college) and political changes (Ogren 2005).

Nontraditional students (sometimes referred to as adult learners) are 24 years of age or older and have been out of school for a period of time. When these adults return to school they maintain responsibilities such as employment, family and other responsibilities of adult life, regardless of full or part-time status (Timarong, 2002.)

Adults who once started college but left before completion of a degree are returning to higher education in larger numbers and the impact of these nontraditional students entering college is just beginning to be understood. Very little is known about the factors that motivate an adult to pursue higher education (Spanard, 1990.)

In many ways nontraditional students are similar to the U.S. population as a whole, with one notable exception-they have much higher income. The average annual household income of nontraditional college students is $76,800. Most are married and roughly one-third has a dependent child 18 or younger living at home.

According to Eduventures (2008) a large percentage of nontraditional students are employed as professionals, with one-third working in management (business and financial operations) or in education (training and library services).

Greater and equal access for all citizens to pursue higher education was a major factor in the introduction of community colleges. In the 1950's community colleges were created, providing low-cost education, and more importantly, locally accessible college programs. This allowed adults who were working full-time to continue their education without the need to leave their current job or move to another part of the state or country to attend a university (Spanard, 1990.)

Nontraditional college programs were first introduced in the early 1970's for adults who wanted to pursue higher education but were unable to attend because of the scheduling of traditional college programs. These first nontraditional programs included university-without-walls programs, university extension programs, and contract or experiential learning assessment programs. Because of the creation of various types of academic programs containing more flexible schedules, the nontraditional college student has a viable option when returning to college to complete a degree (Spanard, 1990.)

Recognizing that scheduling is one of the leading criteria for choosing a college, many colleges and universities are becoming more flexible with program schedules. Online learning provides nontraditional students with the convenience and flexibility they demand, as data show almost two-thirds of nontraditional students enrolled or who are considering enrolling are seeking to add online learning as a way to increase scheduling flexibility (Eduventures, 2008.)

For-profit schools have been at the forefront of offering online courses and programs, understanding the convenience such programs have to offer along with the needs of the nontraditional student. As a result, many nonprofit schools have also added online courses as a way to compete with for-profit schools, as well as providing flexible schedules for students (Eduventures, 2008.)

Nontraditional students also favor other non-traditional formats, most notably accelerated programs. Nontraditional students who are working towards making a career change or looking to finish degrees are far more likely to enroll in accelerated programs. In terms of demographics, most nontraditional students enrolling in accelerated programs are young and an ethnic minority (Horine, 2007.)

The overwhelming numbers of nontraditional students who have graduated from a nontraditional college program believe their degree has made a tremendous impact on their careers. Ninety-five percent stated that completing the degree provided far more benefits than costs due to the advent of nontraditional college programs. These nontraditional programs have lowered opportunity costs because of lower tuitions and students are able to attend without leaving their full-time employment (Timarong, 2002).

Aslanian and Brickell (1980) interviewed 2,000 men and women to determine why nontraditional students attend college. The study found that most decisions to pursue higher education were directly related to significant life changes such as career, family, health, religion, or leisure opportunities. Returning to school seemed in most cases to be a consequence of a change or changes in other areas of the nontraditional student's life. For example, some nontraditional students may return to

college to resume their education if they were laid off by their current employer and had to take work at a much lower pay
scale. Pursuing higher education tends to be the means to affect future change or to cope with changes that have already occurred, making the decision a transitional activity (Smart & Pascarella, 1987.)

Though it may be fairly simple to create a list of reasons for nontraditional students to pursue higher education, as well as a list of the factors that have increased the opportunity to pursue such a goal, there still must be an underlying spark which propels the student towards this goal. This spark, or motivator, can be difficult to understand because of the uniqueness of each student, but the research shows there does seem to be some common themes that motivate nontraditional students to pursue higher education. The following section will discuss some of these motivation theories.

Motivation Theories

Researchers and authors have defined motivation in various ways. The great American psychologist Tolman (1932) presented the viewpoint that behavior is caused by purpose. The definition of motivation, from a simple viewpoint, can be described as a condition that activates goal-oriented behavior. This goal directs and energizes the behavior. Motivation is the psychological process that gives behavior purpose and direction (Kreitner, 1995), an internal drive to satisfy an unsatisfied need (Higgins, 1994), and a predisposition to behave in a purposive manner to achieve specific, unmet needs (Buford, Bedeian, & Lindner, 1995). Analoui (2000) suggests that motivation is an individual drive necessary to direct actions and behavior towards

the achievement of a goal, while Luthans (1995) suggests motivation is the drive to fulfill certain needs and expectations. Wiley (1997), put forth the notion that people are motivated by something that they value, but lack. Westerman and Donoghue (1989) refer to motivation as a process which energizes a person's behavior and directs him or her towards attaining a goal. In the workplace, according to Bassy (2002), motivation deals with forces that direct and sustain behavior towards the attainment of organizational goals and an individual's willingness to put efforts into his or her work to obtain incentives or rewards for achieving specific goals. In summary, motivation can be viewed as an act or process of propelling towards a specific goal and the purpose of this study is to determine the extrinsic and intrinsic factors that motivate nontraditional college students to pursue the goal of higher education.

Factors that motivate nontraditional students may not be equally motivating to traditional students. Furthermore one might inquire as to the motivating factors that drive nontraditional college students to pursue higher education and ask if they are the same factors that motivate traditional college students. Wolfgang and Dowling (1981) conducted a research project to study the differences in motivation between traditional and nontraditional college students. Four hundred students were surveyed, and the study found significant differences in the cognitive interests of traditional and nontraditional students in regards to their desire to pursue higher education. Traditional college students were more apt to choose learning for the sake of learning, while nontraditional college students were more apt to pursue higher education for the derived benefits such as job advancement, increased income, and additional employment opportunities.

As indicated by the above discussion there are many definitions of motivation, and many thoughts and theories relating to factors that affect motivation. As one looks through the literature as it pertains to motivation, a reference point needs to be assumed in order to get a better understanding of the concept of motivation and what might create the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education. To establish this reference point, five of the most well known and respected theories of motivation will be presented. After each theory, this author will summarize the importance of the theory as it relates to the current research. The review of this literature and the significance of the findings will put in better context the research conducted by this author as it pertains to the motivation for U.S. workers to pursue higher education.

Maslow's Hierarchy of Needs Theory

According to Maslow (1943) human needs arrange themselves in hierarchies of pre-potency. In other words, one need usually rests on the prior satisfaction of another more pre-potent need. Maslow's research lists five basic needs: physiological, safety, love, esteem and self-actualization. And although each of these needs is separate, or different, by definition, no one need should be considered isolated from the rest because every need is related to the state of satisfaction or dissatisfaction of the other needs.

Maslow (1943) described 'higher' needs as those that emerge after basic needs are satisfied. An individual may seek to acquire a new car, new home, or higher education if physiological hungers are satisfied, but not before, because the 'hunger'

for the basic needs would be of primary importance if not satisfied. This order of needs is the hierarchy of basic human needs, according to Maslow.

Maslow (1943) described man as a perpetually wanting animal, and man's physiological needs are the starting point for his needs. Of the physiological needs, food is the most basic. An individual who lacks food would hunger for food much more strongly than for safety, love, esteem and self-actualization. Everything else in life, goals, desires, etc., would be defined as unimportant if the need for food is not being satisfied. But once satisfied, one would move into the next level of needs.

Using Maslow's (1943) theory, one could assume a nontraditional student would not pursue higher education if the most basic (physiological needs) were not being met. For example, it may seem unlikely for an individual to consider the pursuit of higher education without first securing food and shelter. The thought of visiting a college or university, choosing classes, purchasing the required books and supplies, and then adhering to the rigors of higher education without having food to eat or shelter from the elements seems unrealistic. Also, it could be assumed that a certain 'level' of basic needs must be met before reaching fulfillment. An example of this would be an individual who might have the most basic form of food and shelter, government subsidized food and housing, but may not consider higher education due to being preoccupied with fulfilling completely the basic physiological needs. Upon meeting those needs, an individual could move up the pyramid towards a point that would motivate pursuit of higher education.

Alderfer's Existence / Relatedness / Growth Theory

The second theory of motivation presented is Alderfer's Existence / Relatedness / Growth (ERG) theory (Alderfer, 1969). Alderfer presents three groups of needs for individuals: existence, relationships and growth. Existence is the basic requirements for existence such as physiological and safety needs. This need could be satisfied by earning money at a job in order to buy food, shelter and clothing. Relatedness (relationships) centers on the desire to establish and maintain interpersonal relationships and since workers spend much of their time at work, this need is satisfied to some degree by co-workers. Growth is achieved through personal development and a person's career can provide a significant amount of satisfaction as it relates to growth.

Alderfer's (1969) ERG theory is based on Maslow's (1943) theory but it reduces the number of needs from five to three. It also differs from Maslow's theory in the sense that Alderfer does not see needs as a hierarchy but rather more of a continuation of the other needs. He also states that more than one need may be influential at any one time, and if a higher level need is not obtainable even for a short period of time, the desire for a lower level need will increase which he identifies as the frustration and shy aggression dimension.

This motivation theory is important as it relates to nontraditional students because of the continuum of needs that motivate individuals to pursue higher education. Often times a specific goal might be unattainable, although short-lived, and during that time period other goals are sufficient enough to motivate behavior. If such is the case, an individual returning to school may find a specific job advancement

opportunity to be an unattainable goal at the present moment, but then could become motivated by a more intrinsic goal of learning for the sake of acquiring knowledge.

Hertzberg's Hygiene and Motivational Factors Theory

The third theory of motivation presented is Hertzberg's (1966) Hygiene and Motivational Factors theory. This theory is very similar to Maslow's (1943) Hierarchy of Needs, but Hertzberg's theory is more focused on work environments and is broken down into two sections: hygiene (dissatisfiers), and motivators (satisfiers). The hygiene factors are working conditions, policies and administrative practices, salary and benefits, supervision, status, job security, co-workers and personal life. The Motivating factors are recognition, achievement, advancement, growth, responsibility, and job challenge. Hertzberg's theory states that hygiene factors must be present in the work before motivators can be used to stimulate performance of an employee and that you cannot use motivators on employees until all hygiene factors have been met (Hertzberg).

Hertzberg's (1966) factors (needs) are more specifically job related and reflect things employees want from their work as opposed to Maslow's (1943) Hierrachy of Needs which reflects overall needs in a person's life. Hertzberg's theory of motivation is very relevant to this study because the overwhelming portion of this theory puts the responsibility on the organization to create an atmosphere (or system) of motivational factors in order to incent employee performance. An employee who considers his or herself to be highly motivated could be less motivated or unmotivated if put in an organization that did not provide the hygiene factors Hertzberg states are necessary before motivation can begin.

In the case of nontraditional students and the pursuit of higher education, the individual college or university would be responsible for creating the motivating factors for students in order for the process to begin. This would need to occur during marketing and advertising campaigns, as well as during information and enrollment seminars given by the college or university.

Examples of motivators that might be used to attract nontraditional college students may include recognition from achieving a degree, personal growth, and job advancement. Though it may be fairly simple for a college or university to offer motivators that might encourage individuals to pursue higher education, each college or university would also need to create and support an environment that is conducive to achieving higher education. For example, personal growth and job advancement both could be overwhelming motivators for an individual to pursue higher education, but if the course offerings are not flexible enough to allow for the responsibilities of a full-time job and/or family commitments, the likelihood of starting the degree program, let alone completing it, is highly unlikely. But, if a nontraditional program was to offer a greater degree of flexibility with regards to course offerings, i.e. online course, weekend courses, etc., this could foster an even greater degree of motivation because the ability of achieving higher education seems much more feasible for each student, and this coupled with preexisting motivators such as job advancement and increased income would create a powerful motivating force.

Vroom' Expectancy Theory

The fourth theory of motivation presented is the Expectancy Theory. This theory is presented using a formula to arrive at motivation. The formula is Valence x

Expectancy x Instrumentality = Motivation, and the product of the formula can be thought of as the strength of the drive towards a goal. Valence (or reward) is the amount of desire for a specific goal, expectancy (performance) is the level of belief that the work related effort will result in the completion of the task, and Instrumentality (belief) is the belief that the reward will be received when the task has been completed (Vroom, 1964).

Vroom's (1964) Expectancy Theory states that an individual will act in a certain way based on the expectation that the act will be followed by a given outcome and on the attractiveness of that outcome to the individual. As an example, if a nontraditional college student was working towards a goal of completing a college degree in order to secure a good paying job with many benefits, then that degree has a high level of valence for that student. If the student also believes that a high level of commitment and work put forth towards the degree will subsequently result in completion of a college degree, then the student has a high degree of expectancy. And if a nontraditional college student believes that the commitment and work put forth towards completing a college degree will lead to successful completion of the degree and secure a good paying job with many benefits, the student has a high degree of instrumentality.

Of course motivation is not purely driven by extrinsic factors; an individual may also be motivated by intrinsic factors. An example of intrinsic motivation with regards to pursuing higher education would be an individual who seeks to achieve the goal of a college education because he or she would be the first in the family to do so. The valence for the degree is derived from being the first in the family to achieve a

degree, the expectancy is the knowledge that completing the required courses will achieve the degree, and the instrumentality is the belief that the degree will be received upon completion of the degree requirements.

In Vroom's (1964) theory, the attractiveness of the outcome is the underlying motivation. As it relates to motivation to pursue higher education, the attractiveness or desire to achieve a college education is the underlying motivation. The research performed later by this author will gather additional data as to the extrinsic and intrinsic motivators in the pursuit of higher education. Vroom's theory of motivation is a relevant theory to consider because it quantifies the desire for a specified goal. Though it could be argued that there is a level of subjectivity with regards to the values given to each variable in the equation, it does create a starting point in order to evaluate motivation.

McGregor's Theory X and Theory Y

The fifth theory of motivation presented is Theory X and Theory Y. This theory was presented by McGregor (1957) and has two opposing views of how human behavior at work is viewed.

Theory X assumes management's role is to coerce and control employees due to employees having an inherent dislike for work. The theory further suggests because employees have an inherent dislike of work, and will avoid it whenever possible, it is the role of management to control or threaten employees with punishment in order to motivate them to work towards organizational goals. In short, employees prefer to be directed by others because they do not want responsibility and have little if any motivation to achieve organizational goals.

In contrast, Theory Y assumes employees are motivated, have potential, will exercise self-direction if they are committed to the objectives of the organization, and management's role is to develop this potential in employees. Unlike Theory X, Theory Y does not suggest employees are inherently lazy or incapable of using their abilities to solve organizational problems. This theory suggests employees can learn to accept and seek responsibility, and that work is as natural to employees as play or rest.

Theory X can be linked to pursuing higher education by assuming some nontraditional students could be "forced" (motivated) to pursue higher education because of job requirements or radical changes in employment, i.e. unemployment. For example, an unemployed individual from the manufacturing sector of industry might find it difficult to gain employment due to the large segment of the manufacturing sector of the economy that has moved overseas. Even if employment is found, the new norm with regards to compensation could be much less than previously earned and this factor could 'force' an individual to pursue higher education.

Theory Y could represent nontraditional students who are motivated to acquire higher education just for the sake of learning, and for attaining skills to better perform their jobs, without any specific benefit in mind. Because Theory Y assumes employees are motivated and have potential, it is feasible to assume these students wish to learn for the additional knowledge and/or sense of fulfillment derived from pursuing higher education. There does not need to be a physical reward for this group of individuals.

The five theories of motivation presented above are considered by many as the foundation for the factors that influence motivation. Though each theory was not specifically created based on research of factors that motivate nontraditional college students to pursue higher education, each theory does offer a starting point from which to base further research. The following section presents studies that have specifically attempted to determine the motivating factors of nontraditional college students pursuit of higher education.

Motivation and the Nontraditional College Student

A number of researchers have conducted studies which have directly focused on motivation and the nontraditional college student. These studies have moved beyond the general topic and research of motivation and specifically addressed factors that motivate nontraditional college students. This section will present these studies in order to further explore the extrinsic and intrinsic factors that motivate nontraditional college students pursuit of higher education.

Houle (1961) suggested that because nontraditional college students are voluntary participants in education, they will only pursue higher education after a rational decision-making process that weighs enhancers and barriers of the goal. Houle identified three overlapping factors that motivate adults to participate in higher education. The first factor was goal-oriented, which is learning as a means to an end, such as career development. The second factor was activity-oriented, which is learning for the sake of social activities and interaction. The third factor was learning-oriented, which is simply learning for the sake of learning (Houle). The following paragraphs will further discuss Houle's theory.

According to Houle (1961), goal-oriented learners view education as a way to accomplish clearly defined goals, as they see themselves and others as goal seekers. Their involvement in learning activities helps to satisfy a particular goal and only occurs after a specific need or interest is identified. Thus the pursuit of education is not continuous because it usually occurs after the realization of a specific goal or unfulfilled goal. All of Houle's goal-orientated participants followed the same course of action by recognizing a goal, having a desire to achieve the goal, and having an opportunity to work towards the goal.

Activity-based learners in Houle's (1961) study took part in the pursuit of education for goals unrelated to the purpose of education. Some of the motivating factors may be due to the need for social interaction, addressing loneliness, recognition of completing a degree, carrying on a family tradition, or maybe filling extra time. The consistent factor in this group is the need to seek out social interaction and the type of relationships that will be formed through various activities. Ultimately the pursuit of education for the activity-based individual is a way to establish or confirm ones' own self-concept.

For learning-orientated individuals, learning is a continuous activity. These individuals view education as a habit. For these individuals it may be difficult for them to distinguish education from the rest of their life, viewing the process in many cases as another form of entertainment. They are preoccupied with learning and some respondents indicated learning is part of their genetic makeup.

Miller (1967) presented a motivational model for factors in an adult's decision to pursue higher education which emphasized both positive and negative factors. His

theory suggests the degree of conflict between individual needs and the perceived strength of the social and situational factors determines participation in higher education. Miller's theory is a push-pull theory because if the factors pulling a student away from college are greater than the factors pushing one toward reentering college, then higher education will not be pursued. However, if the factors pushing a student toward college are greater, and these factors are generated from within the individual as well as by external factors, then the adult will reenter college (Miller).

Using Miller's (1967) model, assume two adults, A and B have the same number of aggregate (total) factors pushing them towards and away from pursuing higher education, though the number of positive or negative may differ for each. Adult A has more positive factors (recognized as goals or benefits) in the decision to pursue higher education with few negative factors (cost or barriers). According to Miller's theory, Adult A will be likely to pursue higher education. Adult B has many more costs or barriers to pursuing higher education and perceives less benefits than student A. Adult B will probably not pursue higher education at this time because of the perceived lack of benefit, although the decision to pursue could still occur at some time in the future.

Aslanian and Brickell (1980) propose a "triggers and transition" theory of motivation whereas an adult's decision to pursue education is the result of significant changes in their lives. In this model, the pursuit of education is not a goal in and of itself, but rather a way to cope with changes that have occurred. Therefore it is viewed as a transitional activity versus a goal to pursue because transitions often require gaining additional knowledge and/or skills, and this leads adults back to

education. According to Aslanian and Brickell, the "trigger" that motivates an individual to education is the result of a past, present or future change and can be divided into one of three categories: 1) work, job-related 2) family, and 3) personal growth.

Job-related motivating factors for individuals would include downsizing of their organization and unemployment. These events could trigger an individual to pursue higher education in order to gain the required skills to compete in the job market. Another example of a job-related trigger would be individuals who are interested in gaining a better job but lack the necessary skills to advance, so pursuit of higher education would address this void in skills.

According to Aslanian and Brickell (1980) family circumstances are the second motivating factor in the pursuit of higher education. These circumstances may include, divorce, remarriage, or death of a spouse. Also, some adults may pursue higher education as a way to be a good role model for their children, as well as improving their earning ability to better care for their children.

The third motivator according to Aslanian and Brickell (1980) is the need for personal growth, or in other words, learning for the sake of learning. For these individuals education can be viewed as a hobby, by taking classes for fun or just to gain additional knowledge. Some individuals in this group may also wish to pursue a career that has always interested them, as well as improve the overall quality of life for themselves and their family. For this group the goal of degree completion is not the intended goal.

Catalano (1985) developed a model based on motivational theories conceptualized by Maslow (1943) and Herzberg (1959), and his model helps to define and organize the factors driving students to pursue higher education. His model combines the concepts of cost/benefit (or barrier/goal) with the understanding that the decision to pursue higher education will be one of many decision issues in an adult's life. This decision will not be considered by itself, but rather prioritized in terms of a priority of needs.

Using Catalano's (1985) model, a decision to pursue higher education versus spending time, energy, and money in other places is the ultimate deciding factor. Catalano's model presents the idea of opportunity costs, which are costs that result directly from a decision one makes. If an adult decides to pursue higher education on a full-time basis, the costs would include tuition, books and fees whereas the opportunity costs would include any earnings lost from not being able to maintain a current job. Other opportunity costs would include time lost from participating in social activities because of increased time studying and in class. All of these costs would need to be considered by students before determining whether or not to pursue higher education (Catalano).

It should be noted, with the emergence of nontraditional educational programs, there has been tremendous progress made to reduce opportunity costs associated with returning to college. Working adults are able to attend classes in the evening, on weekends, or via online classes without the need to forgo full-time employment.

The theories and empirical research addressing what motivates individuals can vary greatly across researchers, but when it is all said and done, there must be

something or some things that motivate an individual to pursue higher education. And although no one motivation theory or study is accepted as the basis for explaining all behavior, all factors that motivate can be categorized as either extrinsic or intrinsic.

Extrinsic vs. Intrinsic Motivation

Various motivation theories and studies have tried to categorize motivation as a means to define and explain factors that move one to act. Though some of the findings vary greatly with regards to the explanation of human behavior, all motivating factors, regardless of the theory, can be separated into one of two major categories, intrinsic or extrinsic.

Intrinsic motivation is recognition on the part of the individual of the value of a particular activity and that the activity is self-rewarding. The motivation comes from the pleasure derived from the activity itself so an intrinsically motivated person would not need a reward or external incentive in order to be moved to action. Therefore, an intrinsically motivated student is engaged in the activity of pursuing higher education for the purpose of self-satisfaction and self-fulfillment (Kolesnick, 1978)

Extrinsic motivation can be viewed as the opposite extreme regarding what drives human behavior in relation to intrinsic, because extrinsic motivation refers to motivation created by external stimuli. To be motivated extrinsically one is motivated to act based upon a goal or reward external to the behavior itself. These goals or incentives are the rewards which serve as motivation to achieve a specific goal. The reward structure system has long been used in business to manage and

motivate individuals, and this same structure is also used as a source of motivation for nontraditional college students (Kolesnick, 1978.)

Reasons to Return to School

Motivation to pursue higher education is increased by a greater connection between the learning process and the perceived application to the needs of the learner (Knowles, 1990). Therefore certain motivators will be of paramount importance in the decision of nontraditional students to pursue higher education. There are numerous studies relating to the factors affecting motivation, and all of these factors can be viewed as either extrinsic or intrinsic. The following sections will present extrinsic and intrinsic motivators for pursuing higher education.

Extrinsic Motivators

The rapid changes in the marketplace have placed great emphasis on learning as jobs are consistently being eliminated, modified, and new jobs created altogether to meet the needs of a global economy. Because of this rapid changing environment, learning and relearning will be of paramount importance in the future (Cross, 1981). According to Heelan (2001), it will be imperative for workers to be technologically literate if they wish to pursue and advance in their careers. As the demand for highly trained workers continues to grow, workers will need higher education if they wish to remain competitive in the workplace. These factors will all but force adults to achieve higher education if they wish to survive and advance in the workplace (Aslanian & Brickell, 1980).

Past research has shown that job acquisition or job advancement is the single most important reason cited for pursuing higher education. Because most adults will

point to this extrinsic motivator as the overriding motivator for pursuing higher education, its importance cannot be overlooked (Henry & Basile, 1994). Other extrinsic factors that may motivate workers to pursue higher education include, increased income, job security, improved working conditions, obtainment of material goods, or increased ability to save for retirement. Although it would seem the overriding factors motivating an individual to pursue higher education are external in nature, there are also many intrinsic factors to consider.

Intrinsic Motivators

Nontraditional students may also be pursuing higher education for intrinsic reasons. Some of these reasons include pursuing new interests, reentering college after having dropped out of school due to a lack of focus and/or maturity, seeking to gain additional knowledge to assist others, and self-fulfillment (Timarong, 2000). Additional motivating factors could also include gaining friends, achieving ones' potential, improving social skills, or to make a difference in the world.

At its core, intrinsic motivation is fueled by the act of doing and not by the reward achieved in reciprocal. Monetary or physical rewards are not the underlying motivation for individuals who are intrinsically motivated. For example, a professor at a university, who has already achieved a high level of education, may take additional courses in his or her area of 'expertise' to become even more effective in the classroom. Though there may ultimately be some additional rewards or physical benefits to becoming a more effective instructor, it is not the fuel for the motivation.

Conclusions

Nontraditional college students often have multiple non-school related commitments and responsibilities that they must also be responsible for in addition to pursuing their educational goals. Having families and full-time jobs, and returning to college will equate to major changes in their lifestyles, and because of this, nontraditional students often lack support from family and friends to return to school. But even with all the barriers in place, an ever growing number of adults are pursuing higher education. But why, what are the overriding motivating factors that motivate an individual to pursue higher education? As indicated by the above literature review there are a number of competing theories of motivation. The present study is designed to determine the most important extrinsic and intrinsic factors that motivate nontraditional college students to pursue higher education. Chapter III will discuss the steps to carry out the research and describe the specific methods used to analyze the research data.

CHAPTER III

METHODOLOGY

Introduction

The problem addressed in this study is that little is known about the factors that motivate U.S. workers to pursue higher education. The purpose of this study was to explore the motivating factors leading U.S. workers to pursue higher education. Specifically, this study was designed to assess the different motivating factors, both extrinsic and intrinsic, leading U.S. workers to seek higher education. In addition, the study determined the relationship between gender, age, and ethnicity as it relates to extrinsic and intrinsic factors that motivate U.S. workers' pursuit of higher education. In order to assess the extrinsic and intrinsic factors, the following research questions were answered.

Research Questions

1. What are the most important extrinsic factors that motivate U.S. workers to pursue higher education?
2. What are the most important intrinsic factors that motivate U.S. workers to pursue higher education?
3. How do gender, age, and ethnicity relate to extrinsic and intrinsic factors motivating U.S. workers to pursue higher education?

The remainder of this chapter will address the following areas: 1) design of the research, 2) population of the study, 3) data collection procedures used, 4) analytical methods utilized to decipher the data collected and, 5) limitations of the study.

Research Design

In order to assess the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education, data regarding the actual factors were gathered. In an attempt to accomplish this mission, a validated survey instrument created by a doctoral student at the University of South Dakota was administered. The specific design of the survey was a cross-sectional survey. The survey was modified for this study in some respects to more efficiently gather the data needed for this research project (see Appendix A for a copy of the survey instrument).

The survey, based on Maslow's (1943) hierarchy of needs, has a seven-point Likert scale that measures the extent to which various factors influenced one's motivation to pursue higher education. The instrument was divided into two sections.

Section I of the survey instrument included eight questions to determine basic demographic information about the respondents including gender, educational status, years of full-time employment, annual income, age, degree program, ethnicity, and occupation.

Section II of the survey included 25 statements that were used to determine the extrinsic and intrinsic factors that influenced the decision to pursue higher education. Extrinsic refers to those factors that are external motivators and intrinsic refers to factors that are internal motivators. The survey statements rated are presented below categorized as extrinsic or intrinsic, and by item number on the survey.

Survey statements – extrinsic motivation factors

1. To increase my income
2. To make my job more secure
3. To make more friends
6. To increase my access to food and clothing
7. To improve my current job condition
8. To participate in a variety of activities and clubs
11. To fulfill my professional objectives
12. To be a member of a university community
14. To buy a better vehicle or other material goods
15. To increase my ability to save for retirement
19. To enhance my social skills
20. To attain social status
21. To have better access to health care
22. To increase my job opportunities
25. To gain a promotion

Survey statements – intrinsic motivation factors

4. To advance my personal growth
5. To develop my potential
9. To perform my job better
10. To fulfill my personal objectives
13. To be appreciated by others
16. To help develop others
17. To be respected
18. To enrich my life
23. To gain the acceptance of friends
24. To gain the acceptance of family

The validated test tool for this study was originally designed to assess motivation according to Maslow's (1943) theory as it relates to pursuing higher education. The five factors of motivation according to his theory are physiological, safety, love, esteem and self-actualization. Though the purpose of this study was to determine the most important extrinsic and intrinsic factors as it relates to pursuing higher education, using a survey rooted in Maslow's theory is extremely relevant and appropriate. Much literature has been written referring to Maslow as the father of motivational theories and some motivation theories even start with Maslow's theory and make slight modifications as is the case with Alderfer's (1969) ERG theory and Hertzberg's (1966) Hygiene and Motivational Factors theory. For these reasons, the survey instrument used for this study and the underlying theory as to how it was designed served as a valuable and effective data collection tool.

Population

The sample for this study was U.S. workers who are current non-traditional students of Robert Morris University. Non-traditional students refers to students who generally are older than the 18-24 college-aged student who have delayed beginning or returning to college due to reasons such as not having a high school diploma, working full-time, or having family obligations, to name a few. Two hundred participants were surveyed to gather the data necessary to make a fair assessment as to the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education.

Data Collection

Surveys were administered to the students at Robert Morris University in a classroom setting during regularly scheduled class times to ensure the participation goal of two hundred students was met. Permission to administer the surveys was obtained from instructors prior to data collection. A general overview of the research was presented to students as well as the voluntary nature of the survey. Students had the option to not partake in the study. The data collection process took between ten and fifteen minutes, depending on the size of the class and questions that arose. Upon completion of the surveys, students returned the survey document to the researcher. All surveys were held until the goal of two hundred surveys was met, at which time the data gathered were analyzed.

Analytical Methods

Upon completion of the data gathering, descriptive statistical analyses were performed in order to measure the mean, median, and mode for each survey item. The rating for each survey item is a dependent variable, and as such, was used to determine the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education. The mixed factorial analysis of variance (ANOVA) was also used to analyze data gathered. These latter analyses were conducted to determine if gender or ethnicity might have an impact on ratings of the extrinsic and intrinsic factors that motivate the pursuit of higher education. All ANOVAs were conducted at the .05 level of significance and SPSS (Statistical Package for Social Sciences) was used for data analysis. Finally, correlational analyses were conducted to determine if age might have an impact on the extrinsic and intrinsic items rated.

Limitations

A major limitation of the study is that it only included current students of Robert Morris University and enrollment at the University consists primarily of African American and Hispanic students; thus it is questionable if these results can be generalized to other ethnic groups. In addition, the range of degree programs studied was almost solely business, so it is also questionable if these results can be generalized to other programs of study such as liberal arts, nursing and health science, art and design, culinary arts, or technology and media.

CHAPTER IV

FINDINGS AND CONCLUSIONS

Introduction

A summary of the study, including the statement of the problem and purpose statement, research questions, implications and recommendations will be presented in this chapter.

Statement of the Problem and Purpose Statement

Pursuing a college degree is both time consuming and expensive but the long-term benefits far exceed the initial investment cost (Dohm & Wyatt, 2002). Some people attend college for intrinsic reasons such as the quest for self-improvement, while others may attend for extrinsic factors such as entering occupations in which a college degree may be required for employment. Although it would be impossible to ascertain each student's individual motivation for attending college, one thing is certain. More U.S. workers are earning college degrees and those degrees have distinct and measurable benefits as it relates to earnings, career opportunities, healthcare, and retirement savings (Dohm & Wyatt).

Motivation – Extrinsic and Intrinsic

Motivation is a highly complex concept that is influenced by a large number of factors, but can be summarized generally as either extrinsic or intrinsic. Extrinsic refers to external factors and intrinsic refers to internal factors as it relates to an individual. Internal motivators are intrinsic needs that satisfy a person, whereas external motivators are considered environmental factors that motivate an individual

(Bassy, 2002). Non-traditional college students may be motivated to pursue higher education by extrinsic motivators, intrinsic motivators, or a combination of both.

Though it may be fairly simple to create a list of reasons for nontraditional students to pursue higher education, there still must be an underlying spark which drives the student towards this goal. This spark, or motivator, can be difficult to understand because of the uniqueness of each student. However, the research shows there does seem to be some common themes that motivate individuals, and these common themes can be used to understand the factors that motivate non-traditional college students to pursue higher education.

The purpose of this study was to explore the motivating factors leading U.S. workers to pursue higher education. The study was designed to assess the different motivating factors, both extrinsic and intrinsic, leading U.S. workers to seek higher education. The research questions to be answered were:

1. What are the most important extrinsic factors that motivate U.S. workers to pursue higher education?
2. What are the most important intrinsic factors that motivate U.S. workers to pursue higher education?
3. How do gender, age, and ethnicity relate to extrinsic and intrinsic factors motivating U.S. workers to pursue higher education?

Findings

Demographics

Section I of the survey gathered demographic data of the survey participants. Data gathered included gender, educational status, years of full-time employment, annual income, age, degree program, ethnicity, and occupation. Tables 1, 2, and 3 present data as it relates to gender, age, and ethnicity. Demographic data regarding educational status, years of full-time employment, annual income, degree program, and occupation, though collected, were not used for this study.

Data regarding the gender of respondents is summarized in Table 1. Of the 200 respondents in the survey, a little more than one-third identified themselves as male, while nearly two-thirds identified themselves as female.

Table 1

Frequency Count and Percentage of Respondents by Gender

Gender	Frequency	Percentage
Male	77	39%
Female	123	62%
Total	200	100%

Data regarding the age of respondents is summarized in Table 2. The ages of respondents were categorized by 5-year increments beginning with ages 21-25. As indicted by Table 2, the largest number of respondents was reported in the age range of 26-30 followed by age range 21-25. Of the 200 respondents, about two-thirds fell in the range of less than 20 years of age to 30 years of age.

Table 2

Frequency Count and Percentage of Respondents by Age

Age	Frequency	Percentage
< 20	43	21.5%
21 - 25	46	23.0%
26 - 30	47	23.5%
31 - 35	25	12.5%
36 - 40	22	11.0%
41 - 45	8	4.0%
46 - 50	7	3.5%
51 - 55	0	0.0%
56 - 60	2	1.0%
Total	200	100.0%

Data regarding the ethnicity of respondents is summarized in Table 3. The survey asked respondents to indicate one of five ethnicities, African American, Asian, Caucasian (white), Hispanic, or Other. As shown by Table 3, about one-third of the respondents fell in both the African American and Caucasian categories respectively. Of the remaining one-third of the sample, most fell in the Hispanic category with only 10 respondents identifying themselves as Asian or Other.

Table 3

Frequency Count and Percentage of Respondents by Ethnicity

Ethnicity	Frequency	Percentage
African American	68	34.0%
Asian	5	2.5%
Caucasian (white)	66	33.0%
Hispanic	56	28.0%
Other	5	2.5%
Total	200	100.0%

Section II of the survey presented statements to be rated relating to the extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education. A seven-point Likert scale was used to measure the motivation of the survey participants where 1 = Strongly Disagree and 7 = Strongly Agree.

The following survey statements were considered extrinsic factors for the purpose of this study.

1. To increase my income
2. To make my job more secure
3. To make more friends
6. To increase my access to food and clothing
7. To improve my current job condition
8. To participate in a variety of activities and clubs
11. To fulfill my professional objectives
12. To be a member of a university community
14. To buy a better vehicle or other material goods
15. To increase my ability to save for retirement
19. To enhance my social skills
20. To attain social status
21. To have better access to health care
22. To increase my job opportunities
25. To gain a promotion

The survey statements listed below were considered intrinsic factors for the purpose of this study.

4. To advance my personal growth
5. To develop my potential
9. To perform my job better
10. To fulfill my personal objectives
13. To be appreciated by others
16. To help develop others
17. To be respected
18. To enrich my life
23. To gain the acceptance of friends
24. To gain the acceptance of family

The mean score for each survey item was computed. The following narratives and tables present the data in response to each of the survey items.

As illustrated in Table 4, the mean, median, and mode was calculated for all respondents and all survey items. Of the 25 items rated, “To advance my personal growth” had the highest mean rating and “To gain the acceptance of friends” had the lowest mean rating. The average for all survey statements was 5.16.

Of the 25 survey items, 14 items had a median of six or higher, and 17 items had a mode of seven. “To gain the acceptance of family”, “To gain the acceptance of friends”, and “To increase my access to food and clothing” each had a mode of one.

As displayed in Table 5, the mean, median, and mode were calculated for male respondents only. For male respondents, “To develop my potential” received the highest mean rating while “To gain the acceptance of friends” received the lowest mean rating. The mean across all items for all male respondents was 5.24.
For male respondents, the median was six or higher for 15 survey items, and 16 survey items had a mode of seven.

As illustrated in Table 6, the mean, median, and mode were also calculated for female respondents only. For female respondents, “To advance my personal growth” was rated highest, and “To gain the acceptance of friends” received the lowest rating. The average for all female respondents was 5.12. The mode for 17 of the 25 survey items for female respondents was seven, and 15 survey items had a median of six or higher.

As presented in the aforementioned tables, male respondents gave the highest mean rating for “To develop my potential” and female respondents gave the highest mean rating for “To advance my personal growth”. Both of the highest rated motivators for pursuing higher education for male and female respondents were intrinsic statements. Also, “To gain the acceptance of friends” was rated lowest for both males and females of the 25 survey items.

Table 4

Measures of Central Tendency for Survey Items - Total Sample

Survey Item		*M*	*Mdn*	*Md*
1	To increase my income	6.13	7.00	7
2	To make my job more secure	5.93	7.00	7
3	To make more friends	3.71	4.00	4
4	To advance my personal growth	6.39	7.00	7
5	To develop my potential	6.34	7.00	7
6	To increase my access to food and clothing	4.06	4.00	1
7	To improve my current job condition	5.78	6.00	7
8	To participate in a variety of activities and clubs	3.88	4.00	4
9	To perform my job better	5.45	6.00	7
10	To fulfill my personal objectives	6.22	7.00	7
11	To fulfill my professional objectives	6.32	7.00	7
12	To be a member of a university community	4.32	4.50	4
13	To be appreciated by others	4.29	4.00	4
14	To buy a better vehicle or other material goods	4.50	5.00	7
15	To increase my ability to save for retirement	5.55	6.00	7
16	To help develop others	5.06	5.00	7
17	To be respected	5.30	6.00	7
18	To enrich my life	6.23	7.00	7
19	To enhance my social skills	5.11	6.00	7
20	To attain social status	4.39	4.00	4
21	To have better access to health care	4.73	5.00	7
22	To increase my job opportunities	6.37	7.00	7
23	To gain the acceptance of friends	3.52	4.00	1
24	To gain the acceptance of family	3.90	4.00	1
25	To gain a promotion	5.64	6.00	7
Overall		5.16	5.58	6

Note, n = 200

Table 5

Measures of Central Tendency for Survey Items - Male Respondents

Survey Item		*M*	*Mdn*	*Md*
1	To increase my income	6.19	7.00	7
2	To make my job more secure	6.08	7.00	7
3	To make more friends	3.96	4.00	4
4	To advance my personal growth	6.25	7.00	7
5	To develop my potential	6.27	7.00	7
6	To increase my access to food and clothing	4.52	5.00	7
7	To improve my current job condition	5.77	6.00	7
8	To participate in a variety of activities and clubs	4.17	4.00	4
9	To perform my job better	5.26	6.00	7
10	To fulfill my personal objectives	6.21	7.00	7
11	To fulfill my professional objectives	6.14	7.00	7
12	To be a member of a university community	4.47	5.00	4
13	To be appreciated by others	4.26	4.00	4
14	To buy a better vehicle or other material goods	4.84	5.00	7
15	To increase my ability to save for retirement	5.74	6.00	7
16	To help develop others	4.99	5.00	5
17	To be respected	5.27	6.00	6
18	To enrich my life	6.17	7.00	7
19	To enhance my social skills	5.17	6.00	7
20	To attain social status	4.57	4.00	4
21	To have better access to health care	5.04	6.00	6
22	To increase my job opportunities	6.25	7.00	7
23	To gain the acceptance of friends	3.74	4.00	4
24	To gain the acceptance of family	4.23	4.00	7
25	To gain a promotion	5.38	6.00	7
Overall		5.24	5.68	6

Note, n = 200

Table 6

Measures of Central Tendency for Survey Items - Female Respondents

Survey Item		*M*	*Mdn*	*Md*
1	To increase my income	6.08	7.00	7
2	To make my job more secure	5.84	7.00	7
3	To make more friends	3.54	4.00	4
4	To advance my personal growth	6.48	7.00	7
5	To develop my potential	6.37	7.00	7
6	To increase my access to food and clothing	3.76	4.00	1
7	To improve my current job condition	5.78	6.00	7
8	To participate in a variety of activities and clubs	3.69	4.00	1
9	To perform my job better	5.57	6.00	7
10	To fulfill my personal objectives	6.22	7.00	7
11	To fulfill my professional objectives	6.43	7.00	7
12	To be a member of a university community	4.23	4.00	4
13	To be appreciated by others	4.31	4.00	4
14	To buy a better vehicle or other material goods	4.28	5.00	7
15	To increase my ability to save for retirement	5.42	6.00	7
16	To help develop others	5.11	6.00	7
17	To be respected	5.32	6.00	7
18	To enrich my life	6.27	7.00	7
19	To enhance my social skills	5.07	6.00	7
20	To attain social status	4.27	4.00	4
21	To have better access to health care	4.54	5.00	7
22	To increase my job opportunities	6.44	7.00	7
23	To gain the acceptance of friends	3.38	4.00	1
24	To gain the acceptance of family	3.69	4.00	4
25	To gain a promotion	5.80	7.00	7
Overall		5.12	5.64	6

Note, n = 200

Table 7 shows the mean ratings by male, female, and overall for the extrinsic survey items. As illustrated in Table 7, “To increase my job opportunities” received the highest mean rating for extrinsic motivator survey items rated. Both male respondents and female respondents rated this survey item as the number one motivator. The lowest overall rating was given to Item 3 “To make more friends”. Both males and females rated this as the lowest motivator.

The overall average for survey items for male respondents was slightly higher than the female respondents. Male respondents rated 8 of the 15 extrinsic survey items higher than the overall average, and female respondents rated 8 of the 15 higher than the overall average. It is also worth noting that female respondents rated 3 of the 15 survey items below four, while male respondents rated only one survey item below four.

Table 7

Means for Extrinsic Ratings as a Function of Survey Item and Gender of Respondent.

Survey Item		Male	Female	Overall
1	To increase my income	6.19	6.08	6.13
2	To make my job more secure	6.08	5.84	5.93
3	To make more friends	3.96	3.54	3.71
6	To increase my access to food and clothing	4.52	3.76	4.06
7	To improve my current job condition	5.77	5.78	5.78
8	To participate in a variety of activities and clubs	4.17	3.69	3.88
11	To fulfill my professional objectives	6.14	6.43	6.32
12	To be a member of a university community	4.47	4.23	4.32
14	To buy a better vehicle or other material goods	4.84	4.28	4.50
15	To increase my ability to save for retirement	5.74	5.42	5.54
19	To enhance my social skills	5.17	5.07	5.11
20	To attain social status	4.57	4.27	4.38
21	To have better access to health care	5.04	4.54	4.73
22	To increase my job opportunities	6.25	6.44	6.36
25	To gain a promotion	5.38	5.80	5.63
Overall		5.22	5.01	5.09

In an attempt to determine if any of the overall mean ratings from Table 7 were significantly different from one another or if there might be a main effect of gender or an interaction between gender of participant and survey item rated, a 2 (gender) X 15 (extrinsic survey item) mixed factorial analysis of variance was conducted upon the data which the means in Table 7 were based upon. The results of this analysis are displayed in Table 8. From these results it was determined there is a significant main effect of the item rated, no main effect of gender, and there is an interaction. Since the interaction was statistically significant between gender and item rated, the main effect of item rated will not be tested, but a test of simple effects of item rated at each level of gender was conducted and the results of this analysis are displayed in Table 9.

Table 8

ANOVA Summary for Mean Rating of Extrinsic Motivator as a Function of Gender of Participant and Item Rated

Source	*F - Observed*	*df*	*MSE*	*Probability*
Item Rated	69.840	7.97, 1578.12	3.811	.000
Gender	1.555	1, 198	30.633	0.214
Item Rated x Gender	2.368	7.97, 1578.120	3.811	.016

The results displayed in Table 9 show a significant effect for both males and females. Because a significant effect has occurred for both male and female respondents, further testing was performed to better explain the significant effect. A Bonferroni Post Hoc Analysis was completed as displayed in Table 10 and Table 11. The results for males are displayed in Table 10, and females are displayed in Table 11.

Table 9

Test of Simple Effects for Items Rated for Extrinsic Motivators by Gender

Source	*F - Observed*	*df*	*MSE*	*Probability*
Male	23.613	8.173; 621.164	3.403	.000
Female	56.282	7.312; 892.031	4.373	.000

Table 10 presents the results of a Bonferroni Post Hoc Analysis of extrinsic survey items for male respondents. As presented in Table 10, four survey items differed significantly from most of the other fifteen extrinsic survey items. The four survey items were, “To increase my income”, “To make more friends”, “To participate in a variety of activities and clubs”, and “To increase my job opportunities.” Of these four items, each differed significantly from at least nine other survey items.

Increasing income and increasing job opportunities had the highest mean ratings over all items, and thus, were rated significantly higher than the items from which they differed significantly. Making more friends and participating in a variety of activities and clubs had the lowest mean ratings, and therefore, were rated significantly lower than the items from which they differed significantly. From this data we can conclude that male respondents are more motivated by increasing income and job opportunities, and that making friends and participating in activities and clubs has little impact as a factor to pursue higher education.

Table 11 presents the results of a Bonferroni Post Hoc Analysis of extrinsic survey items for female respondents. As displayed in the table, “To fulfill my professional objectives” and “To increase my job opportunities” had the highest mean ratings, and these two survey items were rated significantly higher than 12 and 13 other survey items respectively. From these data we can determine the most important extrinsic factors for female respondents to pursue higher education is fulfilling professional objectives and to increase job opportunities.

Table 11 also displays “To make more friends” as the lowest rated extrinsic survey item for female respondents. This survey item differed significantly from 12 other survey items. It is also worth noting that survey Item 6, “To increase my access to food and clothing had the second lowest mean rating for female respondents, and thus, was rated lower than most of the remaining items. From these two low mean ratings it can be determined that female respondents are not highly motivated to pursue higher education as it relates to making more friends or increasing access to food and clothing.

Table 10

Results of Bonferroni Post Hoc Analysis of Single Factor within Subject ANOVA of Extrinsic Items – Male Data

	Survey Item	Differs Significantly From Items:
1	To increase my income (*M* = 6.19)	3, 6, 8, 12, 14, 15 19, 20, 21, 25
2	To make my job more secure (*M* = 6.08)	3, 6, 8, 12, 14 19, 20, 21
3	To make more friends (*M* = 3.96)	1, 2, 7, 11, 14, 15 19, 21, 22, 25
6	To increase my access to food and clothing (*M* = 4.52)	1, 2, 7, 11 15, 22
7	To improve my current job condition (*M* = 5.77)	3, 6, 8, 12 14, 20
8	To participate in a variety of activities and clubs (*M* = 4.17)	1, 2, 7, 11, 15 19, 21, 22, 25
11	To fulfill my professional objectives (*M* = 6.14)	3, 6, 8, 12, 14 19, 20, 21
12	To be a member of a university community (*M* = 4.47)	1, 2, 7, 11 15, 22
14	To buy a better vehicle or other material goods (*M* = 4.84)	1, 2, 3, 7 11, 15, 22
15	To increase my ability to save for retirement (*M* = 5.74)	3, 6, 8, 12 14, 20
19	To enhance my social skills (*M* = 5.17)	1, 2, 3, 8, 11 20, 22
20	To attain social status (*M* = 4.57)	1, 2, 7, 11 15, 19, 22
21	To have better access to health care (*M* = 5.04)	1, 2, 3, 8 11, 22
22	To increase my job opportunities (*M* = 6.25)	3, 6, 8, 12, 14 19, 20, 21, 25
25	To gain a promotion (*M* = 5.38)	1, 3, 8, 22

The mean difference is significant at the 0.05 level for survey items listed above. $p < .05$

Table 11

Results of Bonferroni Post Hoc Analysis of Single Factor within Subject ANOVA of Extrinsic Items – Female Data

Survey Item		Differs Significantly From Items:
1	To increase my income (*M* = 6.08)	3, 6, 8, 12, 14,15 19, 20, 21, 22
2	To make my job more secure (*M* = 5.84)	3, 6, 8, 11, 12, 14 19, 20, 21, 22
3	To make more friends (*M* = 3.54)	1, 2, 7, 11, 12, 14, 15 19, 20, 21, 22, 25
6	To increase my access to food and clothing (*M* = 3.76)	1, 2, 7, 11, 15 19, 21, 22, 25
7	To improve my current job condition (*M* = 5.78)	3, 6, 8, 11, 12 14, 20, 21, 22
8	To participate in a variety of activities and clubs (*M* = 3.69)	1, 2, 7, 11, 15 19, 21, 22, 25
11	To fulfill my professional objectives (*M* = 6.43)	2, 3, 6, 7, 8, 12, 14 15, 19, 20, 21, 25
12	To be a member of a university community (*M* = 4.23)	1, 2, 3, 7, 11 15, 19, 22, 25
14	To buy a better vehicle or other material goods (*M* = 4.28)	1, 2, 3, 7, 11 15, 19, 22, 25
15	To increase my ability to save for retirement (*M* = 5.42)	1, 3, 6, 8, 11, 12 14, 20, 21, 22
19	To enhance my social skills (*M* = 5.07)	1, 2, 3, 6, 8, 11 12, 14, 20, 22, 25
20	To attain social status (*M* = 4.27)	1, 2, 3, 7, 11 15, 19, 22, 25
21	To have better access to health care (*M* = 5.54)	1, 2, 3, 6, 7, 8 11, 15, 22, 25
22	To increase my job opportunities (*M* = 6.44)	1, 2, 3, 6, 7, 8, 12, 14 15, 19, 20, 21, 25
25	To gain a promotion (*M* = 5.80)	3, 6, 8, 11, 12, 14 19, 20, 21, 22

The mean difference is significant at the 0.05 level for survey items listed above. $p < .05$

Table 12 shows the mean ratings by male, female, and overall for the intrinsic survey items. As illustrated in Table 12, of the intrinsic motivators presented in the survey, “To advance my personal growth” received the highest mean rating for female respondents, and “To develop my potential” received the highest mean rating for male respondents. The lowest overall mean rating for male and female respondents was for the survey item which read “To gain the acceptance of friends”.

Table 12

Means for Intrinsic Ratings as a Function of Survey Item and Gender of Respondent

Survey Item		Male	Female	Overall
4	To advance my personal growth	6.25	6.48	6.39
5	To develop my potential	6.27	6.37	6.34
9	To perform my job better	5.26	5.57	5.45
10	To fulfill my personal objectives	6.21	6.22	6.22
13	To be appreciated by others	4.26	4.31	4.29
16	To help develop others	4.99	5.11	5.06
17	To be respected	5.27	5.32	5.30
18	To enrich my life	6.17	6.27	6.23
23	To gain the acceptance of friends	3.74	3.38	3.52
24	To gain the acceptance of family	4.23	3.69	3.90
Overall		5.27	5.27	5.27

It is also worth noting that the overall mean for male and female respondents, as well as the overall average for all respondents were identical. Both male and females rated four survey items above six, and one survey item below four.

In an attempt to determine if any of the overall mean ratings from Table 12 were significantly different from one another or if there might be a main effect of gender or an interaction between gender of participant and survey item rated a 2 (gender) X 10 (intrinsic survey item) mixed factorial analysis of variance was conducted upon the data which the means in Table 12 were based upon. The results of this analysis are displayed in Table 13.

Table 13

ANOVA Summary for Mean Rating of Intrinsic Motivators as a Function of Gender of Participant and Item Rated

Source	*F - Observed*	*df*	*MSE*	*Probability*
Item Rated	103.120	4.223; 836.098	4.249	.000
Gender	.002	1; 198	11.412	.966
Item Rated x Gender	1.613	4.223; 836.098	4.249	.166

As can be seen by perusing Table 13, there was no main effect of the gender variable however there was a significant main effect of item rated, though the interaction did not reach statistical significance. Because the interaction was not significant between gender and items rated a Bonferroni Post Hoc Analysis was performed on the overall means of the items rated. The results of this analysis are presented in Table 14.

As can be seen by perusing Table 14 survey Item 23, “To gain the acceptance of friends” was rated significantly lower than other intrinsic survey items. This survey item also had the lowest overall mean for all survey items. The second lowest mean rating was for “To gain the acceptance of family”, and this survey item was rated significantly lower than seven other survey items. These data suggests that gaining the acceptance of friends and family are not important factors as it relates to motivation to pursue higher education.

Table 14 also presents four intrinsic survey items with mean ratings above six. These survey items are “To advance my personal growth”, “To develop my potential”, “To fulfill my personal objectives”, and “To enrich my life.” These items were rated significantly higher than all other items, but did not differ significantly from one another. From this data we can determine that these four survey items are important factors that assist in the motivation to pursue higher education for both males and females.

Table 14

Results of Bonferroni Post Hoc Analysis for the Effect of Intrinsic Item Rated

Survey Item		Differs Significantly From Items:
4	To advance my personal growth (*M* = 6.39)	9, 13, 16, 17 23, 24
5	To develop my potential (*M* = 6.34)	9, 13, 16, 17 23, 24
9	To perform my job better (*M* = 5.45)	4, 5, 10, 13 18, 23, 24
10	To fulfill my personal objectives (*M* = 6.22)	9, 13, 16, 17 23, 24
13	To be appreciated by others (*M* = 4.29)	4, 5, 9, 10, 16 17, 18, 23
16	To help develop others (*M* = 5.06)	4, 5, 10, 13 18, 23, 24
17	To be respected (*M* = 5.30)	4, 5, 10, 13 18, 23, 24
18	To enrich my life (*M* = 6.23)	9, 13, 16, 17 23, 24
23	To gain the acceptance of friends (*M* = 3.52)	4, 5, 9, 10, 13 16, 17, 18, 24
24	To gain the acceptance of family (*M* = 3.90)	4, 5, 9, 10, 16 17, 18, 23

The mean difference is significant at the 0.05 level for survey items listed above. $p < .05$

Table 15 presents data as to the correlation of the survey items with the age of respondents. As illustrated in Table 15, there was a negative correlation between the survey item and age for 19 of the 25 items and 11 reached statistical significance. Eight of the 11 survey items that were statistically significant were extrinsic survey items. Thus, the trend of these negative correlations indicate that the older the student the lower the rating, the younger the student the higher the rating. These data suggest that the older the student the less extrinsic factors play a part in motivating students to pursue higher education.

The largest extrinsic negative correlation (-.355) was for survey Item 15, “To buy a better vehicle or other material goods.” The largest intrinsic negative correlation (-.248) was for survey Item 24, “To gain the acceptance of family.” Thus the data suggests that the older the student the less likely material goods or acceptance of family will be a factor in the decision-making process to pursue higher education.

Table 15

Correlations of Survey Items 1 through 25 with Age of Respondent – All Data

Survey Item		Correlation	Sig.
1	To increase my income	-.204**	.004
2	To make my job more secure	-.069	.328
3	To make more friends	-.178*	.012
4	To advance my personal growth	.043	.548
5	To develop my potential	-.020	.776
6	To increase my access to food and clothing	-.334**	.000
7	To improve my current job condition	-.001	.988
8	To participate in a variety of activities and clubs	-.233**	.001
9	To perform my job better	.059	.405
10	To fulfill my personal objectives	.035	.628
11	To fulfill my professional objectives	.047	.506
12	To be a member of a university community	-.096	.177
13	To be appreciated by others	-.143*	.043
14	To buy a better vehicle or other material goods	-.355**	.000
15	To increase my ability to save for retirement	-.032	.654
16	To help develop others	.016	.822
17	To be respected	-.098	.166
18	To enrich my life	.016	.822
19	To enhance my social skills	-.211**	.003
20	To attain social status	-.142*	.044
21	To have better access to health care	-.201**	.004
22	To increase my job opportunities	-.106	.137
23	To gain the acceptance of friends	-.210**	.003
24	To gain the acceptance of family	-.248**	.000
25	To gain a promotion	-.018	.804

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

*. Correlation is significant at the 0.05 level (2-tailed).

Table 16 presents data as to the correlation of survey items with the age of male respondents. As illustrated in Table 16, there was a negative correlation between age and the survey items for 22 of the 25 survey statements rated and six of these correlations reached statistical significance. The largest negative correlation (-.416) was survey Item 6, “To increase my access to food and clothing.”

As noted above, 6 of the 25 survey items had negative correlations that were statistically significant, and five of these six survey statements were extrinsic items. Thus for male respondents, extrinsic factors seem to be the most important factor associated with age when making the decision to pursue higher education. “To be respected” was the only intrinsic survey item that was statistically significant. For male respondents the correlation between survey item and age was strongest for extrinsic items, and once again suggested that the older the respondent the less important extrinsic motivators are in the pursuit of higher education.

Table 17 presents data as to the correlation of survey items with the age of female respondents. As illustrated in Table 17, there was a negative correlation with age for 18 of the 25 survey statements. The largest negative correlation for females (-.337) was for survey Item 14, “To buy a better vehicle or other material goods.” Eight of the 18 negative correlations between age and survey item were statistically significant, and only two of these eight survey items were intrinsic survey items, “To gain the acceptance of friends” and “To gain the acceptance of family.” Thus for females, once again, the association between age and rating of survey statements was strongest for extrinsic factors, with older respondents providing lower ratings.

As suggested above, the data show for both genders the association is such that the higher the age the lower the rating and this is particularly true for extrinsic factors.

Table 16

Correlations of Survey Items 1 through 25 with Age of Respondent – Male Data

Survey Item		Correlation	Sig.
1	To increase my income	-.253*	.026
2	To make my job more secure	-.179	.120
3	To make more friends	-.106	.357
4	To advance my personal growth	-.118	.305
5	To develop my potential	.002	.988
6	To increase my access to food and clothing	-.416**	.000
7	To improve my current job condition	-.100	.385
8	To participate in a variety of activities and clubs	-.150	.191
9	To perform my job better	-.061	.601
10	To fulfill my personal objectives	-.099	.392
11	To fulfill my professional objectives	-.191	.096
12	To be a member of a university community	.016	.889
13	To be appreciated by others	-.144	.211
14	To buy a better vehicle or other material goods	-.342**	.002
15	To increase my ability to save for retirement	-.095	.411
16	To help develop others	.011	.925
17	To be respected	-.232*	.042
18	To enrich my life	-.148	.200
19	To enhance my social skills	-.135	.240
20	To attain social status	-.128	.269
21	To have better access to health care	-.249*	.029
22	To increase my job opportunities	-.231*	.043
23	To gain the acceptance of friends	-.112	.334
24	To gain the acceptance of family	-.158	.170
25	To gain a promotion	-.126	.274

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

*. Correlation is significant at the 0.05 level (2-tailed).

Table 17

Correlations of Survey Items 1 through 25 with Age of Respondent – Female Data

	Survey Item	Correlation	Sig.
1	To increase my income	-.181*	.046
2	To make my job more secure	-.008	.934
3	To make more friends	-.188*	.038
4	To advance my personal growth	.102	.260
5	To develop my potential	-.045	.618
6	To increase my access to food and clothing	-.262**	.003
7	To improve my current job condition	.043	.636
8	To participate in a variety of activities and clubs	-.245**	.006
9	To perform my job better	.097	.286
10	To fulfill my personal objectives	.091	.317
11	To fulfill my professional objectives	.138	.129
12	To be a member of a university community	-.132	.145
13	To be appreciated by others	-.152	.093
14	To buy a better vehicle or other material goods	-.337**	.000
15	To increase my ability to save for retirement	.017	.856
16	To help develop others	-.039	.672
17	To be respected	-.039	.669
18	To enrich my life	.085	.352
19	To enhance my social skills	-.243**	.007
20	To attain social status	-.131	.147
21	To have better access to health care	-.156	.085
22	To increase my job opportunities	-.076	.401
23	To gain the acceptance of friends	-.238**	.008
24	To gain the acceptance of family	-.270**	.003
25	To gain a promotion	-.003	.976

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

*. Correlation is significant at the 0.05 level (2-tailed).

Tables 18, 19, and 20 present data regarding the mean for each survey item by ethnicity. Table 18 presents an overall mean (both male and female data combined) for each survey item, Table 19 presents means for extrinsic survey items, and table 20 presents the average for intrinsic survey items.

Of the 200 respondents that took part in this study, 5 respondents (2.5%) identified themselves as Asian, and 5 respondents (2.5%) identified themselves as Other. Because these sample sizes were so small (5% of total sample size) in relation to African American, Caucasian, and Hispanic, these data was left out of the following analysis and no further analyses will be conducted on these groups.

As illustrated in Table 18, “To advance my personal growth” had the highest overall mean of the survey items for all ethnic groups combined. The highest mean by survey item for each ethnic group are African American, “To fulfill my professional objectives, Asian, “To develop my potential”, Caucasian, “To develop my potential”, and Hispanic, “To advance my personal growth” and “To develop my potential”.

The lowest overall mean of the survey items for all ethnic groups as presented in Table 18 was “To gain the acceptance of friends”. The lowest mean by survey item for each ethnic group was African American, “To make more friends”, Asian, “To increase my access to food and clothing” and “To be a member of a university community”, Caucasian, “To gain the acceptance of friends”, and Hispanic, “To gain the acceptance of friends”.

Of the 25 survey items, seven survey items had a mean rating above six, and four of these seven survey items were intrinsic survey statements. The four intrinsic survey items were “To advance my personal growth”, “To develop my potential”, “To fulfill my personal objectives”, and “To enrich my life.”

As illustrated in Table 19, “To increase my job opportunities” had the highest overall mean for extrinsic survey items. The highest mean for extrinsic survey items by ethnic group are African American, “To fulfill my professional objectives”, Asian, (had four survey items), Caucasian, “To increase my job opportunities”, and Hispanic, “To fulfill my professional objectives”.

The lowest overall mean for extrinsic survey items as illustrated in Table 19 was for survey Item 3, “To make more friends”. The lowest mean for extrinsic survey items by ethnic group are African American, “To make more friends”, Asian, “To increase my access to food and clothing”, Caucasian, “To participate in a variety of activities and clubs”, and Hispanic, “To make more friends”.

Of the fifteen extrinsic survey statements, three had an overall mean rating above six. The survey statements with mean ratings above six were “To increase my income”, “To fulfill my personal objectives”, and “To increase my job opportunities.”

As illustrated in Table 20, “To advance my personal growth” had the highest mean for intrinsic survey items. The survey items that had the highest mean by ethnic group are African American, “To fulfill my personal objectives” and “To enrich my life”, Asian, “To develop my potential”, Caucasian, “To advance my personal growth” and “To develop my potential”, and Hispanic, “To advance my personal growth” and “To develop my potential”.

The lowest overall mean for intrinsic survey items as illustrated in Table 20 was for survey Item 23, “To gain the acceptance of friends”. This survey item also had the lowest mean for each ethnic group. From this mean rating the data suggest that gaining the acceptance of friends has very little impact on the pursuit of higher education.

Table 18

Means for all Ratings as a Function of Survey Item and Ethnicity of Respondent.

Survey Item		African American	Asian	Caucasian
1	To increase my income	6.15	5.40	5.94
2	To make my job more secure	5.72	5.60	5.97
3	To make more friends	3.62	3.80	3.50
4	To advance my personal growth	6.24	6.20	6.32
5	To develop my potential	6.10	6.40	6.32
6	To increase my access to food and clothing	4.63	3.60	3.42
7	To improve my current job condition	5.87	5.60	5.52
8	To participate in a variety of activities and clubs	4.18	4.20	3.36
9	To perform my job better	5.54	5.80	5.38
10	To fulfill my personal objectives	6.26	4.40	5.97
11	To fulfill my professional objectives	6.31	6.00	6.11
12	To be a member of a university community	4.43	3.60	4.06
13	To be appreciated by others	4.31	4.40	4.00
14	To buy a better vehicle or other material goods	4.57	4.60	3.94
15	To increase my ability to save for retirement	5.68	4.60	5.36
16	To help develop others	5.13	5.40	4.85
17	To be respected	5.13	5.40	5.11
18	To enrich my life	6.26	5.80	6.15
19	To enhance my social skills	5.29	6.00	4.38
20	To attain social status	4.46	4.60	4.03
21	To have better access to health care	5.00	4.80	4.09
22	To increase my job opportunities	6.28	6.00	6.30
23	To gain the acceptance of friends	3.72	3.80	3.05
24	To gain the acceptance of family	4.04	4.40	3.39
25	To gain a promotion	5.62	6.00	5.44
Overall		5.22	5.06	4.88

Table 18 - Continued

Survey Item		Hispanic	Other	Total
1	To increase my income	6.32	6.80	6.13
2	To make my job more secure	6.18	5.80	5.93
3	To make more friends	3.91	5.20	3.71
4	To advance my personal growth	6.66	6.60	6.39
5	To develop my potential	6.66	6.00	6.34
6	To increase my access to food and clothing	4.05	5.00	4.06
7	To improve my current job condition	5.98	5.80	5.78
8	To participate in a variety of activities and clubs	3.98	5.00	3.88
9	To perform my job better	5.34	6.00	5.45
10	To fulfill my personal objectives	6.54	7.00	6.22
11	To fulfill my professional objectives	6.55	7.00	6.32
12	To be a member of a university community	4.41	6.00	4.32
13	To be appreciated by others	4.59	4.40	4.29
14	To buy a better vehicle or other material goods	5.11	4.00	4.50
15	To increase my ability to save for retirement	5.68	5.60	5.55
16	To help develop others	5.07	6.40	5.06
17	To be respected	5.63	6.40	5.30
18	To enrich my life	6.27	6.80	6.23
19	To enhance my social skills	5.63	5.40	5.11
20	To attain social status	4.61	5.40	4.39
21	To have better access to health care	5.02	6.20	4.73
22	To increase my job opportunities	6.54	6.80	6.37
23	To gain the acceptance of friends	3.77	4.00	3.52
24	To gain the acceptance of family	4.20	4.80	3.90
25	To gain a promotion	5.82	6.00	5.64
Overall		5.38	5.78	5.16

Table 19

Means for Extrinsic Ratings as a Function of Survey Item and Ethnicity of Respondent.

Survey Item		African American	Asian	Caucasian
1	To increase my income	6.15	5.40	5.94
2	To make my job more secure	5.72	5.60	5.97
3	To make more friends	3.62	3.80	3.50
6	To increase my access to food and clothing	4.63	3.60	3.42
7	To improve my current job condition	5.87	5.60	5.52
8	To participate in a variety of activities and clubs	4.18	4.20	3.36
11	To fulfill my professional objectives	6.31	6.00	6.11
12	To be a member of a university community	4.43	3.60	4.06
14	To buy a better vehicle or other material goods	4.57	4.60	3.94
15	To increase my ability to save for retirement	5.68	4.60	5.36
19	To enhance my social skills	5.29	6.00	4.38
20	To attain social status	4.46	4.60	4.03
21	To have better access to health care	5.00	4.80	4.09
22	To increase my job opportunities	6.28	6.00	6.30
25	To gain a promotion	5.62	6.00	5.44
Overall		5.19	4.96	4.76

Table 19 - Continued

Survey Item		Hispanic	Other	Total
1	To increase my income	6.32	6.80	6.13
2	To make my job more secure	6.18	5.80	5.93
3	To make more friends	3.91	5.20	3.71
6	To increase my access to food and clothing	4.05	5.00	4.06
7	To improve my current job condition	5.98	5.80	5.78
8	To participate in a variety of activities and clubs	3.98	5.00	3.88
11	To fulfill my professional objectives	6.55	7.00	6.32
12	To be a member of a university community	4.41	6.00	4.32
14	To buy a better vehicle or other material goods	5.11	4.00	4.50
15	To increase my ability to save for retirement	5.68	5.60	5.55
19	To enhance my social skills	5.63	5.40	5.11
20	To attain social status	4.61	5.40	4.39
21	To have better access to health care	5.02	6.20	4.73
22	To increase my job opportunities	6.54	6.80	6.37
25	To gain a promotion	5.82	6.00	5.64
Overall		5.32	5.73	5.09

Table 20

Means for Intrinsic Ratings as a Function of Survey Item and Ethnicity of Respondent.

Survey Item		African American	Asian	Caucasian
4	To advance my personal growth	6.24	6.20	6.32
5	To develop my potential	6.10	6.40	6.32
9	To perform my job better	5.54	5.80	5.38
10	To fulfill my personal objectives	6.26	4.40	5.97
13	To be appreciated by others	4.31	4.40	4.00
16	To help develop others	5.13	5.40	4.85
17	To be respected	5.13	5.40	5.11
18	To enrich my life	6.26	5.80	6.15
23	To gain the acceptance of friends	3.72	3.80	3.05
24	To gain the acceptance of family	4.04	4.40	3.39
Overall		5.27	5.20	5.05

Table 20 - Continued

Survey Item		Hispanic	Other	Total
4	To advance my personal growth	6.66	6.60	6.39
5	To develop my potential	6.66	6.00	6.34
9	To perform my job better	5.34	6.00	5.45
10	To fulfill my personal objectives	6.54	7.00	6.22
13	To be appreciated by others	4.59	4.40	4.29
16	To help develop others	5.07	6.40	5.06
17	To be respected	5.63	6.40	5.30
18	To enrich my life	6.27	6.80	6.23
23	To gain the acceptance of friends	3.77	4.00	3.52
24	To gain the acceptance of family	4.20	4.80	3.90
Overall		5.47	5.84	5.27

Table 21 presents means for extrinsic survey items for each ethnic group, African American, Caucasian, and Hispanic. For this analysis ethnic group Asian and Other were not used because each group had only five respondents or 5% of the total respondents in the study.

Of the three aforementioned ethnic groups, the group with the highest mean rating was Hispanic, followed by African American and then Caucasian. Each of these ethnic groups rated “To fulfill my professional objectives” and “To increase my job opportunities” as the highest survey items amongst the extrinsic factors. It is worth noting that though the groups rated the same survey items the highest, the rating given to those survey items were highest for Hispanic.

For all three ethnic groups the lowest mean ratings were given to “To make more friends” and “To participate in a variety of clubs and activities.” Caucasians also rated these two survey items lower than the African American and Hispanic ethnic groups.

African Americans rated three survey items above six, Caucasians rated two survey items above six, and Hispanics rated four survey items above six. Overall there were three survey items rated above six.

Table 21

Means for Extrinsic Ratings as a Function of Survey Item and Ethnicity of Respondent

Survey Item		African American	Caucasian
1	To increase my income	6.15	5.94
2	To make my job more secure	5.72	5.97
3	To make more friends	3.62	3.50
6	To increase my access to food and clothing	4.63	3.42
7	To improve my current job condition	5.87	5.52
8	To participate in a variety of activities and clubs	4.18	3.36
11	To fulfill my professional objectives	6.31	6.11
12	To be a member of a university community	4.43	4.06
14	To buy a better vehicle or other material goods	4.57	3.94
15	To increase my ability to save for retirement	5.68	5.36
19	To enhance my social skills	5.29	4.38
20	To attain social status	4.46	4.03
21	To have better access to health care	5.00	4.09
22	To increase my job opportunities	6.28	6.30
25	To gain a promotion	5.62	5.44
Overall		5.19	4.76

Table 21 - Continued

Means for Extrinsic Ratings as a Function of Survey Item and Ethnicity of Respondent

Survey Item		Hispanic	Total
1	To increase my income	6.32	6.13
2	To make my job more secure	6.18	5.93
3	To make more friends	3.91	3.71
6	To increase my access to food and clothing	4.05	4.06
7	To improve my current job condition	5.98	5.78
8	To participate in a variety of activities and clubs	3.98	3.88
11	To fulfill my professional objectives	6.55	6.32
12	To be a member of a university community	4.41	4.32
14	To buy a better vehicle or other material goods	5.11	4.50
15	To increase my ability to save for retirement	5.68	5.55
19	To enhance my social skills	5.63	5.11
20	To attain social status	4.61	4.39
21	To have better access to health care	5.02	4.73
22	To increase my job opportunities	6.54	6.37
25	To gain a promotion	5.82	5.64
Overall		5.32	5.09

In an attempt to determine if any of the overall mean ratings for item rated from Table 21 were significantly different from one another or if there might be a main effect of ethnicity, or an interaction between ethnicity of participant and survey item rated, a 3 (ethnicity) X 15 (extrinsic survey item) mixed factorial analysis of variance was conducted upon the data which the means in Table 21 were based upon. The results of this analysis are displayed in Table 22.

As displayed in Table 22, there is a significant main effect for item rated as well as ethnicity. In addition, the interaction approached statistical significance. Since the interaction approached statistical significance, a test of the simple effects of ethnicity for each item rated was conducted. The results of this analysis are presented in Table 23.

Table 22

ANOVA Summary for Mean Rating of Extrinsic Motivator as a Function of Ethnicity of Participant and Item Rated

Source	*F - Observed*	*df*	*MSE*	*Probability*
Item Rated	75.295	7.835, 1465.106	3.933	.000
Ethnicity	4.145	2, 187	79.931	0.017
Item Rated x Ethnicity	1.634	15.670, 1465.106	3.933	0.055

Table 23 presents the test of simple effects for ethnicity of each extrinsic item rated. Of the fifteen extrinsic items, four of the survey items were statistically significant and one was marginally significant. The four statistically significant survey items were, “To increase my access to food and clothing”, “To buy a better vehicle or other material goods”, “To enhance my social skills”, and “To have better access to health care.”

Table 23

Test of Simple Effects of Ethnicity for each Item Rated - Extrinsic Motivators

Survey Item	*F - Observed*	*df*	*MSE*	*Probability*
1	1.048	2, 187	2.131	0.353
2	1.286	2, 187	2.534	0.279
3	0.721	2, 187	3.696	0.488
6	5.463	2, 187	4.475	0.005
7	1.377	2, 187	2.702	0.255
8	2.920	2, 187	4.076	0.056
11	1.875	2, 187	1.618	0.156
12	0.667	2, 187	4.160	0.514
14	5.056	2, 187	4.127	0.007
15	0.650	2, 187	3.264	0.523
19	7.363	2, 187	3.544	0.001
20	1.379	2, 187	4.065	0.254
21	3.849	2, 187	4.708	0.023
22	0.715	2, 187	1.666	0.490
25	0.668	2, 187	3.308	0.514

As displayed in Table 22, there is a significant main effect for item rated, ethnicity, and the interaction was very close to statistical significance, therefore a test of simple effects was completed and the results of this test are presented in Table 23. The results of this test indicated four of the survey items were statistically significant. In order to determine where the significant differences occurred, a Tukey test was conducted for each of these items. The results of the test were 1) African Americans and Caucasians differed significantly for survey Item # 6, “To increase my access to food and clothing”, 2) Hispanics and Caucasians differed significantly for survey Item # 14, “To buy a better vehicle or other material goods”, 3) Hispanics and African Americans differed significantly from Caucasians for survey Item # 19, “To enhance my social skills”, and 4) Hispanics differed significantly from Caucasians for survey Item # 21, “To have better access to health care”. For each of these significant differences, Caucasians rated the survey item lower than African Americans and Hispanics.

Table 24 presents the means for intrinsic survey items for African American, Caucasian, and Hispanics. As indicated by the table, the following trends were noted. Overall, the highest ratings were given by Hispanics, and the lowest by Caucasian. Hispanics and African Americans rated four intrinsic survey items above six; Caucasians rated three survey items above six. Hispanics and Caucasians rated survey Items 4 and 5, “To advance my personal growth”, and “To develop my potential” highest, while African Americans rated “To fulfill my personal objectives” and “To enrich my life” as the highest. All three ethnic groups rated survey Items 23 and 24, “To gain the acceptance of friends” and “To gain the acceptance of family” as the lowest survey items.

Table 24

Means for Intrinsic Ratings as a Function of Survey Item and Ethnicity of Respondent

Survey Item		African American	Caucasian	Hispanic	Total
4	To advance my personal growth	6.24	6.32	6.66	6.39
5	To develop my potential	6.10	6.32	6.66	6.34
9	To perform my job better	5.54	5.38	5.34	5.45
10	To fulfill my personal objectives	6.26	5.97	6.54	6.22
13	To be appreciated by others	4.31	4.00	4.59	4.29
16	To help develop others	5.13	4.85	5.07	5.06
17	To be respected	5.13	5.11	5.63	5.30
18	To enrich my life	6.26	6.15	6.27	6.23
23	To gain the acceptance of friends	3.72	3.05	3.77	3.52
24	To gain the acceptance of family	4.04	3.39	4.20	3.90
Overall		5.27	5.05	5.47	5.27

In an attempt to determine if any of the overall mean ratings for items rated from Table 24 were significantly different from one another or if there might be a main effect of ethnicity or an interaction between ethnicity of participant and survey item rated, a 3 (ethnicity) X 10 (intrinsic survey item) mixed factorial analysis of variance was conducted upon the data which the means in Table 24 were based upon. The results of this analysis are displayed in Table 25.

Table 25

ANOVA Summary for Mean Rating of Intrinsic Motivator as a Function of Ethnicity of Participant and Item Rated

Source	*F - Observed*	*df*	*MSE*	*Probability*
Item Rated	108.145	4.126, 771.615	4.408	.000
Ethnicity	2.346	1, 187	11.386	0.099
Item Rated x Ethnicity	1.146	8.253, 771.615	5.052	0.329

From the data presented in Table 25 we can determine there is a significant main effect of item rated, a marginal effect of ethnicity, and no interaction. Since the probability was almost .10, a Tukey test did not indicate any significant difference for ethnicity, however Hispanics had the highest mean rating and Caucasians had the lowest mean rating overall.

As displayed in Table 26, a Bonferroni Post Hoc Analysis was performed to determine which intrinsic survey items were statistically significantly different from one another. As can be seen by perusing the table, survey Item 23, “To gain the acceptance of friends” had the lowest mean rating as well as differing significantly from all other intrinsic survey items. From these data we can assume that gaining the acceptance of friends is not an important factor for any of the ethnic groups surveyed as it relates to motivation to pursue higher education.

Table 26 also displays four intrinsic survey items with mean ratings above six, and each of these survey items were rated significantly higher than from six of the ten intrinsic survey statements, but did not differ from one another. From these data we may assume that advancing personal growth, developing potential, fulfilling personal objectives, and enriching one’s life are all important factors in the motivation to pursue higher education across the ethnic groups surveyed.

Table 26

Results of Bonferroni Post Hoc Analysis for the Effect of Intrinsic Item Rated

Survey Item		Differs Significantly From Items:
4	To advance my personal growth (*M* = 6.39)	9, 13, 16, 17 23, 24
5	To develop my potential (*M* = 6.34)	9, 13, 16, 17 23, 24
9	To perform my job better (*M* = 5.45)	4, 5, 10, 13 18, 23, 24
10	To fulfill my personal objectives (*M* = 6.22)	9, 13, 16, 17 23, 24
13	To be appreciated by others (*M* = 4.29)	4, 5, 9, 10, 16 17, 18, 23
16	To help develop others (*M* = 5.06)	4, 5, 10, 13 18, 23, 24
17	To be respected (*M* = 5.30)	4, 5, 10, 13 18, 23, 24
18	To enrich my life (*M* = 6.23)	9, 13, 16, 17 23, 24
23	To gain the acceptance of friends (*M* = 3.52)	4, 5, 9, 10, 13 16, 17, 18, 24
24	To gain the acceptance of family (*M* = 3.90)	4, 5, 9, 10, 16 17, 18, 23

The mean difference is significant at the 0.05 level for survey items listed above.

Conclusions

From the aforementioned data, conclusions can be drawn to determine the most important extrinsic and intrinsic motivators in the pursuit of higher education, and whether gender, age, and ethnicity have an effect on these factors.

The most important extrinsic factors

From the data gathered in this study it can be determined the four most important extrinsic factors in the pursuit of higher education are survey Item 22, “To increase my job opportunities”, survey Item 11, “To fulfill my professional objectives”, survey Item 2, “To make my job more secure”, and survey Item 1, “To increase my income.” These four survey items did not differ significantly from each other, but differed significantly from most other items rated

The most important intrinsic factors

The most important intrinsic items were survey Item 4, “To advance my personal growth”, survey Item 5, “To develop my potential”, survey Item 10, “To fulfill my personal objectives”, and survey item 18 “To enrich my life”. These four survey items did not differ from each other, but were rated significantly higher than all other survey items.

Gender, age, and ethnicity

As indicated above there was no impact of gender for intrinsic items rated and the post hoc analysis revealed the pattern was very similar for extrinsic items rated. There was a significant difference for extrinsic motivator “To increase my access to food and clothing”, as it was rated significantly higher by males than females. The most interesting point about this survey item is that the mode for males is 7 and for

females the mode is 1. From these data we can assume that males are more motivated in their pursuit of higher education by the need to increase their access to food and clothing. This may be due to males predominately viewed as the main "provider" for the family.

Overall there is a significant negative correlation at the .01 level between age and 11 of the 25 survey items. Eight of these correlations were between age and an extrinsic motivator. The largest negative correlations were for survey Item 6, "To increase my access to food and clothing" and survey Item 14, "To buy a better vehicle or other material goods". There were also negative correlations between age and survey items for males and females independently, with most of these correlations being between age and extrinsic motivators for both genders. From these data one could draw the conclusion that older students, though working towards the same goal of a degree as younger students, are less motivated by the extrinsic and intrinsic survey items, specifically food, clothing, obtaining a vehicle or other material goods. This may be due to older students, having worked longer and earned more than younger students, not being as concerned with education providing increases to food, clothing, vehicles, or other material goods.

There was a significant main effect for extrinsic item rated and ethnicity and the interaction approached statistical significance. The test of simple effects indicated that four of the survey items yielded statistically significant results as a function of ethnicity. Results of the follow-up Tukey test indicated African Americans and Hispanics differed significantly from Caucasians on four extrinsic survey items. The survey items were "To increase my access to food and clothing", "To buy a better

vehicle or other material goods", "To enhance my social skills", and "To have better access to health care". For each of these significant differences, Caucasians rated the survey item lower than African Americans and Hispanics.

Caucasians also rated survey items overall on average lower than African Americans and Hispanics. As age played a factor in ratings, it seems ethnic groups also played a factor. The data do not necessarily lead to the conclusion that Hispanics are more motivated by the survey items in this study, but rather that they rated the survey items higher.

The results of the aforementioned tests regarding ethnicity may also be due to Caucasians participants in the survey being more financially secure at the time this research was conducted, and as such, were not as motivated by extrinsic survey items. Because only minimal amounts of annual income data were collected as part of the survey, no further analysis could be performed.

The alignment of the findings and the aforementioned literature review

The bulk of the literature review for this study focused on the extrinsic benefits of pursuing higher education. Increased earnings, better access to healthcare, increased retirement savings, and less time unemployed during a career are some of the extrinsic reasons to pursue higher education. Though some of the literature discussed the difference between extrinsic and intrinsic factors, the focus quickly turned back to the tangible, quantifiable extrinsic benefits. It does stand to reason that extrinsic benefits are the major selling point for universities as it pertains to completing a degree because of the quantifiable nature of the benefits. It would be a vague advertising campaign for a university to tout more self-esteem, a greater degree of happiness, and an increased feeling of self-worth as benefits to completing a degree because there are few ways to measure those attributes and those measurements are subjective at best. As a society we tend to focus on extrinsic, material gains as evidence of our success. You are much more likely to meet someone boasting of their earnings, home, or vehicle than their arrival at self-actualization. Sorry, Maslow.

Researchers' thoughts on findings

Upon analysis of the data, this researcher was surprised at the ratings intrinsic statements received given the population for this study. The overwhelming majority of students at Robert Morris University are first-generation college students, and as such, the underlying assumption was that intrinsic motivators were not as much of a motivating factor as extrinsic. As we tend to be as a nation more focused on material wealth and the many other forms of extrinsic motivators, so too did the expectations for this study run parallel to the masses. Upon further reflection it may be that being the first to attend a university in a family occurs because the internal drive to achieve a degree is so great and it is not due solely to the extrinsic motivators that are so often tied to having a successful career.

Implications and Recommendations

Significance of the study

The significance of this study is that it offered an insight into the most important extrinsic and intrinsic factors that motivate U.S. workers in their pursuit of higher education. The study determined there is no main effect of gender, but an interaction between item rated and gender for extrinsic motivators, there is a negative correlation between age and survey items, and there is a main effect of item rated and ethnicity for extrinsic survey items.

Significance for institutions of higher education

The results of this study are relevant and beneficial to institutions of higher education for the following reasons. First, when looking to develop degree programs, universities can consider programs that are not geared specifically to income, job, or career enhancement. Participants rated non-tangible, intrinsic motivators as important, and in some cases more important, than extrinsic motivators. Secondly, the negative correlation between age and survey items suggests that older students are less motivated by individual motivators though they are motivated to complete a degree program. This is an important point to note for classroom strategies because classes comprised of younger students may be more inclined to engage in a broader depth and range of discussions and activities due to their increased motivation for both extrinsic and intrinsic motivators. Older students may tend to focus more on core objectives and course completion. Lastly, the results of this study suggests African Americans, Caucasians, and Hispanics are motivated differently by extrinsic motivators, thus effective marketing tools would consider these results before attempting to attract

students. Though it would be more cost effective for any university to have one marketing approach for all ethnicities, it may ultimately not be the most effective and successful plan of action.

Significance for employers

The data from this study suggests that it would be beneficial for employers to consider intrinsic motivators as part of an overall benefit plan and not focus solely on extrinsic rewards as the primary form of compensation. Though the purpose of this study was not to determine which type of rewards employees preferred, analysis of the data consistently showed high ratings given to intrinsic motivators. If an employer's sole or primary form of reward was extrinsic in nature, the employer could run the risk of losing employees who are more motivated or as motivated by intrinsic rewards as a form of motivation. The results of the analysis also suggest employers should include both extrinsic and intrinsic motivators in training programs. Creating such programs would allow intrinsically motivated employees to see the value of training programs beyond increased efficiency, effectiveness, and profits for the company.

In summary, institutions of higher education as well as employers would benefit by considering intrinsic motivators when seeking to attract, retain, and reward U.S. workers. Extrinsic motivators are no doubt an alluring payoff for some, but the importance of intrinsic motivators should not be ignored.

Recommendations for future research

This study was conducted at Robert Morris University located in Chicago, Illinois. Similar studies should be conducted at the other campuses of Robert Morris University to determine if the findings are consistent amongst all campuses. The study should also be replicated for students at the doctoral level of education to determine if extrinsic and intrinsic motivators vary at that stage in the pursuit of higher education. Robert Morris University does not currently offer a doctoral program, so research at another university would be necessary to accomplish this additional study.

Because the overwhelming number of respondents of this study were enrolled in a business program, it may be useful to replicate this study with students enrolled in non-business degree programs such as science, the arts, or education. The results of these studies may determine that extrinsic and intrinsic factors vary depending on the degree program of the student.

Advice for future researchers

Collecting annual income data posed a challenge for this study because many respondents appeared hesitant to offer the data, evident by the number of surveys leaving annual income blank. If income levels are to be used in future studies it may be helpful to offer a salary range on the survey for respondents to choose from. This may reduce the hesitancy of respondents to share annual income information. Having accurate annual income data will allow future researchers to determine if there is a correlation between increased income and whether extrinsic or intrinsic motivators are the driving force in the pursuit of higher education. One might assume that

individuals at higher levels of annual income may be more motivated by intrinsic factors because extrinsic goals or satisfiers have been met.

Extrinsic versus intrinsic factors

The purpose of this study was to determine the most important extrinsic and intrinsic factors that motivate U.S. workers to pursue higher education and whether age, gender, or ethnicity has an effect on these factors. Another question one might ask is if there is a significant difference between extrinsic and intrinsic factors as motivators to pursue higher education. In an attempt to answer this question the top four rated extrinsic and intrinsic factors as collected in this study were subjected to a single-factor within-subjects ANOVA. The results of this analysis are displayed in Table 27. As indicated in Table 27, there was a significant effect of the items rated for these eight items. In an attempt to determine where significant differences lie, a Bonferroni analysis was performed and the results of this analysis are displayed in Table 28. In most cases there is no difference between extrinsic and intrinsic items rated. The data suggest that all four of the intrinsic statements were as important as the extrinsic statements, and more important than to make my job more secure. These data were interesting because extrinsic factors are commonly assumed to be the overriding reason to pursue higher education.

In two cases an extrinsic survey item rated lower than the intrinsic items. This extrinsic survey item was “To make my job more secure” which rated lower than “To advance my personal growth” and “To develop my potential.” This is an important point to note because much data can be found regarding the link between obtaining a college degree(s) and increased lifetime earnings, though the results of this survey

suggest intrinsic motivators are sometimes a greater motivating factor in the pursuit of higher education.

Table 27

Test of Effect for Items Rated for Top Extrinsic and Intrinsic Factors – All Data

Source	*F - Observed*	*df*	*MSE*	*Probability*
Survey Item	5.706	4.616; 918.490	1.242	.000

Table 28

Results of Bonferroni Post Hoc Analysis for the Effect of Extrinsic versus Intrinsic Item Rated - All Data

Survey Item		Differs Significantly From Items:
1	To increase my income (*M* = 6.13)	22
2	To make my job more secure (*M* = 5.93)	11, 22, 4, 5
11	To fulfill my professional objectives (*M* = 6.32)	2
22	To increase my job opportunities (*M* = 6.36)	1, 2
4	To advance my personal growth (*M* = 6.39)	2
5	To develop my potential (*M* = 6.34)	2
10	To fulfill my personal objectives (*M* = 6.22)	none
18	To enrich my life (*M* = 6.23)	none

The mean difference is significant at the 0.05 level for survey items listed above.

One might also ask if there would be a different pattern of results if we take gender into account. In an attempt to determine this, a single factor within-subjects analysis was conducted on male and female data separately. As indicated in Table 29, there is an effect for females

In an attempt to determine where the differences lie, a Bonferroni analysis was performed on the female data. As indicated in Table 30, survey Item 4, “To advance my personal growth” had the highest absolute value, and was rated significantly higher than two of the extrinsic items. In no case was there any extrinsic item rated higher than an intrinsic item, but in three cases the reverse of that was true. From these data we can assume that intrinsic motivators are a greater factor in motivating females to pursue higher education than males.

Table 29

Test of Effects for Top Extrinsic and Intrinsic Items Rated by Gender

Source	*F - Observed*	*df*	*MSE*	*Probability*
Male	0.472	5.418; 411.793	0.863	0.811
Female	6.476	4.046; 493.568	1.57	.000

Table 30

Results of Bonferroni Post Hoc Analysis for the Effect of Extrinsic versus Intrinsic Item Rated - Female Data

Survey Item		Differs Significantly From Items:
1	To increase my income (*M* = 6.08)	22, 4
2	To make my job more secure (*M* = 5.84)	11, 22, 4, 5
11	To fulfill my professional objectives (*M* = 6.43)	2
22	To increase my job opportunities (*M* = 6.44)	1, 2
4	To advance my personal growth (*M* = 6.48)	1, 2
5	To develop my potential (*M* = 6.37)	2
10	To fulfill my personal objectives (*M* = 6.22)	none
18	To enrich my life (*M* = 6.27)	none

The mean difference is significant at the 0.05 level for survey items listed above.

Summary of extrinsic versus intrinsic factors

Though the purpose of this study was not to determine which type of factor, extrinsic or intrinsic, is a greater motivator in the pursuit of education, analysis of the data can easily have you wondering. Upon first glance it was clear that the absolute ratings for intrinsic survey items were higher, on average, than the extrinsic survey items. This researcher found the results interesting because personal experiences in a corporate career has lent itself to believing extrinsic motivators, job title, compensation, fringe benefits, etc., are the major motivators in pursuing education. For many, this researcher included, advancing personal growth, developing potential or enriching life, are not often the overriding factors that propel one to "success" in a corporate environment, though having some degree of these intrinsic motivators would not act as a hindrance either.

When comparing the top four rated extrinsic and intrinsic survey items as collected in this study it is clear that intrinsic factors are just as important as, and sometimes more important than extrinsic factors in the pursuit of higher education. As a researcher, it is pleasing to see these results. Education should not be used or viewed solely as a tool to compile tangible, extrinsic goals. Very few of the items one acquires during a career will still be around at the end of that career with the exception of knowledge, and as such, it should be treated as a valuable, lasting commodity.

REFERENCES

Alderfer, C. (1969). An empirical test of a new theory of human needs. *Organizational Behavior and Human Performance, 4*, pp. 142 – 175.

Analoui, F. (2000). *What motivates senior managers? Journal of Managerial Psychology, 15* (4), 324-340.

Aslanian, C. B., & Brickell, H. M. (1980). *Americans in transition: Life changes as reasons for adult learning.* New York: College Entrance Examination Board.

Bassy, M. (2002). *Motivation and work – Investigation and analysis of motivation factors at work.* Doctoral dissertation, Linköping University, Sweden, 2002.

Buford, J. A., Jr., Bedeian, A. G., & Lindner, J. R. (1995). Management in extension (3rd ed.). Columbus, Ohio: Ohio State University Extension.

Butler, S., Deprez, L., & Smith, R. (2004). Education: The one factor that can keep me from sliding into hopeless poverty. *Journal of Poverty*, *8*, 1-24.

Carlson, M. (2009, Feb). For profit education sector: Recession proof? Seeking Alpha. Feb. Retrieved from http://www.seekingalpha.com.

Carnevale, A. (2006, July). Hitting the books still pays off. *Business Week*, p90-91.

Catalano, J.T. (1985). Keeping college students in college: A motivation-retention model. *College Student Journal*, 19, 255-260.

Coyne, T. (2009). Demand for GED classes increase with job losses. Available from http://www.proliteracy.org.

Cross, K.P. (1981). *Adults as learners: Increasing participation and facilitating learning*. San Francisco: Jossey-Bass.

Deci, E. L. (1975). *Intrinsic motivation*. New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (1991). *Intrinsic motivation and self determination in human behavior*. New York: Plenum Press.

Dohm, A. (2000, July). Gauging the labor force effects of retiring baby-boomers. *Monthly Labor Review*, 17- 25. Available from http://bls.gov.

Dohm, A., & Wyatt, I. (2002). College at work: Outlook and earnings for college graduates, 2000 – 2010. *Occupational Outlook Quarterly*, 46, 2-15.

Eduventures, (2008). The adult learner: An eduventures perspective. Retrieved from http://www.plus50.aacc.nche.edu/docs/trends/Eduventures-Adult-Learner.pdf.

Gittins, R. (2009). Getting a degree is an excellent investment. Available from http://www.utahbar.org.

Heelan, C.M. (2001, February/March). Working toward a global view. *Community College Journal*. Available from http://www.communitycollegejournal.com.

Herzberg, F. (1966). *Work and the nature of man*. Cleveland, OH: World.

Henry, G., & Basile, K. (1994). Understanding the decision to participate in formal adult education. *Adult Education Quarterly*, 44(2), 64-82.

Higgins, J. M. (1994). *The management challenge* (2nd ed.). New York: Macmillan.

Horine, L. (2007). An analysis of the motivations, barriers, concerns and special needs of adults returning to higher education. Unpublished doctoral dissertation, University of Central Missouri. Available from http://books.google.com.

Houle, C. (1961). *The inquiring mind.* Madison, WI: University of Wisconsin Press.

Jongsma, A. (2007). *Grab a master's and double your income*. University World News. Available from www.universityworldnews.com.

Knowles, M. (1990). *The adult learner: A neglected species*. Houston, TX: Gulf.

Kolesnick, W.B. (1978). *Motivation*. Boston: Allyn and Bacon.

Kreitner, R. (1995). *Management* (6th ed.). Boston: Houghton Mifflin.

Lee, M., & Mather, M. (2008). U.S. Labor force trends. *Population Bulletin*, 63, 3-16.

Liming, D., & Wolf, M. (2008). Job outlook by education, 2006 – 2016. *Occupational Outlook Quarterly*, 52, 2-14.

Luthans, F. (1995). *Organizational behavior* (7th ed.). New York, NY: Houghton Mifflin.

Maslow, A. (1943). A theory of human motivation. *Psychological Review*, 50, 370-396.

McGregor, D. (1957). *The human side of enterprise*. New York, NY: McGraw-Hill.

Miller, H.L. (1967). Participation of adults in education. A force field analysis. Boston: Center for the Study of Liberal Education for Adults, Boston University.

Mullins, L. J. (1999). *Management and organizational behavior*, (5th ed.). Saddle River, NJ: Prentice Hall.

Ogren, C. (2005). *The American state normal school: An instrument of great good.* New York: Palgrave MacMillian.

Silvia, J. (2007). Where are the jobs*? ABA Banking Journal*, 99, 1-3.

Spanard, J. (1990). Beyond intent: reentering college to complete the degree. *Review of Educational Research*. *60*, (3), pp. 309-344.

Smart, J., & Pascarella, E. (1987). Influences on the intent to reenter higher education. *Journal of Higher Education*, 58, 306-322.

Timarong, A. (2002). Adult learning and learners. Pacific Resources for Education and Learning. Available from www.prel.org.

Tolman, E.C. (1932). *Purposive behavior in animals and men*. New York: Century.

Vallerand, J. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and motivation in education. *Educational and Psychological Measurement, 52,* 1004 – 1017.

Vroom, V. (1964). *Work and motivation*. New York: Jon Wiley & Sons.

Westerman, J., & Donoghue, P. (1989). *Managing the Human Resource*, New York: Prentice Hall.

Wiley, C. (1997). *What motivates employees according to over 40 years of motivation surveys. International Journal of Manpower*. *18*, (3) pp. 263-280.

Wolfgang, M., & Dowling, W. (1981). Differences in motivation of adult and younger undergraduates. *Journal of Higher Education, 52,* 640-648.

Woolcock, N. (2009, Feb 16). University applications rise by 8% as recession bites. *University World News.* Available from http://www.universityworldnews.com.

APPENDIX A

SURVEY INSTRUMENT

Section I

Motivation Survey

This motivation survey is purely for academic analysis and understanding. Please respond to each of the following questions by circling the appropriate letter or filling in the blank with the appropriate number.

1. Gender — A. Male B. Female

2. Educational Status
   A. High School
   B. Undergraduate
   C. Graduate
   D. Other

3. Years of full-time Employment _____

4. Annual Income _____

5. Age _____

6. Degree program
   A. Business
   B. Education
   C. Science

7. Ethnicity
   A. African American
   B. Asian
   C. Caucasian (white)
   D. Hispanic
   E. Other (please specify) _____

8. Occupation _____

Section II

We would like to know to what extent each of the following factors influenced your decision to participate in a higher education program at Robert Morris University or Olivet Nazarene University. Please indicate how influential each of the items listed below was in your decision to participate in the higher education program by circling the one best response for each item. The scale for each item is as follows:

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neutral
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

1.	To increase my income	1 2 3 4 5 6 7
2.	To make my job more secure	1 2 3 4 5 6 7
3.	To make more friends	1 2 3 4 5 6 7
4.	To advance my personal growth	1 2 3 4 5 6 7
5.	To develop my potential	1 2 3 4 5 6 7
6.	To increase my access to food and clothing	1 2 3 4 5 6 7
7.	To improve my current job condition	1 2 3 4 5 6 7
8.	To participate in a variety of activities and clubs	1 2 3 4 5 6 7
9.	To perform my job better	1 2 3 4 5 6 7
10.	To fulfill my personal objectives	1 2 3 4 5 6 7
11.	To fulfill my professional objectives	1 2 3 4 5 6 7
12.	To be a member of a university community	1 2 3 4 5 6 7
13.	To be appreciated by others	1 2 3 4 5 6 7
14.	To buy a better vehicle or other material goods	1 2 3 4 5 6 7
15.	To increase my ability to save for retirement	1 2 3 4 5 6 7
16.	To help develop others	1 2 3 4 5 6 7
17.	To be respected	1 2 3 4 5 6 7
18.	To enrich my life	1 2 3 4 5 6 7
19.	To enhance my social skills	1 2 3 4 5 6 7
20.	To attain social status	1 2 3 4 5 6 7
21.	To have better access to health care	1 2 3 4 5 6 7
22.	To increase my job opportunities	1 2 3 4 5 6 7
23.	To gain the acceptance of friends	1 2 3 4 5 6 7
24.	To gain the acceptance of family	1 2 3 4 5 6 7
25.	To gain a promotion	1 2 3 4 5 6 7

26. Please provide other reasons not listed above that motivated you to pursue higher education.

_____