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The Effect of Motivation on Student Success in a First-Year Experience Course

Kimberly Renee Cunningham

Western Kentucky University, kimberly.cunningham@wku.edu

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THE EFFECT OF MOTIVATION ON STUDENT SUCCESS IN A FIRST-YEAR EXPERIENCE COURSE

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By
Kimberly Renee Cunningham

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THE EFFECT OF MOTIVATION ON STUDENT SUCCESS IN A FIRST-YEAR EXPERIENCE COURSE

Date Recommended March 5, 2013

Jesdi Helbig, Director of Dissertation

Linda Brown Gonzales

Dr. Linda Gonzales

James B. McCaslin

Dr. James McCaslin

Tony Norman

Dr. Tony Norman

Dean, Graduate Studies and Research  Date
Alfred Montapert once said, “To accomplish great things we must first dream, then visualize, then plan…believe…act!” This particular quote has encouraged and motivated me to strive for success in my life. I would like to dedicate this dissertation to Melvin and Inez Cunningham for believing in the power of education and always encouraging me to take leaps of faith in life. Both of you instilled in me the value of hard work and dedication and the belief that I could achieve great things in my life. I thank you for the many sacrifices you made in order to help me complete my educational endeavors. I love you both!

This dissertation is for those who dare to dream the impossible dream and for those who are the first in their family to earn a college degree while faced with many obstacles. This is for those who discover their talents, beat all the odds, and remind us that those who are willing to work hard and overcome obstacles can and will achieve greatness.
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Research on factors involved in freshman retention suggested that conditionally-admitted college students who failed to pass a less academically challenging course, such as freshman orientation, tended to have significantly lower rates of college persistence, and also suggested that failure of such courses may be attributed to motivation factors rather than academic ability. This study examined the relationship between motivation and academic success of conditionally-admitted college freshmen in a first-year experience course to determine whether motivation played a significant role in student achievement in this course.

The population of this study consisted of 309 conditionally-admitted students at a comprehensive university located in the Midwestern United States. Motivation was assessed using a segment of the Motivated Strategies for Learning Questionnaire (MSLQ) comprised of the following five motivation subscales: intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, and self-efficacy for learning. Students enrolled in the first-year experience course were administered the MSLQ during the second week of the fall 2012 semester. Correlation analyses were performed to determine the relationship between motivation subscale scores and academic success, as measured by final grade in the course. Multiple regression analyses were used to determine how the motivation subscales were related to academic success,
controlling for certain demographic and pre-college variables. Because some students were absent from class on the day of the MSLQ administration, chi-square analyses of independence and a t-test were performed to determine whether a difference was found in final grade, demographic, and pre-college characteristics for students who took the MSLQ versus those who did not.

The analyses revealed only slight support for the assertion that motivation is related to success in the university experience course. However, evaluating the motivation subscale scores controlling for demographic and pre-college variables yielded a significant, but weak, relationship with first-year seminar final grade. Given the unfortunate selection bias of the study, it still suggests that the motivational assessment could be used as a tool to predict performance in first-year experience courses, and interventions could be designed to increase success for conditionally-admitted students.
CHAPTER I: INTRODUCTION

The Kentucky State Legislature passed Senate Bill 1 in 2009 mandating that state institutions focus resources on increasing graduation rates by 3% each year for postsecondary students entering college who need developmental work in reading, math, or English. Moreover, the Kentucky Council on Postsecondary Education included in its 2011-2015 Strategic Agenda the requirement to improve graduation rates of underrepresented minorities, students who need developmental courses, and students who are eligible for Pell Grants (Council on Postsecondary Education, 2011). Additionally, Western Kentucky University’s provost established an initiative to improve one-year retention of all first-year students to 80% and increase six-year graduation rates to 60% (D. McElroy, personal communication, May 26, 2011).

To address these and other challenges of enhancing undergraduate retention and graduation rates, Western Kentucky University formed the WKU Retention Task Force in 2011 to focus on the following targeted outcomes:

- Increase first-year persistence rate of first-time, full-time freshmen from 73.7% to 80%
- Increase persistence rate of second-year first-time, full-time freshmen to the third year from 87.3% to 90%
- Decrease the percentage of entering first-time, full-time freshmen not yet graduated after six years from 5.4% to 3.0%
- Increase overall six-year graduation rate from 47.5% to 50% (D. McElroy, personal communication, May 26, 2011)

To achieve these targeted outcomes, the Task Force began examining best practices to
increase retention and hoped to use these evaluations to develop recommendations for improving established campus retention initiatives.

WKU had several existing campus retention programs targeting specifically at-risk, academically underprepared students, many of whom are first-generation students and underrepresented minorities. These programs include Success through Evaluation, Placement, and Support (STEPS); Best Expectations Program (BEP); Cornerstone Program; Summer Early Entry Program; and University Experience.

The STEPS program was developed to assist academically underprepared students with succeeding in college. The goal of the program is to retain and graduate first-time freshmen with an English ACT score of less than 18, Reading ACT score less than 20, or SAT verbal/critical reading score less than 450 (STEPS, 2012). Effective fall 2010, the STEPS program became mandatory for all students meeting the listed criteria for their first two semesters at WKU (Thomas, 2012).

The BEP program was designed to help students become more accountable for their overall success in college. This reactive program targets continuing WKU students on academic probation or below and requires study hours and attendance at workshops on a variety of topics such as the value of time management skills, understanding good study habits, and test taking methods (BEP, 2012).

The Cornerstone program is another program offered to students conditionally-admitted to WKU’s South Campus. The program’s purpose is to assist the persistence efforts of conditionally enrolled students attending South Campus classes as they seek main campus admission by the end of their first-year of college. Cornerstone students are required to participate in peer intrusive advising, attend study hours, and select
supplemental classroom instruction workshops (Cornerstone Program, 2012).

The Summer Early Entry (SEE) program is offered to incoming freshmen at WKU who are required to take any developmental course. Students are invited to take advantage of this opportunity to get a head start on required developmental courses before they begin college in the upcoming fall semester. As an added benefit of the program, students are offered one-on-one faculty support, free tutoring, and the opportunity to become acquainted with WKU’s campus (SEE, 2012).

University Experience is a freshmen seminar course designed specifically to welcome first-year students to WKU and help them acclimate to the college environment. While University Experience 175 (UC 175) is offered to regularly admitted freshmen, University Experience 175C is offered exclusively to conditionally-admitted freshmen at South Campus. The semester-long course is designed with four major themes: building character, learning about campus resources, developing effective academic skills, and exploring personal goals.

WKU-sponsored research supports a positive relationship between grades in University Experience 175 and persistence. Foraker (2011) found that, while passing University Experience 175 was not necessarily a predictor of college persistence, failure to pass was a predictor of not persisting in college and not graduating. He found that freshmen who failed to pass a more challenging college course like math still had a significantly higher graduation rate than those who failed to pass UC 175 (35% to 8%, respectively). In UC 175, which has a 90.1% pass rate and an average grade earned of 3.35 on a 4-point scale, Foraker asserted that failure may be less a function of ability and more a function of motivation factors, which may warrant the attention of those seeking
to improve the university’s retention and graduation rates. If poor performance in the UC 175 course can be predicted by measuring motivation, then targeting these students in the first few weeks of the course may provide an opportunity to turn the tide of freshman attrition.

Predicting potential failure in UC 175 courses by assessing motivation may be especially beneficial for conditionally-admitted freshmen taking the University Experience 175C course, given that participation in University Experience combined with an early warning program to increase freshman retention had the most impact on at-risk students (Foraker, 2011). If early identification of students with low motivation can help to detect students who may be at higher risk for failure in University Experience, a motivational assessment may serve as a valuable tool to target freshman retention services.

**Purpose of the Study and Research Questions**

The purpose of this study was to examine the relationship between student motivation factors and academic success in a first-year experience course for conditionally-admitted freshmen. The following six research questions were addressed:

1. Does intrinsic goal orientation affect success in a first-year seminar course?
2. Does extrinsic goal orientation affect success in a first-year seminar course?
3. Does task value affect success in a first-year seminar course?
4. Does control of learning beliefs affect success in a first-year seminar course?
5. Does self-efficacy for learning and performance affect success in a first-year seminar course?
6. Does motivation as measured by MSLQ affect success in a first-year seminar course controlling for demographic and precollege variables?

Data were analyzed for first-time students enrolled in UCC 175C, the University Experience course designed for at-risk students enrolled at the South Campus of Western Kentucky University. The instrument that was used to assess motivation was the Motivated Strategies for Learning Questionnaire (MSLQ).

**Significance of the Study**

Research is limited on the effect of motivation on academic success for conditionally-admitted students in first-year experience courses. This study is one of the first to evaluate motivational outcomes based on the MSLQ for students in a freshmen experience course targeted to conditionally-admitted students. Results from this study may not only identify a potential tool to help recognize students who may be at higher academic risk due to low motivation, it may provide justification for incorporating dimensions of motivation into the University Experience curriculum for conditionally-admitted students.

**Limitations of the Study**

Given that it was not practical to manipulate the independent variables of motivation subscale scores for the student participants, a non-experimental quantitative research design was used. Non-experimental research is conducted in a natural setting involving multiple variables that may be operating independently or influencing each other. While it may be possible to identify relationships between variables, there are limitations on demonstrating cause and effect between variables (Wiersma & Jurs, 2009). This challenge makes it difficult to determine causal relationships; however, any
relationship established between independent and dependent variables in this study may be useful in future experimental research.

Another limitation of this study involved the sample population. The study targeted conditionally-admitted freshmen enrolled in UCC 175C at the South Campus of Western Kentucky University. UCC 175C is not a requirement course but was highly recommended for this particular population of students. Therefore, conditionally-admitted freshmen who chose to enroll in UCC 175C may differ significantly on motivational factors than students who did not enroll. Since this study sought to determine the relationship between motivation variables and success in a first-year experience course, the results, while not generalizable to all conditionally-admitted freshmen, may be generalizable to those who choose to take advantage of similar college transition courses.

Assumptions

This study is based on the following assumptions common to basic research.

- Participants willingly took part in the study.
- Participants comprehended the questions asked on the instruments.
- Participants truthfully answered the questions on the instruments.
- Participants were representative of the population at their institution.

Definition of Terms

*Academic Motivation.* Academic motivation is a student’s desire (as reflected in approach, persistence, and level of interest) regarding academic subjects when the student’s competence is judged against a standard of performance or excellence (DiPerna & Elliott, 1999; McClelland, 1961; Wigfield & Eccles, 2002).
**Academic Success.** Academic success is defined as the grade earned in the UCC 175C course.

**Conditionally-Admitted.** Conditionally-admitted students are those who have a high school GPA between 2.0 and 2.49 or an ACT composite between 17 and 19.

**Motivated Strategies Learning Questionnaire (MSLQ).** The MSLQ is an 81-item, self-report instrument used to measure a college student’s motivation and learning strategies.

**Definition of MSLQ Terminology**

The following terms are used in this study, as defined specifically by Schunk, Pintrich, and Meece (2007):

- **Intrinsic Goal Orientation.** “Motivation to engage in an activity for its own sake” (p. 377).

- **Extrinsic Goal Orientation.** “Motivation to engage in an activity as a means to an end” (p. 376).

- **Task Value.** “The subjective beliefs about reasons for doing the task, why the individual wants to do the task” (p. 380).

- **Control of Learning Beliefs.** “Expectations about the links between an agent and the end; also called control expectancy beliefs” (p. 376).

- **Self-Efficacy for Learning and Performance.** “One’s perceived capabilities for learning or performing actions at designated levels” (pp. 147-148).
Organization of the Dissertation

This dissertation is divided into five chapters. Chapter I presents the purpose of the study and research questions, significance, limitations, and assumptions. Chapter II is a review of literature that illustrates the theoretical background and empirical foundation for this study. The methodology is explained in Chapter III. Chapter IV describes the results from the data analysis. Finally, the findings and implications of this study, as well as recommendations for future research, are discussed in Chapter V.
CHAPTER II: REVIEW OF THE LITERATURE

Motivation and Student Success

Student motivation has been studied for decades and the relevant literature spans disciplines. Basic theories of motivation in educational settings often draw on Tinto’s 1975 review of relevant research as open admissions universities became readily accessible and dropout rates soared. According to Tinto (1975), it had become increasingly difficult for institutions to design effective retention programs to serve their student bodies, since much of the available literature was contradictory. Tinto argued that current research was only descriptive and proposed that, in order to understand the phenomenon, the concept of dropping out must be precisely defined and the multitude of variables involved in non-completion must be separated into discrete, measurable components. He offered a theoretical model designed to measure both the individual characteristics related to dropout behavior and the effect of individual interactions with the institution. His research design provided a basis for explaining, rather than merely describing “definably different forms of dropout behavior” (p. 90).

Tinto’s (1975) model borrowed from disciplines of social psychology and educational economics to build “an institutional rather than a systems model of dropout” (p. 90) to account for the relationship between individual background characteristics (High school GPA, socioeconomic status, gender, and ethnicity) and individual emotional characteristics (motivation and expectations of academic achievement). He called for future research to implement similar theoretical frameworks for statistical analysis of distinct variables using the dependent variables of persistence or dropout. An overabundance of detailed research based on Tinto’s call for analysis is now available.
Allen (1999) acknowledged the validity of Tinto’s methodology and used a similar model for his study of first-year student motivation and persistence. In his data analysis, Allen found that motivation to complete college had a measurable effect on minorities. Allen’s identification of motivation as a discrete factor in minority persistence is significant, as institutions cannot influence parental level of education or high school ranking (other variables influencing persistence) but might be able to formulate policies to provide effective support for motivation and first-year GPAs.

Chemers, Hu, and Garcia (2001) showed a clear connection between self-efficacy (a kind of self-confidence in one’s abilities), academic expectations (how one expects to perform in school tasks), and academic performance (how one is measured in performance of school tasks). They argued that the attitudes students brought with them to the university were key. Students who brought positive world views and attitudes with them to the university could use those attitudes to aid their transition to university life (Chemers et al., 2001).

Motivation is a well-studied psychological issue since it can be seen as the drive behind all types of behavioral choices. This issue has been of much concern to educators; highly motivated students learn well under variable conditions. Ryan and Deci (2000) conducted a psychologically-based examination of motivation within a framework of self-perceived competence, security in supportive relationships (relatedness), and self-driven purpose (autonomy)—three basic needs people require to experience social and emotional growth. In particular, measures to differentiate internal (intrinsic) from external (extrinsic) sources of motivation were developed so that impacts on both could be explored. Intrinsic motivation occurs when students complete tasks for their own
reasons, not related to external rewards such as grades. Extrinsic motivation is the opposite, when students complete tasks for reasons others have established, such as grades. When autonomy, relatedness, and competence were supported, both intrinsic and extrinsic motivations were enhanced. In the opposite settings, motivations were distinctly diminished. Essentially, when people, students included, were involved in social contexts that were supportive of these three major needs, they had the “nutriments essential for positive motivation and experience and, in turn, for enhanced performance and well-being” (Ryan & Deci, 2000, p. 76).

Among other internal attributes, motivation is strongly linked to possession of autonomy, a desired and expected outcome of higher education. Autonomous people have three main characteristics: intrinsic motivation, personal control of their own decisions, and responsibility for their own actions. These characteristics are associated with high achievement and deep learning styles. Students who are actually interested in and curious about learning, and who study in order to understand, tend to do very well in academics. Data gathered from nearly 400 first-year students showed that these students had high estimates of personal control as well as attributes of intrinsic motivation, which indicated that they were primed for autonomy (Fazey & Fazey, 2001).

Given these understandings of motivation, the importance of autonomous learning, and the link of first-year experiences to persistence, the courses students take in their first year are crucial. To a great extent, the courses freshmen select are within the control of universities, and first-year seminars are offered at over 96% of U.S. universities as a logical result of institutional attempts to offer effective support for their students and subsequently retain them (Barefoot, Griffin, & Koch, 2012).
Porter and Swing (2006) explained that the relationship between first-year seminars and persistence has been established across many significant studies, but they pointed out that most studies centered on only one institution. Since so many universities now offer first-year seminars, and seminar content varies widely, these researchers designed their study to include the common components of standard seminar content, individual characteristics of the students, and relevant institutional characteristics such as size, public/private, and per-student spending. They used data gathered in 2001 from across 45 institutions from over 20,000 students who had responded to a First-Year Initiative survey. Using intent to persist as “one of the best predictors of actual persistence in the future” (p. 97) and as a kind of motivation for completion, the study revealed positive relationships to persistence in all course measurements, though the overall effect was small.

Responding to the 2012 national survey conducted by the John N. Gardner Institute for Excellence in Undergraduate Education, nearly half of participating institutions reported that first-year seminars increased retention and/or graduation rates (Barefoot et.al., 2012). Approximately 25% reported no researched data or new programs with too little data for research. The remainder of approximately 25% of first-year programs generally designed to increase retention failed to do so.

Tinto (1975) pointed out in his foundational call for improved methodology, definitions of terms remain critical as institutions develop policies designed to enhance students’ motivation to persist in university studies. The terms of persistence, retention, completion, and success can be defined such that they have only to do with institutional statistics rather than benefits to students. Tinto (2005) challenged traditional collective
definitions of success and argued that a focus on individual students and individual courses can be considered the basis for overall measures of success because “student success, however defined, is built upon success in one course at a time” (p. 1). He advocated for all students that the institutional focus be on student learning, stronger connections between courses and faculty, and building student communities.

Tinto argued that the connectivity between these components significantly impacts student motivation to persist. A very recent study showed that motivation had a stronger impact on retention than ability (Alarcon & Edwards, 2012) and suggested that programs targeting both abilities and motivations of students would likely be effective. While standardized test scores were validated as logical predictors of academic performance, various analyses of research data showed that “motivation factors were consistently the stronger predictors of retention” (p. 56).

Theoretical Perspective

Bandura’s Social Cognitive Theory attempted to explain the nature of human behavior, suggesting that humans have an innate ability to model the behaviors of others. As a result of modeling such behaviors, humans develop their own set of behaviors (Bandura, 1986).

Based on his analysis of motivation methods in social learning theory, Bandura (1986) developed his Social Cognitive Theory. The theory dealt with a variety of items such as self-efficacy, measures of internal and external motivation, beliefs about one’s own ability to learn, and the value students find in academic tasks. Social Cognitive Theory is widespread in the area of education, and the theory as a whole provides basic
fundamental principles for learning (Schunk et al., 2007). It is particularly relevant for explaining human behaviors such as academic motivation (Bandura, 1986).

Although many motivational models can work with Social Cognitive Theory, Pintrich (2003) identified three aspects that span many different models. The models included “beliefs about one’s ability or skill to perform the task (expectancy components); beliefs about the importance, interest, and utility of the task (value components); and feelings about the self or emotional reactions to the task (affective components)” (p. 105).

The need to assess these general components in students and their relationship to academic motivation led Pintrich and Schunk (1996) to develop the Motivated Strategies Learning Questionnaire (MSLQ). The MSLQ is a reliable instrument widely used in the last 10 years to accurately measure motivational factors associated with college success applied most effectively in a specific class (Artino, 2005). In his theoretical perspective, Pintrich (2003) used a combination of MSLQ and course grades to determine learning strategies that had the most effect on academic performance (Pintrich, Smith, Garcia, & McKeachie, 1993). Artino pointed out one of the specific purposes of the MSLQ is as an early alert system for students needing additional assistance in a particular course, since the scores can identify students’ motivation to do well in the course, as well as their learning strategies for doing well.

The MSLQ has been frequently used in both high school and college settings. In one study involving over 500 junior high math students, Wolters (2004) concluded that motivation was a significant predictor of success, though it was complicated by procrastination and choice. Those students who signaled greater motivation at the
beginning of the math courses were much more likely to avoid procrastination and, therefore, succeed. In a later study of over 1000 first-year college students, the MSLQ helped reveal that student perceptions of academic control had a greater positive effect on their success than critical thinking skills (Stupnisky, Renaud, Daniels, Haynes, & Perry, 2008). Students with higher perceptions of academic control also had matching high intrinsic motivation and studied more effectively. Finally, a 2004 meta-analysis of 109 educational persistence and academic motivation studies utilizing the MSLQ concluded that one of the best predictors of first-year GPA was motivation (Robbins, Lauver, Le, Davis, & Langley, 2004).

**Pre-College Characteristics and Grades**

Background characteristics of students are generally understood to affect their performance in school. Students who are the first in their families to attend college, with minority status of race or gender, low high school GPA, and/or low socioeconomic status (SES), have been studied singly and in various combinations to estimate the effects of the characteristics on their potential academic success and to identify effective administrative policies. With few exceptions, academic success is measured specifically by grades earned by students in their first year.

**First-Generation Students**

First-generation students are those who come to higher education without parents who have been through the same process. Therefore they lack “college knowledge” (Cuseo, 2012; Engle, 2007). First-generation students come from primarily low income families who are part of the changing demographic with increased college access (Terenzini, et al., 1996). Despite increased first-generation student access at universities
since the 1970 open admissions experiment at City University of New York, and the changing demographics of the US. becoming the new normal, Terenzini et al. (1996) reported that “surprisingly little is known about first-generation students . . . beyond factors shaping first-generation students’ persistence behaviors” (pp. 2-3). The new normal includes a significant percentage of first-generation students. One recent study estimated between 25% and 30% of U.S. freshmen enrollments were first generation (Strayhorn, 2007). Statistics included in the 2011 The American Freshman reveal that 27.5% of freshmen enrolled in 4-year institutions reported having mothers without college experience, and 31.8% reported their father had none (Pryor, DeAngelo, Palucki Blake, Hurtado, & Tran, 2011).

First-generation students are at distinct disadvantages across three main categories: demographic/social (the “college knowledge” awareness so instrumental in success); transition (cultural change); and persistence (most likely to leave after year one and, when graduated, less likely to enroll in graduate programs) (Pascarella, Pierson, Wolniak, & Terenzini, 2004). These categories, however, often neglect the specific changes and development of these students once in university settings, despite Terenzini et al.’s (1996) cognitive development study that emphasized that the development of these students within the university that is of considerable concern to administrators.

While students to a degree leave for different reasons and at different points in their journey, one of the most consistent findings in the studies about first-generation students is that they tend, more frequently than their peers, to leave university studies within their first year. Ishitani (2003) found that “the relative risk of departure in the first year was 71% higher for first-generation students than for students with two college-
educated parents” (p. 444). Data suggested that rather than the experiences, or lack thereof, that first-generation students brought to college, the experiences they had after arriving affect performance most significantly (Engle, 2007).

The disadvantages experienced by first-generation students do not disappear after their first year. As a group, by their third year they have earned fewer credits and have achieved a lower grade point average than their peers with college-educated parents (Pascarella et al., 2004). Students who are less well prepared for college-level work and must take remedial courses, specifically in math and writing, earn lower GPAs overall (Engle, 2007; Strayhorn, 2007). The GPA difference may be linked to lower overall goal-setting habits than their peers (Strayhorn, 2007). As early as 8th grade, students without college-educated parents show less motivation to attend college (Engle, 2007).

One of the main disadvantages that first-year students face -- the lack of college knowledge -- can be ameliorated by policies that encourage social and professional contact with those who can transfer the knowledge. Ishitani (2003) concluded that “getting first-generation students with risk factors involved with advisors earlier and more frequently may not only help them with academic issues but may also help them socialize into the higher education environment more easily. (p. 447). Social interactions with peers through campus extracurricular activities had a positive effect on academic success of first-generation students, even though they were, as a group, less likely to participate in them (Engle, 2007; Pascarella et al., 2004; Strayhorn, 2007).

This positive effect of student involvement should be encouraged in university policy because it is successful for this particular group of students after they enter the university. Pascarella et al. (2004) suggested that policy planners carefully select
activities to focus on academic and social activities and to avoid others, because some kinds of activities have a negative impact. Work, either volunteer or paid, shows negative results for first-generation students, and intercollegiate athletics is negatively correlated (Pascarella et al., 2004). Therefore, financial aid also figures into the equation. First-generation students often are from low SES backgrounds with insufficient resources to pay for college without additional employment. Employment, as noted by Pascarella, has a negative effect on first-generation students’ acquisition of the cultural capital that helps with higher education success. Further, due to financial stress, these students often choose work over attending class when such choices must be made (Engle, 2007).

Family support, monetary or otherwise, strongly influences student success in college. First-generation students often have little support, and some experience negative family reaction to their decision to attend college (Engle, 2007). Programs that help fill the social and cognitive gaps left by lack of family support can reduce the impact of this factor. Therefore, campus programs in advising, college-level skills, and peer tutoring designed around the specific needs of first-generation students are effective administrative responses (Strayhorn, 2007). Living/learning programs have been successful at integrating the kind of academic and social support most beneficial to first-generation students, particularly those that emphasize peer relationships initiated through residence hall programs (Inkelas, Daver, Vogt, & Leonard, 2007).

Race

Students from ethnic minority backgrounds face additional challenges as they begin their university studies. These students are less likely to attend a university in the first place, more likely to have first-generation and low SES status, and less likely to be
academically well prepared (Dennis, Phinney, & Chuateco, 2005; Fischer, 2007). African-American first-generation students generally achieve lower first-year GPAs, and African-American males are at significantly more risk than their White female counterparts, even after other significant factors are controlled (Strayhorn, 2007).

In addition to challenges students have experienced before they ever set foot on a university’s campus, race and ethnicity can become negative social factors once on campus. Historically, underrepresented students may have very different experiences than their White counterparts (Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008). Studies of minority students strongly suggest that social integration is a key component of academic success (Allen, 1992; Fischer, 2007).

Allen (1992) compared the success of African-American students at historically black and predominantly White universities at a time when, as the present, in 2012, national economic slowing has created population and funding pressures in universities. Allen described increased racial tension on campuses and decreased White support of success programs for African-American students. In response, institutions have initiated programs to ease tensions and to support African-American students who were experiencing unfriendly environments. Yet, Allen found that “even when an institution is ready to commit more resources to the minority endeavor, its leadership often lacks clear direction on how best to expend these resources” (p. 27). Allen examined student success, social activities, and motivation for employment using much the same focus as more recent studies on first-generation student success models (Engle, 2007; Pascarella et al., 2004; Strayhorn, 2007).
In those recent studies, the environment within which students lived and learned, and the individual personalities involved with the students, had a measureable effect on their success. Allen (1992) found that “Black student college outcomes are influenced by the immediate surrounding social context, while interpersonal relationships represented the bridge between individual predispositions and the institutional setting or context” (p. 39). Students reported greater acceptance at historically Black institutions than at predominantly White ones, with concurrent increased levels of academic and social support.

As of 2000, slightly less than 16% of African-American students were enrolled at historically Black universities, with the majority attending predominantly White institutions where they were more likely to experience minority student issues (Fischer, 2007). Fewer than half of all minority students obtain a degree within six years (Kuh et al., 2008). Fischer interviewed nearly 5,000 students from 28 highly ranked selective institutions about their first-year adjustment and grades, selecting equal numbers of four racial/ethnic groups. The interviews revealed that White and Asian students had the highest first-year GPAs, while Hispanics were significantly lower. Blacks had the lowest GPAs of all, averaging just under 3.0. Black students also showed the lowest college satisfaction as well and reported the “highest average perceptions of a negative campus racial environment” (p. 129).

Similar to first-generation students, African-American students benefitted most from formal connections with the university, including close connections with faculty members. Those with such ties were significantly less likely to leave school despite other difficulties (Fischer, 2007). In Fischer’s study, these ties had little measureable effect on
Asians and no effect on Whites. Others have noted the specific positive benefits to
minority students of closer university connections that can be reasonably engineered by
administration through first-year seminars, living/learning communities, and support
services (Kuh et al., 2008).

**Gender**

Between 1995 and 2005, college enrollments for women rose 9% faster than male
enrollments (Snyder, Dillow, & Hoffman, 2008). More women have not only enrolled,
but have entered college with higher high school GPAs and then earned higher first-year
GPAs once in school (Conger & Long, 2010). Logically, given these entrance
advantages, women also achieved bachelor’s degrees at a 13% greater rate than their
male counterparts (Snyder et al., 2008). Some argue that this difference comes from
“non-cognitive skills, such as organization, dependability, and self-discipline” (Conger &

Studies conflict on whether, given equalizing factors, gender remains a significant
factor in academic success. A study of first-generation, low SES students that utilized
race/ethnicity as a factor discovered no significant success differences between males and
females (McCarron & Inkelas, 2006). Also, males may take more difficult courses once
in college, and those lower grades may contribute to their lack of persistence as well as
their lower first-year GPAs (Conger & Long, 2010). The rise in female college
achievement represents mostly White populations, and Black and Hispanic populations
experienced much less dramatic gender shifts (Reynolds & Burge, 2008).

Expectations play a significant role in academic success (Tinto, 2005), and
females may now exhibit greater clarity of purpose in their studies than males. Research
that compared 1970s with 1990s female attitudes about educational expectations found that social attitudes previously dismissing female educational achievement well before college now supported it (Reynolds & Burge, 2008). Similar, though opposite, social attitudes also may be major factors in the persistently low numbers of females in math and science courses.

**High School GPA**

Standardized test scores and high school GPA are common predictors of student success used by higher education institutions. The College Board Research Notes of 2000 summarized multiple studies and concluded that, while high school GPA is a more accurate predictor of first-year college GPA than SAT scores, using both is most effective (Camara & Echternacht, 2000). Similar findings hold for combining ACT composite scores and high school GPA, with GPA being a better predictor of freshman GPAs between 2.0-3.0 (Noble & Sawyer, 2002). The ACT composite scores, however, proved more reliable predictors across all levels when they fell between 3.0 and 4.0. Neither high nor low high school GPAs were very useful for successfully predicting first-year performance levels.

Several studies have found that validities are slightly higher for females, slightly lower for African-American and Hispanic males, and slightly higher for Asian-Americans than for Whites (Camara & Echternacht, 2000; Ramist, Lewis, & McCamley-Jenkins, 1994; Zwick & Sklar, 2005). These differences may be attributable to the selection of courses at the freshman level and the difficulty of first-generation students in adapting to the college-level environment, which meshes with the academic and social transition challenges of first-generation students (Engle, 2007; Pascarella et al., 2004).
High school GPAs may represent a more complex intellectual and social achievement level for students, while ACT scores present only an intellectual measure. However, standardized scores are useful as measures of suitability for admission for all students (Noble & Sawyer, 2002). For many students, rigorous high school preparation is positively linked to enrollment in college and college-preparatory courses such as advanced math (Engle, 2007). The population of students who take algebra in 8th grade, for instance, achieve advanced levels of math in high school and tend to enroll in higher education. Parental involvement/encouragement and access to superior schools directly affects the probability of rigorous high school preparation. At the 8th grade level, Engle (2007) reported that 1% of students with college-educated parents and 16% of those without college educated parents indicated they did not plan to attend college.

Because first-generation students often present lower standardized test scores and high school GPAs than their peers with two college-educated parents, use of standardized admissions criteria can often disadvantage first-generation students (Ishitani, 2003). Additionally, studies suggest that admissions scores over-predict freshman GPAs for some minority populations (Camara & Echternacht, 2000; Zwick & Sklar, 2005), as other factors may intervene and the anticipated effect of standardized admission scores becomes less clear once students are enrolled in college. For first-generation students, high school GPA and entrance examination scores may have less to do with success than their own self-confidence (Inkelas et al., 2007). A recent study showed that first-generation students with high GPAs and entrance scores did not have an easier transition than those with lower scores. Measures of initial self-perception would be a helpful
addition in determining potential for success, combined with GPA and scores (Inkelas et al., 2007).

**Pell grant Eligibility/Socio-Economic Status**

Low SES is one of many potential risk factors for incoming freshmen and is often combined with race/ethnicity, first generation status, and low academic preparation (Kuh et al., 2008; Walpole, 2003). In keeping with earlier findings, low SES students often have to work, which takes time away from their studies and university involvement. Unsurprisingly, these students often have lower GPAs than more affluent students (Walpole). A study of over 1,800 students revealed that slightly less than 3% of the high achieving students were low SES. In addition, nearly 40% of the lowest SES were first-generation (McCarron & Inkelas, 2006). Low SES students are less likely to have funding for college tuition and, even if that need was met, were often required to work in addition to their studies to provide for their own or their families’ needs (Pascarella et al., 2004). Indeed, these students sometimes face pressure from their families to remain home and refrain from pursuing higher education.

In a recent broad study, approximately 50% of African-American students had only one parent in their household, and only about 30% included at least one parent with a college degree (Fischer, 2007). Forty percent of African-American households earned $75,000, and only about 30% of college expenses could be paid by the family. These social and economic pressures affect student outcomes at least partly because students must take time away from academic life to meet these demands. While academic and social engagement activities are positively associated with academic success, employment is negatively associated (Engle, 2007; Pascarella et al., 2004).
Acquisition of a college degree has significant positive effects on, not only the income of graduates, but also on participation in civil life, attitudes toward political systems, and prospects for their children (Yorke & Thomas, 2003). This promise of social mobility through individual achievement has long been seen as part of the American Dream available to all, yet the question of equitable access has received little study in previous decades (Walpole, 2003). One of the keys for academic success is a matchup between ability and motivation (Tinto, 2005), and low SES students are less likely to be academically well prepared or highly motivated, especially given their frequent first-generation status and lack of financial resources (Walpole). Yet even well-motivated students with low SES are at risk of never achieving their goals. In one study of first-generation students, only 21% of the lowest SES students earned bachelor’s degrees in eight years, while 48% of the highest SES students did (McCarron & Inkelas, 2006).

Even after acquisition of a college degree, results are inequitable. While low SES students are economically better off than their non-college-attending low SES peers, they do not rise to the economic or educational levels of high SES college-attending students (Walpole, 2003).

**Conclusion**

Research-based explanations and solutions for how motivation affects student success have been complicated by imprecise definitions and the need to separate background factors that may hinder student success into discrete, measureable components. This study, which focuses on the impact of motivation on individual students and individual courses, may prove beneficial, especially for students with at-risk
background factors (i.e., first-generation, minority status, low socioeconomic status, low high school GPA). Given the challenge of retaining at-risk students beyond the first year of college, further study is needed to examine the role motivation strategies may play in mitigating these background factors.
CHAPTER III: METHODOLOGY

The research design is explained in this chapter, along with a description of the population from which the sample was drawn, instrumentation, data collection procedures, research hypotheses, and statistical analysis procedures. The results from the data analysis will be discussed in Chapter IV.

Research Design

This study used a quantitative, correlation methodology based on an existing population actively pursuing education. The study attempted to sample the entire available population without applying groups or random selection, based on the guidelines provided by Wiersma and Jur (2009), who specified that “Non-experimental quantitative research is broad in scope, ranging from status quo studies to ex post facto research, which may be causal-comparative or correlational in nature” (p. 190). In such studies, independent variables are interpreted and are not adjusted by the researcher in any way. While correlation research cannot determine a cause and effect relationship between variables, it can determine if a relationship exists between two or more variables. In this study, students enrolled in the University Experience 175C course (UCC 175C) were administered the Motivated Strategies for Learning Questionnaire (MSLQ) during the second week of the fall 2012 semester. The data were analyzed in relation to end of the semester grades in UCC 175C for correlation between motivation and academic success in the course for conditionally-admitted, first-year undergraduate students. To control for additional factors that might influence students’ grades in UCC175C, the study also included demographic and pre-college characteristic variables that have been previously shown by other studies to influence student success.
Population and Sample

The sample for this study was drawn from a population of 309 full-time, conditionally-admitted, first-year undergraduate students entering Western Kentucky University and enrolled in UCC 175C during the fall semester of 2012. Western Kentucky University is a large public university, with a total enrollment of 21,124 in fall 2012. Students with a high school GPA between 2.0 and 2.49 or an ACT composite between 17 and 19 were conditionally-admitted to Western Kentucky University and enrolled at the South Campus. The South Campus student population was 2,250 in fall 2012.

UCC 175C was offered exclusively to conditionally-admitted freshmen at the South Campus of Western Kentucky University. The semester-long course was designed for at-risk students and centered around four major themes: building character, learning about campus resources, developing effective academic skills, and exploring personal goals.

UCC 175C is a two-credit hour course not required for all entering full-time freshmen students in their first semester of college but strongly recommended by academic advisors for incoming at-risk freshmen during their first semester in college. The course was designed to help students navigate and transition into college life. Essential topics taught in this particular course included locating campus resources, time management techniques, goal setting, learning styles, money management, note taking, and study skills. Other topics included in this course were career planning, library usage, academic advising, and critical thinking.
Certain UCC 175C sections were part of a learning community. The learning community sections were excluded from the study because those students received a multitude of additional types of assistance outside the scope of this project. Of the remaining 309 in the population, 178 (58%) students participated in the study.

Excluding the learning community sections, there were 20 class sections of UCC 175C during the fall 2012, semester with an average enrollment of 18 students per section. The typical enrollment for this course was 25 students per section. Two full-time faculty members and 17 adjunct instructors taught the course.

**Instrumentation**

The instrument used in this study was the Motivated Strategies for Learning Questionnaire (MSLQ) (See Appendix A for questionnaire instrument). The MSLQ is an 81-item questionnaire comprised of two sections, motivation and learning strategies. All items on the questionnaire were scored on a 7-point Likert scale: 1(not true of me) to 7 (very true of me).

Given that this study focused on the relationship between motivation and success in a first-year experience course, only the motivation section was administered. The motivation section consisted of 31 items used to assess a student’s attitude about goals and value beliefs in a specific course. The items were designed to assess student beliefs about how they would succeed in the course and measure their test anxiety in the course (Duncan & McKeachie, 2005).

There were six subscales within the motivation section, which included intrinsic goal orientation, extrinsic goal orientation, task value affect, learning belief control, self-efficacy for learning and performance, and test anxiety (Duncan & McKeachie, 2005).
For the purpose of this study, the five questionnaire items that relate to test anxiety were not administered. Since exams are rarely given in UCC 175C, and participant anxiety responses would not relate to test taking within this course, those items were excluded from the questionnaire. As a result of excluding the test anxiety subscale, the participants were administered a 26-item questionnaire with the following motivation subscale definitions established in the research by Pintrich, Smith, Garcia and McKeachie (1991):

1. Intrinsic Goal Orientation (4 items with a score range 4-28):

   Intrinsic goal orientation concerns the degree to which a student perceives oneself to be participating in a task for reasons such as challenge, curiosity, and mastery. Having an intrinsic goal orientation toward an academic task indicates that the student’s participation in the task is an end all to itself, rather than participation being a means to an end. (p. 9)

2. Extrinsic Goal Orientation (4 items with a score range 4-28):

   Extrinsic goal orientation complements intrinsic goal orientation and concerns the degree to which the students perceive themselves to be participating in a task for reasons such as grades, rewards, performance, evaluation by others, and completion. When one is high in extrinsic goal orientation, engaging in a learning task is the means to an end. The main concern the student has is related to issues that are not directly related to participating in the task itself. (p. 10)

3. Task Value (6 items with a score range 6-42):

   Task value, which differs from goal orientation, refers to the student’s evaluation of how interesting, how important, and how useful the task is
(“What do I think of this task?”) High task value should lead to more involvement in one’s learning. Task value refers to students’ perceptions of the course material in terms of interest, importance, and utility. (p. 11)

4. Control of Learning Beliefs (4 items with a score range 4-28):

Control of learning refers to the students’ beliefs that their efforts to learn will result in positive outcomes. It concerns the belief that outcomes are contingent on one’s effort, in contrast to external factors such as a teacher. If students believe that their efforts to study make a difference in their learning, they should be more likely to study more strategically and effectively. That is, if students feel they can control their academic performance, they are more likely to put forth what is needed strategically to effect the desired changes. (p. 12)

5. Self-Efficacy for Learning and Performance (8 items with a score range 8-56):

Self-efficacy for learning and performance comprise two aspects of expectancy: expectancy for success and self-efficacy. Expectancy for success refers to performance expectations and relates specifically to task performance. Self-efficacy is a self-appraisal of one’s ability to master a task. Self-efficacy includes judgment about ability to accomplish a task and confidence in skills to perform that task. (p. 13)

Pintrich et al. (1991; 1993) tested the reliability and predictive validity of the MSLQ questionnaire using 380 students at a four-year comprehensive university enrolled in 14 subject areas. Confirmatory factor analysis was utilized to test for internal consistency and reliability. Their analysis showed a $X^2/df$ ratio of 3.49, which they said suggested a goodness of fit because it was less than .5. They also reported a goodness of
fit index of .77, a root mean residual of .07, and a Hoelter’s critical number of 122
(Pintrich et al., 1991; 1993). Pintrich et al. (1991) explained that a goodness of fit index
of .9 or greater, a root mean residual of .05 or less, and a Hoelter’s critical number of 200
or higher were all indicators of a good fit between the model and the data. However,
none of those three indicators for their model were at levels that suggested a good fit.
They admitted their measures of fit were not “stellar,” but went on to assert that they
were “reasonable” (p.79).

While the goodness of fit was not outstanding, most of the alpha coefficients for
the motivational scales were above .70, which points to good internal consistency. The
highest alpha coefficients were for Self Efficacy (.93) and Task Value (.90), followed by
Intrinsic Goal Orientation (.74), Control of Learning Beliefs (.68), and Extrinsic Goal
Orientation (.62) (Pintrich et al., 1993).

Pintrich et al. (1991; 1993) also tested the predictive validity of the motivational
scales by correlating the scores on the motivational scales with final grade in the course.
All of the motivational scales showed a significant positive relationship with final course
grade except Extrinsic Goal Orientation. However, the zero-order correlations were
small at best. They reported correlation coefficients of .02 for Extrinsic Goal Orientation,
.13 for Control of Learning Beliefs, .22 for Task Value, .25 for Intrinsic Goal Orientation,
and .41 for Self Efficacy. Pintrich et al. (1993) cited the significant correlations in the
expected direction as evidence of predictive validity.

**Data Collection Procedures**

The computerized MSLQ questionnaire was administered by the researcher and a
colleague during class time in a computer lab during the second week of the fall 2012
semester, in coordination with the instructors of the UCC 175C courses. Upon entering each classroom of the 20 sections, the researchers explained the informed consent form and answered any student questions regarding completing the questionnaire. The researchers explained to the students that the questionnaire consisted of a total of 26 questions and would take approximately 25-30 minutes to complete.

On the day the questionnaire was administered, student attendance was lower than expected. The night before, one of the residence halls experienced problems with their indoor sprinkler systems, which caused several floors to flood. Students were displaced for hours, and many students chose not to attend class the following day.

Participation was voluntary and students signed a consent form to allow the Western Kentucky University Office of Institutional Research to add their end-of-term grade in UCC 175C, high school GPA, gender, race, first-generation status, and Pell grant eligibility to their questionnaire results. Students were informed that all identifying information would be stripped from the data file before it was sent back to the researcher. After grades were posted for the semester, the Office of Institutional Research attached the required data, deleted all identifying information, and sent the data back to the researcher (See Appendix B for Informed Consent Letter). Additionally, the Office of Institutional Research provided information related to high school GPA, gender, race, first-generation status, and Pell grant eligibility, which served as a proxy for socio-economic status.

Research Hypotheses

1. A positive significant relationship can be found between intrinsic goal orientation and success in a first-year seminar course.
2. A positive significant relationship can be found between extrinsic goal orientation and success in a first-year seminar course.

3. A positive significant relationship can be found between task value and success in a first-year seminar course.

4. A positive significant relationship can be found between control of learning beliefs and success in a first-year seminar course.

5. A positive significant relationship can be found between self-efficacy for learning and performance and success in a first-year seminar course.

6. A positive significant relationship can be found between intrinsic goal orientation and success in a first-year seminar course, controlling for demographic and pre-college variables.

7. A positive significant relationship can be found between extrinsic goal orientation and success in a first-year seminar course, controlling for demographic and pre-college variables.

8. A positive significant relationship can be found between task value and success in a first-year seminar course, controlling for demographic and pre-college variables.

9. A positive significant relationship can be found between control of learning beliefs and success in a first-year seminar course, controlling for demographic and pre-college variables.

10. A positive significant relationship can be found between self-efficacy for learning and performance and success in a first-year seminar course, controlling for demographic and pre-college variables.
**Statistical Analysis Procedures**

Correlation analyses were used to determine the relationships between the dependent variable of UCC 175C course grade and each of the independent variables, including the five motivational dimensions as measured by the MSLQ: high school GPA, gender, race; first-generation status; and Pell grant eligibility, which was used as a proxy for socio-economic status. Multiple regression determined if UCC 175C course grade could be predicted by each of the motivation subscales, controlling for high school GPA, gender, race, first-generation status, and Pell grant eligibility.
CHAPTER IV: RESULTS

This chapter reports findings from the statistical analyses of the data collected in the research study. Discussions, implications, and recommendations will be provided in Chapter V. Data were analyzed using Pearson’s correlations to determine the relationship between the dependent variable of UCC 175C course grade and each of the independent variables, including the five motivational dimensions as measured by the MSLQ: high school GPA; gender; race; first-generation status, and Pell grant eligibility, which was used as a proxy for socio-economic status, data were analyzed using Pearson’s correlations. Multiple regression was utilized to analyze the effects of the MSLQ motivation sub scores on UCC 175C grade, while holding demographics and pre-college variables constant. The Motivated Strategies Learning Questionnaire (MSLQ) was designed to be used at the course level, and results are reported solely on the relationship of the predictor variables to grades in the UCC 175C course.

The total number of students enrolled in UCC 175C was 309. Of that number, 190 students were administered the actual questionnaire during the second week of class. Twelve students did not provide adequate identification numbers; therefore, their data were not included in the study, which left 178 students as participants. Final grades were collected at the end of the 16-week course for these 178 students.

Analysis of the demographics and pre-college characteristics (see Table 1) showed the sample was 51% male, 52% African-American, 54% first-generation, and 67% Pell-eligible. The average high school grade point average was 2.3 on a 4-point scale.
Research Hypothesis 1: A positive significant relationship between intrinsic goal orientation and success in a first-year seminar course. The analysis found no support for the first hypothesis (see Table 2). For the students who completed the questionnaire, intrinsic goal orientation was negatively related to grade in the course. However, the relationship was not significant ($r = -.021, p = .78$).

Table 2
Summary of Means, Standard Deviations, and Correlations of the Motivation Subscales of the MSLQ and UCC 175C End of Term Grade

<table>
<thead>
<tr>
<th>Motivation Subscale</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$r$ with Grade in UCC175C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Goal Orientation</td>
<td>178</td>
<td>5.24</td>
<td>1.02</td>
<td>-0.021</td>
</tr>
<tr>
<td>Extrinsic Goal Orientation</td>
<td>178</td>
<td>6.20</td>
<td>0.78</td>
<td>0.136</td>
</tr>
<tr>
<td>Task Value</td>
<td>178</td>
<td>5.49</td>
<td>1.02</td>
<td>-0.012</td>
</tr>
<tr>
<td>Control of Learning Beliefs</td>
<td>178</td>
<td>5.58</td>
<td>0.99</td>
<td>0.126</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>178</td>
<td>5.96</td>
<td>0.79</td>
<td>0.084</td>
</tr>
</tbody>
</table>

*p < .05.

Research Hypothesis 2: A positive significant relationship between extrinsic goal orientation and success in a first-year seminar course. The analysis found no support for the second hypothesis (see Table 2). For the students who completed the questionnaire, extrinsic goal orientation was positively related to grade in the course. However, the relationship was not significant ($r = .136, p = .07$).
Research Hypothesis 3: A positive significant relationship between task value and success in a first-year seminar course. The analysis found no support for the third hypothesis (see Table 2). For the students who completed the questionnaire, task value was negatively related to grade in the course. However, the relationship was not significant ($r = -.012, p = .87$).

Research Hypothesis 4: A positive significant relationship between control of learning beliefs and success in a first-year seminar course. The analysis found no support for the fourth hypothesis (see Table 2). For the students who completed the questionnaire, control of learning beliefs was positively related to grade in the course. However, the relationship was not significant ($r = .126, p = .09$).

Research Hypothesis 5: A positive significant relationship between self-efficacy for learning and performance and success in a first-year seminar course. The analysis found no support for the fifth hypothesis (see Table 2). For the students who completed the questionnaire, self-efficacy for learning and performance was positively related to grade in the course. However, the relationship was not significant ($r = .084, p = .26$).

Research Hypothesis 6: A positive significant relationship between intrinsic goal orientation and success in a first-year seminar course, controlling for demographic and pre-college variables. As shown in Table 3, the regression model predicting UCC 175C grade using intrinsic goal orientation and demographic and precollege variables was significant at the .10 level but was not significant at the .05 level ($R^2 = 0.065, F (6, 172) = 1.91, p = 0.082$). While the relationship between intrinsic goal orientation and final grade in UCC 175C was positive, it was not significant. Pell Grant-eligibility was the only
Table 3

*Multiple Regression for UCC 175C Grade using Intrinsic Goal Orientation MSLQ Sub Score, Demographics, and Pre-College Variables as Predictors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Goal Orientation</td>
<td>0.042</td>
<td>0.117</td>
</tr>
<tr>
<td>Male</td>
<td>0.013</td>
<td>0.229</td>
</tr>
<tr>
<td>African-American</td>
<td>-0.264</td>
<td>0.230</td>
</tr>
<tr>
<td>High School GPA</td>
<td>0.512</td>
<td>0.324</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>-0.491*</td>
<td>0.248</td>
</tr>
<tr>
<td>First-Generation</td>
<td>-0.202</td>
<td>0.230</td>
</tr>
</tbody>
</table>

*Note. R² = 0.065 (p = .082); * p < .05.*

significant contributor to the model. Students who were Pell-eligible had significantly lower grades in the class than students who were not Pell-eligible.

Research Hypothesis 7: A positive significant relationship between extrinsic goal orientation and success in a first-year seminar course, controlling for demographic and pre-college variables. As shown in Table 4, the regression model predicting UCC 175C grade using extrinsic goal orientation and demographic and precollege variables was significant at the .05 level ($R^2 = 0.088$, $F(6, 172) = 2.66, p = .017$). However, the small $R^2 (0.088)$, showed that the model explained only 9% of the variation in UCC 175C grades. The relationship between extrinsic goal orientation and final grade in UCC 175C was positive and significant at $p < .05$. Pell Grant-eligibility and extrinsic goal orientation were the only two significant contributors to the model. Students who were Pell-eligible had significantly lower grades in the class than those who were not eligible. Students with higher extrinsic MSLQ sub scores had significantly higher grades in the UCC 175C course compared to the grades of students with lower extrinsic subscale scores.
Table 4
*Multiple Regression for UCC 175C Grade using Extrinsic Goal Orientation MSLQ Sub Score, Demographics, and Pre-College Variables as Predictors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Goal Orientation</td>
<td>0.310*</td>
<td>0.150</td>
</tr>
<tr>
<td>Male</td>
<td>0.092</td>
<td>0.223</td>
</tr>
<tr>
<td>African-American</td>
<td>-0.370</td>
<td>0.230</td>
</tr>
<tr>
<td>High School GPA</td>
<td>0.446</td>
<td>0.322</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>-0.482*</td>
<td>0.242</td>
</tr>
<tr>
<td>First-Generation</td>
<td>-0.222</td>
<td>0.223</td>
</tr>
</tbody>
</table>

*Note. R² = 0.088 (p = .017); * p < .05.*

Research Hypothesis 8: A positive significant relationship between task value and success in a first-year seminar course, controlling for demographic and pre-college variables. As shown in Table 5, the regression model predicting UCC 175C grade using task value and demographic and precollege variables was significant at the .10 level but was not significant at the .05 level (R² = 0.067, F (6, 172) = 1.98, p = .07). Additionally, only 7% of the variation in UCC 175C grade could be explained by the model. While the relationship between task value and final grade in UCC 175C was positive, it was not significant. Pell Grant eligibility was the only significant contributor to the model. Students who were Pell-eligible had significantly lower grades in the class compared to students who were not eligible.

Table 5
*Multiple Regression for UCC 175C Grade using Task Value MSLQ Sub Score, Demographics, and Pre-College Variables as Predictors*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Value</td>
<td>0.087</td>
<td>0.119</td>
</tr>
<tr>
<td>Male</td>
<td>0.055</td>
<td>0.237</td>
</tr>
<tr>
<td>African-American</td>
<td>-0.283</td>
<td>0.231</td>
</tr>
<tr>
<td>High School GPA</td>
<td>0.498</td>
<td>0.324</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>-0.494*</td>
<td>0.246</td>
</tr>
<tr>
<td>First-Generation</td>
<td>-0.214</td>
<td>0.229</td>
</tr>
</tbody>
</table>

*Note. R² = 0.067 (p = .07); * p < .05.*
Research Hypothesis 9: A positive significant relationship between control of learning beliefs and success in a first-year seminar course, controlling for demographic and pre-college variables. As shown in Table 6, the regression model predicting UCC 175C grade using control of learning beliefs and demographic and precollege variables was significant at the .05 level ($R^2 = 0.088$, $F (6, 172) = 2.67, p = .017$). Again, the model explained only 9% of the variation in UCC 175C grade. The relationship between control of learning beliefs and final grade in UCC 175C was positive and statistically significant, ($p < .05$). Pell Grant eligibility and control of learning beliefs were the only two significant contributors to the model. Students who were Pell-eligible had significantly lower grades in the class than did students who were not eligible. Students with higher control of learning beliefs MSLQ sub scores had significantly higher grades in the UCC 175C course compared to students with lower control of learning beliefs subscale scores.

Table 6

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control of Learning Beliefs</td>
<td>0.233*</td>
<td>0.111</td>
</tr>
<tr>
<td>Male</td>
<td>0.080</td>
<td>0.222</td>
</tr>
<tr>
<td>African-American</td>
<td>-0.291</td>
<td>0.224</td>
</tr>
<tr>
<td>High School GPA</td>
<td>0.486</td>
<td>0.320</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>-0.516*</td>
<td>0.243</td>
</tr>
<tr>
<td>First-Generation</td>
<td>-0.199</td>
<td>0.222</td>
</tr>
</tbody>
</table>

Note. $R^2 = 0.088$ ($p = .017$); * $p < .05$.

Research Hypothesis 10: A positive significant relationship between self-efficacy for learning and performance and success in a first-year seminar course, controlling for demographic and pre-college variables. As shown in Table 7, the regression model predicting UCC 175C grade using self-efficacy for learning and performance,
demographic and precollege variables was significant at the .05 level, \( R^2 = .092, F (6, 172) = 2.81, p = .012 \). However, only 9% of the variation in UCC 175C grades was explained by the model. The relationship between self-efficacy for learning and performance and final grade in UCC 175C was positive and statistically significant \( p < .05 \). Pell Grant eligibility and self-efficacy for learning and performance were the only two significant contributors to the model. Students who were Pell-eligible had significantly lower grades in the class than did students who were not eligible. Students with higher self-efficacy for learning and performance MSLQ sub scores had significantly higher grades in the UCC 175C course compared to students with lower self-efficacy for learning and performance subscale scores.

Due to the small impact that motivation had on student success and the residence hall flooding incident that occurred the night before the survey was administered, the researcher suspected possible selection bias in the sample of respondents. On the day the survey was administered, attendance was 61%; only 190 of the 309 enrolled students were in attendance. To address this concern, the researcher requested that the WKU Office of Institutional Research provide aggregate data on UCC 175C grades, pre-college

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy for Learning and Performance</td>
<td>0.351*</td>
<td>0.154</td>
</tr>
<tr>
<td>Male</td>
<td>0.151</td>
<td>0.228</td>
</tr>
<tr>
<td>African-American</td>
<td>-0.366</td>
<td>0.228</td>
</tr>
<tr>
<td>High School GPA</td>
<td>0.526</td>
<td>0.320</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>-0.554*</td>
<td>0.244</td>
</tr>
<tr>
<td>First-Generation</td>
<td>-0.292</td>
<td>0.227</td>
</tr>
</tbody>
</table>

Note. \( R^2 = 0.092 (p = .012); * p < .05 \).
characteristics, and demographics of MSLQ questionnaire respondents and non-respondents. A chi-square test of independence was performed to examine the relationship between whether a student responded to the MSLQ questionnaire and final grade in UCC 175C. The relationship between these variables was significant, \( X^2(5, \ N = 308) = 16.95, \ p = .005 \). Respondents were more likely to have academic success in the UCC 175C course compared to non-respondents (see Table 8). In particular, respondents were more likely to earn A’s while non-respondents were likely to earn F’s. The effect size was .247.

Table 8

<table>
<thead>
<tr>
<th>UCC175C Grade</th>
<th>Respondents</th>
<th>Non-Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( n )</td>
<td>( n )</td>
</tr>
<tr>
<td>A</td>
<td>94</td>
<td>43</td>
</tr>
<tr>
<td>B</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>C</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>D</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>F</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Withdraw/Incomplete</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>131</td>
</tr>
</tbody>
</table>

The researcher compared the high school grade point averages, gender, ethnicity, first generation status and Pell-eligibility of both groups to determine whether the respondents and non-respondents were significantly different in other areas as well. The comparisons of the demographic variables for respondents and non-respondents are shown in Table 9.

An independent-samples t-test was conducted to compare the high school grade point averages of respondents to those of non-respondents. Given a violation of Levene’s test for homogeneity of variances, \( F = 1.53, \ d.f. (173, 121), \ p = 0.0128 \), the t-test showed no significant difference in the high school grade point averages of
Comparison of Demographics and Pre-College Variables of Respondents and Non-Respondents

<table>
<thead>
<tr>
<th>Variable</th>
<th>Respondents</th>
<th>%</th>
<th>Non-Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>90</td>
<td>50.6</td>
<td>71</td>
<td>54.2</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>49.4</td>
<td>60</td>
<td>45.8</td>
</tr>
<tr>
<td>African-American</td>
<td>93</td>
<td>52.2</td>
<td>72</td>
<td>55.0</td>
</tr>
<tr>
<td>Non African-American</td>
<td>85</td>
<td>47.8</td>
<td>59</td>
<td>45.0</td>
</tr>
<tr>
<td>Pell-Eligible</td>
<td>119</td>
<td>66.9</td>
<td>95</td>
<td>72.5</td>
</tr>
<tr>
<td>Non Pell-Eligible</td>
<td>59</td>
<td>33.1</td>
<td>36</td>
<td>27.5</td>
</tr>
<tr>
<td>First-Generation</td>
<td>96</td>
<td>53.9</td>
<td>67</td>
<td>51.1</td>
</tr>
<tr>
<td>Non First-Generation</td>
<td>82</td>
<td>46.1</td>
<td>64</td>
<td>48.9</td>
</tr>
</tbody>
</table>

Respondents (M = 2.30, SD = 0.34) and non-respondents (M = 2.29, SD = 0.28); t(288.07) = -0.31, p = 0.76. These results suggest no significant differences in the high school grade point averages of students who responded to the MSLQ questionnaire compared to the averages of those who did not respond.

A chi-square test of independence was performed to examine the relation between gender and respondent status. The relationship between these variables was not significant, $X^2(1, N = 309) = 0.40, p = 0.527$, indicating that the proportion of males in the respondent and non-respondent groups was similar. A chi-square test of independence also was performed to examine the relationship between African-American status and respondent status. The relationship between these variables also was not significantly different, $X^2(1, N = 309) = 0.223, p = 0.636$; thus, the proportion of African-Americans in the respondent and non-respondent groups was similar. The researcher performed a chi-square test of independence to examine the relationship between Pell grant eligibility and respondent status. The relationship between these variables was also not significantly different, $X^2(1, N = 309) = 1.14, p = 0.286$, which revealed that the proportion of Pell-eligible students in the group of respondents was not significantly different than the proportion of Pell-eligible students in the non-respondent group. Additionally, a chi-square test of independence was performed to examine the
relationship between first-generation status and respondent status. The relationship between these variables was not significantly different, $X^2 (1, N = 309) = 0.235, p = 0.628$, indicating the proportion of first-generation students in the respondent and non-respondent groups was similar.

The results of the comparisons of respondents and non-respondents showed they were very similar in terms of high school grade point average, gender, race, Pell grant-eligibility, and first-generation status. The similarities of demographic and precollege variables between the respondent and non-respondent groups support the assumption that these factors are not related to the difference in UCC 175C final grade. These results still leave open the possibility that difference in motivation factors between MSLQ questionnaire respondents and non-respondents may have contributed to respondents not only attending class, even in the face of adversity, but also receiving higher final grades.
CHAPTER V
DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

This chapter presents a summary of the overview of the problem, purpose statement, research questions, and review of the methodology. It also provides a discussion of the major findings of the study, findings related to the literature, implications for action, limitations, and recommendations for future research.

The focus of this research was to examine the relationship between student motivation factors and academic success in a first-year experience course for conditionally-admitted freshmen. Underprepared college students who fail to pass a less academically challenging course like freshman orientation tend to have a significantly lower rate of college persistence. Foraker (2011) asserted that failure may be less a function of ability and more a function of motivation factors, which may warrant the attention of those seeking to improve the university’s retention and graduation rates. If poor performance in the UCC 175C course can be predicted by measuring motivation, then targeting these students in the first few weeks of the course may provide an opportunity to turn the tide of freshman attrition.

The research questions guiding this study were as follows:

1. Does intrinsic goal orientation affect success in a first-year seminar course?
2. Does extrinsic goal orientation affect success in a first-year seminar course?
3. Does task value affect success in a first-year seminar course?
4. Does control of learning beliefs affect success in a first-year seminar course?
5. Does self-efficacy for learning and performance affect success in a first-year seminar course?
6. Does motivation as measured by MSLQ affect success in a first-year seminar course, controlling for demographic and precollege variables?

This study used a quantitative, correlation methodology based on an existing population actively pursuing education. From the population of 2,250 full-time, first-time freshmen students entering Western Kentucky University’s South Campus in fall 2012, only 309 were actually enrolled in UCC 175C. Of the 309 students enrolled, 190 completed the motivation section of the Motivated Strategies for Learning Questionnaire (MSLQ), which consisted of 31 items used specifically to assess a students’ attitude about goals and value beliefs in a specific course.

The MSLQ questionnaire was administered by the researcher and a colleague during the second week of the fall 2012 semester in coordination with the instructors of the UCC 175C courses. The Office of Institutional Research provided data related to high school grade point average, gender, race, first-generation status, and Pell-grant eligibility, or socio-economic status. The final sample for this study consisted of 178 participants who completed the questionnaire and received a final grade in the UCC 175C course.

The statistical analyses used for this study were Pearson’s correlation and multiple regression. Follow-up analysis using t-test and chi-square analyses also were conducted. Correlation analyses were used to determine the relationship of each of the five dimensions of the motivation from the MSLQ to grade in UCC 175C. Multiple regression predicted course grade in UCC 175C using each of the five dimensions of the motivation from the MSLQ: high school grade point average, gender, race, first-generation status and Pell grant-eligibility. T-tests and chi-squared analyses were utilized
to test differences in respondents and non-respondents in terms of UCC175C grade, high school grade point average, gender, race, first-generation status and Pell grant-eligibility.

Findings and Discussion

Research Question 1: Does intrinsic goal orientation affect success in a first-year seminar course? This study found a negative relationship between students’ MSLQ intrinsic goal orientation subscale score and final grade in the UCC 175C course; however, this relationship was not significant. Given that these students possessed at-risk background factors (i.e., first-generation, minority status, low socioeconomic status, low high school GPA); they may have not possessed the autonomy of learning necessary to invoke high intrinsic motivation. Autonomous people have three main characteristics: intrinsic motivation, personal control of their own decisions, and responsibility for their own actions (Fazey & Fazey, 2001). Examining intrinsic motivation alone may not prove effective in distinguishing students who may succeed from those who may be in danger of failing in first-year seminar.

Research Question 2: Does extrinsic goal orientation affect success in a first-year seminar course? Student responses on the extrinsic goal orientation subscale were positively related to final grade in the UCC 175C course. Extrinsic motivation had the highest correlation to final grade in course of all the predictor variables ($r = .136$, $p = .07$) and showed significance at $p \leq .10$; however, it did not meet the significance level ($p \leq .05$) set for the study. While not significant, the result is expected that extrinsic goal orientation was more strongly correlated than the other MSLQ motivation subscales with final course grade, given that these students recently completed high school where they may have achieved some degree of reward or positive reinforcement in unchallenging
courses by applying the minimal effort necessary.

Research Question 3: Does task value affect success in a first-year seminar course? The task value subscale score was negatively related, but not significantly, to the final grade in the first-year seminar course. This result was somewhat surprising, given that the UCC 175C curriculum focused on learning tasks that had more immediate application and importance for students new to the college environment (e.g., orientation to campus locations and services, time management techniques, study skills, and academic advising). This course lacked the academic challenge evident in other courses on which the MSLQ questionnaire was normed, and this difference may have impacted the finding of statistical significance.

Research Question 4: Does control of learning beliefs affect success in a first-year seminar course? Control of learning beliefs was positively related to final course grade in the first-year seminar and had the second highest correlation; however, the relationship was not significant under the level set for this study. The lack of academic challenge of the course may have led students to believe their efforts would ensure a good grade in the course, even if they were not motivated to put forth the effort.

Research Question 5: Does self-efficacy for learning and performance affect success in a first-year seminar course? For the students who completed the questionnaire the relationship between self-efficacy for learning and performance to grade in the course was positively related although not significant. Chemers et al. (2001) argued that the attitudes students brought with them to the university were key to academic performance. An interesting observation was made that the conditionally-admitted students in this study, who brought positive world views and attitudes with them to the course (higher
self-efficacy for learning and performance), did not differ in final course grade from conditionally-admitted students who were less positive.

Research Question 6: Does motivation as measured by MSLQ affect success in a first-year seminar course, controlling for demographic and precollege variables? Five multiple regression models were developed comparing each of the MSLQ motivation subscale scores evaluated in this study and demographic and pre-college variables to first-year seminar final grade. Only Pell grant eligibility, which was a proxy for socio-economic status, was a consistently significant factor in all five models. Students who were Pell grant eligible had significantly lower grades in the class than those who were ineligible. Three of the five multiple regression analyses, the models using extrinsic motivation, control of learning beliefs, and self-efficacy MSLQ subscale scores, demonstrated significance. Although the standardized coefficients for Pell grant eligibility exceeded the standardized coefficients for each statistically significant MSLQ subscale score, the combination of Pell grant eligibility with each subscale score accounted for only a small portion of the variation in final grades in UCC 175C for the students in the study. Low socio-economic status has been a consistent factor in college success, and the multiple regression results suggest that it is a success factor for conditionally-admitted students in a first-year seminar course.

A comparison of UCC 175C grades for MSLQ questionnaire respondents and non-respondents demonstrated that respondents were more likely to experience academic success in the course, even though no significant differences were found between the two groups on demographic and pre-college variables. Given that no mean differences in demographics or pre-college variables were present between respondents and non-
respondents, these factors cannot account for the respondents receiving higher final grades. Motivation may account for the difference, in that non-respondents, being afforded the same opportunity to complete the MSLQ questionnaire, were not motivated to attend the class in which it was being administered. This suggests that motivation could have played a large role in those who chose to participate in this study, and who did not, which in turn could have significantly biased the results.

**Findings Related to the Literature**

The role of motivation in this study contrasts with prior research, in that motivation was not found to have a statistically significant relationship with course GPA. Allen (1999) found that motivation to complete college had a measureable effect only on minorities. Likewise, Chemers et al. (2001) posited that the attitudes students brought with them to the university were key. This study suggested that if the MSLQ could be a tool to predict performance in the UCC 175C course, interventions could be designed to increase success. Other studies support the use of the MSLQ in this way. In particular, Pintrich et al. (1991; 1993) correlated the motivational scores with the final grade in the course and found all to show small, but significant, correlations except extrinsic goal orientation.

By contrast, this study identified extrinsic goal orientation subscale scores as positively related to final grade in the UCC 175C course. In fact, extrinsic motivation had the highest correlation of all the predictor variables to final grade in the course. As noted in the research by Pintrich et al. (1991; 1993), the effect was small. While the correlation did not reach the level set for significance in this study, the finding that extrinsic goal orientation was more strongly correlated than the other MSLQ motivation
subscales with final course grade suggests that institutionally-supported extrinsic motivation may be of specific benefit to this population. Ryan and Deci (2000) suggested that both intrinsic and extrinsic motivations could be enhanced and diminished. Given that these students were conditionally-admitted with at-risk background factors, they may benefit from such motivational enhancement. Porter and Swing (2006) used persistence as a measure of motivation for completion and found a positive relationship between course grade and student intent to persist. Again, the effect was small.

Although this study does not identify more than very small, statistically insignificant correlations between motivation and course grade, Alarcon and Edwards (2012) found that motivation had a stronger impact on retention than ability and suggested that targeted programs would be effective. The number of studies supporting a small, but significant, correlation between motivation and course grade, success, and persistence, along with the effectiveness of motivation enhancement programs, suggests that motivation remains a crucial, if elusive, factor for this population. Interestingly, this study revealed that the course grades of respondents (students who took the MSLQ questionnaire) were significantly better than non-respondents (those students who did not attend the day of the questionnaire), despite equal pre-college characteristics status. The difference may be in motivation, as evidenced by attendance.

The only consistently significant factor in this study was that of Pell grant eligibility. More than two-thirds of the students in this study were Pell grant-eligible or low SES. Students with low SES had lower course grades than those who were ineligible. This finding is consistent with prior literature. Due to the sample size, the effect was small, but significant. Low SES is quite often combined with race/ethnicity,
first-generation status and low academic preparation (Kuh et al., 2008; Walpole, 2003; McCarron & Inkelas, 2006). Scholarships also do not relieve the pressure, since low SES students often must economically assist with their families’ needs (Pascarella et al., 2004). Race is closely related to low SES status. In this study, slightly over half of the sample populations were African-American. A recent broad study found that approximately half African-American students came from single parent households, and only one-third had a parent with a college degree (Fischer, 2007). As noted earlier, motivation can be a more significant factor than ability (Alarcon & Edwards, 2012); but low SES students suffer from poor academic preparation and are less motivated (Walpole). Across the board, even motivation often does not overcome the effect of low SES. McCarron and Inkelas found in a study of first generation students that only about one-fifth of the lowest SES students earned bachelor’s degrees in eight years.

Implications

This study was an attempt to identify a potential tool to help recognize students who may be at higher academic risk due to low motivation. It also was a means to provide justification for incorporating dimensions of motivation into the curriculum for conditionally-admitted students. First-year experience curriculums are ideal platforms to address these motivational constructs. A major challenge that university administrations face when dealing with conditionally-admitted students is that many fail to achieve academic success within the first year of matriculation. An early alert mechanism may prove to be an important tool in the effort to increase retention of this at-risk student population. A tremendous amount of research exists examining the relationship between motivation factors and academic success. However, limited information has been found
related to how these motivation factors impact conditionally-admitted college students. Although not significant, a positive correlation was noted between these motivation factors and academic success in a first-year seminar course.

**Limitations**

Limitations of this study included issues with the number of students who were absent the day the MSLQ questionnaire was administered. The first limitation involved a flood in the residence hall the night prior to administration. Thirty-nine percent of the students were absent for class the following day and did not complete the questionnaire. Students who responded had better academic success in UCC 175C than non-respondents. Another limitation was the lack of variability along the motivational subscales for developmental students. This lack may account for no finding of significant relationship between particularly motivational subscales and grades for developmental student populations.

**Recommendations for Future Research**

Future research is needed to further examine the implementation of the MSLQ questionnaire in a first-year seminar course as an early alert indicator of academic difficulty, particularly with conditionally-admitted students. Foraker (2011) noted that predicting potential failure in UCC 175C courses by assessing motivation may be especially beneficial for conditionally-admitted freshmen taking the University Experience 175C course. He found that participation in University Experience, combined with an early warning program to increase freshman retention, had the most impact on at-risk students. One of the specific purposes of the MSLQ questionnaire is to serve as an early alert system for students needing additional assistance in a particular course, since
the scores can identify students’ motivation to do well in the course (Artino, 2005). The six subscales of the MSLQ questionnaire (intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, and self-efficacy for learning and performance) would serve as tools to assess motivation.

Since first-year seminar courses rarely provide students the intense rigor associated with an academically challenging course, future research administering the MSLQ questionnaire to developmental courses (i.e., English, Reading, and Math) to determine relationships between course grade and student levels of motivation might provide more meaningful information.

**Concluding Remarks**

The MSLQ questionnaire may be utilized as an early warning system to identify students who need intensive intervention. The current study found little evidence to support the use of the MSLQ as a measure of motivation influencing success in a University Experience course. However, the fact that so many students were absent when the survey was administered, and non-respondents had a significantly lower success rate in the course, suggest that the MSLQ might be a useful tool if administered to all University Experience students. If the MSLQ questionnaire was included as part of the University Experience curriculum, it is possible that all of the students would have completed it; and a significant number who did not respond would have had lower motivation scores.
APPLICATION FOR APPROVAL OF INVESTIGATIONS INVOLVING THE USE OF HUMAN SUBJECTS

The human subjects application must stand alone. Your informed consent document(s), survey instrument, and site approval letter(s) should be attached to the application and referred to in your write up of the appropriate sections so that reviewers may read them as they read your application. Thesis proposals or other documents that are meant to substitute for completing the sections of the application will not be read and should not be attached.

1. Principal Investigator's Name: Kimberly Cunningham

   Email Address: Kimberly.Cunningham@wku.edu

   Mailing Address: 2355 Nashville Rd. Suite B, Bowling Green, KY

   Department: Educational Leadership Doctoral Program Phone: 270-780-2551

   Completion of the Citi Program Training? ☒ Yes ☐ No

   Found at www.citiprogram.org Date: 07/26/2012

2. If you are a student, provide the following information:

   Faculty Sponsor: Dr. Tuesdi Helbig    Department: Institutional Research
   Phone: 270-745-3250 Faculty Mailing Address: Tuesdi.Helbig@wku.edu

   Completion of the Citi Program Training? ☒ Yes ☐ No

   Found at www.citiprogram.org Date 08/02/2012

   Student Permanent Address (where you can be reached 12 months from now): Kimberly.Cunningham@wku.edu

   Is this your thesis or dissertation research? Yes

Policy of Research Responsibility. The Western Kentucky University Institutional Review Board defines the responsible party or parties of the research project as the Principal Investigator and Co-Principal Investigator. In those cases when a student holds the title of Principal Investigator, the Faculty Sponsor (Advisor, Supervisor, Administrator, or general managing Council) will conduct oversight of the research project and share in the accountability to assure the responsible conduct of research.
Researchers outside of the Western Kentucky University campus system are required to provide proof of training to obtain approval for WKU Human Subjects protocols. This proof must be presented by the Compliance Official at the researcher’s institution to the WKU Compliance official. When no training requirement exists at the researcher’s host institution, training must be conducted through affiliation of Western Kentucky University CITI Program.org requirements. WKU faculty, staff, and students are required to complete the CITI Program Training modules outlined by the WKU IRB.


Note: Your project period may not start until after the IRB has given final approval.

4. Has this project previously been considered by the IRB? [ ] Yes [X] No
If yes, give approximate date of review:

5. Do you or any other person responsible for the design, conduct, or reporting of this research have an economic interest in, or act as an officer or a director of, any outside entity whose financial interests would reasonably appear to be affected by the research? [ ] Yes [X] No

If "yes," please include a statement below that may be considered by the Institutional Conflict of Interest Committee:

6. Is a proposal for external support being submitted? [X] Yes [ ] No
If yes, you must submit (as a separate attachment) one complete copy of that proposal as soon as it is available and complete the following:
   a. Is notification of Human Subject approval required? [ ] Yes [X] No
   b. Is this a renewal application? [X] Yes [ ] No
   c. Sponsor’s Name:
   d. Project Period: From: [ ] To:

7. You must include copies of all pertinent information such as, a copy of the questionnaire you will be using or other survey instruments, informed consent documents, letters of approval from cooperating institutions (e.g., schools, hospitals or other medical facilities and/or clinics, human services agencies, individuals such as physicians or other specialists in different fields, etc.), copy of external support proposals, etc.

8. Does this project SOLELY involve analysis of an existing database? [X] Yes [ ] No

If yes, please provide the complete URLs for all databases that are relevant to this application, then complete Section A and the signature portion of the application and forward the application to the Office of Compliance.
If the database is not available in an electronic format readily available on the internet, please provide evidence that the data were collected using procedures that were reviewed and approved by an Institutional Review Board, then complete Section A and the signature portion of the application and forward the application to the Office of Compliance.

9. Is there a plan to publish or present the findings from the research outside the department or university? [X] Yes [ ] No

In the space below, please provide complete answers to the following questions. Add additional space between items as needed.

I. PROPOSED RESEARCH PROJECT

A. Provide a brief summary of the proposed research. Include major hypotheses and research design.

This study seeks to examine the relationship between motivation and academic performance of students in a first year seminar course. To accomplish this, students in a University Experience 175C will be administered targeted sections of the Motivated Strategies Learning Questionnaire (MSLQ) within the first few weeks of the Fall 2012 academic semester. Results of this assessment will be compared to individual students’ course grades at the end of the semester. This research will test the hypothesis that there is a positive relationship between student motivation and success in a first year experience course.

B. Describe the source(s) of subjects and the selection criteria. Specifically, how will you obtain potential subjects, and how will you contact them?

Are the human subjects – under 18 years of age, pregnant women, prisoners, or fetus/neonates? [ ] Yes [X] No

The target population for this study will be first-time students enrolled in UCC175C, the University Experience course designed for at risk students enrolled at the South Campus of Western Kentucky University. The only course sections that will be excluded from the study will be the learning community sections as those students receive a multitude of additional types of assistance, the measurement and study of which is outside the scope of this project. All students under 18 will be asked not to participate.

C. Informed consent: Describe the consent process and attach all consent documents.

The informed consent is attached to this application below. All participants will be asked to read and sign the consent document. During this phase of the protocol any minors in attendance will be asked to not participate. Further cross checks will be made to assure this from happening.
D. Procedures: Provide a step-by-step description of each procedure, including the frequency, duration, and location of each procedure.

The instrument that will be used is the MSLQ, or the Motivated Strategies for Learning Questionnaire. The instrument measures six dimensions of motivation: intrinsic goal orientation, extrinsic goal orientation, task value affect, learning belief control, self-efficacy for learning and performance, and test anxiety (See Appendix A for Survey Instrument). Due to the fact that exams are rarely given in UCC175C course sections, the test anxiety questions will not be used as a measure of motivation to succeed in the course.

The researcher will coordinate with the instructors of the University Experience courses to administer the survey. The computerized survey (Qualtrics) will be administered during class time in a computer lab during the second week of the fall 2012 semester. Students will be asked to consent to allow the Western Kentucky University Office of Institutional Research to add the student’s end-of-term grade in UCC175C, high school GPA, gender, race, first-generation status, and Pell-grant eligibility to their survey results. Students will be informed that all identifying information will be stripped from the data file before it is sent back to the researcher. After grades have been posted for the semester, the Office of Institutional Research will attach the required data, delete all identifying information, and send the data back to the researcher.

E. How will confidentiality of the data be maintained? (Note: Data must be securely kept for a minimum of three years on campus.)

All student records will be maintained under FERPA guidelines, and identifiable records will be housed in the Office of Institutional Research in a password protected file on a secure server. The collected data set will also be de-identified to insure anonymity.

F. Describe all known and anticipated risks to the subject including side effects, risks of placebo, risks of normal treatment delay, etc.

Risks to participants are minimized under FERPA regulations, and additional risks are no more than those found in daily life.

G. Describe the anticipated benefits to subjects, and the importance of the knowledge that may reasonably be expected to result.

The anticipated benefit of the study is that it may show how improving motivation can help students be successful in the first year seminar course. The results will be used to benefit future cohorts to improve education experiences on individual enthusiasm and focus in a first year experience course in further studies.

Additions to or changes in procedures involving human subjects, as well as any problems connected with the use of human subjects once the project has begun, must be brought to the attention of the IRB as they occur.
DATE: August 7, 2012

TO: Kim Cunningham

FROM: Western Kentucky University (WKU) IRB

PROJECT TITLE: [365460-1] The Effect of Motivation on Student Success in a First Year Experience Course

REFERENCE #: IRB 13-013

SUBMISSION TYPE: New Project

ACTION: APPROVED

APPROVAL DATE: August 7, 2012

REVIEW TYPE: Exempt from Full Board Review

Thank you for your submission of New Project materials for this project. The Western Kentucky University (WKU) IRB has APPROVED your submission. This approval is based on an appropriate risk/benefit ratio and a project design wherein the risks have been minimized. All research must be conducted in accordance with this approved submission.

This submission has received Exempt from Full Board Review based on the applicable federal regulation. Please remember that informed consent is a process beginning with a description of the project and insurance of participant understanding followed by an implied consent form. Informed consent must continue throughout the project via a dialogue between the researcher and research participant. Federal regulations require each participant receive a copy of the consent document.

Please note that any revision to previously approved materials must be approved by this office prior to initiation. Please use the appropriate revision forms for this procedure.

All UNANTICIPATED PROBLEMS involving risks to subjects or others and SERIOUS and UNEXPECTED adverse events must be reported promptly to this
office. Please use the appropriate reporting forms for this procedure. All FDA and sponsor reporting requirements should also be followed.

All NON-COMPLIANCE issues or COMPLAINTS regarding this project must be reported promptly to this office.

This project has been determined to be a Minimal Risk project.

Please note that all research records must be retained for a minimum of three years after the completion of the project.

If you have any questions, please contact Paul Mooney at (270) 745-2129 or paul.mooney@wku.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Western Kentucky University (WKU) IRB’s records.
APPENDIX B:

INFORMED CONSENT LETTER
INFORMED CONSENT DOCUMENT

Project Title: The Effect of Motivation on Student Success in a First Year Experience Course

Investigator: Kimberly Cunningham, Academic Support Department, 270-780-2551

You are being asked to participate in a project conducted through Western Kentucky University. The University requires that you give your signed agreement to participate in this project. If you are under 18 years of age; please stop now.

The investigator will explain to you in detail the purpose of the project, the procedures to be used, and the potential benefits and possible risks of participation. You may ask him/her any questions you have to help you understand the project. A basic explanation of the project is written below. Please read this explanation and discuss with the researcher any questions you may have.

If you then decide to participate in the project, please sign on the last page of this form in the presence of the person who explained the project to you. You should be given a copy of this form to keep.

1. Nature and Purpose of the Project: This study seeks to examine the relationship between motivation and academic performance of students in a first year seminar course.

2. Explanation of Procedures: The instrument measures five dimensions of motivation: intrinsic goal orientation, extrinsic goal orientation, task value affect, learning belief control, and self-efficacy for learning and performance. The computerized survey will be administered during class time in a computer lab during the second week of the fall 2012 semester. The researcher will consult with Western Kentucky University Office of Institutional Research to add the student’s end-of-term grade in UCC175C, high school GPA, gender, race, first-generation status, and Pell-grant eligibility to their survey results. After grades have been posted for the semester, the Office of Institutional Research will attach the required data, delete all identifying information, and send the data back to the researcher.

3. Discomfort and Risks: Risks to participants are minimized under FERPA regulations, and additional risks are no more than those found in daily life.

4. Benefits: The anticipated benefit of the study is that it may show how improving motivation can help students be successful in the first year seminar course. The results will be used to benefit future cohorts to improve education experiences on individual enthusiasm and focus in a first year experience course in further studies.
5. **Confidentiality:** All student records will be maintained under FERPA guidelines, and identifiable records will be housed in the Office of Institutional Research. The collected data set will also be de-identified to insure anonymity.

6. **Refusal/Withdrawal:** Refusal to participate in this study will have no effect on any future services you may be entitled to from the University. Anyone who agrees to participate in this study is free to withdraw from the study at any time with no penalty.

*You understand also that it is not possible to identify all potential risks in an experimental procedure, and you believe that reasonable safeguards have been taken to minimize both the known and potential but unknown risks.*

_________________________________________  Date

Signature of Participant

_________________________________________  Date

Witness

_________________________________________  Date

I also consent to release the Fall UCC175C grades to be summarized and coded from the Office of Institutional Research for analysis. I understand the records will not be disseminated with any identifiers.

_________________________________________

Signature of Participant

---

THE DATED APPROVAL ON THIS CONSENT FORM INDICATES THAT THIS PROJECT HAS BEEN REVIEWED AND APPROVED BY

THE WESTERN KENTUCKY UNIVERSITY INSTITUTIONAL REVIEW BOARD

Paul Mooney, Human Protections Administrator TELEPHONE: (270) 745-2129
APPENDIX C:

COPYRIGHT PERMISSION OF THE MOTIVATED LEARNING STRATEGIES
LEARNING QUESTIONNAIRE
Dear Kimberly, that is fine as long as you cite the authors. I have attached a scanned copy.

Best wishes, Marie

Dear Mrs. Bein,

Hi my name is Kimberly Cunningham. Currently, I am a doctoral student at Western Kentucky University with an emphasis in the postsecondary leadership. My dissertation topic title is "Motivation as a Predictor of Academic Success in a First Year Seminar Course". While researching my topic I came across the Motivated Strategies for Learning Questionnaire. I would like to use the questionnaire as an instrument in my research, and administer it to 450 participants. Also, I would like permission to be able to include this information in my dissertation.

I look forward to hearing back from you.

Thanks,

Kimberly Cunningham
Assistant Professor of University Experience & ACES Coordinator
Western Kentucky University
2355 Nashville Road Suite B
Bowling Green, KY 42101
270.780.2551
APPENDIX D:

MOTIVATED STRATEGIES LEARNING QUESTIONNAIRE INSTRUMENT
**Default Question Block**

Please enter your WKU #800 identification number.

Enter your University Experience course identification number per instructions located at the front of the classroom.

The following questions ask about your motivation for and attitudes about this University Experience class. Remember there are no right or wrong answers, just answer as accurately as possible. Use the scale below to answer the questions. If you think the statement is very true of you, click 7; if a statement is not at all true of you, click statement 1. If the statement is more or less true of you, find the the number between 1 and 7 that best describes you.

In a class like this, I prefer course material that really challenges me so I can learn new things.

<table>
<thead>
<tr>
<th>1 not at all true of me</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 very true of me</th>
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If I study in appropriate ways, then I will be able to learn the material in this course.

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<th>1 not at all true of me</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 very true of me</th>
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I think I will be able to use what I learn in this course in other courses.

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<th>1 not at all true of me</th>
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<th>4</th>
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<th>6</th>
<th>7 very true of me</th>
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I believe I will receive an excellent grade in this class.

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I'm certain I can understand the most difficult material presented in the readings for this course.

<table>
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<tr>
<th>1 not at all true of me</th>
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<th>5</th>
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<th>7 very true of me</th>
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Getting a good grade in this class is the most satisfying thing for me right now.

It is my own fault if I don't learn the material in this course.

It is important for me to learn the course material in this class.

The most important thing to me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.

I’m confident I can learn the basic concepts taught in this course.

If I can, I want to get better grades in this class than most of the other students.

I’m confident I can understand the most complex material presented by the instructor in this course.
In a class like this, I prefer course material that arouses my curiosity, even if it is difficult to learn.

1 not at all true of me  2  3  4  5  6  ? very true of me

I am very interested in the content area of this course.

1 not at all true of me  2  3  4  5  6  ? very true of me

If I try hard enough, then I will understand the course material.

1 not at all true of me  2  3  4  5  6  ? very true of me

I'm confident I can do an excellent job on the assignments and tests in this course.

1 not at all true of me  2  3  4  5  6  ? very true of me

I expect to do well in this class.

1 not at all true of me  2  3  4  5  6  ? very true of me

The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.

1 not at all true of me  2  3  4  5  6  ? very true of me

I think the course material in this class is useful for me to learn.

1 not at all true of me  2  3  4  5  6  ? very true of me

When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade.

1 not at all true of me  2  3  4  5  6  ? very true of me
If I don't understand the course material, it is because I didn't try hard enough.

1 not at all true of me  2  3  4  5  6  7 very true of me

I like the subject matter of this course.

1 not at all true of me  2  3  4  5  6  7 very true of me

Understanding the subject matter of this course is very important to me.

1 not at all true of me  2  3  4  5  6  7 very true of me

I'm certain I can master the skills being taught in this class.

1 not at all true of me  2  3  4  5  6  7 very true of me

I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.

1 not at all true of me  2  3  4  5  6  7 very true of me

Considering the difficulty of this course, the teacher, and my skills, I think I will do well in this class.

1 not at all true of me  2  3  4  5  6  7 very true of me
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