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## AGAINST THE ODDS: A STUDY OF LOW SOCIOECONOMIC STATUS STUDENTS' ENROLLMENT IN HIGHER EDUCATION

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AGAINST THE ODDS: A STUDY OF LOW SOCIOECONOMIC STATUS  
STUDENTS' ENROLLMENT IN HIGHER EDUCATION

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THESIS

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A thesis submitted in partial fulfillment of the requirements for the degree of Masters of Science in Community and Leadership Development in the College of Agriculture, Food, and Environment at the University of Kentucky

By

Andrea Taylor Kirby

Lexington, KY

Committee Chairman: Dr. Stacy K. Vincent, Professor of Agricultural Education

Lexington, KY

2016

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## ABSTRACT OF THESIS

### AGAINST THE ODDS: A STUDY OF LOW SOCIOECONOMIC STATUS STUDENTS' ENROLLMENT IN HIGHER EDUCATION

For generations, researchers have been examining attributes that make low socioeconomic status students resilient. Attributes that help one become resilient are known as protective factors. The purpose of this study was to describe the protective factor(s) that contributed to the first-generation, low socioeconomic status students' enrollment at The University of Kentucky. The population for this study consists of the University of Kentucky First Scholars participants during the 2015 – 2016 academic year. The researcher examines the existing literature on low socioeconomic status effects on post-secondary education. Recommendations were made for the University of Kentucky's First Scholars Program on how to further enhance their program and continue promoting low socioeconomic status students with opportunities in higher education.

**KEYWORDS:** poverty, protective factors, resilience, risk factors, and socioeconomic status

Andrea Taylor Kirby

April 15, 2016

AGAINST THE ODDS: A STUDY OF LOW SOCIOECONOMIC STATUS  
STUDENTS' ENROLLMENT IN HIGHER EDUCATION

By:

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April 15, 2016

## **DEDICATION**

To my mom and grandmother, Traci and Vickie, and in memory of my grandfather,

Wayne, I dedicate this work.

To Mom – Thank you for pushing me to be the best version of myself and teaching me

giving up is never an option.

To Granny – Thank you for always being my biggest fan. You always whole-heartedly

believe in me.

To Papa – Thank you for being my moral compass and giving me someone to look up to.

Without your love and guidance, I would not be the person I am today.

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First and foremost, thank you to my Lord and Savior, Jesus Christ. If my effort throughout this thesis had a theme it would have been Philippians 4:13, “I can do all things through Christ who strengthens me”. Without answered prayers, this thesis would still be ongoing today.

To my husband and best friend, Joshua, thank you for not only being there, but also encouraging each of my crazy endeavors. It is your love, support, and encouragement that have guided me throughout this process. Although we have put many of our shared dreams and goals on hold for my career, it has always been my top priority to better this life we share together.

To my family (Mom, Granny, and Catherine) thank you for always being there for me, even when I am unbearable ☺. You have taught me many instrumental life lessons in prioritizing what and who are important, hard work, and never giving up on my dreams. Each of you has impacted who I am today and for that I am eternally grateful. To Catherine, I have always tried to be the best sister that I know how to be. I know I am not perfect, but I hope my love has always shown through my actions.

To Dr. Stacy Vincent, I consider myself blessed to have a handful of people I can call a mentor. You are among the top of that list. It is because of a phone call asking me to fulfill the position of a graduate research assistant that I have had the pleasure of

working with you and embarking upon a journey that would have never been possible. From our debates to our crazy “hippie” dance parties, it has been a memorable ride. I hope one day I can repay all of the opportunities you have so graciously given me.

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## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
TABLE OF CONTENTS.....	v
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
CHAPTER I	
INTRODUCTION .....	1
Background and Setting .....	1
Poverty in America .....	1
The Correlation to Poverty and Higher Education .....	4
The First Scholars Program .....	5
Theoretical/Conceptual Framework.....	9
Need for the Study .....	9
Statement of the Problem.....	12
Purpose of the Study .....	14
Research Objectives/Hypotheses .....	14
Definitions of Terms .....	14
Limitations of the Study.....	15
Basic Assumptions.....	16
CHAPTER II	
LITERATURE REVIEW .....	18
Resilience .....	18
Resilience and Protective Factors .....	20
Resiliency in Society.....	27
Resiliency in Post Secondary Education .....	26
Resilience Rate .....	30

CHAPTER III	
METHODOLOGY .....	33
Purpose of the Study .....	33
Research Objectives .....	33
Research Design.....	34
Population and Sample .....	35
Instrumentation .....	36
Validity and Reliability.....	37
Data Collection .....	39
Data Analysis .....	40
Research Objective 1: Describe the selected characteristics of the first-generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, GPA, and parent/guardian education level. ....	41
Research Objective 2: Describe the protective factors present among the first-generation, low socioeconomic status students. ....	41
Research Objective 3: Describe the protective factors present among the first-generation, low socioeconomic status students by grade classification (sophomore, junior, and senior). ....	42
CHAPTER IV	
RESULTS .....	43
Purpose of the Study .....	43
Research Objectives .....	43
Findings.....	43
Research Objective 1: Describe the selected characteristics of the first-generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, GPA, and parent/guardian education level. ....	44
Research Objective 2: Describe the protective factors present among the first-generation, low socioeconomic status students. ....	45

Research Objective 3: Describe the protective factors present among the first-generation, low socioeconomic status students by grade classification (sophomore, junior, and senior). .....	54
CHAPTER V	
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS.....	57
Purpose of the Study .....	57
Research Objectives .....	57
Research Design.....	57
Population and Sample .....	58
Data Collection .....	59
Limitations to the Conclusions .....	60
Summary of Research Findings with Conclusions and Recommendations.....	61
Research Objective 1: Describe the selected characteristics of the first-generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, GPA, and parent/guardian education level. ....	61
Research Objective 2: Describe the protective factors present among the first-generation, low socioeconomic status students. ....	62
Research Objective 3: Describe the protective factors present among the first-generation, low socioeconomic status students by grade classification (sophomore, junior, and senior). ....	66
Researcher to Practice.....	68
APPENDICES .....	70
Appendix A – IRB Protocol Approval.....	70
Appendix B – Waive Requirement for Documentation of Informed Consent .....	72
Appendix C – Consent Cover Letter.....	75
Appendix D – Against the Odds: Protective Factors Questionnaire.....	77
Appendix E – Email Correspondence with Dr. Emmy E. Werner .....	82

REFERENCES .....	84
VITA.....	97

## LIST OF TABLES

Table	Page
1.1 <i>Types of Poverty</i> .....	2
1.2 <i>University of Kentucky's First Scholars Program Enrollment</i> .....	8
1.3 <i>University of Kentucky's First-Generation Programs</i> .....	10
2.1 <i>Werner's (2000) Protective Factors within the Individual</i> .....	22
2.2 <i>Werner's (2000) Protective Factors within the Family and Community</i> .....	24
3.1 <i>Assumptions by Statistical Analysis</i> .....	41
4.1 <i>Characteristics of University of Kentucky's First Scholar Participants (n = 37)</i> .....	44
4.2 <i>Protective Factors Present Among University of Kentucky's First Scholars Participants</i> .....	49
4.3 <i>Central Tendencies of Protective Factors Among University of Kentucky's First Scholar Participants (n = 37)</i> .....	53
4.4 <i>ANOVA of Protective Factors by University of Kentucky's First Scholars (n = 37)</i> .....	55
4.5 <i>Central Tendencies of Protective Factors by Grade Level</i> .....	56

## LIST OF FIGURES

Figure	Page
1.1 <i>First Scholars' (2014) Steps to Success Framework</i> .....	7
2.1 <i>Earnings and Unemployment Rates by Educational Attainment</i> (United States Department of Labor, 2014).....	32

# CHAPTER I

## INTRODUCTION

### Background and Setting

#### Poverty in America

In the 1960s, President Lyndon B. Johnson declared war on poverty. In order to show the severity of this issue, President Johnson scheduled a trip to Martin County, Kentucky where poverty was at an all time high to showcase the circumstances in which rural Americans lived (Bello, 2014). According to the United States Census Bureau (2013), in 1960, 70.12% of this Appalachian county's population was below the poverty level. In the late 1950's, 22.4% of Americans lived in poverty (National Poverty Center, 2014).

Prior to President Johnson's declaration of war, poverty had to be turned into a figure in order for the U.S. government to officially collect data. Mollie Orshanky, government economist, first calculated the poverty line in 1963. The poverty line was determined by "multiplying the cost of a very minimal diet by three, as a 1955 government study had determined that the typical American family spent one-third of its income on food. Thus a family whose cash income is lower than three times the cost of a very minimal diet is considered officially poor" (Barkan, 2012, para. 1). Today, the United States determines a person lives in poverty by the household's total income. If the total income for the household is less than the threshold or allowable income amount set by the government then everyone in the household is considered to be below the poverty line (United States Census Bureau, 2012).

Although the United States’ government determines poverty by monetary means, researchers have described different types of poverty (see Table 1.1). These different types of poverty not only consider a person’s income level, but also examine their family background and living circumstances.

Table 1.1  
*Types of Poverty*

Type of Poverty	Description
Absolute Poverty	Chronic lack of basic needs (food, water, housing) (eSchoolToday, 2010).
Generational Poverty	Generations living in poverty without the means to move out of it (eSchoolToday, 2010).
Relative Poverty	Although some have access to basic necessities, they still cannot afford or meet societal standards such as vacations (eSchoolToday, 2010).
Rural Poverty	Lack of services and conveniences can cause poverty-engrained situations (USDA, 2015).
Situational Poverty	Caused by sudden adversity or crisis like a serious illness (eSchoolToday, 2010).
Urban Poverty	Overcrowding, congestion, unemployment, social problems (crime and violence) (The World Bank, 2011).

On January 8, 1964, President Johnson addressed the nation, “Very often a lack of jobs and money is not the cause of poverty, but the symptom. The cause may lie deeper in our failure to give our fellow citizens a fair chance to develop their own capacities, in a lack of education and training, in a lack of medical care and housing, in a lack of decent communities in which to live and bring up their children” (Johnson, 1964, para. 25).

Based upon these beliefs, the “war on poverty” was centered on four parts of legislation:

1. The Economic Opportunity Act (EOA) of 1964 – The EOA established well-known programs such as Head Start, Job Corps, Volunteers in Service to America (VISTA), the federal work-study program, and several other initiatives (Johnson, 1964).



2. The Elementary and Secondary Education Act (ESEA) – This act was passed into law in 1965. The ESEA enacted the Title I program in public schools, which provided funding for disadvantaged students (Matthews, 2014). In 2002, ESEA was amended and renamed the No Child Left Behind Act (NCLB) (Office of Superintendent of Public Instruction [OSPI], 2014).
3. The Food Stamp Act of 1964 – The Food Stamp Pilot Program was initiated in 1961 under the leadership of President John F. Kennedy. The purpose of making the Food Stamp Act permanent was to improve “levels of nutrition among low-income households” (United States Department of Agriculture [USDA], 2013).
4. The Social Security Amendments of 1965 – These amendments created healthcare for the elderly (Medicare) and low-income individuals (Medicaid) and increased Social Security benefits (Matthews, 2014).

Due to President Johnson’s efforts towards the “war on poverty”, the United States’ poverty rate began to steadily decrease in the 1960’s. In 1973, the poverty rate had decreased to 11.1%. However, by the 1980’s the poverty rate had began to rise again and by 1983 it had reached 15.2% or 35.3 million individuals (National Poverty Center, 2014). After decades of minimal fluctuation, in 2012, the poverty rate percentage had decreased to 15.0% or 46.5 million individuals. Kentucky’s poverty rate was slower to decrease, compared to the national average, with a rate of 17.9% (United States Census Bureau, 2013). Even though the poverty rate had declined since 1983, the number of individuals living in poverty in 2012 has increased due to the United States’ increased population.

## **The Correlation Between Poverty and Higher Education**

The widening economic gap among social classes is gaining national attention. This gap has been associated with the dwindling representation of low socioeconomic status (SES) students in post-secondary education and the high dropout rates in secondary education (Thomas & Stockton, 2003). The effect SES has on student achievement has been a popular field of research since the late 1960's. Coleman (1966) led the way with groundbreaking research on low SES students and as a result published *Equality of Educational Opportunity* discussing the importance of making education accessible to everyone regardless of income.

SES research has been combined with several factors to examine student achievement. Many of these factors have been external, including parental involvement (Ma, 2009), parental occupation (Leppel, Williams, & Waldauer, 2001), parental encouragement (Sewell & Shah, 1968), parental education level (Dubow, Boxer, & Huesmann, 2009), family support, (Seccombe, 2012), and peer associations (Stewart, 2008). Other factors have been internal, including student resilience (Werner, 1990) and career goals (Calcagno, Bailey, Jenkins, Kienzl, & Leinbach, 2008). Researchers have also examined the intersection SES and demographic characteristics have on student achievement. Demographic factors have included race (Thomas & Stockton, 2003), ethnicity (McWhirter, 1997; Trusty, Robinson, Plata, & Ng, 2000), age (Reason, 2009), and gender (Astin, 1993). Dubow, Boxer, and Huesmann, (2009) found the most influential combination of factors when determining a student's enrollment at a higher education institution is socioeconomic status and parents' education level.

Parental social class is a significant contributing factor to whether or not the child will go to college. Children with parents of high SES have greater access to higher education (Persell, 2010). Social class can determine what type of school the child will be able to attend, which relates to the quality of teachers, curriculum, and teaching practices the school embraces (Persell, 2010).

To widen the economic gap even further, research posits that counselors poorly perceive and expect less from low SES students (Auwarter & Aruguete, 2008). In 2008, Auwarter and Arguete reported high school counselors view low SES students as having a less promising future than students from middle and high-income families. The perception school officials have of students give a negative self-awareness and can affect the individuals and follow them beyond their school experience (Lubienski, 2002).

Seccombe (2012) identified poverty as having a negative impact on the home environment. Low-income parents tend to interact with their children less frequently than high-income parents because of the emotional distress over income. Seccombe reported this lack of parental encouragement influences children's goals and whether they see value in education. If a student does not see meaning and value in continuing their education then they will not enroll in college (Seccombe, 2012).

### **The First Scholars Program**

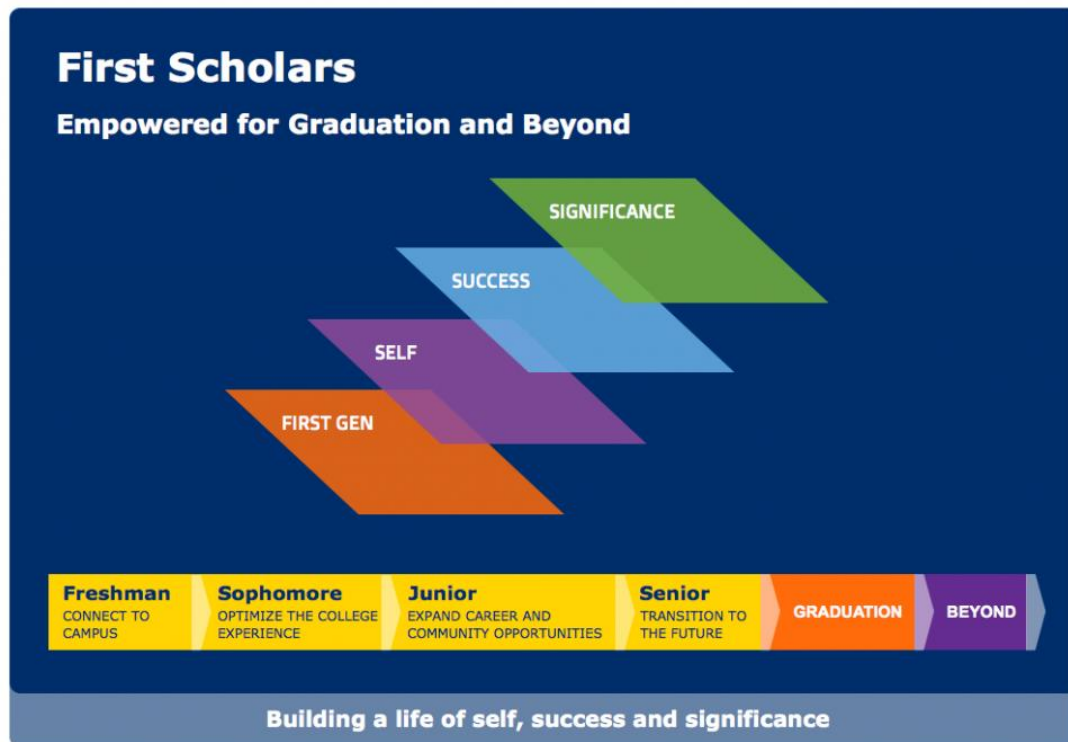
In 2008, Eric Suder founded The First Scholars Program in Plano, Texas after developing an interest in disadvantaged students. Suder identified the less advantaged students by financial need and first generation college students. Suder discovered that these less advantaged students received scholarships and/or grants, but lacked the cultural

capital (educational preparation, knowledge, and skills) required by the college system to be successful (First Scholars, 2014).

The First Scholars Program is a comprehensive program that seeks to develop the students through a four-year process (University of Kentucky, 2014). In Figure 1.1, the annual themes (connect to campus, optimize the college experience, expand career and community opportunities, and transition to the future) are outlined according to grade-level. The students are also provided with specific learning objectives (first-gen, self, success, and significance) beginning their freshmen year (First Scholars, 2014). The learning objectives include:

1. First-Gen – Bridging the gaps, transforming challenges, creating opportunities, and accessing resources.
2. Self – Discovering potential, expanding awareness, utilizing strengths, and clarifying values and beliefs.
3. Success – Exploring possibilities, developing a personal vision, gaining experience, and building a skill set.
4. Significance – Giving back, engaging personal passion, developing leadership, and making a difference (First Scholars, 2014).

Figure 1.1  
*First Scholars' (2014) Steps To Success Framework* (First Scholars, 2014)



The First Scholars Program currently has partnerships with seven universities across the nation: University of Kentucky, The University of Alabama, Southern Illinois University Carbondale, The University of Memphis, Washington State University, Northern Arizona University, and Kansas State University. These institutions were not randomly selected. Each affiliated institution has to be a four-year public university, maintain an undergraduate enrollment of 15,000-30,000, possess traditional residence halls, enroll a significant amount of first-generation students, and have a university-wide commitment to the success of every student including first-generation (First Scholars, 2014).

The University of Kentucky (UK) was the first institution accepted as an affiliated university (First Scholars, 2014). The First Scholars Program was established as a pilot program at UK in 2009 after receiving a \$1.1 million grant from The Suder Foundation

(Geegan, 2012). After being accepted as an affiliate university, the pilot or first year consisted of creating and implementing the program (Hahn, 2012). In 2010, the first class of First Scholars enlisted in the program consisting of ten individuals. Since 2010, the program has steadily increased in enrollment numbers (see Table 1.1) (First Scholars, 2014). However, the enrollment numbers began to decline in the 2015 – 2016 school year due to lack of funding.

The Suder Foundation establishes the First Scholars program at the universities to fund themselves after a period of four years. The Suder Foundation funds each university by 100% the first year the program becomes an affiliate institution. Due to the University of Kentucky being the pilot school, it was fully funded for two years. After the first year, the Suder Foundation decreases funding by 25% each year until the university is responsible for 100% of the funds. Each year the foundation decreases funding, the affiliated university funds whatever percentage the foundation does not. Every year the University of Kentucky has paid the percentage that the Suder Foundation has decreased until 2015. Due to the lack of funds, a freshmen class was not recruited for the 2015 – 2016 academic year. Unless funding is reinstated to the First Scholars program by UK then when the current sophomore class graduates the program will cease to exist (M. Martin, personal communication, September 16, 2015).

Table 1.2  
*University of Kentucky's First Scholars Program Enrollment*

Year	Enrollment
2010	20
2011	40
2012	58
2013	75
2014	72
2015	51

## **Theoretical/Conceptual Framework**

Researchers consider first-generation, low socioeconomic status students that enroll at higher educational institutions as resilient (Dubow, Boxer, & Huesmann, 2009). The focus of resilience theory has been how people adapt to situations and overcome adversity (Bradley & Corwyn, 2005). Werner (1995) divided the resilience theory into three aspects: “good developmental outcomes despite high-risk status, sustained competence under stress, and recovery from trauma” (p. 81). An example of a “good developmental outcomes despite high-risk status” is a first-generation, low socioeconomic status student. A person that sustains “competence under stress” could be a student that helps take care of a parent with a mental illness. Lastly, a student that recovers from a traumatic situation could have experienced the death of a parent (Werner, 1995). If a person experiences any one of these situations and succeeds despite the odds against them, then they are considered resilient (Bradley & Corwyn, 2005). However, Werner (1995) found people do not overcome any of these three situations by themselves. A person must have at least one protective factor present to assist in overcoming the adverse situation. Protective factors are attributes within the individual and/or environmental influences that enhance “developmentally appropriate outcomes” (Werner, 2000, p. 116). An example of protective factors includes: hobbies/talents, faith, mentors, supportive family members, etc. (Werner, 2000). Resilience theory and Emmy Werner’s protective factors provided the theoretical framework for this research study.

## **Need for the Study**

The First Scholars Program is not the only program at the University of Kentucky that targets first generation college students. Two similar programs exist at UK, the

Robinson Scholars Program and Student Support Services (SSS) (University of Kentucky, 2014). However, the First Scholars Program is the most recently established and the only program that requires participants to also have a financial need to be eligible for their benefits and services (Table 1.2).

Table 1.3  
*University of Kentucky's First-Generation Programs*

Programs	Founded	Target Population	Benefits and/or Services
First Scholars	2009	Students must exhibit the following factors to qualify for the First Scholars Program (2014): 1. First generation (defined by both parents being limited to no more than two years of education past high school) and 2. Financial need.	First Scholars (2014) are eligible to receive the following benefits and services: 1. Academic/ cultural activities 2. Annual \$3,000 scholarship (totaling \$12,000) at an affiliate university 3. Mentoring program 4. Personal and career development program 5. Social integration program.
Robinson Scholars	1991	Every year the Robinson Scholars Program (2014) selects one first generation student from every Eastern Kentucky county (totaling 29 students/counties), with “the potential to succeed but who might encounter economic, cultural, or institutional impediments”.	The Robinson Scholars Program (2014) offers the following benefits to Robinson Scholars <i>college</i> students: 1. College Services 2. Coordinator (secondary advisory) 3. Full scholarship to the University of Kentucky International study abroad program.
Student Support Services (SSS)	1993	Students must meet any one of the following criteria to qualify for SSS: 1. First generation 2. Low income 3. Documented disability (SSS, 2014).	SSS (2014) offers the following services to assist students enrolled in their program: 1. Career programs 2. Graduate school preparation 3. Peer mentoring program



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Table 1.3 (cont.)

---

- 4. Social culture programs
  - 5. Tutoring services.
- 

The First Scholars Program was created based upon the following research factors: student success characteristics, tools to access characteristics, and support strategies (Moschetti, 2012). Rather than conducting their own studies and repeating current research experiments, the First Scholars utilized experts in the corresponding field of study and existing research (First Scholars, 2014).

Student success characteristics refer to the student's background (geographical location, parents' education level, socioeconomic status, race, gender, etc.) and how likely they are to enroll and succeed at a post-secondary institution. Perna and Titus (2005) found the most influential factor in determining college enrollment is parents' education level. However, the most influential combination of factors in determining college enrollment is parents' education level and socioeconomic status (Dubow, Boxer, & Huesmann, 2009).

After a first-generation, low-income student has entered college, they often face difficulties with academic, cultural, and/or social transitions (Moschetti, 2012). The parents of these students do not have the knowledge to help their student adjust to a college environment because they have never experienced college first-hand (Pike & Kuh, 2005). Due to the realization that college support can be limited, the First Scholars Program requires each student to develop an Individual Strategic Plan (ISP). The ISP serves as the primary tool to access student characteristics. The ISP is tailored to each

student based on goals. The ISP requires the students to select activities and experiences that will assist in achieving their goals (Moschetti, 2012).

In an effort to retain and support students, the First Scholars Program utilizes a mentor program to aid the students with their individual and academic needs (First Scholars, 2014). Ishiyama (2007) found when first-generation students are paired with faculty or peers the retention rate increases in the first-generation population of students. These relationships help the students feel supported in an educational setting (Moschetti & Hudley, 2008).

The three characteristics (student success characteristics, tools to access characteristics, and support strategies) and the body of research is what currently drives the First Scholars Program (Moschetti, 2012). Although the First Scholars Program relies on researchers (Dubow, Boxer, & Huesmann, 2009; Werner, 2000; Werner & Smith, 1992) that have examined factors influencing post-secondary enrollment, no one has actually examined the factors that have influenced the participants in the First Scholars Program. Without this knowledge, this population will continued to be lumped with the mass.

### **Statement of the Problem**

The First Scholars Program created the Figure 1.1: *First Scholars' (2014) Steps to Success Framework* by developing four learning objectives (first-gen, self, success, and significance) and four themes (connect to campus, optimize the college experience, expand career and community opportunities, and transition to the future). Each year the students focus on one objective and theme depending on what grade they are in (First Scholars, 2014).

During the students' freshmen year, the focus is "connecting to campus". This objective/theme is met by requiring all of the freshmen to reside in the living-learning community and enroll in a transition course. The sophomores' theme is to "optimize the college experience". They continue to participate in a peer-mentoring program as the mentee. This allows the students to address any issues that may arise in a safe environment. The First Scholars also host activities and workshops designed specifically for each grade level so the students can engage in social and cultural interactions. The students' junior year consists of "expanding career and community opportunities". The students have the opportunity to become mentors to the younger participants. These students are also continually participating in workshops tailored to meet their individual needs. Seniors are focusing on "transitioning to the future". The final objective/theme is focused on ensuring the program has completed its intended task, to develop each student holistically. By the time the students reach this level, the First Scholars should have gained a self-awareness of their strengths, developed a vision for their future, and eventually gain a responsibility to give back to the program (First Scholars, 2014).

The First Scholars Program objectives and themes were designed based upon three factors: student success characteristics, tools to access characteristics, and support strategies (Moschetti, 2012). These three factors were identified through third-party research (First Scholars, 2014; Moschetti, 2012). Although there are similar collegiate programs (Esters, 2007) that have collected research based on their specific program, these studies and programs differ by requirements, expectations, services, benefits, etc. Tailoring a study to meet the needs of this specific program could provide more insight to

the First Scholar's population, problems the students face, and allow more diversified tools and programs to be developed to meet the needs to their students.

### **Purpose of the Study**

The purpose of this study was to describe the protective factor(s) that contributed to the first-generation, low socioeconomic status students' enrollment at The University of Kentucky.

### **Research Objectives/Hypotheses**

The following research objectives and corresponding hypotheses were developed to be the focus of this study:

1. Describe selected characteristics of the first generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, and GPA.
2. Describe the protective factors present among the first generation, low socioeconomic status students.
3. Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior).

**HO<sub>1</sub>:** There is no statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

**H<sub>1</sub>:** There is a statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

### **Definition of Terms**

The following terms are defined to provide clarity and are used operationally in this study:

1. Poverty – The United States Census Bureau is responsible for determining the poverty status. If a family’s total household income is less than the threshold or allowable income amount set by the United States’ government then everyone in the household is considered to be living in poverty. (United States Census Bureau, 2012).
2. Protective Factors – Attributes within the individual and/or environmental influences that enhance “developmentally appropriate outcomes” (Werner, 2000, p. 116).
3. Resilience – People who have adapted to unfavorable situations and overcome adversity (American Psychological Association, 2014; Bradley & Corwyn, 2005).
4. Risk Factors – Stressful life events that predict negative life outcomes (Werner & Smith 1992).
5. Social Class – “A group of individuals who occupy a similar position in the economic system of production” (University of Delaware, *n.d.*, para. 4).
6. Socioeconomic Status – “A combination of education, income, and occupation. It is commonly conceptualized as the social standing or class of an individual or group. When viewed through a social class lens, privilege, power, and control are emphasized” (American Psychological Association, 2014, para. 1).

### **Limitations of the Study**

The researcher recognizes the following limitations to this study:

1. The population was limited to first generation, low socioeconomic status students enrolled at The University of Kentucky as of August 26, 2015.
2. The population was limited to first generation, low socioeconomic status students enrolled in the First Scholars program as of August 2015.
3. The population enrolled in the First Scholars Program as of August 2015 was limited to the grade classifications of sophomore, junior, and senior.

### **Basic Assumptions**

In regards to this study, the following can be assumed:

1. In order for students to be eligible for the First Scholars program the following criteria must be met (First Scholars, 2014):
  - a. First-time freshmen and admitted to the University of Kentucky
  - b. Complete the Student Strengths Inventory
  - c. Demonstrate financial need and complete the Free Application for Federal Student Aid [FAFSA]
  - d. US Citizen or qualified non-citizen as defined by federal law
  - e. Eligible for in-state tuition
  - f. ACT score between 22-28 and minimum high school GPA of 3.0
  - g. Neither parent have more than two years of education beyond high school  
(does not include siblings or other relatives)
2. Participants of the First Scholars Program must have a financial need in order to participate in the program. In return the program provides a \$3,000 scholarship/year to each participant totaling \$12,000.

3. The First Scholar Program freshmen live on-campus in a living-learning community and enroll in a one semester designated course for First Scholars.
4. The First Scholars Program has provided academic, leadership, and social opportunities to guide each participant to success in their future.
5. Students involved in the First Scholars Program have been exposed to competent mentors in the required progressive mentoring program.
6. The First Scholars Program expects the upperclassman students enrolled in the program to transition into serving the leadership roles within the organization.
7. Students enrolled in the First Scholars Program must maintain a minimum 2.5 cumulative Grade Point Average (GPA).
8. Participants of the First Scholar Program are expected to attend and participate in regular meetings, activities, retreats, service projects, and workshops organized by the First Scholars Program. The purpose of these activities is to regularly make contact with the participants to ensure their academic needs are met.
9. The First Scholar Program participants completed the questionnaires honestly and to the best of their ability.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **Resilience**

Malcolm Gladwell (2008) wrote,

People don't rise from nothing. We do owe something to parentage and patronage. The people who stand before kings may look like they did it all by themselves. But in fact they are invariably the beneficiaries of hidden advantages and extraordinary opportunities and cultural legacies that allow them to learn and work hard and make sense of the world in ways others cannot. (p. 19)

For decades, psychologists, counselors, and theorists have described people who acclimate to unfavorable situations and overcome adversity as resilient (Bradley & Corwyn, 2005). More specifically, the American Psychological Association (2014) defines resilience as “the process of adapting well in the face of adversity, trauma, tragedy, threats, or even significant sources of stress – such as family and relationship problems, serious health problems or workplace and financial stressors” (p. 2). Through circumstances, resilient individuals have obtained the ability to “bounce back” from life's hardships (Association, 2007).

Resilience research emerged over four decades ago (Wright, Masten, & Narayan, 2013). Several key individuals have been crucial in laying the groundwork for the concept of resiliency. Norman Garmezy, known as the “grandfather of resilience theory”, was among one of those key individuals (Harlow, 2009). Garmezy first identified resilience in schizophrenia patients when he recognized certain patients exhibited more adaptive functioning behaviors than the other patients (Masten & Powell, 2003). The



findings from Garmezy's early work sparked an interest to examine the children of mentally ill patients because of their increased risk to develop the same mental illness (Masten & Powell, 2003).

Thus, Garmezy continued his research by creating Project Competence. The primary focus of Project Competence was to pursue studies that examined three key factors: competence, adversity, and resilience (Garmezy, 1971). Auke Tellegen, psychologist, and Ann Masten, graduate student, both from the University of Minnesota, joined the project. Together Garmezy, Tellegen, and Masten conducted numerous studies including children with congenital heart defects, physical handicaps, and homeless children. Despite the children's high-risk status, many of the children were found to be resilient (Masten & Powell, 2003). The researchers' results led to an increased effort to understand individual responses to adversity (Luthar, Cicchetti, & Becker, 2000).

Emmy Werner and Ruth Smith were also among the resiliency pioneers. Werner and Smith (1992) used the term "resilient" in the 1970's to describe a cohort of poverty-stricken children in Kauai, Hawaii. Werner and Smith (1989) expanded resiliency research with the longitudinal study based in Kauai, Hawaii because of the examination of the multiple risk factors such as socioeconomic status, family stability, perinatal stress, etc. Werner and Smith found one out of three children developed into a successful individual as an adult (1989).

Early resiliency researchers focused on studying the individual and the individual's internal risk factors such as autonomy or high self-esteem (Luthar, Cicchetti, & Becker, 2000), which could be attributed to helping the individual become resilient. The individual-themed lens researchers used to study resiliency narrowed the field by

limiting the investigation of how the individuals were becoming resilient (Hayhurst, Hunter, Kafka, & Boyes, 2013).

As resiliency began to be explored in more depth, researchers realized external factors could attribute to an individual becoming resilient as well (Werner & Smith, 1982, 1992). Additional research led to the creation of three factors associated with the “development of resilience: (1) attributes of the children themselves, (2) aspects of their families, and (3) characteristics of their wider social environments” (Luthar, Cicchetti, & Becker, 2000, p. 544). These three factors have been termed “protective factors” (Werner & Smith, 1992).

### **Resilience Theory and Protective Factors**

Since the founding, literature on resilience has grown to the emergence of a theory. The resilience theory has grown to the point where it has been divided into three constructs. Werner (1995) describes the three constructs as the “three kinds of phenomenon: good developmental outcomes despite high-risk status, sustained competence under stress, and recovery from trauma” (p. 81). In each of these phenomena’s, children have a situation that hinders their potential for future success.

The first phenomenon, good developmental outcomes despite high-risk status, focuses on children, who are at-risk because of poverty, substance abuse, etc. The second phenomenon, sustained competence under stress, describes children in environments where coping is necessary. An example of this phenomenon is a child with divorced parents. Lastly, the third phenomenon, recovery from trauma, describes people who have successfully overcome a traumatic experience such as war or a child overcoming the death of a parent (Werner, 1995).

Werner (2000) determined in the process to becoming resilient over a situation or learning how to cope with a situation, there has to be an influence(s) that is buffering the person from the situation's negative influences. For example, a student from a low socioeconomic status family is less likely to go to college than a student from a middle or high socioeconomic status family (Sewell & Shah, 1967). However, if that same low SES student receives an athletic scholarship to attend college and follows through with enrollment then the sport would be considered the influence or buffer.

Werner identified these influences as protective factors. Protective factors are “moderators of risk and adversity that enhance good, that is, developmentally appropriate outcomes” (Werner, 2000, p. 116). In the Kauai longitudinal study, Werner and Smith (1992) identified three sources of protective factors: within the individual, within the family, and in the community.

Tables 2.1 and 2.2 display the protective factors Werner (2000) found in the study. Werner (2000) created these tables based on data collected from 505 individuals from the prenatal to adulthood developmental periods. The purpose of Werner and Smith's (1992) Kauai longitudinal study was to identify resiliency and in the process learn how to advance positive adult adaptation.

Table 2.1 focuses on the first source of the protective factors: within the individual. Protective factors within the individual are based solely on the person's internal characteristics. An example of a protective factor within the individual is a positive self-concept. Even though a person's self-concept can be shaped by outside influences or factors that is not within one's self (example: encouraging parents), a

person does not rely on another person to have a self-concept. Everybody has a self-concept whether positive or negative (Werner, 2000).

Werner (2000) found in a longitudinal study observing 698 children, the boys and girls categorized as resilient possessed several of the same protective factors within the individual. These characteristics include: self-control, sociability, reflective cognitive style, and flexible coping strategy.

Table 2.1  
*Werner's (2000) Protective Factors within the Individual*

Protective Factors	Developmental Period	Risk Factors
Low distress/ low emotionality	Infancy–Adulthood	Child abuse/neglect Poverty Multiple risks
Active; alert; high vigor; drive	Infancy	Poverty Multiple risks
Sociability	Infancy	Child abuse/neglect Parental mental illness Poverty Multiple risks
“Easy,” engaging temperament (affectionate; cuddly)	Infancy–Childhood	Child abuse/neglect Divorce Parental substance abuse Poverty Multiple risks
Advanced self-help skills	Early childhood	Poverty Multiple risks
Average–above average intelligence (language and problem-solving skills)	Childhood–Adulthood	Child abuse/neglect Parental mental illness Parental substance abuse Poverty Multiple risks
Ability to distance oneself; impulse control	Childhood–Adulthood	Parental mental illness Parental substance abuse Poverty Multiple risks
Internal locus of control	Childhood–Adolescence	Parental mental illness Child abuse/neglect Poverty Multiple risks

Table 2.1 (cont.)		
Strong achievement motivation	Childhood–Adolescence	Parental mental illness Parental substance abuse Poverty Multiple risks
Special talents, hobbies	Childhood–Adolescence	Parental mental illness Poverty Multiple risks
Positive self-concept	Childhood–Adolescence	Divorce Poverty Multiple risks
Planning, foresight	Adolescence–Adulthood	Teenage parenthood Poverty Multiple risks
Strong religious orientation, Faith	Childhood–Adulthood	Parental mental illness Parental substance abuse Poverty Multiple risks

Table 2.2 concentrates on the second and third sources: within the family and in the community. Werner (2000) reported the majority of the 698 children in the longitudinal study were able to establish a close relationship with a family member or caregiver. Grandparents and siblings most often adopted this role. Grandparents often take over the role as parent in many resilient children’s lives due to adverse situations the parents may be coping with. In turn, the children develop a strong connection with the grandparent and serves as their buffer (Werner & Smith, 1992). Sibling caregivers are the most effective when the parenting is supplementary rather than substituting for the parent entirely (Werner, 2000).

The majority of emotional support for resilient children tends to come from protective factors in the community (Werner, 2000). Werner and Smith (1992) reported resilient children are inclined to establish friendships that last into adulthood. These friendships help the students gain insight into other people’s perspectives and maintain a healthy distance from their home life (Anthony & Cohler, 1987; Werner & Smith 1989).

Researchers have found resilient children tend to enjoy school because it gives them a sense of community and stability whereas their households may not. The school community is also where the students meet the majority of their lifelong friends (Werner & Smith, 1989).

Table 2.2  
*Werner's (2000) Protective Factors within the Family and Community*

Protective Factors	Developmental Period	Risk Factors
Small family size < 4 children	Infancy	Teenage motherhood Poverty Multiple risks
Mother's education	Infancy–Adulthood	Teenage motherhood Poverty Multiple risks
Maternal competence	Infancy–Adolescence	Child abuse/neglect Poverty Parental mental illness Multiple risks
Close bond with primary caregiver (who need not be biological parent)	Infancy–Adolescence	Child abuse/neglect Poverty Parental mental illness Parental substance abuse Teenage motherhood Multiple risks
Supportive grandparents	Infancy–Adolescence	Child abuse/neglect Divorce Parental substance abuse Teenage motherhood Poverty Multiple risks
Supportive siblings	Childhood–Adulthood	Child abuse/neglect Divorce Parental substance abuse Poverty Multiple risks
For girls: emphasis on autonomy with emotional support from primary caregiver	Childhood–Adolescence	Poverty Multiple risks
For boys: structure and rules in household	Childhood–Adolescence	Divorce Poverty Multiple risks
For both boys and girls: assigned chores: “required	Childhood–Adolescence	Parental psychopathology Poverty

helpfulness		Multiple risks
Close, competent peer friends who are confidants	Childhood–Adolescence	Divorce Poverty
Supportive teachers	Preschool–Adulthood	Multiple risks Divorce Parental mental illness Parental substance abuse Poverty
Successful school experiences	Preschool–Adulthood	Multiple risks Divorce Parental mental illness Poverty
Mentors (elders, peers)	Childhood–Adulthood	Multiple risks Poverty Multiple risks

Since the discovery of protective factors, researchers such as Michael Rutter (1999) and Suniya Luthar (2003) have steered away from merely identifying protective factors. Rather researchers have been examining the complete process of how protective factors help individuals overcome adverse situations (Luthar, Cicchetti, & Becker, 2000). This aspect of resilience research is essential in the designing and implementation process of prevention and intervention strategies for at-risk individuals (Luthar, 2003).

### **Resiliency in Society**

Werner and Smith (1982, 1992, 2001) followed 698 children from birth to adulthood. Every individual in the cohort had at least one or more risk factors (poverty, parental stress, perinatal stress, etc.) present. When Werner and Smith (1982, 1992, 2001) met with the individuals at the adolescent stage (18 years old) of their life, two-thirds of the population was still considered to be “at-risk”. The “at-risk” population experienced teenage pregnancies, delinquencies, etc. While the one-third resilient population had found a way to cope or “bounce back” from the risk factors they experienced as a child (Werner & Smith, 1982, 1992, 2001).

When these individuals reached adulthood/midlife (32 and 40 years old), only one-sixth of the population was still in the “at-risk” category. The rest of the population had found some kind of coping mechanism or protective factor to help them lead “normal” lives. These “normal” lives consisted of a stable job, marriage, and/or children. However, one-sixth of the population was “struggling with chronic financial problems, domestic conflict, violence, substance abuse, serious mental health problems, and/or low self-esteem” (Werner & Smith, 2001, p. 37).

Risk factors are a predictor of negative outcomes (WestEd., 2004) Researchers have found risk factors can only predict 20 – 49% of outcomes for at-risk individuals (Rutter, 1999; Werner & Smith, 2001). However, protective factors, a predictor of positive outcomes, can predict the outcomes for at-risk individuals 50 – 80% of the time (WestEd., 2004). Werner and Smith (1992) suggest, “these buffers [i.e. protective factors] make a more profound impact on the life course of children who grow up under adverse conditions than do specific risk factors or stressful life events” (p. 202).

A common misconception and hindrance to society is the misconception people have an innate resiliency (WestEd., 2004). Masten (2001) suggests resiliency is a quality any individual can develop. Resiliency should not be thought of, as the individuals lacking the quality are to blame. Instead the realization that some individuals are subjected to protective factors or buffers and others are not is how resiliency needs to be viewed (WestEd., 2004). “What began as a quest to understand the extraordinary has revealed the power of the ordinary” (Masten, 2001, p. 9).

Even though resiliency is a quality individuals can develop, researchers recommend we do not simply forget about the youth in high-risk circumstances.



Society's future depends on the youth of America to grow up in healthy, supportive environments in order to produce healthy, supportive citizens (WestEd., 2004).

### **Resiliency in Post Secondary Education**

Researchers have focused on the effects low SES has on students after high school by evaluating potential correlating factors such as paternal encouragement, intelligence, and the students' college aspirations (Sewell & Shah, 1968). Swell and Shah (1967) reported low SES students with negative parental encouragement, low intelligence, and low aspirations of attending college had low retention rates. By evaluating these factors, researchers have increased understanding of why low SES students tend to have low enrollment rates in postsecondary institutions and even lower retention rates. Researchers have found retention rates for low SES students in post secondary institutions are usually low compared to high-income students and even lower in graduate school enrollment (Walpole, 2003).

In 2003, Walpole published findings from a nine-year longitudinal study, which evaluated student enrollment in higher education. The objective of the study was to examine how SES affects students' overall college experience and the students' final outcome. Key variables in the study were the students' background (time spent studying, activities involved in during college, and jobs held during college), parental income, and the students' career aspirations. The researcher found that low SES student enrollment was overall lower than high SES student enrollment. Furthermore, when low SES students did attend college, they attended institutions with lower standards such as community colleges (Bailey, Calcagno, Jenkins, Kienzl, & Leinbach, 2008; Walpole, 2003).

Sewell and Shah (1967) conducted a study on the effects low SES and low intelligence have on the attainment of higher education. Overall, the low SES students scored lower on the intelligence test than the middle and high SES students. The researchers measured intelligence on the Henmon-Nelson Test of Mental Maturity. This test was given annually to all Wisconsin high school juniors. Even when intelligence seemed to be the main factor in determining which students would attend college, SES still influenced which students would actually graduate (Sewell & Shah, 1967).

Researchers have also found students from low SES backgrounds tend to have lower achievement scores in math and reading. These low achievement scores have led to a lower success rate in college settings. Low SES students that are not successful in college have had higher dropout rates than middle and high SES students (Lee, Daniels, Puig, Newgent, & Nam, 2008).

In 2009, Reason reviewed research on student retention in the college setting. The researcher focused on individual student demographic characteristics (race, ethnicity, gender, age, and social class). Overall, more women, ethnically diverse students, and older students are enrolling in higher education. However, the rate of low SES students attending college has been decreasing. (Reason, 2009).

Thieman, Henry, and Kitchel (2012) examined common themes related to the stress of ten preservice teachers at the University of Missouri. The researchers found each preservice teacher dealt with similar stressors when working with high school students. These stressors ranged from classroom management/discipline, youth organization concerns, and work/life balance. The researchers found it was imperative for the

preservice teachers to have a positive and supportive student teaching experience for the participants to become resilient.

The majority of low SES research focuses on four-year institutions. Bailey, Calcagno, Jenkins, Kienzl, and Leinbach (2008) examined the impact institutional characteristics (tuition rates, location, scheduling, admissions policy, and services for at-risk students) had on community college students' success. Low-income and minority students had higher enrollment rates at community colleges than at four-year institutions. Bailey et al. hypothesized lower tuition rates, convenient location, flexible scheduling, open-door admissions policies, and having more services for at-risk students support low SES students in community colleges.

Astin and Osequera (2004) studied trends that contributed to the retention rates of low SES students in higher education. The trends studied were: financial aid, affirmative action, and outreach program. The researchers conducted a longitudinal study spanning the course of 38 years with over 400,000 college freshmen and more than 700 higher educational institutions. The researchers' findings determined low SES students' financial needs were not being met. Students from upper and middle class families were being targeted through outreach programs such as recruitment, while no parallel programming was being conducted for low SES students. Thus, year after year low-income and low-education families continue to be underrepresented in higher education (Astin & Osequera, 2004).

The current tuition rate at the University of Kentucky (2014), for an in-state resident is \$9,012. When combined with room and board, the rate increases to \$19,340. In the 2013 – 2014 school year, 51% of students enrolled at UK had a financial need. Of

those 51% of UK students with a financial need, 50% of students received some type of financial aid, including loans. While, less than half of the students (24%) received grants and need-based scholarships. However, only 8% of those students' financial needs were fully met (University of Kentucky, 2014). This leaves the additional 43% of students with a financial need left searching for a way to afford higher education opportunity.

Even though researchers have examined the impact low SES has on college enrollment and retention, there have not been any reformation plans created to address the problem (Tinto, 2006). Tinto suggested the profession move from theory to action in order to begin creating a reformation plan.

### **Resilience Rate**

In 2012, Fisher reported 11% of low-income students were obtaining a college degree from a four-year university. However, 79% of high-income students are earning a degree from these universities (Fisher, 2012). When examining Ivy League institutions, the gap widens even further. The Ivy League student population is made up of approximately 60% of high-income students, 5% of low-income students, and the remaining individuals are considered middle-income (Fisher, 2012).

In order to alleviate the gap between the haves and have not's in the higher educational realm, the Basic Educational Opportunity Grant was established in 1980 (Federal Education Budget Project, 2014). Today the Basic Educational Opportunity Grant is known as the Pell Grant Program. The Pell Grant is a federal grant awarded to low-income undergraduate students to assist with higher education expenses. In 2014, approximately \$30 billion was awarded to nine million students in the form of a Pell Grant (Federal Education Budget Project, 2014).

The maximum award a student can attain with the Pell Grant is \$5,550 (Fisher, 2012). This equates to approximately half the cost of a state university leaving students and their families responsible for the remaining fees. The Advisory Committee on Student Financial Assistance (2010) reported for the 2007 – 2008 school year, 48% of a low-income family's income would be the remaining cost of attendance for a full-time dependent student enrolled in a four-year university. This 48% of a low-income family's income also includes their student receiving the maximum amount of grant aid allowable (Advisory Committee on Student Financial Assistance, 2010).

Although the Pell Grant is the largest grant program in the U.S., Mundel and Rice (2008) reported the impact of these federally funded grant programs have not been substantial in narrowing the enrollment gap between low- and high-income students. Although federal grant-based programs provide an opportunity for access to higher education, barriers still exist (National Association of Student Financial Aid Administrators [NASFAA], 2012). The barriers the students are facing are a lack of preparation for college, limited knowledge about college opportunities, and an unmet financial need (Higher Education Act of 1965, 1965).

Researchers know there is a correlation between education and income (Reason, 2009). In Figure 2.1, the U.S. Department of Labor (2014) reported the majority of the unemployed population (11%) did not earn a high school diploma. However, 4% of the unemployed population earned a Bachelor's degree. When comparing the median weekly income for all workers (\$827) to individuals without a high school diploma (\$472), the individuals without a diploma makes \$355 less than the average person. If a person attended college but did not earn a degree (\$727) or earned an Associate's degree (\$777),

their median weekly earnings still fell below the average earnings (\$827) (U.S. Department of Labor, 2014).

Figure 2.1  
*Earnings and Unemployment Rates by Educational Attainment* (United States Department of Labor, 2014)

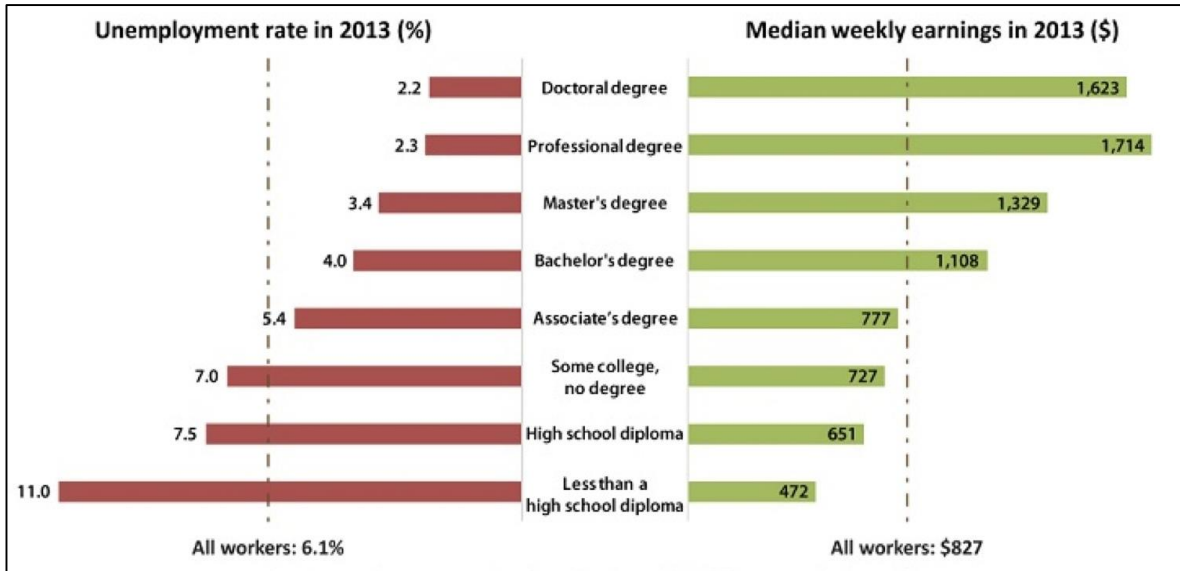


Figure 2.1 shows the importance of attaining a higher education degree. However, during 1992 – 2004, the enrollment of low-income students in four-year universities fell from 54% to 40% (Fisher, 2012). Based on this analysis of previous studies, there is a need for further research on the enrollment and success of first-generation, low socioeconomic status students to examine what determining factors persuaded these individuals to pursue a college degree despite the odds stacked against them.

## **CHAPTER III**

### **METHODOLOGY**

The primary focus of this chapter was to examine the methodology and procedures used in the study. The following procedures are provided: research design, population and sample, instrumentation, validity and reliability, and data collection. After the development of the questionnaire, but prior to the data collection stage, approval from the Institutional Review Board [IRB] at the University of Kentucky was sought. After receiving an “exemption certification” for protocol number 13-0697-X4B (see Appendix A), data was collected.

#### **Purpose of the Study**

The purpose of this study was to describe the protective factor(s) that contributed to the first-generation, low socioeconomic status students’ enrollment at The University of Kentucky.

#### **Research Objectives**

The following research objectives and corresponding hypotheses were developed to be the focus of this study:

1. Describe selected characteristics of the first generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, and GPA.
2. Describe the protective factors present among the first generation, low socioeconomic status students.
3. Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and

senior).

**HO<sub>1</sub>:** There is no statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

**H<sub>1</sub>:** There is a statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

### **Research Design**

This study was descriptive and correlational by design. Descriptive research is used when a researcher wants to examine existing conditions (Fraenkel & Wallen, 2006). Correlational research is collecting data on two or more variables and examining the relationship between those variables (Houghton Mifflin Harcourt, 2014). In this study, the researcher examined which protective factor(s) assisted first-generation, low socioeconomic status students enrolling in a higher educational institution.

The dependent variable investigated was the enrollment of the First Scholars participants at the University of Kentucky. The independent variables were Werner's (2000) protective factors (see Table 2.1). Protective factors refer to attributes within the individual and/or environmental influences that allow the individual to succeed despite their circumstances. In this case, the circumstance would be growing up in a low socioeconomic status environment.

When conducting a descriptive, correlational study, internal and external validity must be addressed. Internal validity ensures the data collected and analyzed are accurate (Michael, 2000). In order to protect internal validity, the researcher must minimize measurement error by ensuring the instrument is valid and reliable (Michael, 2000). External validity is the degree "to which the results of a study can be generalized to the



world at large” (Boyd, *n.d.*). Random sampling technique and maintaining a low dropout rate of participants improves external validity (Michael, 2000).

### **Population and Sample**

In this study, the population consisted of first-generation students enrolled at the University of Kentucky’s First Scholars Program in the 2015 – 2016 academic year ( $N = 51$ ). At UK, 18% of students are considered first-generation (University of Kentucky, 2014). The purpose requires the identification of a low-socioeconomic status population. The population was narrowed upon identification of first-generation, low socioeconomic status students enrolled at the University of Kentucky’s First Scholars Program ( $N = 51$ ). The researcher identified the low SES population by the Free Application for Federal Student Aid [FAFSA].

The frame for this study consisted of the First Scholars program at UK designed to assist first-generation, low socioeconomic status students to succeed while in college. The University of Kentucky offers three similar programs (First Scholars, Robinson Scholars, and Student Support Services) that assist this population. Examining each of the program’s requirements narrowed the frame (see Table 1.2). The researcher identified that First Scholars was the only program to require participants to have a financial need and be considered first-generation (First Scholars, 2014).

Due to the lack of funding in the First Scholars Program, no freshmen cohort exists for the 2015 – 2016 academic year. The First Scholars Program is currently partnered with seven universities, including the University of Kentucky; however, UK is the only university in the Commonwealth to offer this program (First Scholars, 2014). This provided a convenient sampling technique of the population ( $n = 37$ ).

Convenient sampling is often used in exploratory research. The researcher generally wants to obtain a “gross estimation” in the most inexpensive way possible (Jackson, 2011; StatPac, 2014). In order to maximize response rate, face-to-face instrument distribution was utilized: therefore a convenient sample of those present during the day of distribution as utilized.

### **Instrumentation**

The instrument used for this study was developed by the researcher and guided by Werner’s (2000) protective factors. The questionnaire was referred to as, “Against the Odds: Protective Factors Questionnaire”. The questionnaire was folded in the form of a booklet and composed on 8-½ inch x 11 inch paper. There were two sections to the instrument: part I consisted of the protective factors and part II consisted of participant characteristics.

The 23 protective factors in part I of the questionnaire were developed by Dr. Emmy E. Werner (2000) and adapted for this study. Dr. Werner was contacted by email to access the protective factors on July 25, 2012 (see Appendix E). Werner and Smith (1992) used a questionnaire in the Kauai, Hawaii longitudinal study to determine the protective factors found in this study.

In the “Against the Odds: Protective Factors” study, the participants are asked to determine how influential each factor was on their enrollment at the University of Kentucky. The influence is based on a five-point Likert scale (1-no influence, 2-slightly influential, 3-moderately influential, 4-influential, and 5-extremely influential).

The second section of the questionnaire sought out the participants’ characteristics demographically. These questions were closed-ended and convenient because they

allowed the participants to answer quickly. The responses were analyzed and coded in Statistical Package for the Social Sciences® [SPSS] 22.0 for Windows numerically. The demographic questions contained the following: gender, race/ethnicity, home residence, grade level, and GPA.

Part II of the questionnaire also allowed the participants to describe which factor(s) they felt were the least and most important to their enrollment at the University of Kentucky. Part I did not allow this opportunity because all 23 factors were answered on the Likert scale. Finally, the last question in part II allowed the participants to provide any additional comments or concerns in a confidential setting. Although, this is not a qualitative study open-ended questions can provide useful information.

### **Validity and Reliability**

A panel of experts ( $n = 3$ ) reviewed the questionnaire for content validity. Part I sought to measure the saliency of the protective factors within the participants' choice to attend the University of Kentucky. Part II collected characteristic and demographic information.

The panel of experts consisted of three university faculty members representing Departments of Agricultural Education and Community Leadership and Development at the University of Kentucky and The Ohio State University. Two of the members were selected based on their experience in teaching. All three members were selected based on their research and field knowledge of underserved populations.

In order to establish validity, a systematic process was established through email. The panel of experts received an email requesting their expertise for content validity. The questionnaire and a Microsoft Word document containing the research purpose and

objectives were attached to the email. The members were asked to specifically examine clarity, verbiage, and visual appearance. Modifications were made following the panel members review in order to improve the questionnaire. Sample protective factor statements were added in place of the protective factors in order to improve the understanding of the meaning of the protective factors.

Face validity was established through an audience that field-tested the instrument. The field test was conducted on May 1, 2015 with a University of Kentucky class ( $n = 8$ ). The students were asked to complete the survey and to evaluate the statements to make sure they were easy to understand.

Reliability is the extent an instrument produces accurate results (Phelan & Wren, 2006). The reliability of the questionnaire was established using a field test. Cronbach's alpha reliability coefficient for the scale was this study's scale was 0.81 (Santos, 1999). The Cronbach's alpha coefficient scale ranges from 0 to 1. The higher the Cronbach alpha score is indicative of the higher the reliability of a multi-point questionnaire or scale, while a score of 0.70 or higher is acceptable (Santos, 1999).

The field test participants were selected based upon enrollment at UK and similar in age to the study sample. The professor was selected based upon research and field experience with underserved populations. The professor received the questionnaire as 8- $\frac{1}{2}$  x 11 booklets and was asked to send the students' responses back by postage mail or fax within a week. The researcher provided the professor steps for properly administering the questionnaire.

Part II of the questionnaire sought to collect characteristic and demographic information from the participants. Researchers suggest not calculating and reporting

demographic data due to the margin of error being minimal (Glasgow, 2005; Salant & Dillman, 1994).

### **Data Collection**

The researcher met with the University of Kentucky's First Scholars coordinator to discuss protocol for distributing the questionnaires (see Appendix D). The First Scholars coordinator already had meetings scheduled with the students to discuss scheduling for the upcoming semester so the coordinator decided to distribute the questionnaires at the individual meetings. The researcher chose the coordinator to administer the questionnaires to increase response rate and minimize non-response error.

The researcher provided the coordinator with packets for each participant. Each packet contained a consent cover letter (see Appendix C) explaining the details of the study. The consent cover letter provided the research objectives, time frame for the data collection process, and the researcher's and IRB's contact information. The researcher was approved a waiver of informed consent (see Appendix B) for the participants due to the study presenting no more than minimal risk and written consent was not required outside of the research study. After the First Scholars' coordinator read the consent cover letter aloud, the participants were given the opportunity to decline participation in the study. The participants that declined participation in the study were asked to return the packets back to the coordinator. The remaining participants were instructed to keep the consent cover letter for their records for future questions or concerns.

The following steps were followed in the data collection process of the willing participants:

1. Before the distribution of materials the participants were instructed to wait to begin before completing the questionnaire.
2. The First Scholars' proctor distributed a questionnaire, a manila envelope, and a pencil to each participant.
3. The First Scholars' proctor read the instructions in part I and part II of the questionnaire, explained the Likert scale, brought attention the additional comments and concerns section, instructed participants to place the questionnaire in the manila envelope provided at the completion of the questionnaire, answered participants' questions, and then instructed them to begin answering the questionnaire.
4. After the participants completed the questionnaire, the First Scholars' proctor collected and stored all questionnaires ( $n = 37$ ) in a locked filing cabinet until collected by the researcher. Once the researcher collected the questionnaires, they were once again stored in a locked filing cabinet only accessible to the researcher.

After the questionnaires were distributed and collected, the researcher and the First Scholars coordinator contacted the non-responsive participants by email in order to solve for non-responsive error. "Non-response error occurs when a significant number of people in the survey sample do not respond to the questionnaire" (Salant & Dillman, 1994, p. 20). Salant and Dillman (1994) consider a response rate under 60-70 percent as an indicator of non-response error. The researcher was able to secure a 72% response rate.

### **Data Analysis**

The Statistical Package for the Social Sciences® [SPSS] 22.0 for Windows was utilized for data analysis. All statistical analyses are subject to assumption; therefore the statistical analysis was guided by the scale of measurement (nominal, ordinal, interval, and ratio) of the data. Table 3.3 illustrates the analysis, assumptions, and statistical methods utilized to examine each assumption. An alpha level of .05 was established.

Table 3.1  
*Assumptions by Statistical Analysis*

Statistical Test	Assumption	Assumption Examined
Continuous variables	Normality	PP – plots
Bivariate correlation	Linearity Outliers	Scatter- plots

**Research Objective 1: Describe selected characteristics of the first generation, low socioeconomic status students.**

For research objective one, descriptive statistics, more specifically frequencies and percentages were used to report and analyze the characteristics of the first-generation, low socioeconomic status students. Frequency counts and percentages were used to describe nominal and ordinal data. Characteristics analyzed included: gender, race/ethnicity, home residence, grade level, and GPA.

**Research Objective 2: Describe the protective factors present among the first generation, low socioeconomic status students.**

Measures of central tendencies were reported to address research objective two. These measures include mean, median, mode, and range. The researcher analyzed each protective factor mean score to determine which factors were salient among the participants.

**Research Objective 3: Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior).**

Measures of central tendency, including mean, standard deviation, and a minimum and maximum range, were reported to address research objective three.

**HO<sub>1</sub>:** There is no statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

**H<sub>1</sub>:** There is a statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

In order to determine whether a difference does exist among the protective factors, an Analysis of Variance (ANOVA) was utilized. ANOVA test determines the difference between vectors of means between two or more groups (Stats, *n.d.*). The classification of the students (sophomore, junior, and senior) was evaluated as multichotomous variables. To complete research objective three, an univariate linear 2–way ANOVA model was conducted to determine the differences in the existing protective factors identified. A Levene’s test reveals that an equal variance was assumed in the protective factors. Hochberg’s GT2, post hoc, pair–wise comparison was utilized due to the unequal sample size between the grade classifications (sophomore, junior, and senior). Type I error is addressed by the Hochberg’s GT2 because it provides a calculation for the honest significant difference (Field, 2000).



## CHAPTER IV

### RESULTS

#### Purpose of the Study

The purpose of this study was to describe the protective factor(s) that contributed to the first-generation, low socioeconomic status students' enrollment at The University of Kentucky.

#### Research Objectives

The following research objectives and corresponding hypotheses were developed to be the focus of this study:

1. Describe selected characteristics of the first generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, and GPA.
2. Describe the protective factors present among the first generation, low socioeconomic status students.
3. Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior).

**HO<sub>1</sub>:** There is no statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

**H<sub>1</sub>:** There is a statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

#### Findings

**Research Objective 1: Describe selected characteristics of the first generation, low socioeconomic status students.**

Research objective one sought to describe the characteristics (gender, race/ethnicity, home residence, grade level, and GPA) of the first generation, low socioeconomic status students enrolled in the First Scholars program at the University of Kentucky. In Table 4.1, the majority of the First Scholar participants were found to be females ( $f = 21$ ; 56.8%), while sixteen were found to be males (43.2%). Of the participants, 73.0% ( $f = 27$ ) identified as White/Caucasian, followed by other ( $f = 5$ ; 13.5%), then Black/African-American ( $f = 3$ ; 8.1%), and lastly Hispanic/Latino ( $f = 2$ ; 5.4%). The majority of First Scholar participants ( $f = 20$ ; 54.1%) considered their home residence to be in a suburban setting, while 37.8% ( $f = 14$ ) identified their residence as rural, and 8.1% ( $f = 3$ ) lived in an urban residence. Out of the  $n = 37$  participants, the majority were sophomores ( $f = 13$ ; 35.1%), while juniors ( $f = 12$ ; 32.4%) and seniors ( $f = 12$ ; 32.4%) had the same number of participants. The majority of the participants ( $f = 10$ ; 27.0%) fell in the GPA range of 3.26-3.5; while 21.6% ( $f = 8$ ) of the students GPA were in the 3.75-4.0 range, followed by a GPA of 3.51-3.74 ( $f = 7$ ; 18.9%) and 2.0-3.0 ( $f = 7$ ; 18.9%), four students ( $f = 10.8$ ) identified their GPA between 2.0-3.0, one student ( $f = 2.7$ ) responded with above 4.0 GPA, and no students ( $f = 0$ ; 0%) had a GPA below 2.0.

Table 4.1  
*Characteristics of University of Kentucky's First Scholar Participants (n = 37)*

Characteristic	Frequency	Percentage
Gender		
Male	16	43.2
Female	21	56.8
Race/Ethnicity		
White/Caucasian	27	73.0
Black/African-American	3	8.1

Characteristic	Frequency	Percentage
Hispanic/Latino	2	5.4
Other	5	13.5
Home Residence		
Rural (Less than 2,500)	14	37.8
Suburban (2,499-49,999)	20	54.1
Urban (50,000 or more)	3	8.1
Grade Level		
Sophomore	13	35.1
Junior	12	32.4
Senior	12	32.4
GPA		
Above 4.0	1	2.7
3.75-4.0	8	21.6
3.51-3.74	7	18.9
3.26-3.5	10	27.0
3.01-3.25	4	10.8
2.0-3.0	7	18.9
Below 2.0	0	0

**Research Objective 2: Describe the protective factors present among the first generation, low socioeconomic status students.**

In research objective two, the participants were asked to identify which protective factors ( $N = 23$ ) were influential in their decision to attend the University of Kentucky. The participants ranked the influence of each protective factor on a Likert scale (1 = no influence, 2 = slightly influential, 3 = moderately influential, 4 = influential, and 5 = extremely influential).

In Table 4.2, the majority of participants ( $f = 11$ ; 29.7%) found high school activities to be slightly influential in their enrollment at UK, followed by moderately influential ( $f = 8$ ; 21.6%). While 18.9% ( $f = 7$ ) of individuals, reported high school activities were considered extremely influential. Six individuals (16.2%) responded influential to high school activities and five participants (13.5%) stated high school activities had no influence.

Thirteen participants (35.1%) identified personality as extremely influential, followed by moderately influential ( $f = 11$ ; 28.7%), and third was influential ( $f = 9$ ; 24.3%). 8.1% ( $f = 2$ ) of the First Scholars indicated personality was slightly influential. Lastly, 2.7% ( $f = 1$ ) listed personality as having no influence on their decision to enroll at the University of Kentucky.

Of the First Scholar participants, 45.9% ( $f = 17$ ) reported the ability to be a self-starter was extremely influential in attending college; while nine participants (24.3%) stated it was influential. Seven students (18.9%) recorded being a self-starter was moderately influential, whereas, 8.1% ( $f = 3$ ) of students found this factor to be slightly influential. One participant (2.7%) stated this factor had no influence.

Of the First Scholar participants, 37.8% ( $f = 14$ ) said intelligence was influential, however twelve students (32.4%) described intelligence as extremely influential. Of the participants, 27% ( $f = 10$ ) reported intelligence as a moderately influential factor, followed by slightly influential ( $f = 1$ ; 2.7%) and no influence ( $f = 0$ ; 0%).

The students reported the ability to physically distance oneself tied between moderately influential ( $f = 9$ ; 24.3%) and influential ( $f = 9$ ; 24.3%). No influence ( $f = 7$ ; 18.9%) and extremely influential ( $f = 7$ ; 18.9%) followed. Lastly, 13.5% of students ( $f = 5$ ) reported the factor as slightly influential.

The majority of the participants ( $f = 18$ ; 48.6%) responded influential to the ability to focus on one's education, whereas 43.2% ( $f = 16$ ) students reported the factor was extremely influential. Two students (5.4%) stated the factor was moderately influential and 2.7% ( $f = 1$ ) said the factor was slightly influential. Of the students, 0% ( $f = 0$ ) felt the ability to focus on education had no influence on their enrollment at UK.

Over three-quarters of the participants ( $f = 29$ ; 78.4%) described the ability to achieve their goals as extremely influential, followed by influential ( $f = 6$ ; 16.2%) and moderately influential ( $f = 2$ ; 5.4%). None of the students ( $f = 0$ ; 0%) reported this factor as slightly influential or no influence.

Of the students, 29% ( $f = 11$ ) responded moderately influential to hobbies and/or special talents affecting their college enrollment, however nine students (24.3%) felt this factor was slightly influential. Approximately 21.6% ( $f = 8$ ) reported no influence, followed by influential ( $f = 6$ ; 16.2%), and extremely influential ( $f = 3$ ; 8.1%).

The majority of the participants ( $f = 13$ ; 35.1%) stated positive self-concept was moderately influential, trialed by influential ( $f = 12$ ; 32.4%), and extremely influential ( $f = 9$ ; 24.3%). Two participants (5.4%) rated the factor as slightly influential and one student (2.7%) said it had no influence.

Over half of the participants ( $f = 22$ ; 59.5%), found the ability to plan for their future as extremely influential, followed by influential ( $f = 9$ ; 24.3%), and moderately influential ( $f = 4$ ; 10.8%). Approximately 5.4% ( $f = 2$ ) reported this factor as slightly influential and 0% of the students ( $f = 0$ ) reported no influence.

The First Scholar participants ( $f = 16$ ; 43.2) reported their upbringing/how they were raised as extremely influential, moderately influential ( $f = 9$ ; 24.3%), and influential ( $f = 8$ ; 21.6%). 5.4% ( $f = 2$ ) reported upbringing as have no influence and slightly influential ( $f = 2$ ; 5.4%) on their college decision.

Approximately 21.6% of the students described their parents' education as extremely influential ( $f = 8$ ), influential ( $f = 8$ ), and moderately influential ( $f = 8$ ). 18.9% ( $f = 7$ ) felt it had no influence, while 16.2% ( $f = 6$ ) stated it was slightly influential.

Ten students (27.0%) stated a relationship with a caregiver was extremely influential, while eight students (21.6%) stated a caregiver had no influence on their decision. 18.9% of the students ( $f = 7$ ) responded as slightly and moderately influential, and 13.5% ( $f = 5$ ) felt a caregiver was influential.

The majority ( $f = 13$ ; 35.1%) described their grandparents as slightly influential, then moderately influential ( $f = 8$ ; 21.6%), followed by extremely influential ( $f = 6$ ; 16.2%) and no influence ( $f = 6$ ; 16.2%). Lastly, five participants (13.5%) responded as influential.

A third of the participants ( $f = 13$ ; 35.1%) stated siblings had no influence, while 24.3% ( $f = 9$ ) reported siblings as being moderately influential. Seven students (18.9%) described this factor as influential, followed by extremely influential ( $f = 5$ ; 13.5%), and slightly influential ( $f = 2$ ; 5.4%).

Over half of the students ( $f = 19$ ; 51.4%), found being independent was extremely influential, then influential ( $f = 10$ ; 27.0%), followed by moderately influential ( $f = 7$ ; 18.9%). Of the students, 2.7% ( $f = 1$ ) described independence as slightly influential and none of the students ( $f = 0$ ; 0%) felt the factor had no influence.

The majority of the participants ( $f = 13$ ; 35.1%) reported structure and rules in their household was considered extremely influential, second was moderately influential ( $f = 7$ ; 18.9%). The participants reported influential ( $f = 6$ ; 16.2%) and slightly influential ( $f = 6$ ; 16.2%) as the same on the Likert scale. 13.5% ( $f = 5$ ) of the participants felt this factor had no influence.

Seventeen participants (45.9%) responded to responsibilities as extremely influential, while twelve participants (32.4%) answered influential. 13.5% ( $f = 5$ ) of the

scholars replied moderately influential, then slightly influential ( $f = 2$ ; 5.4%), and no influence ( $f = 1$ ; 2.7%).

Nearly a third of the First Scholars ( $f = 12$ ; 32.4%) found close friends to be extremely influential, while 24.3% ( $f = 9$ ) responded influential. Seven individuals ( $f = 18.9\%$ ) scored close friends as moderately influential, then no influence ( $f = 5$ ; 13.5%), and slightly influential ( $f = 4$ ; 10.4%).

Of the protective factor of teacher(s), nine students described it as extremely influential (24.3%) and moderately influential (24.3%). 21.6% found teacher(s) to be influential, followed by no influence ( $f = 7$ ; 18.9), and slightly influential ( $f = 4$ ; 10.8%).

Approximately 29.7% of the students reported school experiences as extremely influential ( $f = 11$ ) and influential ( $f = 11$ ). Secondly was moderately influential ( $f = 9$ ; 24.3%), followed by slightly influential ( $f = 3$ ; 8.1%) and no influence ( $f = 3$ ; 8.1%).

Of scholars, 29.7% stated high school mentor(s) had no influence ( $f = 11$ ) and was moderately influential ( $f = 11$ ). 18.9% of scholars ( $f = 7$ ) described high school mentor(s) as slightly influential, while 10.8% felt this factor was influential ( $f = 4$ ) and extremely influential ( $f = 4$ ).

Table 4.2  
*Protective Factors Present Among University of Kentucky's First Scholars Participants (n = 37)*

Protective Factor	<i>f</i>	%
High School Activities		
No Influence	5	13.5
Slightly Influential	11	29.7
Moderately Influential	8	21.6
Influential	6	16.2
Extremely Influential	7	18.9
Personality		
No Influence	1	2.7
Slightly Influential	2	8.1
Moderately Influential	11	28.7

Table 4.2 (cont.)		
Protective Factor	<i>f</i>	%
Influential	9	24.3
Extremely Influential	13	35.1
Ability to be a self-starter		
No Influence	1	2.7
Slightly Influential	3	8.1
Moderately Influential	7	18.9
Influential	9	24.3
Extremely Influential	17	45.9
Intelligence		
No Influence	0	0
Slightly Influential	1	2.7
Moderately Influential	10	27.0
Influential	14	37.8
Extremely Influential	12	32.4
Physically distance self		
No Influence	7	18.9
Slightly Influential	5	13.5
Moderately Influential	9	24.3
Influential	9	24.3
Extremely Influential	7	18.9
Focus on education		
No Influence	0	0
Slightly Influential	1	2.7
Moderately Influential	2	5.4
Influential	18	48.6
Extremely Influential	16	43.2
Achieve goals		
No Influence	0	0
Slightly Influential	0	0
Moderately Influential	2	5.4
Influential	6	16.2
Extremely Influential	29	78.4
Hobbies/special talents		
No Influence	8	21.6
Slightly Influential	9	24.3
Moderately Influential	11	29.7
Influential	6	16.2
Extremely Influential	3	8.1
Positive self-concept		
No Influence	1	2.7
Slightly Influential	2	5.4
Moderately Influential	13	35.1
Influential	12	32.4
Extremely Influential	9	24.3



Table 4.2 (cont.)		
Protective Factor	<i>f</i>	%
Ability to plan for future		
No Influence	0	0
Slightly Influential	2	5.4
Moderately Influential	4	10.8
Influential	9	24.3
Extremely Influential	22	59.5
Faith		
No Influence	10	27.0
Slightly Influential	7	18.9
Moderately Influential	2	5.4
Influential	5	13.5
Extremely Influential	13	35.1
Upbringing		
No Influence	2	5.4
Slightly Influential	2	5.4
Moderately Influential	9	24.3
Influential	8	21.6
Extremely Influential	16	43.2
Parents' education		
No Influence	7	18.9
Slightly Influential	6	16.2
Moderately Influential	8	21.6
Influential	8	21.6
Extremely Influential	8	21.6
Caregiver relationship		
No Influence	8	21.6
Slightly Influential	7	18.9
Moderately Influential	7	18.9
Influential	5	13.5
Extremely Influential	10	27.0
Grandparents		
No Influence	6	16.2
Slightly Influential	13	35.1
Moderately Influential	8	21.6
Influential	4	10.8
Extremely Influential	6	16.2
Siblings		
No Influence	13	35.1
Slightly Influential	2	8.1
Moderately Influential	9	24.3
Influential	7	18.9
Extremely Influential	5	13.5
Being independent		
No Influence	1	2.7

Table 4.2 (cont.)		
Protective Factor	<i>f</i>	%
Slightly Influential	0	0
Moderately Influential	7	18.9
Influential	10	27.0
Extremely Influential	19	51.4
Structure and rules		
No Influence	5	13.5
Slightly Influential	6	16.2
Moderately Influential	7	18.9
Influential	6	16.2
Extremely Influential	13	35.1
Responsibilities		
No Influence	1	2.7
Slightly Influential	2	5.4
Moderately Influential	5	13.5
Influential	12	32.4
Extremely Influential	17	45.9
Close friends		
No Influence	5	13.5
Slightly Influential	4	10.8
Moderately Influential	7	18.9
Influential	9	24.3
Extremely Influential	12	32.4
Teacher(s)		
No Influence	7	18.9
Slightly Influential	4	10.8
Moderately Influential	9	24.3
Influential	8	21.6
Extremely Influential	9	24.3
School experiences		
No Influence	3	8.1
Slightly Influential	3	8.1
Moderately Influential	9	24.3
Influential	11	29.7
Extremely Influential	11	29.7
High school mentor(s)		
No Influence	11	29.7
Slightly Influential	7	18.9
Moderately Influential	11	29.7
Influential	4	10.8
Extremely Influential	4	10.8

In research objective two, the researcher reported the measures of central tendencies for the protective factors ( $n = 23$ ) in Table 4.3. The First Scholar participants

scored the protective factor of achieving goals ( $M = 4.73$ ) higher than the other twenty-two protective factors. The ability to plan for one's future ( $M = 4.38$ ) followed. The ability to focus on one's education had a mean score of 4.32, followed by the protective factor of being independent ( $M = 4.24$ ) and then responsibilities ( $M = 4.14$ ). The First Scholar participants scored the ability to be a self-starter with a mean of 4.14 and intelligence with a mean of 4.00. The protective factor of the participants' upbringing received a mean score of 3.92, while personality received a mean score of 3.81. The next highest mean score of the protective factors is positive self-concept ( $M = 3.70$ ), then school experiences ( $M = 3.65$ ), close friends ( $M = 3.51$ ), structure and rules ( $M = 3.43$ ), and teacher(s) ( $M = 3.22$ ). The ability to physically distance oneself, faith, and parents' education all had a mean score of 3.11. The protective factor caregiver relationship mean score was 3.05, followed by high school activities ( $M = 2.97$ ) and grandparents ( $M = 2.76$ ). The scholars scored siblings next ( $M = 2.68$ ), then hobbies/special talents ( $M = 2.65$ ) and lastly, high school mentor(s) ( $M = 2.54$ ).

Table 4.3  
*Central Tendencies of Protective Factors Among University of Kentucky's First Scholar Participants (n = 37)*

Protective Factor	Mean	Median	Mode	Range
Achieve goals	4.73	5.00	5.00	3.00-5.00
Ability to plan for future	4.38	5.00	5.00	2.00-5.00
Focus on education	4.32	4.00	4.00	2.00-5.00
Being independent	4.24	5.00	5.00	1.00-5.00
Responsibilities	4.14	4.00	5.00	1.00-5.00
Ability to be a self-starter	4.03	4.00	5.00	1.00-5.00
Intelligence	4.00	4.00	4.00	2.00-5.00
Upbringing	3.92	4.00	5.00	1.00-5.00
Personality	3.81	4.00	5.00	1.00-5.00
Positive self-concept	3.70	4.00	3.00	1.00-5.00
School experiences	3.65	4.00	4.00	1.00-5.00
Close friends	3.51	4.00	5.00	1.00-5.00
Structure and rules	3.43	4.00	5.00	1.00-5.00
Teacher(s)	3.22	3.00	3.00	1.00-5.00

Table 4.3 (cont.)

Protective Factor	Mean	Median	Mode	Range
Physically distance self	3.11	3.00	3.00	1.00-5.00
Faith	3.11	3.00	5.00	1.00-5.00
Parents' education	3.11	3.00	3.00	1.00-5.00
Caregiver relationship	3.05	3.00	5.00	1.00-5.00
High School Activities	2.97	3.00	2.00	1.00-5.00
Grandparents	2.76	2.00	2.00	1.00-5.00
Siblings	2.68	3.00	1.00	1.00-5.00
Hobbies/Special talents	2.65	3.00	3.00	1.00-5.00
High school mentor(s)	2.54	4.00	4.00	1.00-5.00

*Scale based on: 1 = No Influence, 2 = Slightly Influential, 3 = Moderately Influential, 4 = Influential, and 5 = Extremely Influential*

**Research Objective 3: Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior).**

The researcher conducted an ANOVA test on the protective factors utilizing SPSS 22.0 for Windows. Out of the twenty-three protective factors, teacher(s) ( $F = 3.15$ ;  $p = .05$ ) was the only factor found to be significant. The other twenty-two protective factors received a significant value greater than .05. Grandparents had a value of .06 ( $F = 3.01$ ), followed by close friends ( $F = 2.72$ ;  $p = .08$ ), and high school mentor(s) ( $F = 2.56$ ;  $p = .09$ ). The First Scholar participants scored intelligence ( $F = 2.22$ ) with a significant value of .12, and then being independent with a significant value of .14 ( $F = 2.07$ ), followed by positive self-concept ( $F = 1.46$ ;  $p = .25$ ). The significant value of the ability to physically distance oneself ( $F = 2.39$ ;  $p = .26$ ) was next, followed by high school activities ( $F = .94$ ;  $p = .40$ ), and then achieves goals ( $F = 1.18$ ;  $p = .32$ ). The protective factors, parents' education ( $F = .77$ ) and grandparents ( $F = .78$ ) both earned a significant value of .47. The personality ( $F = .62$ ) protective factor trailed with a significant factor of .55, while hobbies/special talents ( $F = .57$ ) scored .57, then the participants' school experiences ( $F$

= .49;  $p = .62$ ). The next protective factor was siblings ( $F = .42$ ;  $p = .66$ ), the ability to plan for one's future ( $F = .29$ ;  $p = .75$ ), upbringing ( $F = .21$ ;  $p = .81$ ), and faith ( $F = .18$ ;  $p = .84$ ). The students scored structure and rules ( $F = 1.52$ ) with a significant factor of .86 and then the ability to be a self-starter ( $F = .15$ ;  $p = .87$ ). The protective factor of the ability to focus on one's education ( $F = .108$ ;  $p = .90$ ) trailed and lastly, was responsibilities ( $F = .02$ ;  $p = .98$ ).

Table 4.4  
*ANOVA of Protective Factors by University of Kentucky's First Scholars (n = 37)*

Protective Factor	<i>F</i>	<i>p</i>
High School Activities	.94	.40
Personality	.62	.55
Ability to be a self-starter	.15	.87
Intelligence	2.22	.12
Physically distance self	1.39	.26
Focus on education	.108	.90
Achieve goals	1.18	.32
Hobbies/Special talents	.57	.57
Positive self-concept	1.46	.25
Ability to plan for future	.29	.75
Faith	.18	.84
Upbringing	.21	.81
Parents' education	.77	.47
Caregiver relationship	.78	.47
Grandparents	3.01	.06
Siblings	.42	.66
Being independent	2.07	.14
Structure and rules	1.52	.86
Responsibilities	.02	.98
Close friends	2.72	.08
Teacher(s)	3.15	.05*
School experiences	.49	.62
High school mentor(s)	2.56	.09

$p \geq 0.05$

The researcher described the protective factors by grade classification (sophomore, junior, and senior) in Table 4.5. Mean and standard deviation were used to

describe the question. For each of the twenty-three protective factors, thirteen sophomores, twelve juniors, and twelve seniors responded.

Table 4.5  
*Central Tendencies of Protective Factors by Grade Level*

Protective Factor	Sophomore			Junior			Senior		
	<i>n</i>	M	<i>SD</i>	<i>n</i>	M	<i>SD</i>	<i>n</i>	M	<i>SD</i>
High School Activities	13	3.00	1.41	12	2.58	1.38	12	3.33	1.23
Personality	13	3.54	1.33	12	3.92	.79	12	4.00	1.13
Ability to be a self-starter	13	3.92	1.19	12	4.00	1.04	12	4.17	1.19
Intelligence	13	3.62	.87	12	4.17	.83	12	4.25	.75
Physically distance self	13	2.62	1.19	12	3.25	1.48	12	3.50	1.44
Focus on education	13	4.38	.65	12	4.25	.87	12	4.33	.65
Achieve goals	13	4.54	.78	12	4.83	.39	12	4.83	.39
Hobbies/Special talents	13	2.38	1.33	12	2.67	1.07	12	2.92	1.31
Positive self-concept	13	3.62	1.12	12	3.42	1.00	12	4.08	.79
Ability to plan for future	13	4.23	.83	12	4.50	.90	12	4.42	1.00
Faith	13	2.92	1.93	12	3.08	1.62	12	3.33	1.61
Upbringing	13	3.77	1.30	12	3.92	1.38	12	4.08	.90
Parents' education	13	3.46	1.39	12	2.75	1.48	12	3.08	1.44
Caregiver relationship	13	2.77	1.69	12	2.92	1.68	12	3.50	1.17
Grandparents	13	2.69	1.25	12	2.17	1.28	12	3.42	1.24
Siblings	13	2.54	1.61	12	3.00	1.48	12	2.50	1.38
Being independent	13	3.92	1.19	12	4.67	.65	12	4.17	.83
Structure and rules	13	3.46	1.51	12	3.25	1.66	12	3.58	1.31
Responsibilities	13	4.15	.80	12	4.17	1.19	12	4.08	1.16
Close friends	13	3.08	1.50	12	3.25	1.54	12	4.25	.87
Teacher(s)	13	3.00	1.41	12	2.67	1.54	12	4.00	1.04
School experiences	13	3.62	1.12	12	3.42	1.38	12	3.92	1.24
High school mentor(s)	13	2.62	1.26	12	1.92	1.08	12	3.08	1.44

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Purpose of the Study

The purpose of this study was to describe the protective factor(s) that contributed to the first-generation, low socioeconomic status students' enrollment at The University of Kentucky.

#### Research Objectives

The following research objectives and corresponding hypotheses were developed to be the focus of this study:

1. Describe selected characteristics of the first generation, low socioeconomic status students. Specifically: gender, race/ethnicity, home residence, grade level, and GPA.
2. Describe the protective factors present among the first generation, low socioeconomic status students.
3. Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior).

**HO<sub>1</sub>:** There is no statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

**H<sub>1</sub>:** There is a statistically significant difference in the protective factors by grade classification (sophomore, junior, and senior).

#### Research Design



This study was descriptive and correlational by design. Descriptive research is used when a researcher wants to examine existing conditions (Fraenkel & Wallen, 2006). Correlational research is collecting data on two or more variables and examining the relationship between those variables (Houghton Mifflin Harcourt, 2014). In this study, the researcher examined which protective factor(s) assisted first-generation, low socioeconomic status students enrolling in a higher educational institution.

The dependent variable investigated was the effects of low socioeconomic status, as reported by the First Scholars at the University of Kentucky. The independent variables were Werner's (2000) protective factors (see Table 2.1). Protective factors refer to attributes within the individual and/or environmental influences that allow the individual to succeed despite their circumstances. In this case, the circumstance would be growing up in a low socioeconomic status environment.

When conducting a description, correlational study, internal and external validity must be addressed. Internal validity ensures the data collected and analyzed is accurate (Michael, 2000). In order to protect internal validity, the researcher must minimize measurement error by ensuring the instrument is valid and reliable (Michael, 2000). External validity is the degree "to which the results of a study can be generalized to the world at large" (Boyd, *n.d.*). Random sampling technique and maintaining a low dropout rate of participants improves external validity (Michael, 2000).

### **Population and Sample**

In this study, the population consisted of first-generation, low socioeconomic status students enrolled at the University of Kentucky's First Scholars Program in the 2015 – 2016 academic year ( $N = 51$ ;  $n = 37$ ). The researcher selected the First Scholars

Program because the participants were required to have a financial need and be considered first-generation (First Scholars, 2014). This qualification helped determine the participants enrolled in the First Scholars program would also be the sample for this study ( $n = 37$ ). However, only three classes (sophomores, juniors, and seniors) were represented in this study due to lack of funding. There was not a freshmen class recruited for the 2015 – 2016 school year.

The researcher utilized a convenient sampling method. This method is often used in exploratory research when a researcher wants to obtain a “gross estimation” in the most inexpensive way possible (Jackson, 2011; StatPac, 2014). The researcher determined that face-to-face delivery of the instrument was best in order to maximize response rate therefore a convenient sample was used. A two-part sampling technique was used in this study. A cluster sampling technique was used in the data collection process. Cluster sampling is when the researcher randomly selects “clusters” of the population that will be in the same place at the same time (StatTrek, 2015). The First Scholars Program requires participants to attend a monthly meeting in order to receive benefits, which includes the students’ scholarship (First Scholars, 2014). The researcher was able to utilize a convenient cluster sampling technique by attending this monthly meeting to collect data due to the high volume of the sample.

### **Data Collection**

The researcher met with the University of Kentucky’s First Scholars coordinator to discuss protocol for distributing the questionnaires (see Appendix D). The researcher and the First Scholars coordinator chose to allow the coordinator to administer the questionnaires to maximize participation and increase response return time.

The researcher provided the coordinator with packets for each participant. Each packet contained a consent cover letter (see Appendix C) explaining the details of the study, the “Against the Odds: Protective Factors Questionnaire” (see Appendix D), and manila envelopes for the questionnaire. The researcher was approved a waiver of informed consent (see Appendix B) for the participants due to the study presenting no more than minimal risk and written consent was not required outside of the research study. After the First Scholars’ coordinator read the consent cover letter aloud, the participants were given the opportunity to decline participation in the study. The participants that declined participation in the study were asked to return the packets back to the coordinator. The remaining participants were instructed to keep the consent cover letter for their records for future questions or concerns.

### **Limitations to the Conclusions**

This study was limited to the University of Kentucky’s First Scholars Program. Therefore, the conclusions and recommendations can only be made for UK’s First Scholar Program. The sample size ( $n = 37$ ) of this study was minimal due to the lack of funding and phasing out of this program. If this study was repeated, it is recommended to examine all seven of the First Scholars Programs at the corresponding universities in order to maximize response rate and provide conclusions and recommendations about the First Scholars Program as a whole.

### **Summary of Research Findings with Conclusions, Recommendations, and Implications**

**Research Objective 1: Describe selected characteristics of the first generation, low socioeconomic status students.**

The majority of the First Scholar participants identified as White/Caucasian ( $f = 27$ ; 73.0%). Based upon these findings, it is concluded the majority of the First Scholar participants are White/Caucasian. Researchers have reported students that are exposed to ethnical diversity tend to thrive in educational settings (nprEd, 2015). Therefore, it is recommended the University of Kentucky's First Scholars Program continue to recruit ethnically diverse individuals. The implications for recruiting ethnically diverse students would be exposing the participants to different backgrounds among their peers. The majority of the participants were female ( $f = 21$ ; 56.8%). Of the 37 participants, over half ( $f = 20$ ; 54.1%) identified their home residence as suburban. Each grade level (sophomores, juniors, and seniors), excluding freshmen, among the First Scholars was well represented. Another conclusion is students reported a GPA in the 3.26-3.5 range. Researchers found students enrolled in collegiate programs/activities perform better academically than students not enrolled in extra curricular activities (Calcagno, Bailey, Jenkins, Kienzl, & Leinbach, 2008). Therefore, by continuing programs such as the First Scholars Program it helps students to stay focused academically. The implication of this recommendation would be the high-risk students identified in these programs would continue to stay focused on their studies and have a higher success rate at the collegiate level.

**Research Objective 2: Describe the protective factors present among the first generation, low socioeconomic status students.**

The First Scholar participants evaluated twenty-three protective factors. The students used a Likert scale (1 = no influence, 2 = slightly influential, 3 = moderately

influential, 4 = influential, and 5 = extremely influential) to rank how influential each factor was on their decision to attend the University of Kentucky.

The First Scholar participants' results concerning the protective factors were diverse when it came to how influential each factor was considered. Researchers have attributed this finding to the diversity among the students' backgrounds and experiences (Werner, 1990).

Twenty-nine First Scholars scored achieving goals (78.4%) as extremely influential. Researchers reported first generation students that enroll in collegiate first-generation programs stay focused on achieving career goals (Engle, Bermeo, & O'Brien, 2006). It is recommended the First Scholars program continue targeting first-generation students in order to help them continue achieving their goals. If the First Scholars program continues targeting first-generation students, then these students will be more likely to stay focused on their academic goals than their counterparts. The implications for this recommendation is more first-generation students will be able to earn a college degree.

Of the participants, 59.5% ( $f = 22$ ) found the protective factor; the ability to plan for one's future, extremely influential. Researchers found students that regularly set goals for career preparation stay focused on studies more than their counterparts (Massey, 2015). Since the students find value in goal setting, it is recommended the University of Kentucky's First Scholars program help the students stay focused on their career aspirations by performing goal-setting workshops and providing academic advisors. High school educators can also assist with this recommendation by teaching students the value of setting goals and how to follow through with their goals. If high school educators offer

goal setting workshops to their students, then the students are more prepared when they reach the collegiate level. The implication of this recommendation is having more well-prepared, first-generation students entering into college. This will also help programs such as the First Scholars because the students will already be familiar with how to set and manage their goals.

Approximately 70.2% of the participants found the protective factor, intelligence, to be extremely influential or moderately influential in their decision to attend the University of Kentucky. Researchers have found students with a higher intelligence level hold themselves to higher standards and expectations when it comes to evaluating college and career success. These students also tend to have the higher grade point averages in school as well (Nickerson, Diener, & Scharwz, 2010). Since the majority of First Scholars participants value education, it is recommended to have educational opportunities (tutoring, support services, etc.) readily available to them. If the participants have access to these services, then they will be able to focus and maintain their studies more easily. The implications of this recommendation are these students focusing on their grade point averages and remaining competitive with their counterparts in the academic realm.

Over half of the First Scholars participants ( $f = 19$ ; 51.4%), found the protective factor, being independent, extremely influential. This protective factor could potentially benefit programs like the First Scholars program and their coordinators in the recruitment of students. If programs such as the First Scholars program, recruit independent students then the programs will be able to save time and resources motivating these students because they are already self-motivated. Students that identify as being independent will

benefit from these programs because they offer mentoring, tutoring, and workshops that allow them to continue developing skills such as independence that will help them in the future.

Approximately 78% of the participants ( $f = 29$ ) responded to the protective factor of having responsibilities within their household as influential to their successful enrollment in college. Researchers have found students' responsibilities such as household chores can lead to educational success (Bowen, 2015). It is recommended for the University of Kentucky to consider evaluating potential students on admission and scholarship applications based on this attribute. The implication of this recommendation would be narrowing the gap between the low-socioeconomic status students and their high-socioeconomic status counterparts. Often low SES students do not have the same opportunities as the other students due to income. If admission and scholarship committees begin examining factors such as household responsibilities this would narrow the gap in enrollment in reference to SES.

Of the thirty-seven First Scholar participants, twenty-six individuals ranked teachers as being influential in their decision to attend college. Schexnider (2013) found teachers have more of an impact on students than other factors. It is recommended teachers serve as club sponsors or mentorship roles in order to continue making connections with students. If these educators continue serving as a mentor to these students, then these students will continue to be motivated and inspired to further their education after high school. This will also help increase the percentage of first-generation students receiving a college degree.

When examining the protective factor faith, approximately half of the students found it to have no influence or slightly influential ( $f = 17$ ; 45.9%). However the other half of the students ( $f = 18$ ; 48.6%) found faith as extremely or moderately influential in their decision to attend the University of Kentucky. Researchers have found this to be consistent when determining if faith contributes to college choice (Kinzie et al., 2004). This finding could have been for several reasons. Since UK is not a religious based university, but instead offers many religious organizations for students to explore or not explore this could have been a recruiting factor for the participants. Also the students could have a religious friend that helped influence their decision to attend UK. Based on this finding, it is recommended the First Scholars Program offer faith-based training to help students explore all faiths and build tolerance. Whether these students are interested in faith or religion, by exposing them to the different religions will allow them to build more tolerance to their peers.

**Research Objective 3: Describe the protective factors present among the first generation, low socioeconomic status students by grade classification (sophomore, junior, and senior)**

In research objective three, the researcher sought to describe the protective factors by grade classification (sophomore, junior, and senior). The researcher reported the significance of each of the twenty-three protective factors. If the protective factor was greater than or equal to .05, the factor was considered significant.

Out of the twenty-three protective factors, the only factor that was found to be significant with a score of .05 was teacher(s). The seniors scored this protective factor the highest with a mean score of 4.00 ( $SD = 1.04$ ), followed by the sophomores ( $M = 3.00$ ;



$SD = 1.41$ ), and then the juniors ( $M = 2.67$ ;  $SD = 1.54$ ). Based upon these findings, it is concluded the First Scholars found their former teacher(s) to be significant in their decision to enroll in a postsecondary institution. The ANOVA revealed the seniors' score was considered significant. Researchers have concluded the impact teachers have on students throughout their school years is considered influential (Schexnider, 2013). Due to this finding, it is recommended teachers continue serving as mentors for students in and out of the classroom. If the teachers continue to serve in this capacity, the implication means more high-risk status students will continue to excel after high school because they had a mentor nurturing them and encouraging them to further their education beyond high school.

It is also concluded, that the other twenty-two factors were not significant for several reasons. These reasons include, but are not limited to, the students' diverse backgrounds and circumstances they have faced throughout their lifetime (Lotkowski, Robbins, & Noeth, 2004). It is evident from the findings in objective one that the students did not grow up with the same background. It is recommended further research be conducted using a larger sample size to examine the protective factors further. If a larger sample size was used in a future study, then a researcher could group students by characteristics and examine if any protective factors were recurring. The implications to this recommendation would allow researchers and educators to better understand their students' backgrounds and what motivates them to excel. If educators had this information, they would be able to help more low socioeconomic status students achieve their goals.

Lastly, a recommendation is made to the University of Kentucky's First Scholars program to diversify opportunities for their clientele. If all first generation programs offer the same opportunities and require the same criteria for their program then they cannot service as many students as possible. Although all the students in this study were considered low socioeconomic status, they did have the same experiences or the same background (see Table 4.1). By offering different opportunities for these individuals, the implications would allow more students to benefit academically and socially. The students would be able to experience the opportunities the programs have to offer. High school educators would also benefit from these diverse programs because when they are mentoring low SES students, they would have a support system to recommend their students seek after high school.

### **Researcher to Practice**

When conducting this study, I never considered the possibility that I would work in a school system where 100% of the student population received free and/or reduced lunch. However, this is becoming the reality of more and more school systems today. This study has opened my eyes to the actual struggles that students face. Often times, educators get self-involved with how important content and test scores are that we forget we are dealing with people that have real problems outside of the safe haven we call school.

One of the main components this study has helped me understand is students' actions and behaviors. There are so many students that only get a decent meal or have the luxury of heating and cooling when they come to school. Most of the time we think that students get attitudes or attempt to sleep in class because they do not care about their

studies. However that is not always the case. If there is one lesson I have learned, it is to always be kind and compassionate because you never know what a person is going through.

After conducting this study, I have become more aware of what students actually value and consider influential in their educational achievement. Although not every student will attend college or even earn a college degree, my goal is to help all students find a career or learn a trade that they can be proud of and make a decent living at. By examining protective factors, I am more able to identify what motivates students. Knowing what motivates someone is half of the struggle of helping him or her succeed. Once I have made that connection with my students I can help them determine what they want to do with their future.

This study has opened my eyes to how effective teaching and mentoring can affect a student's outcome. I will never again underestimate the influence a teacher has on a student's life. I know that I can be that difference if I take the time to reach out and make a connection. It is that connection that could be all the difference to one student. As an educator, I now realize how powerful of a profession teaching can be.

**APPENDIX A:**  
**IRB PROTOCOL APPROVAL**



Office of Research Integrity  
IRB, IACUC, RDRC  
315 Kinkead Hall  
Lexington, KY 40506-0057  
859 257-9428  
fax 859 257-8995  
[www.research.uky.edu/ori/](http://www.research.uky.edu/ori/)

### EXEMPTION CERTIFICATION

MEMO: Andrea Kirby  
Education  
2110 Dug Hill Rd.  
Irvine, KY.  
PI phone #: (859)582-7243

FROM: Institutional Review Board  
c/o Office of Research Integrity

SUBJECT: Exemption Certification for Protocol No. 13-0697-X4B

DATE: January 27, 2014

On January 27, 2014, it was determined that your project entitled, *Against the Odds: The Study of Low Socioeconomic Status Students' Achievement to Higher Education*, meets federal criteria to qualify as an exempt study.

Because the study has been certified as exempt, you will not be required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or full review.

The Office of Research Integrity will hold your exemption application for six years. Before the end of the sixth year, you will be notified that your file will be closed and the application destroyed. If your project is still ongoing, you will need to contact the Office of Research Integrity upon receipt of that letter and follow the instructions for completing a new exemption application. It is, therefore, important that you keep your address current with the Office of Research Integrity.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" from the Office of Research Integrity's Guidance and Policy Documents web page [<http://www.research.uky.edu/ori/human/guidance/htm#PIresp>]. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site [<http://www.research.uky.edu/ori/>]. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at (859) 257-9428.

**APPENDIX B:**

**WAIVE REQUIREMENT FOR DOCUMENTATION OF INFORMED CONSENT**

## Form F

### Include in IRB Application to Waive Requirement for Documentation of Informed Consent

If you are requesting IRB approval for waiver of the requirement for documentation of informed consent (i.e. telephone survey or mailed survey, internet research, or certain international research), **your research activities must fit into one of two regulatory options:**

- 1) The only record linking the participant and the research would be the consent document, *and* the principal risk would be potential harm resulting from a breach of confidentiality (i.e., a study that involves participants who use illegal drugs).
- 2) The research presents no more than minimal risk to the participant *and* involves no procedures for which written consent is normally required outside of the research context (i.e. a cover letter on a survey, or a phone script).

**Check the box next to the option below that best fits your study, and explain in the space provided how your study meets the criteria for the selected regulatory option.**

Note: The IRB cannot waive the requirement for documentation or alter the consent form for FDA-regulated research unless it meets Option #2 below. FDA does not accept Option #1.

Note: Even if a waiver of the requirement for documentation is approved by the IRB, participants must still be provided oral or written (e.g., cover letter) information including all required and appropriate elements of consent.

<input type="checkbox"/> <b>Option 1</b>
a) The only record linking the participant and the research would be the consent document. <hr/>
b) The principal risk would be potential harm resulting from a breach of confidentiality (i.e., a study that involves participants who use illegal drugs). <hr/>
Under these conditions, each participant must be asked whether (s)he wants to sign a consent form; if the participant agrees to sign a consent form, only an IRB approved version should be used.

**☒ Option 2**

a) The research presents no more than minimal risk to the participant.

The questionnaire does not contain private or sensitive questions and will be confidential.

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b) The research involves no procedures for which written consent is normally required outside of the research context (i.e. a cover letter on a survey, or a phone script).

A written cover letter including all required and appropriate elements of consent to the participants.

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**APPENDIX C:**  
**CONSENT COVER LETTER**



September 15, 2015

First Scholars Program  
University of Kentucky

Dear Participants,

I am a Master's candidate in the agricultural education program at the University of Kentucky. Dr. Stacy K. Vincent from the Community and Leadership Development Department serves as my faculty advisor. As a partial fulfillment to complete my degree, I am conducting a study entitled, "Against the Odds: The Study of Low Socioeconomic Status Students' Achievement to Higher Education". My research objectives are to identify the factors that influenced you to enroll at the University of Kentucky. I will also be examining the saliency of each of these factors. I would like your expertise as participants in the First Scholars Program. I am asking for your cooperation to complete a questionnaire. The questionnaires should take approximately 15-20 minutes to complete. All responses will remain confidential.

Participation in this study is completely voluntary and you will not be penalized in any way for not participating. If you choose to participate, you may discontinue or skip questions at any time. There are no known risks to participating in this study.

I appreciate your cooperation with this study and look forward to working with you. If you have any questions about the study, please contact the lead investigator, Andrea Taylor Kirby by email at [andrea.kirby@montgomery.kyschools.us](mailto:andrea.kirby@montgomery.kyschools.us) or at 859-582-7243.

If you have complaints, suggestions, or questions about your rights as a researcher volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428. Please keep this letter for your records, in case you need to contact the University of Kentucky Office of Research Integrity or myself.

Thank you,

Andrea Taylor Kirby, GRA  
Agricultural Education  
University of Kentucky  
(859) 582-7243  
[andrea.kirby@montgomery.kyschools.us](mailto:andrea.kirby@montgomery.kyschools.us)

**APPENDIX D:**  
**AGAINST THE ODDS: PROTECTIVE FACTORS QUESTIONNAIRE**

## Factors Contributing to the Enrollment at the University of Kentucky

Part I

Directions: Please use the scale from 1 to 5, (1-no influence, 2-slightly influential, 3-moderately influential, 4-influential, 5-extremely influential) concerning the influence each factor had on your enrollment at the University of Kentucky [UK].

<b>How have each of the following factors (1–23) contributed to your enrollment at UK?</b>	<b>No Influence</b>	<b>Slightly Influential</b>	<b>Moderately Influential</b>	<b>Influential</b>	<b>Extremely Influential</b>
1. High school activities	1	2	3	4	5
2. Personality	1	2	3	4	5
3. Ability to be a self-starter	1	2	3	4	5
4. Intelligence	1	2	3	4	5
5. Ability to physically distance myself from others	1	2	3	4	5
6. Ability to focus on my education	1	2	3	4	5
7. Determination to achieve my goals	1	2	3	4	5
8. Hobbies/special talents	1	2	3	4	5
9. Positive self-concept	1	2	3	4	5
10. Ability to plan for my future	1	2	3	4	5
11. Faith	1	2	3	4	5

<b>Factor</b>	<b>No Influence</b>	<b>Slightly Influential</b>	<b>Moderately Influential</b>	<b>Influential</b>	<b>Extremely Influential</b>
12. Upbringing	1	2	3	4	5
13. Parents' education	1	2	3	4	5
14. A close relationship with a caregiver (does not have to be biological)	1	2	3	4	5
15. Grandparents	1	2	3	4	5
16. Siblings	1	2	3	4	5
17. Being independent	1	2	3	4	5
18. Structure and rules in my household	1	2	3	4	5
19. Responsibilities	1	2	3	4	5
20. Close friends	1	2	3	4	5
21. Teacher(s)	1	2	3	4	5
22. School experiences	1	2	3	4	5
23. High school mentor(s)	1	2	3	4	5

**Part II**

Directions: Please complete the following demographic characteristics about yourself.

24. What is your gender?

\_\_\_\_\_ Male \_\_\_\_\_ Female

25. What is your grade level?

\_\_\_\_\_ Freshmen \_\_\_\_\_ Junior

\_\_\_\_\_ Sophomore \_\_\_\_\_ Senior

26. What is your estimated GPA?

- \_\_\_\_\_ Above 4.00                      \_\_\_\_\_ 3.26-3.5                      \_\_\_\_\_ Below 2.0  
\_\_\_\_\_ 3.75-4.00                      \_\_\_\_\_ 3.01-3.25  
\_\_\_\_\_ 3.51-3.74                      \_\_\_\_\_ 2.0-3.0

27. What is your race/ethnicity?

- \_\_\_\_\_ White/Caucasian  
\_\_\_\_\_ Black/African-American  
\_\_\_\_\_ Hispanic/Latino  
\_\_\_\_\_ Other, Please Specify \_\_\_\_\_

28. Which best describes your home residence?

- \_\_\_\_\_ Rural (less than 2,500)  
\_\_\_\_\_ Suburban (2,501 – 49,999)  
\_\_\_\_\_ Urban (50,000 or more)

29. Out of the 23 factors listed on the previous page, which do you feel influenced your enrollment at the University of Kentucky the **most**?

Answer: \_\_\_\_\_

30. Out of the 23 factors listed on the previous page, which do you feel influenced your enrollment at the University of Kentucky the **least**?

Answer: \_\_\_\_\_

31. Please utilize the space below to provide any additional comments/concerns that you may have in regards to this study:

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**Thank you for participating!**

Any questions concerning this questionnaire may be directed to:

Andrea Taylor Kirby

(859) 582-7243

**APPENDIX E:**  
**EMAIL CORRESPONDENCE WITH DR. EMMY E. WERNER**



From: Emmy Werner [[ewerner@ucdavis.edu](mailto:ewerner@ucdavis.edu)]  
Sent: Wednesday, July 25, 2012 4:38 PM  
To: Taylor, Andrea L  
Subject: RE: Research Project Question

Dear Andrea,

The instruments we used are in the Appendices of our last three books.

Sincerely,  
Emmy Werner

Good afternoon!

My name is Andrea Kirby and I am currently a graduate research assistant at the University of Kentucky, under the guidance of Dr. Stacy Vincent. I am in the beginning stages of my thesis and I have immersed myself in your research. I too am passionate about at-risk students; more specifically, students of low socioeconomic statuses and the adversities these students face is my research area of interest. I am interested in how these students overcome obstacles and obtain success by attending college. Your resilience/protective factors theory is currently serving as my guiding theory. I was wondering if there would be anyway to get a copy of the questionnaire you used in your protective factors research? Also, if you have any advice for a young researcher I would be more than glad to hear it!

I realize that time is irreplaceable for you. However, I do appreciate you taking the time to read and consider my request. If you have any concerns or questions, you can contact me via email or phone. Good luck in your future endeavors!

Best,

Andrea Taylor Kirby  
Graduate Assistant  
University of Kentucky  
Dept. of Community & Leadership Development  
307 Garrigus Building  
Lexington, KY 40546  
(859) 582-7243  
[altayl7@uky.edu](mailto:altayl7@uky.edu)<<mailto:altayl7@uky.edu>>

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