

A QUANTITATIVE STUDY OF IDAHO HIGH SCHOOL SENIORS' POSTSECONDARY  
DECISION-MAKING INFLUENCES

A Dissertation

Presented in Partial Fulfillment of the Requirements for the

Degree of Doctor of Education

with a

Major in Educational Leadership

in the

Department of Graduate Education

Northwest Nazarene University

by

Shana L. Hawkins

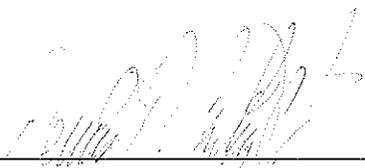
May 2015

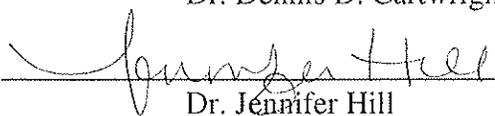
Major Professor: Dennis D. Cartwright, PhD

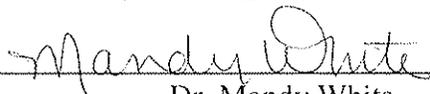
## AUTHORIZATION TO SUBMIT DISSERTATION

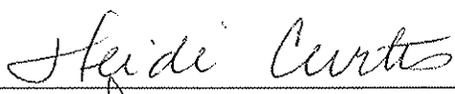
This dissertation of Shana L. Hawkins submitted for the degree of Doctor of Education with a major in Education Leadership and titled "A Quantitative Study Of Idaho High School Seniors' Postsecondary Decision-Making Influences" has been reviewed in final form.

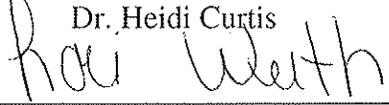
Permission, as indicated by the signatures and dates given below, is now granted to submit final copies.

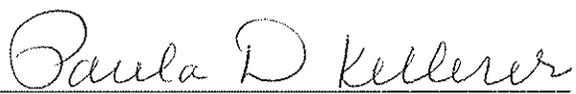
Major Professor  Date 4/2/15  
Dr. Dennis D. Cartwright

Committee Members  Date 4-2-15  
Dr. Jennifer Hill

 Date 4-2-15  
Dr. Mandy White

Program Director  Date 4-2-15  
Doctor of Education Dr. Heidi Curtis

Department  Date 4-2-15  
Administrator Dr. Lori Werth

Discipline's  Date 4-2-15  
College Dean Dr. Paula Kellerer

© Copyright by Shana L. Hawkins 2015

All Rights Reserved

## ACKNOWLEDGMENTS

Thank you to Dr. Lori Werth, Dr. Curtis, and Dr. Cartwright for their support and encouragement throughout this process. Their guidance and direction along with their words of wisdom have been a great asset to me through this journey. I cannot begin to thank my family and friends who have helped and supported me through the various stages of this journey by offering their services through encouragement and through reading and rereading parts of my dissertation. Mrs. Angie Neal, my collaboration partner and friend, who has shared this journey with me from the beginning and has continued to inspire me to make it to the end. My motto through this journey has been “I can do hard things” which stems from Mark 10:27 “. . . for with God all things are possible.” I am truly grateful for the blessings I have received through this process from our Heavenly Father and our Savior Jesus Christ.

## DEDICATION

This dissertation is dedicated my nieces and nephews to show them an example of the importance of becoming lifelong learners. Through the enjoyment of lifelong learning, opportunities will be provided to you beyond what you are able to imagine.

## ABSTRACT

The purpose of this study is to assist state, district, and high school educational leadership in understanding the influences of the Idaho high school students' postsecondary decision-making. The literature review established five categories that influence students' postsecondary decision-making: postsecondary and career awareness, postsecondary and career admissions process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and social capital influence for postsecondary education. The theoretical framework for the study was the work of Perna's proposed conceptual model of students' college choice. Descriptive quantitative research methods were used to survey 566 high school seniors from south western Idaho during their fall 2014 semester. Participants selected social capital influence for postsecondary education as the greatest influence on their college decision-making. Correlations were run to find if any relationship existed between students' postsecondary plans and income, counseling services, and parental educational level. All three categories demonstrated statistical significance, however, none achieved practical significance. Participant responses pertaining to counseling services indicated that many students were not satisfied or were unsure about the services their school counselor provided.

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	ii
DEDICATION .....	iii
ABSTRACT .....	iv
LIST OF TABLES .....	vii
LIST OF FIGURES .....	viii
Chapter I Introduction .....	1
Statement of the Problem .....	5
Background .....	6
Research Questions .....	11
Description of Terms .....	12
Significance of the Study .....	16
Overview of Research Methods .....	17
Chapter II Literature Review .....	19
Introduction.....	19
Postsecondary and Career Awareness .....	21
Postsecondary and Career Admission Process .....	30
Academic Readiness for Postsecondary Education and Careers .....	37
Postsecondary Monetary Cost.....	43
Social Capital Influences for Postsecondary Education .....	49
Theoretical Framework .....	54
Conclusion .....	60
Chapter III Design and Methodology .....	61

Research Design .....	62
Role of the Researcher .....	64
Instrument .....	65
Participants .....	71
Data Collection .....	74
Analytical Methods .....	75
Limitations and Delimitations.....	77
Conclusion .....	80
Chapter IV Results.....	81
Introduction.....	81
Instrument Reliability .....	83
Results.....	83
Conclusion .....	121
Chapter V Summary and Conclusion .....	124
Introduction.....	124
Summary of Results .....	126
Conclusions.....	136
Recommendations for Further Research.....	137
Implications for Professional Practice .....	138
Final Thoughts .....	143
References .....	144
Appendix A Online Student Survey .....	161
Appendix B Email to Content Experts.....	178

Appendix C Pilot Survey Student Feedback Form .....	179
Appendix D District Research Proposal Site Approval .....	180
Appendix E High School A Research Proposal Site Approval .....	181
Appendix F High School B Research Proposal Site Approval .....	182
Appendix G Human Research Review Committee Approval .....	183
Appendix H Verbatim Instructions .....	184
Appendix I Informed Consent .....	185
Appendix J Assent for Student Participants .....	187
Appendix K Postsecondary and Career Awareness Survey .....	188
Appendix L Postsecondary and Career Admission Survey .....	189
Appendix M Academic Readiness for Postsecondary Education and Career Survey .....	190
Appendix N Postsecondary Monetary Cost Survey .....	191
Appendix O Social Capital Influences for Postsecondary Education Survey .....	192
Appendix P Demographic Frequency and Percentage Responses .....	193
Appendix Q Counseling Services for Postsecondary and Career Survey .....	197
Appendix R Human Resource Research Committee Approval .....	198
Appendix S Consent for Theoretical Framework .....	199
Appendix T Consent for 2013 Education & Training Pay .....	203
Appendix U Consent for Interpreting a Correlation Coefficient Table .....	204

## LIST OF TABLES

Table 1 <i>Cronbach's Alpha Coefficients for Postsecondary Decision-Making Survey</i> .....	72
Table 2 <i>Students' Decision-Making Influences for Postsecondary Education Frequency and Percentage Responses</i> .....	84
Table 3 <i>Postsecondary and Career Awareness Frequency and Percentage Responses</i> .....	86
Table 4 <i>Postsecondary and Career Admission Frequency and Percentage Responses</i> .....	91
Table 5 <i>Academic Readiness for Postsecondary Education and Careers Frequency and Percentage Responses</i> .....	95
Table 6 <i>Postsecondary Monetary Cost Frequency and Percentage Responses</i> .....	100
Table 7 <i>Social Capital Influences for Postsecondary Education Frequency and Percentage Responses</i> .....	107
Table 8 <i>Interpreting a Correlation Coefficient</i> .....	113
Table 9 <i>Counseling Services Frequency and Percentage Responses</i> .....	119

LIST OF FIGURES

Figure 1 *2013 Education and Training Pays* ..... 25

Figure 2 *2013 Earning Over a Lifetime* ..... 26

Figure 3 *Proposed Conceptual Model of Student College Choice* ..... 55

## **Chapter I**

### **Introduction**

In 2009, President Obama addressed members of a joint session of Congress where he challenged the American public to increase their educational investments in themselves (The White House, 2009). President Obama recommended that Americans increase their knowledge and training beyond a high school diploma through accessing professional technical training programs, community college courses, or two- and four-year institutions, for at least one year in order to better their lives. The President's challenge came in response the United States continuing to fall behind other nations in the rankings of percentage of college-educated individuals between ages 25 and 34 (Schneider, 2009). In 2012, three years after the challenge was given, only 38% of Americans between ages 25 and 34 had completed a two- or four-year postsecondary degree (Organization for Economic Cooperation and Developing Countries, 2012).

The National Center for Education Statistics (2012a), defines the immediate college enrollment rate as the percentage of high school students who have graduated from high school and enrolled in two- or four-year colleges the fall immediately after graduating. The immediate college enrollment rates improved between 1975 and 2012 (National Center for Education Statistics, 2012a). In 1975, about 18% of students who graduated from high school enrolled at a two-year college; while in 2011, 26% of high school graduates enrolled in a two-year college. Likewise, in 1975, approximately 33% of high school graduates enrolled at a four-year college, compared with 42% in 2011 (National Center for Education Statistics, 2012a). Student enrollment in postsecondary institutions has increased through the years, but not at the rate

needed to meet the growing demands of the international workforce market (National Governors Association Center, 2010).

The Idaho State Board of Education (ISBE) reported for the 2010-2011 student cohort that 40% of Idaho high school seniors enrolled in a postsecondary institution the fall immediately following graduation (Idaho State Board of Education, 2011a). The ISBE also reported that 46% of the high school seniors enrolled in a postsecondary institution at some point during the first year after high school. This includes two- and four-year institutions along with programs leading to professional certificates which usually take less than two years to complete. Fifty-four percent of high school seniors did not enroll in any postsecondary program at any time during their first year after graduation.

In July 2011, the J.A. and Kathryn Albertson Foundation projected that by the year 2018, 61% of jobs (503,000) in Idaho will require postsecondary education. It was also projected that at the national level, 63% of all jobs will require postsecondary education. Currently, only 34% of Idaho's population above the age of 18 has a postsecondary credential or degree. The Albertson Foundation claims between 2008 and 2018 new Idaho jobs requiring postsecondary education will grow by 65,000, while the number of jobs for high school graduates and dropouts will grow by only approximately 33,000 (Albertson Foundation, 2011).

At the national level, the National Center for Education Statistics (2013) recognized that over time, two- and four-year college enrollment rates of high school graduates continue to improve. Nationally, student enrollment increased by 37% from 2000 to 2010. For full-time students, the increase was 45% and for part-time students it was 26%. Research supports the need for increasing the number of students who are prepared for college and careers because the lack of trained and educated workers in the United States is having an impact on the national and

state economies (Boser & Burd, 2009; Cummings et al., 2004; National Governors Association Center, 2010). In order to meet the workforce demand in 2018, an additional three million students who have obtained a certificate or degree beyond a high school diploma will be needed (National Governors Association Center, 2010).

According to the Idaho Department of Labor (2014b), employers are concerned with their ability to find qualified, skilled workers to meet the demands for their companies to be productive and successful. The lack of qualified employees has been identified as a skills gap by the Idaho Department of Labor. When discrepancies between a potential employee's skill levels and the prospective employer's skill needs are identified, the employer is forced to decide whether to train the low skilled applicant or continue to look, hoping to find those with needed skill levels. In order to decrease the skills gap, individuals almost always need to obtain some type of postsecondary education or training such as an associate's degree, professional technical certificate, apprenticeship, or even a bachelor's degree (National Center for Education Statistics, 2012b). Examples of professional certificates or apprenticeships are certified nursing assistant, emergency medical technician, mason, plumber, office assistant, and phlebotomist.

Boser and Burd (2009) noted, students in the twentieth century were able to leave high school with or without a diploma and still obtain employment through hard work in careers which were considered very acceptable for middle class. Due to an unprecedented wave of technological transformation in the workplace, our nation's economy over the past two decades has been altered. Individuals now need a college diploma or additional postsecondary training to be successful in the workplace and in their lives.

Throughout the years, researchers have studied students' decision-making processes for enrolling in postsecondary institutions (Choy, 2002; Clarke, Gushue, Pantzer, & Scanlan, 2006;

Conklin, Dahling, & Garcia, 2012; Duffett, Johnson, & Ott, 2005; Govan, Patrick, & Yen, 2006; Grodsky & Riegle-Crumb, 2010; McKechnie, 2012; Perna, 2006; Perna, 2010; Perna & Titus, 2005). The college decision-making process was discovered to be a complex experience for students in the twenty-first century and continues to grow in complexity for the current student (Cummings et al., 2004).

Hossler and Gallagher (1987) developed a three-phase model to help identify the phases of college-choice for students. This three-phase model continues to be used by students who are pursuing a postsecondary education in this century. The first phase is identified as the predisposition phase. During this phase, students develop career and college goals as they are exposed to peer influences, family expectations, and their own academic successes. The predisposition stage usually takes place between the seventh and tenth grade. The second phase is identified as the search phase, during which a student begins to search for colleges which meet his or her areas of interests and needs, such as the availability of programs and majors, along with course offering times and affordability. The amount of college information a student is exposed to through the guidance of his or her family, affects the search phase (Hossler & Gallagher, 1987). The search phase is often conducted between the tenth and the twelfth grades. The third phase is identified as the choice phase. The choice phase normally takes place during a student's senior year of high school. It is a time when the student makes the choice to apply to various colleges and then makes a final decision as to which postsecondary institution to attend. The choice phase begins as early as the eleventh grade and continues through the twelfth grade until the student has made a final decision on which institution to attend. Understanding the three-phase model developed by Hossler & Gallagher (1987) is important in order to identify the influences which effect whether or not students pursue a postsecondary education.

It is imperative to understand why students are making the decision to go or not go to a postsecondary institution. The purpose of this study is to assist high school personnel in understanding the influences of the student postsecondary decision-making. The study will identify influences which may hinder or assist students going on to a postsecondary institution after high school graduation. The remaining parts of this chapter will present the statement of the problem with its background, research questions, description of key terms, significance of the study, and an overview of the research methods.

### **Statement of the Problem**

The state of Idaho has begun to emphasize the importance of all high school students being college and career ready (Idaho Legislature, 2012; Treasure Valley Education Partnership (TVED), 2013), but in 2011, even though 40% to 46% of all Idaho high school students enrolled in a postsecondary institution sometime during the first year after graduation, 54% to 60% of Idaho high school students did not go on to obtain a higher education. Idaho's immediate college enrollment rate was 43% which is historically slightly below the national enrollment percentage by two points (Idaho State Board of Education, 2011b; National Center for Education Statistics, 2012a).

In order to make sure Idaho is ready for the complexity of future employment opportunities, it is imperative for the state to produce more students who are completing a postsecondary education or training program (Albertson Foundation, 2011; Carnevale, Smith, & Strohl, 2010; National Governors Association Center, 2010). In order to accomplish this, it will be necessary to identify and address the factors which negatively influence high school students in their postsecondary decision-making. It is also necessary to review current practices of high school personnel that contribute to creating and fostering a successful postsecondary and career

readiness culture in order to identify what can be improved to better serve students. Based on the literature review, this study is unique because it offers a quantitative perspective of the data for high school seniors' postsecondary decision-making.

## **Background**

Cummings et al. (2004) studied the influence of the college-choice process, its history through the twentieth century, and how the process has evolved over the last 70 years. During the 1920s and through the 1940s, most families did not recognize the significance and importance of obtaining a college degree. This was due to the fact that the economy was less developed and times were less sophisticated, thus requiring far fewer workers with higher education credentials. Before the 1950s, for every 10 students who graduated from high school, less than two students pursued higher education. The culture of attending college began to change during this time, encouraged by the veterans of World War II cashing in on the GI Bill education benefits. Americans everywhere began to see that college training was possible, even though few before them in their families had attended college. The belief in society began to shift to the idea that attending college was the framework to an individual's future. It provided an individual with the ability to create his or her career path and it was a time for individuals to find a spouse. The majority of the students attending college during this era were white males from middle and high socioeconomic families (Cummings et al., 2004; Mondale & Patton, 2001).

The importance of attending college began to grow significantly to the American public, though it had not yet been addressed through public policy (Cummings et al., 2004; Pulliam & Van Patten, 2013). The Servicemen's Readjustment Act of 1944, also known as the "GI Bill", became the first step in addressing access to higher education through public policy on the national level (U.S. National Archives & Records Administration, 2014). The GI Bill was

established to decrease unemployment rates, increase college enrollment numbers, and provide greater access to a college education for veterans returning from World War II. In 1946, President Truman commissioned the Higher Education for American Democracy Report which became known as the Truman Commission Report of 1946 (Peters & Woolley, 2014). This report focused on eliminating barriers which kept students from higher education opportunities.

One of the barriers was a lack of availability of postsecondary institutions such as community colleges. A recommendation for expanding the community college system throughout the country was a step in addressing access to higher education for students. The Truman Commission Report of 1946 resulted in the nationwide expansion of community colleges causing a large increase in opportunities for students to attend at least the first two years of college or to obtain an associate's degree (Cummings et al., 2004; Peters & Woolley, 2014; Pulliam & Van Patten, 2013).

Education at all levels was addressed during the civil rights movement through national legislation. In 1954, *Brown v. Board of Education* was one of the first steps in the process to end school segregation which opened opportunities for all individuals to attend higher education institutions (United States Courts, 2014). *The Civil Rights Act of 1964* made it illegal to discriminate against an individual based on his or her race, ethnicity, gender, religion, or national origin. As a result of the *Civil Rights Act of 1964*, greater access to higher education institutions was provided for all students (United States Senate Committee, 2013).

In 1965, President Lyndon Johnson signed into legislation the *Higher Education Act* which provided federal funding to higher education institutions, scholarships, and low-interest loans for students. Congress reauthorized the *Higher Education Act of 1965* in 1968, 1971, 1972, 1976, 1980, 1986, 1992, 1998, 2008 and they began the reauthorization process in 2013 when the

act expired (U.S. Department of Education, 2013). The reauthorization process for *the Higher Education Act* has traditionally taken Congress a few years to complete in order to reach a consensus for the new recommendations and financial requirements (Parke, 2013). *The Higher Education Act of 2013* continues to be refined by an appointed committee; a committee which reviews the legislation and provides recommendations to Congress. As society changed, the aforementioned court cases and legislation influenced access to higher education institutions since the 1920s. The notion only the wealthy and select few were able to attend began to move to the idea that all students are entitled to equal access to higher education (Cummings et al., 2004; Pulliam & Van Patten, 2013).

Changes in public programs, institutional practices, institutional marketing strategies, and student demographics influence the student college-choice process (Cummings et al., 2004; Pulliam & Van Patten, 2013). Due to limited communication techniques in the 1930s, 1940s and 1950s, students and their parents were restricted in how they selected a college to attend. During this time, colleges used brochures, pictures, and course catalogs as their main marketing tools to increase student enrollment. Students tended to select a college based on reputation, facilities, family values, cost, and parental influence (Cummings et al., 2004; Hossler & Gallagher, 1987; Perna, 2006). Colleges struggled during this time because there was not a system to effectively identify college-qualified students at the secondary level. As a result, the College Board (2013a) was established to develop a more congruent system to identify college-qualified students. Another area of challenge for colleges was the lack of school-to-college articulation strategies that connected high school requirements and college admission requirements. The college admissions process was a struggle for many students and families due to the complexity and inconsistency of procedures at postsecondary institutions (Cummings et al., 2004). Due to

changes in legislation in the 1960's and 1970's, open enrollment increased the number of women and minority students attending college (Pulliam & Van Patten, 2013).

The College Board and the National Association for College Admission Counseling (NACAC) are two organizations which have influenced college access for students throughout the twentieth century and into the twenty-first century (Cummings et al., 2004; NACAC, 2012). NACAC was established in 1937 as a result of high schools seeking more information from colleges in order to successfully guide students to higher education opportunities (NACAC, 2012). NACAC continues to oversee regulations for college admissions, serve as a liaison between colleges and high schools, and contribute information to policymakers that addresses issues such as college access for equity.

The College Board (2013a) was established in 1900 for the purpose of assisting colleges and universities seeking quality candidates through college entrance exams. The first Scholastic Aptitude Test (SAT) was administered by the College Board in 1926. The SAT measured students' skills and knowledge for reading, mathematics, and writing, as a way to see if students were prepared for college-level course work. In 1955, the SAT established the Advanced Placement program (AP) to academically engage high school students in college-level work (College Board, 2013a). The College Board continues to influence college admissions and academic readiness in high schools as well to work with policymakers to promote higher educational opportunities to all students, especially lower socioeconomic students.

In the late 1970s and 1980s, college recruiting strategies became more aggressive in an effort to expand student enrollment and to reach a broader potential student base. The use of advertising through educational television, professional journals, billboards, commercial radio, television, and college representatives sent to visit high schools increased the amount of

information students received about the importance of attending college and the enrollment process (Mondale & Patton, 2001; Cummings et al., 2004). Colleges sought traditional students, non-traditional students, minority students, economically disadvantaged students, athletes, and part-time students to increase the number of individuals enrolling.

In the 1980s and through the 1990s, the rising cost for attending college continued to be an area of concern due to the economic pressures and strained relationships between higher education institutions and the state and federal government. During these years, grant funding decreased but an increase in accountability measures for higher education institutions was established at the state and federal levels (Cummings et al., 2004). In the late 1990s and into the 2000s, marketing strategies were expanded through the use of the Internet, computer software, CD-ROMs, and DVD's. Through the use of the Internet, prospective college students and their families are now able to share their opinions about specific institutions in online forums.

By the 1980s, Americans' thinking about education in general and higher education specifically had shifted. Higher education was no longer seen as the bastion of the elite, but that all qualified individuals should have opportunity for the college experience (Cummings et al., 2004; Pulliam & Van Patten, 2013). States began to recognize the benefits that an individual and a community receive when a student obtains a certificate, an associate's degree, or a bachelor's degree. Highly educated adults were seen to receive better employment opportunities, be unemployed for shorter amounts of time, experience fewer health issues, have a higher income, and have a happier life (Baum & Payea, 2004; Cummings et al., 2004; Fatima & Paulsen, 2004; Perna, 2006). According to the studies reviewed, there are economic benefits, such as an increase in competition and productivity, which leads to higher profits that affect the community, state, and nation where these individuals are employed (Baum & Payea, 2004; Cummings et al., 2004;

Fatima & Paulsen, 2004; Perna, 2006). College graduates tended to vote regularly and served in civic leadership positions. They were also more likely to be positive, contributing citizens to their communities, which helped to increase the overall effectiveness and productivity of the state and the nation (Baum & Payea, 2004; Cummings et al., 2004; Fatima & Paulsen, 2004; Perna, 2006).

After the researcher reviewed the background literature about students' processes enrolling in a postsecondary institution, the following research questions were generated to guide this study.

### **Research Questions**

This study used descriptive quantitative research of the student postsecondary decision-making process. In order to better understand the process and to potentially improve the number of Idaho students who pursue postsecondary education, this study focused on the following four primary questions and five subquestions:

1. Which influences have the greatest impact on Idaho students' decision-making for pursuing a postsecondary education?
  - How well prepared did the participants believe they were in the components of postsecondary and career awareness?
  - How well prepared did the participants believe they were in the components of postsecondary admission process?
  - How well prepared did the participants believe they were in the components of academic readiness for postsecondary education and careers?
  - How well prepared did the participants believe they were in the components of postsecondary monetary cost?

- How well prepared did the participants believe they were in the components of social capital influences for postsecondary education?
2. What is the relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education?
  3. What is the relationship between Idaho students' plans for postsecondary education and access to high school counseling services?
  4. What is the relationship between parental educational level and Idaho student plans for postsecondary education?

### **Description of Terms**

The researcher found through the literature review that various terms, differing terms, definitions, and acronyms were used when referring to students' postsecondary decision-making processes. Creswell (2008) recommends that researchers use operational definitions to define the variables which will be used in the study. An operational definition is defined as "the specification of how the researcher will define and measure the variable in the study" (Creswell, 2008, p. 160). The terms used in this study are given operational definitions as follows:

**Academically prepared.** A student who has taken a rigorous college-preparatory curriculum and is able to demonstrate his or her knowledge and understanding through exams such as the SAT and the American College Testing (ACT) (ACT, 2006; Chen, Choy, Horn, & Nunez, 2000; Bedsworth, Colby, & Doctor, 2006).

**Career and college-going culture.** When a high school's mission and vision encourages students to go on to a postsecondary institution. This culture encompasses staff, such as teachers and counselors, who are key influencers in a student's college decision-making process (ACT, 2010).

**College and career readiness.** A student's ability to acquire the needed knowledge and skills in order to successfully complete his or her first year of course work at a postsecondary institution (ACT, 2010).

**College.** Two- and four-year postsecondary schools (Achieve, 2013; National Governors Association Center, 2010).

**College-going habitus.** Whether or not a student claims to have made a cognizant decision to attend college (Grotsky & Riegle-Crumb, 2010).

**Cultural capital.** The cultural knowledge of the value of college attainment through the influence of home, peers, and K-12 schools (Perna, 2006).

**Cross-sectional survey design.** A survey designed to study current attitudes, beliefs, options, or practices at one point in time. This design is used in social science and educational research studies (Creswell, 2002).

**Fictive kin.** Peers who play a social support role that helps create a culture of success. An example of a fictive kin group is peer counselors whose role is to assist other students in understanding the financial aid process and college access procedures (Tierney & Venegas, 2006).

**Financial capital.** A family's income or wealth which allows for material resources such as a home, transportation, food, educational materials, security, all of which helps enhance learning (Coleman, 1988).

**First generation student.** An individual within a family who is first to attend a postsecondary institution beyond high school. The family of a first generation student typically does not have a college-going culture established in the home (College Board, 2013b).

**Habitus.** An individual's morals, standards, lifestyle, characteristics, and expectations usually influenced by a specific social group (Perna, 2006; World Book Dictionary, 2005).

**Human capital.** A parent's educational attainment and the home environment which fosters greater learning opportunities through the development of the student's life (Coleman, 1988).

**Higher education.** A workforce training program, a certificate program, an associate's degree, or a bachelor's degree. Each of these requires a student to seek additional education and/or training beyond high school. This term can be interchanged with postsecondary education (ACT, 2010).

**Immediate college rate.** The "percentage of high school students who [have graduated and] enrolled in two- or four-year [college] the fall immediately" after graduating. This rate does not include certificated programs considered less than a two-year degree (National Center for Education Statistics, 2013, p. 1).

**Non-cognitive competencies.** An individual's behaviors, skills, attitudes, and strategies that influence the student's ability to perform academically in high school such as academic behaviors, academic perseverance, academic mindsets, learning strategies, and social skills (ACT, 2008; Farrington et al., 2012, p. 6; TVEP, 2013).

**Non-traditional student.** An individual who did not continue with his or her education immediately after completion of high school. Non-traditional students are also individuals who work more than 35 hours a week and attend college part time. These individuals may also have children, other dependents or can be a single parent. Individuals who were considered financially independent according to the financial aid criteria or individual who has obtained a General

Educational Diploma (GED) are also considered non-traditional students (National Center for Education Statistics, 2002).

**Occupational information network (O\*NET).** The primary source of occupational information in the United States. The database is sponsored by the US Department of Labor (USDOL) and the Employment and Training Administration (ETA). The network provides information regarding standardized and occupation-specific descriptors for individuals, business, and industry to explore occupations and the required skills and education needed for specified careers (O\*NET, 2013).

**Pell grant aid.** A needs-based federal grant to low socioeconomic students who are pursuing a postsecondary undergraduate education. The grant does not have to be repaid like a student loan. The grant amount is determined by factoring in the amount of funding the student's family will be able to contribute, the cost of attendance at the institution, and the student's enrollment status (U.S. Department of Education, 2014).

**Postsecondary education.** Attendance at a two- or four-year college, a trade school, or a technical school. Each one of these requires a student to seek additional education and/or training beyond high school. This term can be interchanged with higher education (ACT, 2010).

**Skills gap.** The difference between the skills which are needed for a job and skills which an individual possesses (Idaho Department of Labor, 2014b).

**Social capital.** The student-parent relationship which influences a student's intellectual development and the student-parent-community relationship that facilitates the social community connections which are developed over time to assist the student with completing high school and going on to a postsecondary institution (Coleman, 1988; Perna, 2006).

**Succeed.** Being able to progress successfully in a chosen career program (McGaughy, 2011).

**Unmet need.** The remaining educational cost after all aid, including loans, that is awarded to a student. In other words, the funding which students have to produce on their own to meet the remaining cost for the postsecondary expenses (Educational Opportunity, 2001).

**Workforce training programs.** The preparation for careers that offer competitive, livable salaries above the poverty line. These programs also provide opportunities for career advancement in a growing or sustainable industry (Achieve, 2013; National Governors Association Center, 2010). Workforce training programs are offered through professional technical programs and specialized training programs which are found in the private sector, at community colleges, or at two- and four-year colleges (ACT, 2010).

### **Significance of the Study**

Students need to be college and career ready in order to be productive citizens in society after high school graduation. In the twenty-first century, it has become imperative that students be prepared to enroll in and attend a higher education institution in order to make the most of their lives culturally and economically. As a result of a postsecondary education, students will also contribute positively to the social and economic growth on a national level. In June 2010, Georgetown University, Center on Education and the Workforce released *Help Wanted: Projections of Jobs and Education Requirements Through 2018* by Carnevale, Smith, and Strohl (2010). This national study projected the jobs and educational requirements which will be needed in the United States for the future. It was projected that by 2018, 63% of all jobs will require postsecondary education or training. Students without some type of postsecondary education or

training will have less than half of the total number of employment opportunities as those with a postsecondary education or training.

It is important to review the factors hindering Idaho high school students from obtaining some type of postsecondary education or training. The purpose of this study is to assist state, district, and high school educational leadership in understanding the influences of the Idaho high school student's postsecondary decision-making. Data from the study will allow high school personnel to better serve students by helping them transition to a postsecondary institution. American College Testing (ACT) (2006) researched the importance of states educating all students with uniform academic expectations that prepared them for both a postsecondary education and the workforce (Boser & Burd, 2009). It was noted that the primary mission of our public education system is to give every student the opportunity to live a meaningful and productive life, which includes earning a wage sufficient to support a family of four individuals (ACT, 2006, p. 2).

### **Overview of Research Methods**

A quantitative descriptive design was selected to facilitate the research, using the selected research questions. The study was conducted during the fall 2014 semester. Participants were seniors from two public high schools in the Valley School District (pseudonym). One high school has more students from families of lower socioeconomic students which was labeled as High School A. The other high school has a higher percentage of middle and higher socioeconomic students and was labeled as High School B.

A cross-sectional online survey was developed to address the high school postsecondary decision-making influences which reflect Perna's (2006) theoretical framework for the proposed conceptual model of students' college-choice. Perna's theoretical framework is based on the

“human capital investment model which [found that] college-choice decisions are based on the comparison of the expected benefits and costs” (Perna, 2006, p. 106). The survey was validated by a panel of individuals who had expertise in this content area. After validation, the survey was piloted at the Valley School District summer school program to check for reliability and validity before the formal study was conducted in the fall 2014. The survey consisted of five subject areas which contained a variety of statements for each category generated from the literature review. Student demographic information was also gathered. The online survey instrument used a 5-point Likert scale. Students’ anonymity was guaranteed when completing the 20 minute survey.

The online survey was administered to students through the software Qualtrics. Once the data had been collected and converted to numerical data, the data were analyzed for results using the software IBM SPSS. Descriptive statistics such as the mean, median, and mode for the five survey categories and the demographic data were computed. The Spearman’s rho was selected as the non-parametric test to analyze the ordinal data collected in order to determine if there was a correlation between the variables. The targeted level of significance was selected to be  $p \leq 0.05$ .

## Chapter II

### Literature Review

#### Introduction

Throughout the 1900s and 2000s, researchers have studied students' decision-making processes for going to college and selecting careers (Choy, 2002; Clarke et al., 2006; Conklin et al., 2012; Duffett et al., 2005; Govan et al., 2006; Grodsky & Riegle-Crumb, 2010; McKechnie, 2012; Perna, 2006; Perna, 2010; Perna & Titus, 2005). Due to the increased demand for skilled workers, it has become vital for students to go on to a postsecondary institution to obtain a professional technical certificate, an associate's degree, or a bachelor's degree. As a result of the complexity of the job market, workers are encouraged to seek additional training and schooling to have the necessary skills to be competitive in the workforce (Boser & Burd, 2009; National Governors Association Center, 2010). Among the benefits a society experiences when students invest in higher education are economic growth to national income and productivity along with economic growth to the state workforce (Perna, 2006). The community in which the institution resides also experiences economic growth as does the community where the individual graduate resides (Fatima & Paulsen, 2004; Leslie & Brinkman, 1988; Paulsen, 1996a,b; Perna, 2006). Other benefits to society are an increase in community service and civic participation, a reduction in the need for social support programs, and lower crime rates (Baum & Payea, 2004; Cummings et al., 2004; Fatima & Paulsen, 2004; Leslie & Brinkman, 1988; Paulsen, 1996a,b; Perna, 2006).

The National Center for Public Policy and Education (2008) commissioned the *Measuring Up 2008* report card. This report evaluated how states performed educationally compared to other states. States were determined to be predominantly responsible for educational

access and its quality within the nation. The *Measuring Up 2008* report card measured states in six categories: preparation, participation, affordability, completion, benefits, and learning. Preparation measured how adequately the states prepared students for education and training after high school to eventually enter the workforce. Participation measured the opportunity for individuals to enroll in education and training after high school. Affordability measured how affordable a postsecondary education was to students and their families. Completion measured whether students were able to make progress towards completing a certificate or degree at a two- or four-year college. Benefits measured the positive results the state received for having a more highly educated workforce. Learning measured what was known about students' education beyond high school with additional education and training.

Performance measures were assessed in the following three ways: graded information, change over time, and international comparisons. Graded information was explained as the state's current performance compared to the best-performing states with the results being reported as a letter grade. Change over time was defined as a state's current performance compared with its own performance in the 1990's. If a state received an up arrow, it indicated the state had improved or had maintained; a down arrow indicated that the state had decreased its performance measures. International comparisons compared how a state was ranked, given students' knowledge and skills along with their ability to compete economically with other countries (National Center for Public Policy and Education, 2008).

The Idaho State Report Card for the Measure Up 2008 Report by the National Center for Public Policy and Education (2008) illustrated the state's need to decrease the barriers which prevent students from going on to a postsecondary institution. Idaho's preparation category received a "C" and had a positive change over time. Participation received a "D" and had a

negative change over time. Affordability received an “F” and had a negative change over time. The ability for families to assist their students in paying for college after financial aid has been received has decreased due to the increased costs of higher education. Completion received a “C” and had a positive change over time. Benefits received a “C-” and had a positive change over time. Learning received an “I” for incomplete, but all states received an “I” due to lack of sufficient data. Idaho also had a decrease in its international comparisons to other countries such as Japan, South Korea, New Zealand, Norway, Belgium, Ireland, Denmark, France, Australia, Sweden, Spain, Finland, United Kingdom, Netherlands, and Luxembourg with its adult education levels and completion rates (National Center for Public Policy and Education, 2008).

In summary, the purpose of this literature review was to identify the key factors influencing Idaho high school students’ postsecondary-choice decisions. Through the review of literature, common threads became apparent to the researcher. The threads from the literature review were the basis the researcher used to develop the five key categories of influences which affect student postsecondary-choice decisions. The need for postsecondary and career awareness, postsecondary and career admission process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and the social capital influences for postsecondary education were the five key categories which influenced student postsecondary-choices. Each of these key categories plays a role in a high school student’s postsecondary decision-making process.

### **Postsecondary and Career Awareness**

The research reviewed confirms the importance of high schools creating a college and career readiness culture for all students (ACT, 2006; The Idaho State Board of Education, 2012; National Center for Education Statistics, 2012b; National Governors Association Center, 2010).

The National Governors Association Center (2010) defined college readiness as a student's ability to have acquired the needed knowledge and skills to successfully complete his or her first year of course work at a postsecondary institution. In June 2010, Georgetown University, Center on Education and the Workforce released its findings *Help wanted: Projections of jobs and education requirements through 2018* (Carnevale, Smith, & Strohl, 2010). The national study was conducted to project the jobs and educational requirements needed in our nation for the future. The study projected that 63% of all jobs will require a postsecondary education in the United States by 2018. At this point in time, students without some type of postsecondary education or training will have available to them fewer than half of the employment opportunities as those with a postsecondary education.

ACT (2006) researched the importance of states educating all students with common academic expectations that prepared them for both a postsecondary education and the workforce. ACT noted that public education has the mission to provide every student with the skills and knowledge needed to live a meaningful and productive life. In order to accomplish this, students must acquire the necessary skills to earn a wage adequate to support a small family. The ACT defined what the expectation for workforce training readiness were through O\*NET. The Employment and Training Administration of the U.S. Department of Labor created O\*NET in order to have an all-encompassing national database of jobs and worker attributes to provide benchmarks for future employees. This database was divided into five job zones depending on the levels of education, experience, and training necessary to perform the occupation. The five job zones were the following:

- Zone 1 – little or no preparation
- Zone 2 – some preparation

- Zone 3 – medium preparation needed
- Zone 4 – considerable preparation needed
- Zone 5 – extensive preparation needed (O\*NET, 2013).

Job Zone 3 was the measurement used in this study to compare the needed education and skills for the workforce for professions that needed some type of training beyond a high school diploma. Electricians, construction workers, plumbers, cosmetologist, and upholsters were identified as workforce professions in Zone 3. ACT College Readiness Benchmarks and WorkKeys Level Scores was the instrument used to compare workforce training readiness and college readiness. WorkKeys was designed to measure what businesses expected of entry level workers or new hires. The ACT research concluded the expectations of students who choose to enter workforce training programs after high school should be no different from the expectations of students who are planning on attending college.

Research supported the need for increasing the number of students who are prepared for postsecondary education and careers because it was having an impact on the nation's and states' economies (Boser & Burd, 2009; Cummings et al., 2004; National Governors Association Center, 2010). In order to meet the growing and changing requirements of the workforce demands by 2018, an additional three million students who have acquired some type of certificate or degree beyond a high school diploma will be needed (National Governors Association Center, 2010).

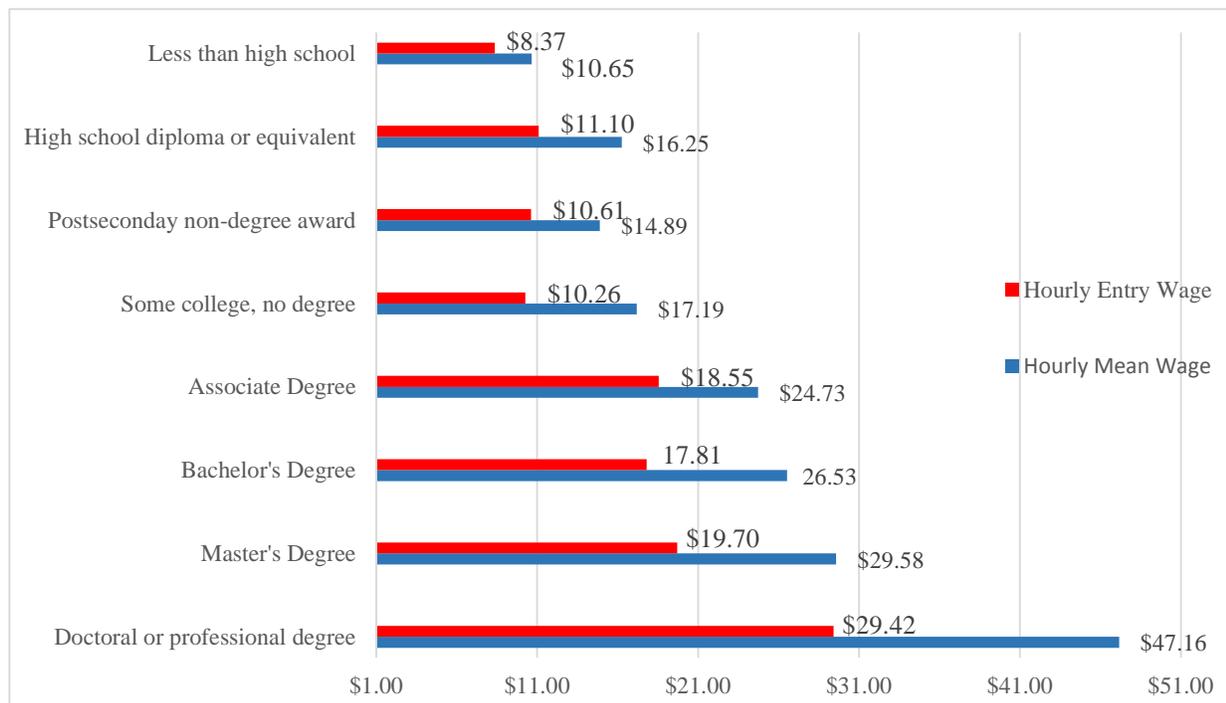
Boser and Burd (2009) noted past generations of students could leave high school and obtain a position in middle management or enjoy a successful career in an auto company or real estate firm; but an unprecedented wave of technological changes have altered our nation's

economy over the past two decades. High school graduates now need a college diploma and/or additional training for the workplace to be successful in their lives.

Baum and Payea (2004) studied the individual benefits and societal benefits of students who go on to obtain a higher education. Individual benefits were evident as a result of going on to a higher education institution even if it was for a brief time. It was recognized that any college experience was better than no college experience, although the benefits of completing a bachelor's degree and beyond were significantly greater. A college graduate will earn 73% more than a high school graduate over his or her working lifetime (Baum & Payea, 2004; Cummings et al., 2004). Individuals who obtain a degree beyond a bachelor's will earn two to three times more than high school graduates without a college degree throughout their working lifetime (Baum & Payea, 2004).

**Idaho's postsecondary and career awareness need.** The Idaho Department of Labor (2013) created a graph which demonstrated the hourly and entry wage based on different levels of education. Figure 1 illustrates that an individual who furthers his or her education has greater possibilities to earn a higher hourly and his or her entry wage increases.

Figure 1



*Idaho Department of Labor 2013 Education and Training Pays*

Figure 1. Adapted from *2013 Education and Training Pay*, by Idaho Department of Labor, (2013). Retrieved from <http://labor.idaho.gov/publications/educationpays.pdf>. Copyright 2013 by Idaho Department of Labor.

Figure 1 supports the Boser and Burd (2009) findings that a high school graduate needs a college diploma or additional training for the workplace to be financially successful over his or her lifetime. From Figure, 1 it becomes readily apparent that monetary rewards await those who further their formal education beyond high school. Students need to be able to see the correlation between obtaining a postsecondary education and potential wage earnings in order to understand the importance of gaining a higher education.

Figure 2 demonstrates the earning capacity of an individual based on his or her educational level. Based on the chart in Figure 2, on the average the more education a person has the greater amount of income he or she has the opportunity to earn (Idaho Department of Labor,

2013). Individuals who have more education than a high school diploma are less likely to be unemployed and live in poverty (Baum & Payea, 2004; Cummings et al., 2004). The high school student who comes to an understanding of the monetary rewards available to those who pursue training and education beyond high school is much more likely to make postsecondary education a goal in his or her life (Idaho Department of Labor, 2013).

Figure 2

*Idaho Department of Labor 2013 Earning Over a Lifetime*

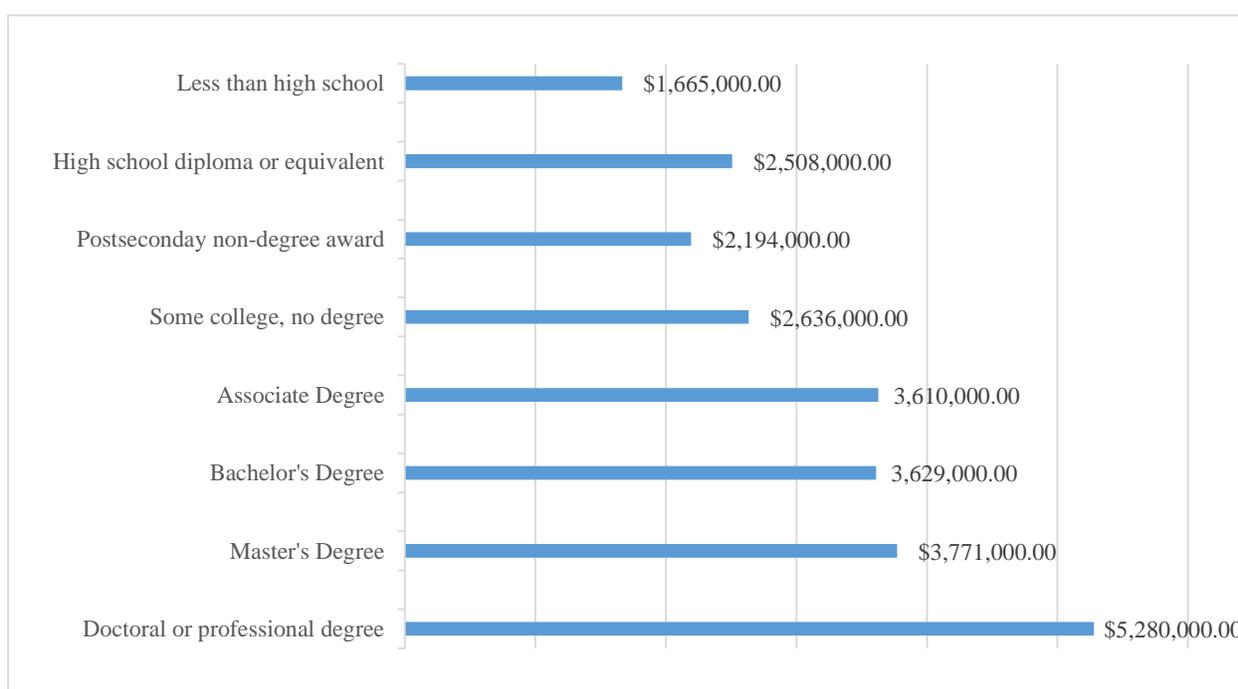


Figure 2. Adapted from *2013 Education and Training Pay*, by Idaho Department of Labor, (2013). Retrieved from <http://labor.idaho.gov/publications/educationpays.pdf>. Copyright 2013 by Idaho Department of Labor.

Individuals who have gone on to study at an institution of higher education have a greater positive economic impact on communities, states, and the nation because of their increased productivity (Baum & Payea, 2004; Cummings et al., 2004). Society reaps the rewards of individuals who are employed as a result of their education beyond a high school diploma through payment of taxes at the local, state, and federal levels. The average college graduate

working full-time with a bachelor's degree pays 100% more in federal income taxes and approximately 78% more in state and local taxes than the average high school graduate (Baum & Payea, 2004). Unemployment and poverty levels are lower when individuals have more education and those individuals are less likely to need the assistance of social support programs. Individuals who have higher levels of education tend to participate in organized volunteer activities, donate blood, vote, and be contributing citizens to their communities. Other benefits which society experiences as a result of individuals with higher education levels is they tend to have a positive perception of their health, have lower smoking rates, and have lower incarceration rates than individuals who have not graduated from college. Baum and Payea (2004) also found that individuals who have education beyond a high school diploma read more to their young children and their children have higher cognitive skill levels and better concentration than other children.

States continue to shoulder the responsibility for increasing expectations for all students. In order to accomplish this huge responsibility, it was necessary for states to create appropriate postsecondary and career readiness goals. States must demonstrate their priority for education and make good education policy that reinforces the ability of their high school students to be postsecondary education and career ready by graduation (National Governors Association Center, 2010). The Idaho State Board of Education (2012) has created a plan to address the need for students to be college and career ready. The purpose of this plan was to increase students' ability to meet the growing demand for qualified individuals ready to enter professional careers which would enhance the state's economy.

By 2018, 61% of jobs in Idaho will need a postsecondary education or training after high school graduation (Idaho State Board of Education, 2012). It was a great concern to the Idaho

State Board of Education that by 2020, 63% of the jobs in Idaho will need some type of degree or certificate, as currently only 35% of adult Idahoans have a degree or certificate (Idaho State Board of Education, 2012; National Center for Education Statistics, 2012b). It was recognized that the current generation of high school students are in great danger of being the first in United States history to be less educated than their parents (Idaho State Board of Education, 2012). The Idaho graduating class of 2010-11 had 40% of its students enroll in a postsecondary education or training program immediately after graduation (Idaho State Board of Education, 2011a). This statistic reaffirmed the importance of creating and supporting a postsecondary and career readiness culture in Idaho high schools since 60% of the students were not pursuing a postsecondary education after graduation. It is the goal of the Idaho State Board of Education to have 60% of Idaho students between the ages of 25-34 obtain a postsecondary degree or certificate by 2020.

**Implementation for postsecondary and career awareness.** The Idaho State Board of Education (2012) developed five key strategies to address preparing students to go on to college or a career training program. The first step in the plan was to strengthen the pipeline. High school counselors need to possess the skills and knowledge to effectively assist students with college applications, the financial aid process, and postsecondary access information. They need to help build student social skills and provide high school academic guidance to facilitate students' success in transitioning to a postsecondary education. Counselors were also encouraged to participate in the Collaborative Counselor Training Initiative which provided additional training about the most current information available to help students succeed after high school. Counselors helped to increase the number of students who were able to take advantage of dual

credit and tech prep programs which may influence the number of students going on to a postsecondary institution.

The second step in the plan was to transform remediation. It was noted that 41% of all first-time, full-time college freshmen in 2010 needed access to some type of remedial services (Idaho State Board of Education, 2012). Students who needed remedial services were not academically prepared for the rigor of college. When students needed to access remedial services, it increased the amount of time and resources to pursue a postsecondary education. The Idaho State Board of Education worked with colleges and universities to address the need of completing an institutional readiness inventory evaluation and to develop a method to evaluate efficacy of student placement and success. They worked to determine appropriate tools to assess student readiness for college-level work and articulate area competencies with student learning outcomes.

The third step of the plan was to create a structure for student success. It was important for colleges and universities to communicate clear enrollment guidelines and guarantee statewide articulation and transfer options. It provided students' with the ability to transfer their completed college credits from high school to a postsecondary institution. Students who were able to transfer credits decreased the need to complete additional course work at postsecondary institutions. In being able to successfully make the transition from high school to a postsecondary institution, students' self-confidence rose. In the 2014 Legislative Session, the Idaho Legislature passed Senate Bill 1233 which provided advanced postsecondary opportunities for high school students (Idaho State Department of Education, 2014a). The advanced postsecondary opportunities were known as the Fast Forward Program that provided funds to

cover 75% of the cost for professional-technical exams, concurrent credit courses, and credit-bearing exams such as Advanced Placement (AP) and International Baccalaureate (IB) tests.

The fourth step in the plan was to reward progress and completion. This entailed the creation of a system of metrics to evaluate and hold accountable each postsecondary institution. It recognized the need to adjust the statewide scholarship program to ensure that students with the greatest need and who demonstrated the ability to succeed received the financial assistance.

The fifth step was to increase leverage partnerships. It was important to create and maintain effective partnerships between education, businesses, and industries. It allowed for collaboration regarding the needed skills and knowledge of students preparing to enter the workforce (Idaho State Board of Education, 2012).

### **Postsecondary and Career Admission Process**

Several research studies supported the importance of creating a college and career-oriented culture in high schools (Bedsworth et al., 2006; Sneva, 2011; The Institute for Higher Education Policy, 2013). Bedsworth, Colby, and Doctor (2006) conducted a longitudinal study to review what kind of support system for low and middle socioeconomic income students to become successful in going on to a postsecondary institution. The students who participated in this study were part of the National Educational Longitudinal Study beginning in 1988 and ending in 2000. Students, parents, teachers, and school administrators participated through questionnaires, tests, coursework, and grades. In the study it was observed that high schools that created a college-going culture increased the number of students pursuing a postsecondary education.

The Institute for Higher Education Policy (2013) stated that counselors and teachers play a vital role in developing and maintaining the postsecondary and career readiness culture because

they were on the front lines with students daily. Foote (2011) conducted an ethnographic study at a high school in the Midwest with students and personnel to observe the practices that influenced students going on to a postsecondary institution. Teachers had the greatest opportunity to influence students' skills and perceptions about themselves. They spent more time with students than any other group and provided opportunities to emphasize the importance of going on to pursue a postsecondary education. Teachers shared their college-going experiences with their students and helped students gain the necessary skills and knowledge needed to be academically prepared to pursue a postsecondary education.

It was recommended that high school counselors needed to be aware of the influence they have in providing support for the college application process (Idaho Legislature, 2012; Smith & Zhang, 2011). Through the use of surveys, Smith and Zhang (2011) studied 574 students and their transition process to college. It was noted by Smith and Zhang that high school counselors impacted students going on to a postsecondary institution. The Idaho State Board of Education (2012) encouraged counselors to participate in the Collaborative Counselor Training Initiative program to increase their knowledge and skills in order to assist students. Counselors must possess the knowledge and skills needed to meet the responsibility to assist students and parents with college and career information, college admissions, and guidance through the needed high school academic curriculum (Idaho Legislature, 2012). By developing trusting relationships with students and their families, counselors were able to provide information, guidance, and support necessary for students to understand the importance of developing a college and career plan after graduation (Chen et al., 2000; Duffett et al., 2005; Foote, 2011; Savitz-Romer, 2015). High schools which provided opportunities to assist families with financial aid information and the application process, along with encouraging campus visits, increased students' chances in

successfully enrolling in college (Chen et al., 2000; Duffett et al., 2005; Foote, 2011; Savitz-Romer, 2015).

Choy (2002) conducted a longitudinal study about barriers which prevent low and middle socioeconomic students from enrolling in a postsecondary institution. The students who participated in the longitudinal study were part of the 1988 cohort group which the U.S. Department of Education's National Center for Education Statistics (NCES) commissioned. The cohort of students had data collected in 1990, 1992, 1994, and 2000. Choy's (2002) research indicated there were specific steps a student must take in order to successfully enroll in a postsecondary institution. Step one was for students to develop the aspiration and goal to attend a postsecondary institution; the second step was to make sure students were academically prepared; the third step was to take a college entrance exam, and the last step was to apply and enroll in a postsecondary institution. These steps will be discussed in further detail with additional studies to support the steps students must take to enroll in a postsecondary institution successfully (Bailey, Constantine, Finkelstein, Hurd, & Tierney, 2009; Chen et al., 2000; Choy, 2002).

**Step one.** The first step students needed to take in order to enroll in a postsecondary institution was to have aspirations and goals to attend college. (Cabrera & La Nasa, 2000; Chen et al., 2000; Choy, 2002; Duffett et al., 2005). Cabrera and La Nasa (2000) conducted a study about the student college-choice process using the NCES National Educational Longitudinal Study of 1988. Cabrera and La Nasa noted that students who had educational and occupational aspirations had a greater tendency to pursue a postsecondary education. This was accomplished by providing a connection between the postsecondary educational plan to an anticipated career choice (Bedsworth et al., 2006; Conklin et al., 2012). Bedsworth, Colby, and Doctor (2006)

found that students were six times as likely to enroll in college and attain a degree if they were able to make connection between postsecondary education and life career goals.

Research supported the use of the Career Decision Self-Efficacy Scale – Short Form (CDSES-SF) to provide information to students and schools, which may be helpful to schools as they counsel students in pursuing a postsecondary education and career. (Betz, Hammond, & Multon, 2007; Clarke et al., 2006; Conklin et al., 2012; McKechnie, 2012). The CDSES-SF had 25 items measuring the five skills which were self-appraisal, gathering occupational information, goal selection, future planning, and problem solving. Individuals responded to the questions on a 5-point scale designating they had no confidence to complete confidence.

Four studies using different populations groups, all using the CDSES-SF as a data collection instrument found similar results. First, Betz, Hammond, and Multon (2007) studied the career decision, self-efficacy, and going to college of 220 African American college students from the Midwest. Clarke, Gushue, Pantzer, and Scanlan (2006) conducted a quantitative study with 72 African American high school students exploring the relationship between professional identity, career exploratory performance, and career decision-making self-efficacy. Conklin, Dahling, and Garcia (2012) studied the relationship of affective commitment, career self-efficacy, and outcome expectations for 200 students from the Mid-Atlantic region of the United States. McKechnie (2012) researched how achievement goals and career orientation influenced students pursuing a postsecondary education through a quantitative study with 200 high school participants from the Eastern United States.

Each of the researchers cited above found that students who scored higher on the CDSES-SF tended to demonstrate higher levels of career decision self-efficacy. Providing students insight to themselves through the use of the CDSES-SF assisted students to effectively

create and implement a successful postsecondary plan. Students who scored higher were better prepared to make well-informed decisions and wasted less time in the transition from high school to a postsecondary institution (Betz et al., 2007; Clarke et al., 2006; McKechnie, 2012).

**Step two.** The second step students must complete in order to successfully enroll in a postsecondary institution was to participate in rigorous academic courses to ensure they were academically prepared (Chen et al., 2000; Choy, 2002). In order for students to be academically prepared by graduation, an academic plan needed to begin as early as the eighth grade. Chen, Choy, Horn, and Nunez (2000) conducted a quantitative study exploring key areas in assisting students to transition to a postsecondary institution using the National Educational Longitudinal Study of 1988. Through the study, Chen et al., (2000) found one of the key areas necessary for students to successfully transition to postsecondary education and the workforce was for students to develop an academic plan. The expectations from postsecondary institutions included a need for rigorous high school curriculum as part of the postsecondary information and awareness process. Bedsworth, Colby, and Doctor (2006) found through their study a discrepancy between college aspiration and student high school curriculum aspirations. According to the study, students stated they had the expectation to attend college because that was the answer adults wanted to hear, or, on the other hand, students implied they were planning to attend college but did not have an understanding of the requirements to get there.

Macdonald, Reynolds, Sischo, and Stewart (2006) studied twenty-five years of educational and occupational plans of high school seniors to determine the practicality or level of realism of their postsecondary plans. As a result of the quantitative study, they found that high school seniors' college expectations were not realistic, meaning they were not academically prepared and lacked information about what was required for their desired career. One of the

study's findings was when students have unrealistic expectations for their education and careers, they had an increased probability of experiencing anxiety and distress as they faced barriers in being successful. Macdonald et al., (2006) concluded that under-informed students with unrealistic expectations wasted their time and resources pursuing educational and occupational plans and were more likely to be less successful in completing college.

**Step three.** The third step students undertook in order to successfully enroll in a postsecondary institution was to take a college entrance examination such as the SAT or the ACT (Chen et al., 2000; Choy, 2002; SAT, 2013; Strive Partnership Report, 2011). Among other things, the ACT and SAT function as indicators of college readiness. Students who were planning on attending college had to have completed one or both of the exams (Idaho Legislature, 2012, SAT, 2013). The reason some students complete both exams is because some colleges require the ACT while others require the SAT. The ACT test was designed to measure student academic readiness in English, mathematics, reading, and science reasoning to help determine if they are college ready (ACT, 2011). The SAT (2013) measures students' skills and knowledge for reading, mathematics, and writing which provides information about the student's college readiness. Providing increased opportunities to students to take the test was a goal of the SAT College Board. One of the ways this was accomplished was by providing fee waivers to students from low income families. For many these students, the fee waiver helped reduce the financial barrier preventing them from taking the college entrance exam.

Another strategy the SAT College Board implemented was the SAT School Day option. On a specified day, the test was given to all 11<sup>th</sup> grade students in high school during the school day. This eliminated the barrier of not being able to take the test on a Saturday due to work or other conflicts. Offering the SAT to all students made available college-readiness information to

even those students who had not yet made the decision to go. As a result of completing the exam, it also provided some encouragement to students to make the decision to go on to a postsecondary institution. Since 2012, the State of Idaho has participated in the SAT School Day option for all Idaho high school 11<sup>th</sup> graders (Idaho Legislature, 2012; SAT, 2013). Currently all high school 11<sup>th</sup> graders are required to take the SAT at the expense of the State of Idaho. Students were also able to take the ACT if they choose, but the cost of that exam was not financially covered by the state. Requiring all students to take a college entrance exam provided a more complete and encompassing view of whether or not Idaho students were meeting the college readiness measurements (Idaho Legislature, 2012).

**Step four.** The fourth step students must take in order to successfully enroll in a postsecondary institution was to apply and enroll in college (Bailey et al., 2009; Chen et al., 2000; Choy, 2002). Knowledge of what the college requirements and application process needs to be understood by students and their families (Bailey et al., 2009; Coca, Nagaoka, & Roderick, 2009). The college application process entailed students investigating colleges which met their areas of interests and needs such as the total cost, availability of programs and majors, along with a variety of course offering times such as days, nights, and weekends. Students also sought institutions which provided a variety of delivery systems such as face-to-face instruction, or synchronous and asynchronous Internet courses offerings (Brown & Hoyt, 2003; Cabrera & La Nasa, 2000; Pulliam & Van Patten, 2013; Public Agenda, 2012). Often students were required to write an application essay which included reasons why the student was interested in attending a particular postsecondary institution (High School Action Plan, 2013). In addition to the application essay, students often needed to obtain letters of recommendations from teachers, mentors, coaches, and community members who were aware of the students' strengths. Being

aware of the timeline for college scholarships and financial aid forms was another critical part of the college application process (High School Action Plan, 2013).

### **Academic Readiness for Postsecondary Education and Careers**

Several research studies supported the premise that academic readiness was an important contributing factor in the college and career decision-making for students (ACT, 2007; Allen, Robbins, & Sawyer, 2010; Bedsworth et al., 2006; Bozick & Deluca, 2010; Choy, 2002; Educational Opportunity, 2001; Idaho Legislature, 2012; National Center for Education Statistics, 2001; Public Agenda, 2012; SAT, 2013; SAT, 2014). Academic preparation was the most effective means of increasing the likelihood of students graduating high school and college, and being career ready (ACT, 2007; Bedsworth et al., 2006, p. 3; SAT, 2013; SAT, 2014).

Across the United States, high school seniors were exiting high school lacking the academic readiness to pursue a postsecondary education or career (ACT, 2007; Bozick & Deluca, 2010; SAT, 2013; SAT, 2014).

In 2014, 1.67 million high school students throughout the United States took the SAT college entrance exam (SAT, 2014). The College Board studied the testing results from the graduating class of 2014 and found that less than half of the high school students who took the SAT college entrance exam would be academically or career ready when leaving high school. ACT (2014) released the testing results for the 2014 high school graduates. Of the 1.8 million students who graduated in 2014, approximately 26% met the college benchmarks in English, reading, mathematics, and science. Only 47% of the 1.8 million students met at least one of the college benchmarks in the four subjects tested (ACT, 2014; Bidwell, 2014). A number of studies have been conducted to determine indicators of student postsecondary and college readiness. The indicators include eighth-grade achievement, standard high school coursework, advanced and/or

honors high school coursework, high school grade point average, and student testing behaviors (ACT, 2008; Chen et al., 2000; Choy, 2002; Dougherty & Fleming, 2012; Idaho Legislature, 2012; National Center for Education Statistics, 2001; Pound, 2011, SAT, 2013).

The ACT (2008) conducted a study of 216,000 students in the graduating classes of 2005 and 2006 identifying factors that influenced students going on to college and the workforce. The study found that a key indicator for students who were academically on target by their eleventh and twelfth grade year was that they had met the academic requirements at the end of their eighth grade year. A study conducted in Arkansas by Dougherty and Fleming (2012), reviewed the importance of assisting students on a pathway to college and career readiness through two cohort groups of students. Dougherty and Fleming found that students who had been academically behind in their eighth grade year were unlikely to close the gap with their peers by the end of high school.

**Cognitive strategies.** Academic readiness during the eighth grade year continues to be an area of focus for researchers. It was a pivotal point in determining a student's success in high school and his or her ability to be college and career ready at the time of graduation (ACT, 2006; ACT, 2007; Dougherty & Fleming, 2012; Sawyer, 2008). The ACT EXPLORE test measures 8th or 9th grade students' understanding of English language arts, reading, science, and mathematics compared to other students across the country (ACT EXPLORE, 2014). It asked information about students' interests, educational and career plans, high school coursework plans, and students' need for support. ACT (2007) studied the importance of making sure students were on track during elementary and middle school to ensure they would be college and career ready by graduation. In 2007, 540,000 eighth grade students across the nation participated in an ACT study by taking the ACT EXPLORE assessment. As a result of the students participating in the

assessment, ACT found only one in 10 eighth graders was on target academically to be ready for college-level work by the time he or she graduated from high school.

As a result of the ACT (2007) findings, it was imperative that middle schools and high schools develop plans to intervene and provide the academic assistance needed to ensure that students were college and career ready by the time they graduated from high school. The ACT's finding indicated that early intervention at the elementary and middle school levels prompted students to make greater academic growth (ACT, 2007). It was noted by the ACT study that eighth-grade achievement was the greatest indicator of students being college and career ready by the eleventh and twelfth grades. The study showed a strong correlation between the eighth graders who were on track in mathematics, science, reading, and English and their readiness to graduate from high school and pursue postsecondary education four years later (ACT, 2007; Bailey et al., 2009; Dougherty & Fleming, 2012). Ensuring that all eighth grade students had the opportunity to be academically on track increased the number of students who were college and career ready by graduation (ACT, 2008; Dougherty & Fleming, 2012).

School districts needed to establish rigorous academic requirements to ensure more students were academically prepared for postsecondary education and the workforce. An effective way to ensure all students were academically prepared was to require a rigorous, college-preparatory curriculum (ACT, 2006; Chen et al., 2000; Bedsworth et al., 2006). A rigorous high school core curriculum incorporated four years of English, three or more years of mathematics, three or more years of natural science, and three or more years of social sciences and history (SAT, 2013). Researchers confirmed the level of mathematics students take in high school directly relate to students' ability to meet the demands of college academics (Bedsworth et al., 2006; Chen et al., 2000; Choy, 2002). Mathematics classes such as algebra II or higher

were the levels that correlated to academic readiness. It was recommended that schools offer algebra I no later than eighth grade so students had the ability to take mathematics beyond algebra II during their high school years (Chen et al., 2000; Choy, 2002). Another strong indicator that students were academically prepared was the number of lab science credits completed in high school (Bedsworth et al., 2006; SAT, 2013). Ensuring all students had the ability and were prepared to take rigorous honors courses beginning in the ninth grade was another academic readiness indicator (Bailey et al., 2009).

There was a need for states and districts to adopt academic standards that reflect the skills and knowledge necessary to be college and career ready (ACT, 2007; ACT, 2008; Bedsworth et al., 2006; Boser & Burd, 2009). Through the adoption of the Common Core Standards throughout the nation and in the State of Idaho, school districts have begun to implement the standards at all grades (ACT, 2008; ACT, 2010; Idaho Legislatures, 2012). As of 2014, all states, with the exception of Alaska, Nebraska, Indiana, Texas, and Virginia adopted the Common Core Standards (Academic Benchmarks, 2014). Minnesota adopted the English language art standards but not the mathematics standards. The Common Core Standards provided standards alignment from elementary to middle school to high school with the end goal of college and career readiness (ACT, 2007; Boser & Burd, 2009; Sawyer, 2008). The standards focused on rigorous English language arts such as reading, writing, speaking, and listening along with a solid knowledge of mathematical content to assure students were being prepared to meet the academic demand at the postsecondary level (Council of Chief State School Officers, 2010).

It was recommended by researchers that schools and districts develop and implement a system to demonstrate evidence that students were on track academically for college and target those who needed assistance (Bailey et al., 2009; National Center for Education Statistics, 2001;

Pound, 2011). Pound (2011) studied a South Carolina high school college preparation program which included 232 students and 80 teachers and counselors. She found exams such as ACT, SAT, and Advanced Placement (AP) were excellent indicators of students being academically on track for college. Pound noted in her studies that the ACT PLAN and Preliminary Scholastic Aptitude Test (PSAT) were good predictors of students successfully progressing academically in mathematics, English, and science.

School districts implemented systems to demonstrate that students were on track academically and used standardized tests such as the ACT EXPLORE, PLAN, ACT, PSAT, and SAT as college readiness measurements (ACT, 2008; Chen et al., 2000; Idaho Legislature, 2012, Pound, 2011, SAT, 2013). The ACT EXPLORE, PLAN, and PSAT were good indicators of whether or not students progressed academically in mathematics, English and science. These tests provided students with information about their academic strengths and weakness (ACT, 2007, ACT, 2008, Pound, 2011; SAT, 2013). Results of the SAT (2013) study, which included 1.66 million high school students throughout the United States, showed that of the students in the graduating class of 2013 who participated in the SAT, only 49% met the benchmark. This indicated that the rigor of the core curriculum in schools needed to be increased. Students who scored at the 1550 benchmark or higher were academically ready to meet the challenges of the college curriculum. The students who met the SAT benchmark were more likely to have taken honors or AP courses, had taken a higher mathematics course beyond algebra II, and had a grade point averages of 3.00 or higher (Pound, 2011; SAT, 2013). Students who successfully completed AP, college prep, and honors courses demonstrated the ability to be academically ready for the rigors of college course work.

**Non-cognitive competencies.** Non-cognitive competencies were another indicator which influenced student academic readiness (ACT, 2013; Betz, 2007; Betz et al., 2007; Farrington et al., 2012; Sawyer, 2008; TVEP, 2013). Farrington et al., (2012) conducted a study with Chicago Public School students to identify the role of non-cognitive factors in student performance. Non-cognitive competencies were explained as an individual's behaviors, skills, attitudes, and strategies that influence the student's ability to perform academically in high school. The non-cognitive competencies were difficult to measure and were not evident in the results from standardized tests (ACT, 2008; Farrington et al., 2012; TVEP, 2013). Five specific non-cognitive competencies were identified which influenced the academic performance of students. These were "academic behaviors, academic perseverance, academic mindsets, learning strategies, and social skills" (Farrington et al., 2012, p. 6).

Academic behaviors include behaviors such as going to class, doing homework, organizing materials, participating, and studying, all of which influenced a student's grade point average (ACT, 2008; Farrington et al., 2012; TVEP, 2013). Academic perseverance was described as a student's ability to demonstrate self-control, self-discipline, delayed gratification, grit, and tenacity. Students who exhibited academic perseverance demonstrated the ability to have thoroughly learned the material and they were more prepared for class versus someone who put forth minimal effort (ACT, 2008; Farrington et al., 2012; Tate, Caperton, Kaiser, Pruitt, White, & Hall, 2015; TVEP, 2013). Academic mindset was explained as an individual's beliefs or attitudes about themselves in relation to academic work. A student who had an effective academic mindset tended to believe he or she belonged to the academic community and his or her abilities and academic competencies grew with effort. Farrington and colleagues found that

when a student believed he or she could succeed at academic tasks, the importance of school work increased (ACT, 2008; Farrington et al., 2012; Tate et al., 2015; TVEP, 2013).

Learning strategies are techniques that supported a student's cognitive thinking, remembering, or learning (Farrington et al., 2012). Study skills, metacognitive strategies, self-regulated learning, and goal setting were techniques applied to effective learning strategies (ACT, 2008; Farrington et al., 2012; TVEP, 2013). Social skills such as interpersonal skills, empathy, cooperation, assertion, and responsibility were skills students needed to possess in order to be college and career ready at the time of high school graduation. A young person's ability to work with others was shown to have a direct impact on his or her academic preparations and his or her eventual entry into a postsecondary institution or into the workforce (ACT, 2008; Betz, 2007; Betz et al., 2007; Farrington et al., 2012; Tate et al., 2015; TVEP, 2013).

### **Postsecondary Monetary Cost**

Students who went on to a postsecondary institution were influenced by its affordability. Several research studies found financial affordability factors contributed to the decision-making process for high school students to go on to a postsecondary institution (Abou-Nassif, 2011; Coca, Nagaoka, & Roderick, 2011; Gibbons, 2005; Bedsworth et al., 2006; Duffett et al., 2005; Grodsky & Riegler-Crumb, 2010). Abou-Nassif (2011) studied 720 high school students' college decision-making influences and found family income and the cost of the institutions were the main factors that affected their decision-making. Eighty-one percent of students stated the factor of family income as very important or moderately important in the college decision-making process. Seventy-eight percent of students rated the cost of education as being very important or moderately important to them (Abou-Nassif, 2011). A student's view of whether they could

afford to go and the reality to attend college were known as perceived affordability versus real affordability of attending college. The perceived affordability and the real affordability was yet another consideration in this issue (Bedsworth et al., 2006; Gasbarra, Johnson, Immerwahr, Ott, & Rochkind, 2007).

Duffett, Johnson, and Ott (2005) studied the influences of life choices after high school for 1000 young adults between the ages of 18-25. The study included 200 African American young adults, 200 Hispanic young adults, and 200 Asian young adults in the United States. They found the main contributing influence for students enrolling in postsecondary institutions was financial concerns for these individuals. It was noted that even though student loans, grants, work study programs, and part-time work provided the ability to attend college, many students shared that they still could not afford the school of their choice. In 2005, Gibbons conducted a study of 272 middle school students in North Carolina which she focused on the students' perceived barriers to attending college. The study found that one of the most influential barriers which discouraged students at a young age from pursuing a postsecondary education was financial concerns for them personally and for their families.

The Advisory Committee on Student Financial Assistance was established in 1986 through the Higher Education Amendments to provide information and guidance to Congress and the Secretary of Education on student financial aid policy. In 2001, the Advisory Committee on Student Financial Assistance was commissioned to study how financial barriers impacted students going on to a postsecondary institution (Educational Opportunity, 2001). The report focused on the reasons why low-income students continued to lag behind moderate- and high-income students enrolling in a postsecondary institution. The report noted that the college

participation rate of students from low socioeconomic families continued to show a discrepancy of 32% points behind middle and high socioeconomic families for the last 30 years.

According to the report, it was imperative for state and federal governments to significantly increase the investments in higher education in order to meet the demands of a highly skilled global workforce. On March 7, 2014, President Obama spoke to high school students in Florida to announce the Free Application for Federal Student Aid (FAFSA) Completion Initiative which was designed to encourage students to complete the FAFSA process. The initiative included resources to assist states in educating and supporting students who were not aware of FAFSA, or did not know how to complete the FAFSA form. The President shared the statistic that low- and middle-income students were 25% to 30% more likely to enroll in a postsecondary institution if they had completed the FAFSA form. On average, 57% of high school seniors completed the FAFSA process. President Obama stated,

Nationwide, over 1 million high school students do not fill out the FAFSA. My challenge to every high school student in America: fill out the form. Even if you think you might not qualify for financial aid, fill out the form...We're making it easier than ever...and it could change the rest of your life. (Khadaroo, 2014, para. 4)

**Barriers.** The Advisory Committee on Student Financial Assistance (2001) reported three barriers as reasons why low-income students did not enroll in a college institution. The first barrier was the increased cost of higher education. Due to increased costs of higher education, the research indicated students were discouraged from enrolling in a postsecondary institution (Abou-Nassif, 2011; Bedsworth et al., 2006; Coca et al., 2011; Gibbons, 2005; Duffett et al., 2005; Grodsky & Riegle-Crumb, 2010). A study conducted by Gasbarra et al. (2007) researched

the perception of the American public's view of higher education. Participants in the study were a national random sample of 1000 young adults along with 200 African American and Hispanic parents of high school students. The study also included 25 expert interviews and seven focus groups from Atlanta, Georgia; Denver, Colorado; Detroit, Michigan; Chicago, Illinois; and San Jose, California. Gasbarra and colleagues found the cost of education had dramatically increased and people were concerned students would incur a great deal of debt to pay for college. Parents worried about how they would assist their student in paying for college due to their own limited income. Coca, Nagaoka, and Roderick (2009) studied students and families from the Chicago Public School District regarding the barriers to college. Through the collected data, the researchers found the rising cost of college was a deterrent to many students and families.

In 2012, the Idaho Legislature commissioned a study to be conducted by the State Office of Performance Evaluations to identify the barriers which prevented some high school students from pursuing a postsecondary education. The study included focus groups, surveys, and interviews with 710 middle and high school students along with parents and counselors. One of its main findings over a ten-year span was that the median Idaho family income had increased less than 10%, while the cost of tuition in Idaho had increased by more than 50%, therefore making a postsecondary education less affordable, especially for lower- and moderate-income families (Idaho Legislature, 2012).

*The National Report Card on Higher Education Measuring Up* (2008) reported that families from low-, moderate- and upper-income paid a portion of their salaries to assist their student to attend college. Low-income families paid 40% of their family income while moderate-income families paid 25% and upper-income families paid 13% of their income for their student to attend college (National Center for Public Policy and Higher Education, 2008). It was

important to recognize how low- and moderate-income families were affected by the increased cost of attending higher education, which perpetuated the public perception that attending college might not be worth its cost (Gasbarra et al., 2007; National Center for Public Policy and Higher Education, 2008).

The second barrier found by the Advisory Committee on Student Financial Assistance (2001) was that policy priorities had shifted away from access to higher education impacting all income levels. Research supported the findings that the financial barrier to gaining a college education had increased significantly due to the shifts in policies and priorities at the national, state, and institutional levels (Advisory Report, 2002; Coca et al., 2009; Educational Opportunity, 2001). Lack of adequate state-funded financial aid, federal financial aid, scholarships, and student loans along with increased tuition costs placed an increased financial burden on the student and family (Idaho Legislature, 2012). Another finding from the study conducted by the Idaho State Office of Performance Evaluation (2012) confirmed that when there was a change in the economy at the state and/or national level, it had far reaching implications for postsecondary institutions (Idaho Legislature, 2012; Perna, 2006; Perna, 2010). During times of economic recession, the trend was to decrease spending and resources to higher education institutions, which then resulted in increased cost to students (Perna, 2010). As a result of this action, there has been a shortage of student aid, especially Pell Grant aid, and a rise in college tuition costs (Advisory Report, 2002). This has caused an increase in unmet need for low- and moderate-income students, defined as the remaining educational costs after all aid, including loans, was awarded (Educational Opportunity, 2001).

The national unmet need for low- and moderate-income students was approximately \$3,800 annually for two- and four-year state schools (Advisory Report, 2002). The Pell Grant

was the single largest source of grant funds which made it possible for low- and moderate-income students to attend college. The total dollar amount awarded through the Pell Grant was reduced by the increased need of the number of academically prepared low- and moderate-income students, federal and state policy, and the increased cost of college tuition.

The third barrier which the Advisory Committee on Student Financial Assistance (2001) found was the increased number of hours worked and loan burdens were obstacles for low- and moderate-income students (Advisory Report, 2002; Educational Opportunity, 2001). Students who worked 27 or more hours a week were unable to attend school full-time and still be successful in their studies (National Center for Education Statistics, 2013). Loans were another source of help to supplement the cost of attending college. It was daunting for students and their families to take on excessive debt because often low- and moderate-income students and families struggled to make the necessary payments (Advisory Report, 2002; Gasbarra et al., 2007). The research noted that the large remaining expenses after grant aid, which produced excessive work and loan burdens, deterred academically prepared, low- and moderate-income students from enrolling in college and obtaining a degree (Advisory Report, 2002; Educational Opportunity, 2001).

Perna (2010) conducted a longitudinal study with more than 800 high school students over six years to understand the impact financial aid had on students pursuing a postsecondary education. Perna found that low- and moderate-income students needed access to more financial aid because existing levels had not kept up with the increasing costs of college. Financial aid increased through the amount of loans, but the need-based aid has not kept up with inflation and demand (Bedsworth et al., 2006; Coca, Nagaoka, & Roderick, 2009; Duffett et al., 2005; Perna,

2010). It was noted that current financial aid packages were not sufficient to make college affordable for low- and moderate- income students.

As a result of the lack of funding in financial support nationally for low- and moderate-income students, the Advisory Report (2002) found over 400,000 academically prepared students were unable to enroll in a four-year college. Based on this staggering loss of postsecondary education for students, the Advisory Report (2002) projected over the next decade 4.4 million academically prepared students will be unable to attend a four-year college due to financial barriers. In 2011, the immediate college enrollment rate of high school completers from low-income families was 52%, 66% for middle-income families, and 82% from high-income families. The immediate college enrollment rate from low- and middle-income families continued to be lower than those from high-income families (National Center for Education Statistics, 2012a).

### **Social Capital Influences for Postsecondary Education**

Several research studies supported the effect social capital influences had on student college decision-making choices (Abou-Nassif, 2011; Bozick & Deluca, 2010; Cabrera & La Nasa, 2000; Choy, 2002; Chen et al., 2000; Duffett et al., 2005; Grodsky & Riegle-Crumb, 2010; Elder, Erickson, & McDonald, 2009; Foote, 2011; Kim & Schneider, 2005; Perna, 2006; Tierney & Venegas, 2006). Social capital was defined by the student-parent relationship which influences a student's intellectual development and the student-parent-community relationship that facilitates the social community connections which are developed over time to assist the student with completing high school and going on to a postsecondary institution (Coleman, 1988; Perna, 2006). Coleman's (1988) research on social capital is often used in educational research because he identified social capital through the parent-student relationship and the parent-student-

community relationship. Perna and Titus (2005) expanded Coleman's (1988) work regarding parent-student relationships and its effect on student college decision-making choices. Two types of parental relationships were identified by Perna and Titus (2005) in their study of the influences of social capital through the conceptual model of college enrollment. The first relationship was between a student and his or her parents and the second relationship was collectively between the student, parents, and other adults (Coleman, 1988; Perna & Titus, 2005). These other adults had some type of connection to the student's education through the community.

Parent-student involvement was explained as parent-student discussions about education-related issues, such as classes, school activities, grades, SAT or ACT preparation, college applications, and potential careers. Educational expectations were established in the home such as homework completion, good attendance, a minimum grade point average, and fostered a culture of educational importance for the student (Chen et al., 2000; Kim & Schneider, 2005; Perna & Titus, 2005). Researchers noted that parents who made a number of college visits with their student had more influence on their student's decision to enroll in a postsecondary institution (Chen et al., 2000; Kim & Schneider, 2005). Students whose parents actively participated in school programs about postsecondary opportunities and financial aid information presentations were twice as likely to enroll in college (Chen et al., 2000; Kim & Schneider, 2005; Perna & Titus, 2005). It was found that parents who had completed college set high educational expectations to attend college as early as eighth grade or younger for their student (Choy, 2002).

Research confirmed that the more education the parent had, the greater chance there was of their child enrolling in a four-year college (Choy, 2002; Coleman, 1988; Grodsky & Riegle-

Crumb, 2010; Kim & Schneider, 2005; Reisel, 2011). Students whose parents completed at least a bachelor's degree were 20% more likely to have a college-going habitus in their home than students whose parents did not attend college (Grotsky & Riegle-Crumb, 2010; Reisel, 2011). It was noted that students who had friends whose parents were highly involved in their education were able to connect to those parents to assist them in developing the social capital needed to enroll in a postsecondary institution (Perna & Titus, 2005). Coleman (1988) explained the results of this educational influence between parents and students as a form of human capital. Human capital through the social capital lens was categorized by parent's educational attainment and the environment which fostered greater learning opportunities throughout the development of the student's life (Coleman, 1988).

Student-parent-community relationships were described as the parental and community adults who were able to provide guidance and support to assist students in the college decision-making process (Coleman, 1988; Bailey et al., 2009; Elder et al., 2009; Kim & Schneider, 2005; National Center for Education Statistics, 2001; Perna & Titus, 2005; Public Agenda, 2012). High school students benefited from having multiple adults who completed an associate's or bachelor's degree because they had the ability to navigate through the college going process. Research reinforced how critical it was for disadvantaged students to have access to adult mentors to influence and assist them in the college decision-making process (Elder et al., 2009; Kim & Schneider, 2005). A mentor was defined by Elder, Erickson, and McDonald (2009) as a non-parental adult who was several years older than the student, such as relative, older sibling, friend, teacher, coach, clergy, employer, or coworker. Mentors often took special interest in a student by offering advice and supporting the student through navigating the social environment needed to complete the college-going process successfully (Elder et al., 2009). Adult mentors

who were able to impact high school students were considered to be those individuals who were currently pursuing or had completed a postsecondary education. They were able to assist the student by providing effective advice about the importance of going on to college or a professional technical training program (Elder et al., 2009; Perna & Titus, 2005; Rowan-Kenyon, 2007).

Elder, Erickson, and McDonald (2009) studied the influence of the student-mentor relationship and educational success through a longitudinal study. The authors of the study interviewed and surveyed school administrators, parents, and students from 80 high schools in this mixed study. Students exposed to mentoring by an adult were associated with greater educational success in terms of educational performance and overall educational attainment. Students who had teachers as mentors tended to have greater educational success than those students who had mentors in the community. Students who had access to more social resources also had greater access to mentors than those who were considered disadvantaged students. It was recognized that disadvantaged students greatly benefited from having teachers as mentors due to the teachers' knowledge and skills to guide the student through the college-going process since many of these students lack the parent-student involvement in their education (Choy, 2002; Elder et al., 2009; Perna & Titus, 2005; Rowan-Kenyon, 2007). Success in the educational process was due to many factors, chief among them the mentoring and encouragement by caring adults in the students' lives.

Peer influence was another facet of social capital in the college decision-making process (Abou-Nassif, 2011; Bailey et al., 2009; Bedsworth et al., 2006; Bozick & Deluca, 2010; National Center for Education Statistics, 2001; Sokatch, 2006; Tierney & Venegas, 2006). Tierney and Venegas (2006) studied the effects of peer influence through the use of peer

counseling in high schools. A fictive kin model was used with peers who played a social support role to help create a culture of success in regards to college information. The role of peer counselors was to disseminate information about college and financial aid information to other students. The study found that schools that used peer counselors developed fictive kin groups that were able to think about college and college eligibility in ways that other students may not have considered. Peer counselors were chosen at the end of the students' junior year in high school and were academically eligible to attend college but were not necessarily the best students. These students attended training to provide them with the necessary knowledge and skills to become peer counselors. Peer counselor students had the knowledge of the college application process and the timeline for completing the ACT/SAT, financial aid forms, and scholarships. Peer counselors were a resource to schools which had both limited career counselors and students who had limited social capital (Sokatch, 2006; Tierney & Venegas, 2006).

Tierney and Venegas (2006) studied students' responses as to why they wanted to serve in the role of a peer counselor, their relationships among peer counselors, their relationships with friends and other students, and their relationships with adults. Many of these students saw this as an opportunity to gain information to help them meet their own college goals, but also as a way to assist others. Students who participated in the peer counselor program were not considered a clique, but were acquaintances who focused on the college-going process. These students often assisted other students with questions throughout the day in their classes and in the hallways in addition to structured allotted time. Through the process of participating as a peer counselors, student mentors developed a strong adult-level connections with the school counselor under whom they worked. The connections provided support to the students and strengthened their

social capital connections with adults. Tierney and Venegas' fictive kin study indicated that students who were able to develop social capital influences for postsecondary education had the ability to navigate through the decision-making process to enroll in a postsecondary institution (Choy, 2002; Kim & Schneider, 2005; Elder et al., 2009; Sokatch, 2006).

### **Perna's Theoretical Framework**

Throughout the years, researchers have used multiple theoretical and methodological approaches to study student college access and choice (Perna, 2006). Perna built on previous research conducted by Hossler, Braxton, and Coopersmith (1989), McDonough (1997), and Paulsen (1990). The collective research focused on student college choice through an economic model of human capital investment and sociological model of status attainment through qualitative and quantitative methodological approaches. Perna proposed a conceptual model of student college choice as illustrated in Figure 3. This model incorporated both the economic and sociological approaches for student access and choice. The premise of the proposed conceptual model of student college choice was an individual's evaluation of the costs and benefits to attending college which were influenced by the individual's habitus, the school and community context, the higher education context, and the social, economic, and policy context.

Figure 3

*Proposed Conceptual Model of Student College Choice*

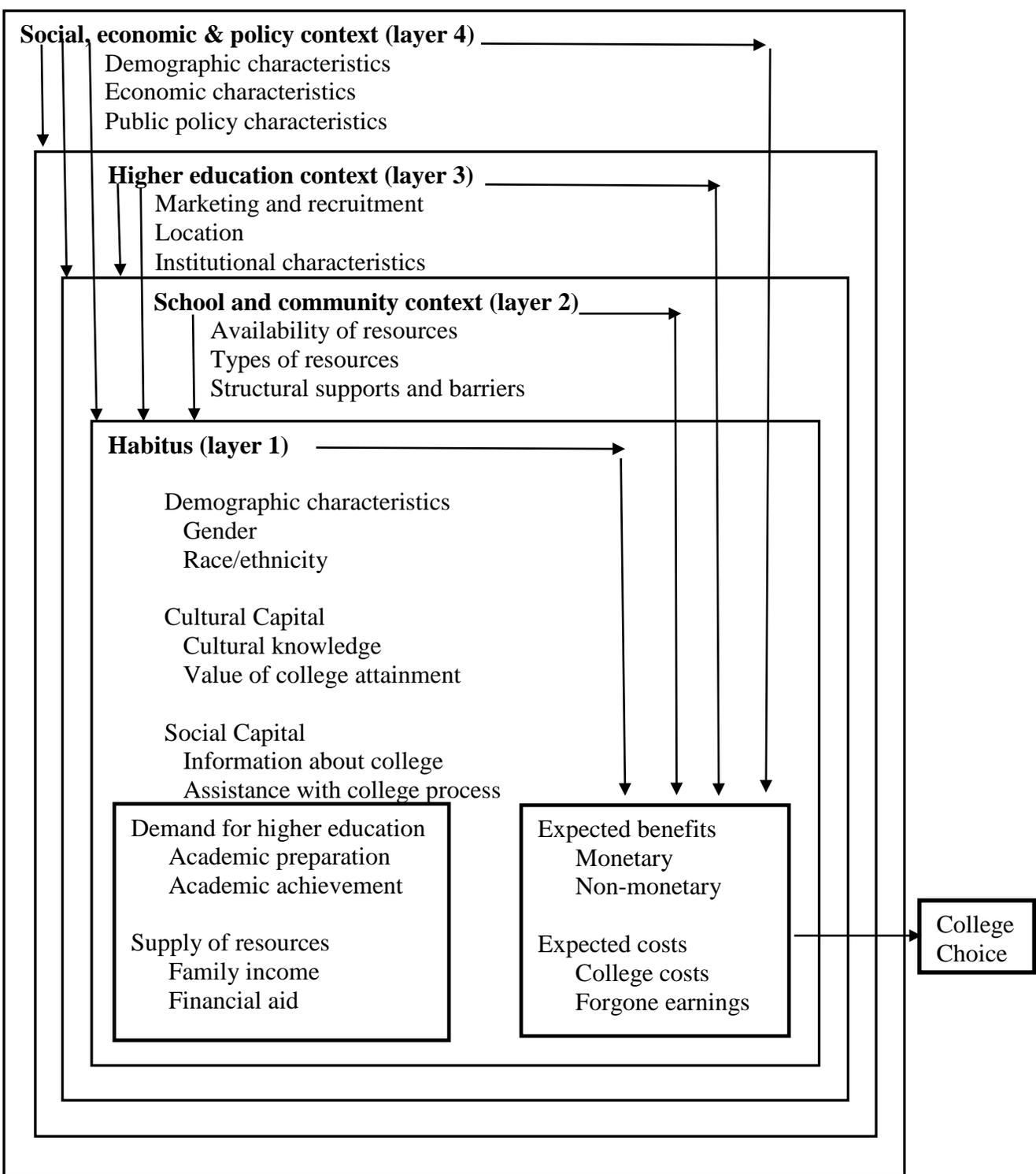


Figure 3. Adapted from “Studying College Access and Choice: A Proposed Conceptual Model,” by L. W. Perna, 2006, *Higher Education: Handbook of Theory and Research*, XXI, p. 99-157. Copyrighted 2006 by Copyright Clearing Center.

At the core of the proposed conceptual model of students' college choice was the human capital investment model which demonstrated that college-choice decisions were being based on the comparison of the expected benefits and costs (Perna, 2006). Perna explained expected benefits as both monetary and non-monetary. Expected costs were described as the costs of attendance and forgone earnings. Expected benefits and costs were shaped by an individual's academic preparation and availability of resources. Through the proposed conceptual model of student college choice, Perna strategically placed the human capital investment model within the individual's habitus, the school and community context, the higher education context, and the social, economic, and policy context which were the four contextual layers. The relationship of the four contextual layers in Perna's conceptual model of student college choice demonstrated the variability of expected costs and benefits for student resources, which influenced the individual's postsecondary choice.

**First contextual layer.** The first contextual layer in the proposed conceptual model of student college choice was the individual's habitus. This layer identified a student's demographic characteristics such as gender, race, ethnicity, and socioeconomic status. It recognized the influences cultural capital and social capital had on an individual's habitus. Cultural capital was the environment in which students learned at an early age that college was important and a viable option in their lives. Social capital is the environment in which students have access to support from caring adults such as teachers, counselors, and mentors, who together act as a support group to assist students with the college application process (Perna, 2006).

**Second contextual layer.** The second contextual layer was the school and community context. It identified the influences of social structures and resources which impact student college choice positively or negatively. Students who had a strong school and community

context benefited from accessing adult supports. Teachers and counselors provided assistance with information to students about the college application process. They also provided guidance for academic preparedness and emphasized the importance of seeking a postsecondary degree. Lower income students tended to struggle accessing the resources in the school and community context. Perna (2006) recognized that teachers and counselors, who function as gatekeepers to the college application process, might actually hinder student college choices, if trusting mentor relationships were not developed.

**Third contextual layer.** The third contextual layer was the higher education context and its influence in affecting student college choice (Perna, 2006). Higher education institutions had the ability to provide college enrollment information to students and parents through various venues which affected student college choice. These institutions had the capability to recruit students through strategic marketing plans which targeted students who had specific traits. As higher education institutions implemented marketing strategies to recruit students, the proximity, the attributes, and the characteristics of the institution influenced student college choice. Students tended to make decisions about where to attend college based on the course offering schedule, instructional methods, cost, safety, and the availability of programs and majors (Brown & Hoyt, 2003; Perna, 2006).

**Fourth contextual layer.** The last contextual layer was the social, economic, and policy context in the proposed conceptual model of student college choice. The social, economic, and policy context could influence student college choices either directly or indirectly through the other three contextual layers in the model (Perna, 2006). Social changes such as demographic fluctuations had the ability to affect student college choice through the supply and demand in the availability of enrollment slots. Economic conditions such as a recession or a decrease in

financial support for higher education influenced student college choices due to the commensurate increase costs of attending college. When unemployment rates were high, a greater number of individuals tended to return to postsecondary institutions to gain more knowledge and skills in hopes of improving their opportunities for employment. The result was an increase in the number of individuals who enrolled in postsecondary institutions. Public policy also influenced student college choice. Policymakers made financial decisions about funding for higher educational institutions which affected their operating expenses, the result of which was that tuition for students often increased.

Perna (2006) summarized the proposed conceptual model of student college choice by emphasizing the importance of the human capital investment model based on the expected benefits and costs for college-choice decisions. She recognized that an individual's assessment of the expected costs and benefits were not shaped solely by the demand for higher education and the availability of financial resources, but by an individual's habitus; the school and community context; the higher education context; and the social, economic, and policy context. Her proposed conceptual model of a student's college choice provided a comprehensive understanding of student college choice through multiple contextual layers.

Perna's (2006) proposed conceptual model of student college choice influenced the study due to its core focus of an individual's habitus influences. Each of Perna's contextual layers within the proposed conceptual model either directly or indirectly affected individuals who were pursuing a postsecondary education. Perna referred to college as a two- or-four-year institution. For this study, the researcher included students who enrolled in a professional technical certificated program or an apprenticeship along with those enrolling in two- or four-year

colleges. The researcher believed Perna's proposed conceptual model of students' college choice could be applied to this expanded set of postsecondary choices.

Through the literature review, the researcher generated the following general questions to reflect the influences of high school students' decision-making processes:

- Why is there a need for students to be career and college ready by the time they graduate?
- Are students aware of what they need to do in order to have access to college and future careers?
- What does it mean to be academically ready to attend college or enter the workforce?
- What is the cost to obtain a higher level of education beyond high school?
- What is the amount of social capital a student is able to access to help obtain a higher education?

These questions guided the development of the five categories which are reflected in the literature review and the online survey. The study used an online survey to seek additional information about the influences of student postsecondary choice. The categories developed were

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education.

Each of these categories reflected parts of the proposed conceptual model of student college choice by Perna.

## **Conclusion**

The need for students to be ready to pursue postsecondary education upon graduation from high school is paramount to the nation's and Idaho's economic stability and future growth. In order to meet the growing demands in the workforce, students who reside in Idaho need to understand the postsecondary decision-making process which will affect their futures. In 2014, the Idaho State Department of Education and the Idaho State Legislature continued to emphasize the importance of creating a postsecondary and career readiness culture through K-12 which they hope will increase the number of student who pursue postsecondary education (Idaho State Department of Education, 2014a).

Over the years, researchers studied various influences on students' postsecondary and career decision-making processes. Through Perna's (2006) proposed conceptual model of student college choice, a framework was established to examine the individual's selection process through multiple contextual layers as a result of the complexity of the postsecondary decision-making process. Through the literature review, factors which played a role in a student's postsecondary decision-making process were supported through the four contextual layers in Perna's (2006) proposed conceptual model of student college choice.

## Chapter III

### Design and Methodology

#### Introduction

After reviewing the literature, the researcher generated five categories which summarized the influences that impact high school students' postsecondary decision-making. The five categories are as follows:

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education.

The researcher developed four primary questions and multiple subquestions to focus on during the dissertation study:

1. Which influences have the most impact on Idaho students' decision-making for pursuing a postsecondary education?
  - How well prepared did the participants believe they were in the components of postsecondary and career awareness?
  - How well prepared did the participants believe they were in the components of postsecondary admission process?
  - How well prepared did the participants believe they were in the components of academic readiness for postsecondary education and careers?
  - How well prepared did the participants believe they were in the components of postsecondary monetary cost?

- How well prepared did the participants believe they were in the components of social capital influences for postsecondary education?
2. What is the relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education?
  3. What is the relationship between Idaho students' plans for postsecondary education and access to high school counseling services?
  4. What is the relationship between parental educational level and Idaho student plans for postsecondary education?

Chapter III includes a discussion of the research methods used to answer the questions that guided the study. The primary method of gathering data was an online survey to determine the influences of students' postsecondary decision-making for high school seniors who had returned parent/guardian consent forms. Chapter III also includes a description of the research design, the role of the researcher, the instrument, the participants, the data collection, the statistical methods required to analyze the data, and the limitations and delimitations of the study.

### **Research Design**

The theoretical framework for the study was the work of Perna (2006) who stated the core of the proposed conceptual model of students' college choice is the human capital investment model. The model demonstrated that college-choice decisions were based on a comparison of the expected benefits and costs. The researcher established that Perna's proposed conceptual model of students' college choice would extend to postsecondary choices such as professional technical certificates, and two-or four-year institutions. Quantitative research methods were selected to provide an in-depth study exploring factors that influenced the decisions of high school students who may or may not have been pursuing a postsecondary

education. The study was conducted at two high schools in a Idaho school district. The school district and the two high schools where the data was collected were given pseudonyms to protect their identities.

The selection process for the population to be sampled was a convenience sample with stratification characteristics (Creswell, 2014; Slavin, 2007). Using the strategy of stratification for a specific population, Creswell (2014) explained that the population being studied has specific characteristics which the researcher requires the sample population to mirror. The stratification characteristic selected for use in the study was the socioeconomic status of high school seniors. High School A and High School B were selected to participate in the study due to the socioeconomic population representation.

Approximately 800 students had the opportunity to participate. The researcher sought to reach at least a 30% participation rate in order to have an adequate sample size of the population. Seniors from the two high schools responded to statements about influences on their postsecondary decision-making process. Students were provided a link to the online survey after they returned the parental/guardian consent form.

Quantitative research through the use of surveys provided the researcher with information about behaviors, attitudes, trends, or opinions for the population being examined (Creswell, 2014). A cross-sectional survey design was used for the study since the collected data was intended to reflect high school students' perception of their postsecondary decision-making at the time the survey was administered. Creswell (2002) explained that a cross-sectional survey design is used when the researcher collects data to reflect the population's beliefs, attitudes, or opinions for the present. As a result of the information gathered from the study, data for the descriptive quantitative study were collected from a cross-sectional online survey (Appendix A). The survey

provided demographic information and data on student perception of their postsecondary decision-making during the fall semester of their senior year in high school.

### **Role of the Researcher**

The researcher has worked in the education field for 15 years. Of those years in education, the researcher worked with high school students for 13 years as a business education teacher, an assistant principal, and principal. During the time the researcher worked as an assistant principal with high school students, it became evident that it was vital not only to assist the students to graduate from high school, but it was equally important for them to have a plan to go on to a postsecondary institution.

The researcher served as an elementary principal for two years, during which time, the researcher gained considerable insights into the significance of students gaining an understanding of the importance of planning for postsecondary education at an early age. In order for students to develop a desire to go on to a postsecondary institution, they must explore areas of interest which influence career exploration. The researcher came to believe that at each level of education for students, “the elementary, middle, and high school” was a viable venue for career exploration which provided a connection to the purpose of pursuing a postsecondary education or training program. Assisting educational staff and parents in expanding their understanding of the student postsecondary decision-making became an important topic of discussion for the researcher.

The study took place in the district where the researcher is currently employed. The survey was intentionally conducted at two high schools where the researcher had not been employed. The researcher was familiar with the logistics of how the administration at the two high schools worked and had a working relationship with the administrators. The two high

schools were selected because of socioeconomic diversity and because students were unfamiliar with the researcher.

### **Instrument**

The researcher conducted an extensive review of the literature looking for an instrument that would measure the influences in a high school student's postsecondary decision-making, but no published instrument met the researcher's needs for the study. As a result, the researcher designed an instrument to reflect the five categories from the literature review. Each of the five categories had multiple statements for which students were to provide a response. In addition to the five categories, the last section of the survey was compiled of demographic items for student response.

After reviewing multiple instrument formats, the researcher elected to use the 5-point Likert scale for an online survey for the items in the five categories. The Likert scale was selected because it is simple to construct, it is likely to produce a highly reliable scale, and it is easy for participants to read and complete (Bertram, 2011). Some of the weakness the researcher considered while reviewing the Likert scale format was it may demonstrate central tendency bias, which means students may avoid the "Strongly Disagree or Strongly Agree" responses. Another area of weakness was identified as acquiescence bias. The acquiescence bias occurs when a participant wants to please the researcher, and does this by answering "Agree" to the statements in the survey.

The Likert scale was developed in 1932 by Dr. Rensis Likert, a sociologist from the University of Michigan (Bertram, 2011). The purpose of the tool was to measure psychological attitudes and opinions in a scientific way through the use of attitude measures which could reasonably be interpreted as measurements on a metric scale. The most commonly used Likert

scale is the 5-point scale which ranges from “Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree,” which allows for varying degrees of opinions (Bertram, 2011; Boone & Boone, 2012; McLeod, 2008). The Likert scale has been used to conduct research throughout the years since its development to measure attitudes and opinions by asking participants to respond to a series of statements about a specific topic (McLeod, 2008). One advantage of using the Likert scale was participants were not able to simply answer yes or no to the statements.

Statements for the Likert scale can be analyzed individually or be combined to obtain a score for all the statements in the topic area. Student responses from the survey are ordinal data. Ordinal data implies the response levels have a relative position, but the researcher cannot assume the participants understand the differences among each of the levels to be equal. In order to have ordinal data all the items must use the same Likert scale (Bertram, 2011). Methods used to analyze ordinal data were conducted in the software Statistical Package for the Social Sciences (SPSS) through central tendency summarized by mean, median, and mode and non-parametric tests. At the time the research was conducted, SPSS was the most common program used to analyze data in social science research (Slavin, 2007; Tanner, 2012).

The instrument designed was an online survey with 51 statements using the 5-point Likert scale to address the postsecondary decision-making. The 5-point Likert scale was based on responses correlated with a numeric value such as the following:

- Strongly Agree - 5
- Agree - 4
- Neither - 3
- Disagree - 2
- Strongly Disagree - 1

The survey had five categories which were developed from the literature review in addition to demographic data. The five categories were the following:

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education.

Each category had multiple items with the 5-point Likert scale response. The demographic data collected used categorical choices for student response. Though not timed, the survey was designed to be completed in less than 20 minutes.

The researcher validated the survey instrument through a panel of content experts. There were ten content experts that included administrators, guidance counselors, and career counselors, who were contacted through personal conversation and email in the Valley School District (Appendix B). The content experts were selected based on their knowledge and experience in assisting high school students with their decision to pursue a postsecondary education. One part of the validation process was to identify whether the survey items measure what they were meant to measure. This process was known as face validity (Lodico, Spaulding, & Voegtle, 2006; Slavin, 2007). The researcher informed the content experts of the purpose of the study, which was to better understand the postsecondary decision-making for high school students and to increase the number of students enrolling in a postsecondary institution. In order to better understand the students' postsecondary decision-making, it was important for the researcher to be able to identify the influences which impact that process. The panel of content

experts participated in the process known as content validity. Each item in the survey was rated on a 4-point scale by the content experts. The 4-point scale which was used was

- 1 – Not relevant
- 2 – Somewhat relevant
- 3 – Quite relevant
- 4 – Highly relevant (Lynn, 1986).

The researcher provided the content experts an Excel workbook with a worksheet which represented each of the five categories and demographic items. At the beginning of each section, the experts had common definitions for the categories to ensure the items had face validity. Each content expert provided a score for each item and then returned the workbook electronically to the researcher. The researcher compiled the scores for each item from the 10 content experts and then completed an Item Content Validity Index (I-CVI) for each item in the survey. In order for the items in the survey to be valid, the total combined score from all the content experts needed to be .80 or higher (Lynn, 1986).

The items in the Postsecondary and Career Awareness and Postsecondary Admission Process categories each had two items which scored below .80; the researcher did not use those items in the pilot survey. The items in the Academic Readiness and Postsecondary Cost categories all scored a .80 or higher from the content experts. The Social Capital category had four items scored by the content experts that were .70 or below and were excluded from the survey. The Demographic category items all scored .80 or higher. The I-CVI item mean was .95 and the mean for the proportion relevance by the content expert proportion was .92. The researcher completed the Scale Content Validity Index (S-CVI). The resulting score was .887.

The results of the I-CVI and S-CVI survey met the criteria of the instrument being .80 or higher, therefore, it is a valid survey (Lynn, 1986).

A pilot study was conducted to assist in establishing reliability through the Valley School District summer school program on July 23, 2014. The pilot study allowed the researcher the ability to facilitate a preliminary analysis to check for feasibility and to improve the survey instrument (Fowler, 2014; Saint Paul Public Schools, 2009). Students under the age of 18 obtained a parental/guardian consent form to participate in the pilot of the online survey. There were 42 students who participated in the online survey for the pilot study. Students took the survey in a computer lab during their senior English course at summer school. Students were asked what their home high school was to ensure these students did would not participate in the 2014 fall study. The demographic data collected from the pilot survey provided a good representation of the population of students that was to be studied. Students from different race/ethnicity, socioeconomic status, and special populations were represented in the pilot study.

The researcher provided a survey feedback form (Appendix C) for each student to provide comments about the items from the online survey. The researcher asked the students to write down the time they started and ended the survey. The survey took less than 20 minutes for each student to complete. As students participated in the pilot, they were asked the following questions:

- Do you believe the survey is anonymous?
- Do you understand that by participating in the survey you are providing your own consent?
- Did you need further explanation after reading the directions for the survey?
- What terminology/vocabulary, if any, were you unsure of the meaning?

- What statements, if any, were unclear to you?
- What statements, if any, did you think you did not have enough information for a response?
- What statements, if any, did you not want to answer?
- What demographic items, if any, were uncomfortable to answer?
- For which, if any, of the demographic items, did you not have enough information to answer?
- Any other input which would be helpful for the researcher to be aware of.

After the pilot was completed, the survey feedback forms were collected by the researcher. The researcher reviewed the comments from the students. All 42 students responded “Yes” they understood they provided individual consent by reading the directions of the survey and believed the survey was anonymous. Students indicated they understood that if they choose to discontinue the survey they could do so at any time with no consequence, though each student who participated in the pilot chose to complete the online survey.

The researcher reviewed the feedback comments from the 42 students and made modifications to the survey items. Based on student response the researcher included a definition in the statement dealing with social capital. The researcher corrected a typographical error. The researcher felt the data about household income and GPA were important to collect even though a few students were uncomfortable responding or did not have the information. Students had the opportunity to skip the item. Following the revisions from the content experts review and the pilot, the instrument was administered in fall 2014.

When a survey is only administered one time, which it was for this study, the Cronbach’s Alpha statistical test is an appropriate test to measure internal consistency reliability (Lodico et

al., 2006; Tanner, 2012). Cronbach's Alpha statistical test was conducted after students completed the survey to measure the internal consistency of the survey items administered to high school seniors. This statistical test was administered after the data for the survey was collected during the fall semester of 2014. It measured each of the responses to the survey items related to the other survey items and to the whole survey (Florida Center for Instructional Technology, 2012; Tanner, 2012). The range for reliability coefficients could potentially be 0 to 1.0. If a coefficient was zero, it implied no reliability and if a coefficient equals 1, it implied a perfect reliability. In social science research, all tests are prone to some type of error and therefore reliability coefficients never reach the perfect reliability of 1.0. The literature suggested if the reliability of an instrument measured by the Cronbach's Alpha was above .80, it had good reliability (Florida Center for Instructional Technology, 2012; Dennick & Tavakol, 2011; Garson, 2012). The literature also indicates that an item with an alpha value between 0.7 and 0.8 is acceptable for interrelated reliability and internal consistency (Dennick & Tavakol, 2011; Garson, 2012). An inadequate reliability score was any score below .50 (Florida Center for Instructional Technology, 2012; Dennick & Tavakol, 2011; Garson, 2012).

The results for Cronbach's Alpha internal consistency and reliability values are illustrated in Table 1. The values show that the survey has reliability at all levels and constructs since each value was greater than 0.70. These values combined for a total Cronbach's Alpha score of 0.901. In the five categories of the *Postsecondary Decision-Making Survey* each alpha score was  $\geq$  0.771, which was an acceptable level of internal consistency and reliability. The instrument as a whole achieved an excellent level reliability.

Table 1

*Cronbach's Alpha Coefficients for Postsecondary Decision-Making Survey*

Postsecondary Category	Number of Items (N)	Cronbach's Alpha Coefficient ( $\alpha$ )
Total	48	0.901
Postsecondary and Career Awareness	8	0.792
Postsecondary and Career Admissions Process	6	0.805
Academic Readiness for Postsecondary Education and Careers	8	0.771
Postsecondary Monetary Cost	14	0.801
Social Capital Influence for Postsecondary Education	12	0.785

**Participants**

The participants in the study were high school seniors in the fall of 2014. Two high schools were selected from the Valley School District which is located in southwest Idaho. High School A was selected due to its having a higher percentage of lower-socioeconomic students. High School B was selected due to having a higher percentage of middle- and higher-socioeconomic students. Approximately 800 students had the opportunity to participate. The researcher sought to reach at least a 30% participation rate in order to have an adequate sample size.

High Schools A and B are located in a city which was considered to be mostly suburban with some rural area. The city had an estimated population of 80,386 (U.S. Census Bureau, 2012). The estimated median household income for 2012 was \$64,107 and the percentage of persons living below the poverty level was 7.3% (U.S. Census Bureau, 2012). According to the Valley School District website (2014), the district operates 31 elementary schools, nine middle schools and ten high schools for a total of 36,700 students. High School A reported that 39% of

the students were identified as students who were socioeconomic disadvantaged, while High School B reported that 17% of their students were identified as economically disadvantaged. The district as a whole reported that 30% of its students were socioeconomically disadvantaged. High School A had the largest population of economically disadvantage students with the exception of the alternative schools. High School A had a student population of approximately 1500 and a counselor to student ratio of 1:375 and High School B's student population was approximately 2200 with a counselor to student ratio of 1:440.

The Idaho State Department of Education (2014b) developed a K-12 longitudinal data system known as the Idaho System for Educational Excellence (ISEE). ISEE had specific demographic parameters. The Valley School District used the ISEE demographic parameters to collect its information about students. The researcher chose to use the ISEE demographic parameters to collect student race/ethnicity data for the study from High Schools A and B. The demographics reflect the sample of participants for the Valley School District seniors' fall 2014 representation of ethnicity/race:

- American Indian or Alaskan Native = 1.8%
- Asian = 1.6%
- Black/African American = 2.5%
- Native Hawaiian or Other Pacific Islander = .9%
- White = 77.6%
- Hispanic or Latino Ethnicity = 7.9%
- Two or More Races = 3.9%
- Unclassified = 3.8%

Other types of demographic data collected from the sample were parental educational levels, students with disabilities, English learners, and annual household income, which illustrated students' socioeconomic status. Another important piece of information was to find out if students who were pursuing a postsecondary education were first generation students, which was defined as the first individual within a family to attend a postsecondary institution beyond high school (College Board, 2013b).

### **Data Collection**

Qualtrics (2014) was the data collection software used for this cross-sectional online survey due to its efficiency and flexibility in reaching a large group of participants in a short period of time (Fowler, 2014). The monetary cost for the online survey was minimal (Fowler, 2014; Wyse, 2012). The researcher had the ability to complete the data collection process in a timely manner. Students who participated in the study remained anonymous. The ability to offer anonymity to students through an online survey provided students the opportunity to be honest and candid with their responses (Wyse, 2012). Students had the ability to access the survey by the Internet through their home or school computer or even on their smart phone.

Consent from the Valley School District superintendent and the school board was given to the researcher to conduct a study (Appendix D). Principals from High School A and High School B also provided consent to conduct the study with their senior level students (Appendices E and F). A Human Resource Research Committee (HRRC) research proposal was submitted and approved by Northwest Nazarene University in June 2014. The approval provided the researcher the consent of the institution to proceed with the quantitative descriptive study using human participants (Appendix G).

Through the senior English class for each high school, students were provided information about the research study (Appendix H) and then given the parental/guardian consent forms (Appendix I). The consent form was returned to their senior English teacher from whom the researcher collected and maintained a master list of which students returned a consent form. Although a master list was maintained, there was no way to connect the student's identity to an individual student's response to survey items.

Once the signed consent forms were returned, a link to the online survey was provided to the students by their English teacher. When students accessed the link for the online survey, the survey started with an explanation of the study. The students then had the option to either continue to participate or exit the survey (Appendix J). Students were informed that they had the opportunity to discontinue the survey at any time without repercussion. Students received reminders to return the consent form and to participate in the online survey. Participants in the study were students whose parents completed the consent form and who then completed the survey.

### **Analytical Methods**

Data collected through the student online survey was considered to be descriptive. The purpose of descriptive research was to collect information about many individuals' opinions, beliefs, or perceptions about a specific topic (Lodico et al., 2006; Slavin, 2007). Descriptive research also tends to answer the "what is" in a study and describes events as they currently exist through relationships (Nebeker, 2014).

Using the Qualtrics application to collect the online survey data, the 5-point Likert scale was given a numeric value as follows:

- Strongly Agree – 5

- Agree – 4
- Neither – 3
- Disagree – 2
- Strongly Disagree – 1.

This allowed the data to be used in a numeric form for the IBM SPSS program. The SPSS application was used for this study to analyze the online survey data due to its common use in educational research. Although data was translated to numbers, it was treated as ordinal data.

Demographic data such as race/ethnicity, gender, household income, parent educational level, students with disabilities, and English learners were also collected from the participants.

The researcher analyzed data for each of the five following survey categories:

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education.

The researcher was looking for relationships between the data. Descriptive statistics were used to illustrate the influences on students' decisions about pursuing a postsecondary education. The researcher calculated the measures of mean and median for each of the five survey categories (The Association for Educational Communications and Technology (AECT), 2001; Allen & Seaman, 2007; Tanner, 2012).

Spearman's rho determined correlation coefficients for the following research questions:

2. What is the relationship between socioeconomic status, as measured by parental income, and students' plans for postsecondary education?

3. What is the relationship between students' plans for postsecondary education and access to high school counseling services?
4. What is the relationship between parental educational level and students plans for postsecondary education?

This non-parametric test assessed responses based on rankings for one variable to the other variable to determine if the results were statistically significant (Laerd Statistics, 2013; Harding University, 2014). The targeted level of significance was  $p \leq 0.05$ .

### **Limitations and Delimitations**

According to Marshall and Rossman (2011), no such thing as a perfect research design exists, and each research design has its limitations. As with all research designs, this study had limitations and delimitations. Delimitations were choices the researcher had to make. Influences which could not be controlled by the researcher were considered limitations (Baltimore County Public Schools, 2010; Marshall & Rossman, 2011). The study had delimitations and limitations which affected the data analysis or could create bias.

A significant limitation of the study was the challenge of obtaining parental/guardian consent for the student to participate in the online survey. High school students tended to not take papers home to be reviewed by parents/guardians unless the papers had significant meaning to the student. Also, the parents/guardians, might not have been available to sign the consent form in order to return it in the specified time.

It was important to convey to parents/guardians and students that their consent and participation in the research study mattered because it would better assist future high school students through the postsecondary decision-making process. Students had to be convinced that their responses mattered because the data collected would influence the results to better serve

future students through the postsecondary decision-making process. Fowler (2014) discussed the importance of the researcher's capacity to collect data from all the participants which had the ability to influence the degree bias in the data.

Another limitation to the study was the tendency of high school seniors not to take the survey seriously. Some students may have found it amusing to complete the survey by inaccurately responding, using the same answer such as "Strongly Disagree" throughout the entire survey. The researcher discarded surveys that appeared to have been completed in this manner. The researcher assumed that the majority of students answered the questions to the best of their ability. Students who randomly selected answers were the most difficult to identify. The researcher made significant efforts to convey to students the importance of accurately responding to the items to the best of their ability, although the researcher was not able to guarantee 100% accuracy in the responses.

A significant delimitation to the study was that it was administered in the fall of the year, which timing might have influenced the data students provided through the online survey. High school seniors would have just begun the school year and may or may not have been looking ahead to post graduation plans. For instance, students who responded to items in the fall, with "I plan to complete the FAFSA form" may have answered, "I have successfully completed the FAFSA form" in the spring. These changes would be due to the time of year the survey was administered. The survey items may have been answered differently as seniors gained a better understanding of tasks needing to be completed in order to pursue a postsecondary education. The timing of the survey could have significantly influenced the student response. Despite the delimitations, the data collected from the survey will be meaningful because it meets the required definition of a cross-sectional survey design according to Creswell (2002).

Another delimitation of the study was the researcher's decision to use a large, mostly suburban, school district in the State of Idaho instead of another district in the state or out-of-state districts. The researcher selected the two schools which provided a socioeconomic student representation of the high schools in the district.

The decision to limit the study to factors that the literature supports as influencing high school seniors' postsecondary decision-making was made by the researcher. The study does not address whether or not students who enrolled in a postsecondary institution were successful in completing their first year of postsecondary education. In addition, the study does not address if the students completed a certificated program, an apprenticeship, an associate's degree, or a bachelor's degree.

The data collected through the online survey includes students who may or may not have a postsecondary plan. The researcher acknowledges that the data may have been skewed by the fact many of the participants indicated they had no postsecondary education plan because of their intention to do voluntary service prior to continuing with their education. The area from which the sample was drawn included a large population of The Church of Jesus Christ of Latter-Day Saint (LDS) members which may have an impact on the data gathered. The LDS church encourages young people to complete a two-year mission soon after high school graduation. This may account for a greater number of participants planning to do voluntary service immediately after high school rather than developing postsecondary plans. It was difficult for the researcher to find data which captures this group of individuals.

A further delimitation was the researcher's decision to use Perna's (2006) proposed conceptual model of student college choice and expanded its application to include professional

technical certificated programs and apprenticeships in addition to two- and four-year degrees as part of the postsecondary decision-making process.

It was noted by the researcher that high school professional technical programs (PTE) offered in high schools such as certified nursing assistant (CNA), emergency medical training (EMT), pharmacy technicians and other PTE courses provided certificates for students to help them to be career ready upon graduation. The researcher recognized that even though students had the opportunity to participate in high school professional technical programs, a relatively small number of students obtained certificates and were ready to enter the workforce. The majority of high school graduates needed to pursue a postsecondary education in order to obtain the knowledge and skills required to be career ready and enter the workforce.

### **Conclusion**

Overall, there is a high level of interest in understanding students' postsecondary decision-making. It is the hope of the researcher to identify which of the five categories has the most impact on students' decision-making for pursuing a postsecondary education. The researcher will review the relationships between students' plans for postsecondary education and parental income, parental educational levels, and counseling services. The next chapter will provide the results of the data collected through the online survey.

## Chapter IV

### Introduction

The purpose of this study was to assist state, district, and high school educational leadership in understanding the influences of the Idaho high school students' postsecondary decision-making. Quantitative research methods were selected to provide an in-depth study exploring factors that influenced the decisions of high school students who were or were not pursuing a postsecondary education. It was the researcher's hope that an increased understanding of these influences will assist educators in improving their ability to meet the needs of high school students as they plan for their educational future. In order to better understand the student decision-making and to increase the number of Idaho students who pursue a postsecondary education, this study focused on four primary questions and five subquestions:

1. Which influences have the greatest impact on Idaho students' decision-making for pursuing a postsecondary education?
  - How well prepared did the participants believe they were in the components of postsecondary and career awareness?
  - How well prepared did the participants believe they were in the components of postsecondary admission process?
  - How well prepared did the participants believe they were in the components of academic readiness for postsecondary education and careers?
  - How well prepared did the participants believe they were in the components of postsecondary monetary cost?
  - How well prepared did the participants believe they were in the components of social capital influences for postsecondary education?

2. What is the relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education?
3. What is the relationship between Idaho students' plans for postsecondary education and access to high school counseling services?
4. What is the relationship between parental educational level and Idaho student plans for postsecondary education?

Chapter IV reports descriptive data for the five categories that were generated through the literature review and are reflected in Question 1 and the subquestions. The online survey tool used a 5-point Likert scale with responses from "Strongly Disagree" to "Strongly Agree". The frequency and percentages of participant responses were reported as descriptive statistics in tables for each item within each of the five survey categories. The mean, median, and mode for each item within the five categories were reported for in the appendices (Appendices K-O) as follows:

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education

Chapter IV also includes the findings for Questions 2, 3, and 4 which deal with the relationship between the variables. These relationships are reported as correlations using Spearman's rho where  $p \leq 0.05$ .

Approximately 800 high school students had the opportunity to take the online survey after they returned the parental/guardian consent form. The response rate to the online survey was approximately 71% ( $N = 566$ ).

### **Instrument Reliability**

An internal consistency reliability check was performed using Cronbach's Alpha for each of the survey's five categories and the survey as a whole. Each of these categories was assessed by multiple items in the instrument as illustrated in Table 1. The overall score for the online survey was  $\alpha = .901$  and for the five categories: postsecondary and career awareness  $\alpha = .792$ , postsecondary and career admissions process  $\alpha = .805$ , academic readiness for postsecondary education and careers  $\alpha = .771$ , postsecondary monetary cost  $\alpha = .801$ , and social capital influence for postsecondary education  $\alpha = .785$ . The literature supports the alpha value 0.7 to 0.8 as acceptable for internal consistency reliability (Dennick & Tavakol, 2011; Garson, 2012). Thus it was established that each of the five categories of the instrument had an acceptable level of reliability and the instrument as a whole was reliable.

### **Results**

**Question 1: Which influences have the most impact on Idaho students' decision-making for pursuing a postsecondary education?** Table 2 illustrates which influence had the most impact on participants' decision to pursue additional education after high school graduation. Of the 566 total survey responses, 435 participants identified postsecondary educational plans such as military service, professional technical programs, or a two- or four-year college after high school graduation. These 435 participants then had the opportunity to identify the category they believed had the greatest influence on their decision to pursue a postsecondary education.

This item was only available to the participants who had responded to the demographic section of the survey which asked for postsecondary plans.

Table 2

*Students' Decision-Making Influences for Postsecondary Education Frequency and Percentage Responses*

	Postsecondary and Career Awareness	Postsecondary Admission Process	Academic Readiness	Postsecondary Monetary Costs	Social Capital
Frequency	95	35	87	97	121
Percentage	21.8%	8.0%	20.0%	22.3%	27.8%

The data in Table 2 indicated approximately 22% of the participants believed postsecondary and career awareness had the greatest influence on their decision to go on, while only 8% of the participants felt the postsecondary admission process had the greatest influence on their decision. Academic readiness drew 20% of participants' responses for greatest impact on their decision to pursue a postsecondary education. However, approximately 22% of the participants selected postsecondary monetary costs as having the greatest influence on their decision for additional education. Therefore, there were three categories that approximately equal number of participants selected as having the greatest impact on their postsecondary decision-making was postsecondary and career awareness, academic readiness, and postsecondary costs. Approximately 28% of participants identified social capital as to having the greatest impact on pursuing a postsecondary education. While all categories were most important to some of the participants, the largest number of participants selected social capital. As a result, the importance of adult relationships that influence students' postsecondary decision-making processes was evident.

**Subquestion: How well prepared did the participants believe they were in the components of postsecondary and career awareness?** Table 3 illustrates the participant replies to each item associated with this category. The data in the table indicates the percentage and frequency of participant responses to each level of the Likert scale. The mean, median, and mode for each of the survey items are provided in Appendix K. The number of participant responses for Items 1 to 8 ranged from 562 to 566. The researcher recognized that the data cannot generate a true mean as ordinal data was used. However, the median, mode, and weighted mean indicates an understanding of the participants' responses to the items. The weighed mean was calculated by multiplying the participants' responses by the weight of the Likert scale for each level, summing the totals for each level, and then dividing the overall sum by the number of respondents.

Table 3

*Postsecondary and Career Awareness Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I am confident that my high school courses prepared me academically for a postsecondary education.					
Frequency	19	66	104	283	93
Percentage	3.4	11.7	18.4	50.1	16.5
2. I received a sufficient amount of postsecondary advising from my school counselor to make decisions about my future.					
Frequency	43	142	192	151	36
Percentage	7.6	25.2	34.0	26.8	6.4
3. High school supplied me with adequate information about career exploration for me to make informed choices for my future.					
Frequency	36	113	159	198	56
Percentage	6.4	20.1	28.3	35.2	10.0
4. I know what career I want to pursue after high school graduation.					
Frequency	34	62	96	161	211
Percentage	6.0	11.0	17.0	28.5	37.4
5. I have researched the level of effort it will take to pursue my desired career.					
Frequency	27	71	129	208	126
Percentage	4.8	12.7	23.0	37.1	22.5
6. I have an understanding of the educational requirements needed to pursue my chosen career.					
Frequency	20	48	113	260	120
Percentage	3.6	8.6	20.1	46.3	21.4
7. High school prepared me academically for the workforce.					
Frequency	32	106	195	190	41
Percentage	5.7	18.8	34.6	33.7	7.3
8. High school supplied me with adequate information about postsecondary opportunities for me to make informed choices for my future.					
Frequency	16	79	192	239	38
Percentage	2.8	14.0	34.0	42.4	6.7

In Item 1, approximately 66% of the participants agreed or strongly agreed that their academic preparation for postsecondary education was sufficient while approximately 15% disagreed or strongly disagreed and approximately 18% neither agreed nor disagreed with this item. Item 1 responses ( $M = 3.65$ ,  $Mdn = 4.00$ ) indicated participants as a group had confidence in their academic high school preparation to go on to a postsecondary institution. The mode for Item 1 ( $Mo = 4$ ) shows participants selected "Agree" more than any other response and more often than all the other four categories combined.

The mean and median for Item 2 was a neutral response ( $M = 2.99$ ,  $Mdn = 3.00$ ) (Appendix K). The responses for Item 2 in Table 3 indicated approximately a third of the participants disagreed or strongly disagreed they had received sufficient postsecondary advising from their school counselor. Another third of the participants agreed or strongly agreed they had received sufficient postsecondary advising from their school counselor and a third responded they neither agreed nor disagreed to having received sufficient postsecondary advising. The mode for Item 2 was "Neither Agree nor Disagree" ( $Mo = 3$ ).

Responses from Item 3 ( $M = 3.22$ ,  $Mdn = 3.00$ ) indicated participants were slightly more positive than in the previous item (Appendix K). The mode ( $Mo = 4$ ) for Item 3 represented the most frequently selected response was "Agree." Approximately 28% of participants neither agreed nor disagreed, and approximately 26% of participants disagreed or strongly disagreed with the statement their high school supplied them with adequate information. This left approximately 45% of the participants who indicated agreement or strongly agreed with the statement that high school supplied them with adequate information about career exploration in order to make informed decisions about their future.

Item 4 ( $M = 3.80$ ,  $Mdn = 4.00$ ) showed most of the participants were confident what career they wanted to pursue after high school graduation (Appendix K). The mode for Item 4 was "Strongly Agree" ( $Mo = 5$ ). Of the participants who replied to Item 4, 17% neither agreed nor disagreed and 17% disagreed or strongly disagreed, while approximately 66% of the participants agreed or strongly agreed they knew which career to pursue after graduation. This seems to indicate that the majority of participants were aware of a career direction.

The mean and median ( $M = 3.60$ ,  $Mdn = 4.00$ ) for Item 5 reports that participants believed they had researched the level of effort it would take to pursue their desired career. The mode was "Agree" ( $Mo = 4$ ) (Appendix K). Approximately 17% of the participants disagreed or strongly disagreed and 23% of the participants neither agreed nor disagreed with this item. However, 60% of the participants agreed or strongly agreed they had researched the level of effort it would take to pursue their chosen career.

Approximately 68% of the participants agreed or strongly agreed they had an understanding of the educational requirements needed to pursue their chosen career (Item 6), however, approximately 12% of the participants disagreed or strongly disagreed, and 20% of the participants neither agreed nor disagreed. The participants' response to Item 6 ( $M = 3.73$ ,  $Mdn = 4.00$ ) indicated the group believed to have had an understanding of the educational requirements needed to pursue their chosen career. The most frequent response was "Agree" ( $Mo = 4$ ) (Appendix K).

Responses to Item 7 ( $M = 3.18$ ,  $Mdn = 3.00$ ) reported participants had a more neutral perception about high school preparing them academically for the workforce (Appendix K). The mode of 3 for Item 7 indicates the participants "Neither Agree nor Disagree" with this item. The data from Item 7 indicated approximately 41% agreed or strongly agreed that high school

prepared them academically for the workforce while approximately 25% of the participants disagreed or strongly disagreed and 34% neither agreed nor disagreed.

Item 8, approximately 17% of the participants disagreed or strongly disagreed, 34% neither agreed nor disagreed, and 49% agreed or strongly agreed that high school supplied them with adequate information about postsecondary opportunities to make informed choices for their future ( $M = 3.36$ ,  $Mdn = 3.00$ ,  $Mo = 4$ ). This data revealed the participants had a somewhat positively opinion that high school supplied them with adequate information about postsecondary opportunities to make informed choices for their future.

**Conclusion.** A review of the data regarding students' perceptions of their preparation in postsecondary and career awareness, reflected in Table 3, revealed the percentage of students selecting "Strongly Agree" or "Agree" for each of these items ranged from a high of 68% (Item 6) to a low of 33% (Item 2). While the participants' responses varied depending on the item, it indicated there was an inconsistent perception about students' postsecondary and career awareness preparation. Approximately 66% of the participants believed their high school courses prepared them for postsecondary education (Item 1), while approximately 49% perceived they were academically ready for the workforce (Item 7). Items 4, 5, and 6 reflected 60% to 68% of the participants were confident in their perception of identifying which career to pursue and the needed educational requirements. However, 40% to 32% of the participants, combining the Likert scale responses for strongly disagree, disagree, and neither agree nor disagree, had not identified or were unsure of what career to pursue or did not understand the educational requirements needed. Item 3 indicated approximately 55% of the participants feels he or she lacked confidence that their high school supplied them with adequate information about career exploration to make informed choices for their future. Item 8 also indicated approximately 51%

of the participants believed their high school had not provided sufficient information about postsecondary opportunities. Analyzing the data for item two, combining the Likert scale responses for strongly disagree, disagree, and neither agree nor disagree, indicated at least 66% of the group of participants believed they had not received a sufficient amount of postsecondary advising from their school counselor.

**Subquestion: How well prepared did the participants believe they were in the components of postsecondary admission process?** Table 4 illustrates the participants' replies to each item associated to this category. The data in the table indicated the percentage and frequency of participant responses to the Likert scaled categories of "Strongly Disagree," "Disagree," "Neither Agree nor Disagree," "Agree," and "Strongly Agree." Appendix L provides the mean, median, and mode of the responses for each of the survey items for the sample group related to this category. The number of participant responses to Items 1 to 7 ranged from 560 to 565.

Table 4

*Postsecondary Admission Process Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. It is important to me to understand the postsecondary admission process.					
Frequency	8	12	68	238	239
Percentage	1.4	2.1	12.0	42.1	42.3
2. I plan to apply to one or more postsecondary institutions this fall.					
Frequency	14	42	108	189	210
Percentage	2.5	7.5	19.2	33.6	37.3
3. It is important for me to complete an application for each postsecondary institution I am considering.					
Frequency	6	18	82	231	224
Percentage	1.1	3.2	14.6	41.2	39.9
4. It is important for me to request a letter of recommendation as part of the postsecondary application process.					
Frequency	9	11	120	251	171
Percentage	1.6	2.0	21.4	44.7	30.4
5. It is important for me to complete a postsecondary entrance exam (SAT/ACT/Compass).					
Frequency	12	12	69	197	270
Percentage	2.1	2.1	12.3	35.2	48.2
6. Visiting a postsecondary campus during the school year may influence your decision to attend a postsecondary institution?					
Frequency	10	19	91	248	194
Percentage	1.8	3.4	16.2	44.1	34.5
7. I am aware of the postsecondary application process for the institutions to which I am going to apply.					
Frequency	27	93	166	180	96
Percentage	4.8	16.5	29.5	32.0	17.1

Item 1 illustrated that 84% of the participants agreed or strongly agreed to having recognized the importance of understanding the postsecondary admission process while approximately 4% disagreed or strongly disagreed and approximately 12% neither agreed nor

disagreed. Most of the participants valued the importance of understanding the postsecondary admission process ( $M = 4.22$ ,  $Mdn = 4.00$ ,  $Mo = 5$ ) (Appendix L).

Data for Item 2 ( $M = 3.96$ ,  $Mdn = 4.00$ ) indicated most of the participants believed they planned to apply to one or more postsecondary institutions this fall (Appendix L). The most frequent response for Item 2 was "Strongly Agree" ( $Mo = 5$ ). Approximately 19% of the participants neither agreed nor disagreed and approximately 10% disagreed or strongly disagreed with having a plan to apply to one or more postsecondary institutions this fall. Approximately 71% of participants agreed or strongly agreed with the statement that they were planning to apply to one or more postsecondary institutions this fall.

Of the participants who responded to Item 3, 15% neither agreed nor disagreed, 4% disagreed or strongly disagreed, and approximately 81% of the participants agreed or strongly agreed they understood the importance of completing an application for each postsecondary institution they planned to attend. Responses to Item 3 ( $M = 4.16$ ,  $Mdn = 4.00$ ,  $Mo = 4$ ) shows that most of the participants believed it was important to complete postsecondary applications (Appendix L).

Responses to Item 4 showed approximately 4% of the participants disagreed or strongly disagreed, 21% of the participants neither agreed nor disagreed, and 75% of the participants agreed or strongly agreed they understood the importance of securing a letter of recommendation in order to complete the postsecondary application process. Data for Item 4 ( $M = 4.00$ ,  $Mdn = 4.00$ ,  $Mo = 4$ ) indicated most of the participants agreed it was important to request a letter of recommendation (Appendix L).

The participants' response to Item 5 ( $M = 4.25$ ,  $Mdn = 4.00$ ) indicated that most of the participants agree it was important for them to complete an entrance exam in order to pursue a

postsecondary education. The mode indicated "Strongly Agree" ( $Mo = 5$ ) was the most commonly selected response (Appendix L). Approximately 83% of responses to Item 5 expressed strong agreement or agreement to the importance of completing a postsecondary exam such as the ACT, SAT, or Compass. However, approximately 4% of the participants disagreed or strongly disagreed and 12% of the participants neither agreed nor disagreed to the statement.

In Item 6, approximately 79% of the participants agreed or strongly agreed that making a postsecondary campus visit may influence their decision to attend a particular institution. Approximately 5% of the participants disagreed or strongly disagreed and 16% neither agreed nor disagreed to the statement ( $M = 4.06$ ,  $Mdn = 4.00$ ) which indicated the participants believed visiting a postsecondary campus during the school year may influence their decision to attend a postsecondary institution. The most frequently selected response was "Agree" ( $Mo = 4$ ) (Appendix L).

The mean and median for Item 7 ( $M = 3.40$ ,  $Mdn = 3.00$ ) indicates participants were neutral to the statement that they were aware of the postsecondary application process for the institution to which they planned to apply, however, the most frequent response was "Agree" ( $Mo = 4$ ). Approximately 21% of the participants disagreed or strongly disagreed and 30% neither agreed nor disagreed with the statement, while 49% agreed or strongly agreed they were aware of the process.

**Conclusion.** A review of the data dealing with students' perceptions of their understanding of the postsecondary and career admission process reveals the percentage of students selecting "Strongly Agree" or "Agree" for each of these items ranged from a high of 84% (Item 1) to a low of 49% (Item 7). The modes for all items in this category were 4's and 5's. This supports the claim that many of the participants acknowledged the importance of

understanding the various parts of completing the postsecondary application process. While these could be considered positive responses, there appears that a number of students lack confidence in understanding the postsecondary and career admission process while in high school. The data from Item 7 indicated that approximately 51% the participants were unaware of the postsecondary application process to specific institutions. The researcher recognized that the participants' responses in this category may be skewed by whether or not a participant had a postsecondary plan.

**Subquestion: How well prepared did the participants believe they were in the components of academic readiness for postsecondary education and careers?** Table 5 illustrates the participant replies to each item associated with this category. The data in the table indicated the percentage and frequency of participant responses to each level of the Likert scale. The mean, median, and mode for each of the survey items are provided in Appendix M. The number of participant responses for Items 1 to 8 ranged from 561 to 565.

Table 5

*Academic Readiness for Postsecondary Education and Careers Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. My GPA was important to me throughout high school.					
Frequency	9	34	85	191	246
Percentage	1.6	6.0	15.0	33.8	43.5
2. It was important to me to take rigorous academic courses (honors/AP/concurrent credit courses).					
Frequency	30	91	150	146	147
Percentage	5.3	16.1	26.5	25.9	26.1
3. I challenged myself academically to prepare for a postsecondary education and the workforce.					
Frequency	11	54	140	204	153
Percentage	2.0	9.6	24.9	36.3	27.2
4. I feel academically prepared to pursue a postsecondary education.					
Frequency	10	44	134	270	103
Percentage	1.8	7.8	23.9	48.1	18.4
5. My school counselor provided academic guidance to prepare me for a postsecondary education.					
Frequency	45	122	180	164	53
Percentage	8.0	21.6	31.9	29.1	9.4
6. My school counselor provided academic guidance to prepare me to enter the workforce.					
Frequency	59	147	184	138	35
Percentage	10.5	26.1	32.7	24.5	6.2
7. Other high school personnel provided academic guidance to prepare me for a postsecondary education.					
Frequency	0	108	183	272	0
Percentage	0.0	19.2	32.5	48.3	0.0
8. Other high school personnel provided academic guidance to prepare me to enter the workforce.					
Frequency	0	161	188	213	0
Percentage	0.0	28.6	33.5	37.9	0.0

In Item 1, approximately 77% of the participants strongly agree or agree their GPA was important to them throughout high school, while approximately 8% strongly disagree or disagree and 15% neither agree nor disagree. Item 1 responses ( $M = 4.21$ ,  $Mdn = 4.00$ ) indicated participants as a group valued their grade point average (GPA) throughout high school. The mode of 5 indicates the participants “Strongly Agree” with this item.

The response for Item 2 indicated that approximately 26% neither agreed nor disagreed and 21% disagreed or strongly disagreed that taking rigorous academic courses was of value during high school. This left approximately 52% of the participants who agreed or strongly agreed it was important to them to take rigorous academic courses while in high school. Item 2 ( $M = 3.51$ ,  $Mdn = 4.00$ ) showed the participants tended to be concerned about taking rigorous academic courses, though the mode indicated “Neither Agree nor Disagree” ( $Mo = 3$ ) (Appendix M). The mode of 3 (26.5%) was within one percentage point of strongly agree (26.1%) and agree (25.9%).

Of the participants who replied to Item 3, approximately 25% neither agreed nor disagreed and 12% disagreed or strongly disagreed with the statement that they believed they had challenged themselves academically to prepare for postsecondary education and the workforce. Approximately 64% of the participants agreed or strongly agreed that they had academically challenged themselves. Responses from Item 3 ( $M = 3.77$ ,  $Mdn = 4.00$ ) indicated that most of the participants were confident in believing they had challenged themselves academically to prepare for a postsecondary education and the workforce (Appendix M). The most common response to Item 3 was “Agree” ( $Mo = 4$ ).

In Item 4, approximately 9% of the participants disagreed or strongly disagreed and 24% of the participants neither agreed nor disagreed to believing they were academically ready to

pursue a postsecondary education. However, 66% of the participants agreed or strongly agreed they felt academically prepared to pursue a postsecondary education. The mean and median ( $M = 3.73$ ,  $Mdn = 4.00$ ) indicated most of the participants agreed they felt they were academically prepared to pursue a postsecondary education. The mode was “Agree” ( $Mo = 4$ ) (Appendix M).

Approximately 38% of the participants for Item 5 agreed or strongly agreed that their high school counselor provided academic guidance to prepare them for a postsecondary education, while approximately 32% of the participants neither agreed nor disagreed and approximately 30% of the participants disagreed or strongly disagreed. The mean, median, and mode for Item 5 indicate a neutral response ( $M = 3.10$ ,  $Mdn = 3.00$ ,  $Mo = 3$ ) with participants more or less equally divided (Appendix M).

The responses for Item 6 indicated approximately a third (36%) of the participants disagreed or strongly disagreed they had received sufficient academic guidance from their high school counselor to prepare them to enter the workforce. A third (31%) of the participants agreed or strongly agreed and a third (33%) responded that they neither agreed nor disagreed to having received sufficient academic guidance from their school counselor to prepare for the workforce (Table 5). The mean and median ( $M = 2.90$ ,  $Mdn = 3.00$ ) for Item 6 was a neutral response. The mode for item six was “Neither Agree nor Disagree” ( $Mo = 3$ ) (Appendix M).

Data from Item 7, indicated approximately 48% agreed other high school personnel provided academic guidance for postsecondary education. The participants reported approximately 19% disagreed and 33% neither agreed nor disagreed to other high school personnel providing academic guidance. Responses from Item 7 ( $M = 3.29$ ,  $Mdn = 3.00$ ) indicated the participants neither agreed nor disagreed that other high school personnel provided academic guidance for a postsecondary education, however the mode was “Agree” ( $Mo = 4$ )

(Appendix M). If the participant selected “Agree,” he or she had a follow up item. In the follow up item, approximately 73% of the participants identified teachers as the other high school personnel who provided academic guidance.

In Item 8, approximately 29% of the participants disagreed or strongly disagreed and 34% neither agreed nor disagreed that other high school personnel supplied them with academic guidance to be prepared to enter the workforce, while 38% agreed or strongly agreed. The mean and median ( $M = 3.09$ ,  $Mdn = 3.00$ ) for Item 8 indicated a neutral response that other high school personnel supplied them with adequate academic guidance to help prepare them to enter the workforce, while the mode was “Agree” ( $Mo = 4$ ) (Appendix M).

**Conclusion.** A review of the data dealing with students’ perceptions of their academic readiness for postsecondary education reflected in Table 5 reveals the percentage of students selecting “Strongly Agree” or “Agree” for each of these items ranged from a high of 77% (Item 1) to a low of 31% (Item 6). While these “Strongly Agree” or “Agree” responses vary, there appears to remain a substantial number of students who lack confidence that their postsecondary academic readiness needs are being met. The data from participants for Item 5, 6, 7, and 8 indicated less than 50% believed their high school counselor or other high school personnel provided academic guidance to prepare them for a postsecondary education or to enter the workforce.

Approximately 52% of the group of participants for Item 2 believed it was important to take academically rigorous courses in high school. Of the participants for Item 4, 66% felt academically ready to pursue a postsecondary education, while approximately 63% of the participants believed they had challenged themselves academically to prepare for a postsecondary education and the workforce. The researcher noted the similarities of the data

collected from Item 4 in this category and Item 1 from the postsecondary and career awareness category which indicates that approximately 66% of the participants for both items responded to “Strongly Agree” or “Agree” to being academically prepared to pursue a postsecondary education. The data from the academic readiness postsecondary education and careers category informs high school personnel of the need to increase supports to assist students to become academically ready by graduation and to pursue a postsecondary education and career.

**Subquestion: How well prepared did the participants believe they were in the components of postsecondary monetary cost?** Table 6 illustrates the participant replies to each item associated with this category. The data in the table indicated the percentage and frequency of participant responses to each level of the Likert scale. The mean, median, and mode for each of the survey items are provided in Appendix N. The number of participant responses for Items 1 to 14 ranged from 559 to 564.

Table 6

*Postsecondary Monetary Cost Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I have an estimation of what it would cost me to attend a postsecondary institution.					
Frequency	21	69	96	261	114
Percentage	3.7	12.3	17.1	46.5	20.3
2. It is important for me to understand the postsecondary financial aid process.					
Frequency	7	10	52	248	245
Percentage	1.2	1.8	9.3	44.1	43.6
3. I understand the difference between Pell Grants, student loans, scholarships, and work study programs.					
Frequency	75	146	117	167	57
Percentage	13.3	26.0	20.8	29.7	10.1
4. I plan to complete the Free Application for Federal Student Aid (FAFSA) form.					
Frequency	16	41	159	160	186
Percentage	2.8	7.3	28.3	28.5	33.1
5. I am confident in my ability to complete the FAFSA form with my parents/guardians.					
Frequency	19	34	172	194	140
Percentage	3.4	6.1	30.8	34.7	25.0
6. Having to navigate the financial aid process will affect my decision to pursue a postsecondary education.					
Frequency	30	60	175	195	102
Percentage	5.3	10.7	31.1	34.7	18.1
7. I will need assistance from my school counselor to complete the FAFSA form.					
Frequency	36	81	254	137	55
Percentage	6.4	14.4	45.1	24.3	9.8
8. The results of the financial aid process will affect my decision to pursue a postsecondary education.					
Frequency	36	84	168	191	84
Percentage	6.4	14.9	29.8	33.9	14.9

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
9. My family's financial situation will influence my decision to pursue a postsecondary education.					
Frequency	46	96	129	168	122
Percentage	8.2	17.1	23.0	29.9	21.7
10. My family's financial situation will influence which postsecondary institutions I consider.					
Frequency	35	53	118	219	138
Percentage	6.2	9.4	21.0	38.9	24.5
11. It is important to me to apply for scholarships so I can pursue a postsecondary education.					
Frequency	6	23	92	189	252
Percentage	1.1	4.1	16.4	33.5	44.9
12. It is important for me to receive scholarships so I can pursue a postsecondary education.					
Frequency	9	19	107	176	249
Percentage	1.6	3.4	19.1	31.4	44.5
13. I will need to work, while I pursue my postsecondary education.					
Frequency	9	21	109	203	219
Percentage	1.6	3.7	19.4	36.2	39.0
14. I am willing to accept a student loan in order to pursue my education.					
Frequency	40	43	166	190	125
Percentage	7.1	7.6	29.4	33.7	22.2

The mean and median ( $M = 3.67$ ,  $Mdn = 4.00$ ) for Item 1 indicates that most participants were confident in their understanding of the cost at attend a postsecondary institution. The mode for Item 1 was "Agree" ( $Mo = 4$ ) (Appendix N). Approximately 67% of the participants agreed or strongly agreed that they had an estimation of what it would cost to attend a postsecondary institution, while 16% disagreed or strongly disagreed and 17% neither agreed nor disagreed.

Item 2 ( $M = 4.27$ ,  $Mdn = 4.00$ ) revealed that most of the participants had a strong belief that it was important for them to understand the postsecondary financial aid process (Appendix N). The mode for Item 2 was "Agree" ( $Mo = 4$ ). Approximately 9% of the participants neither

agreed nor disagreed, 3% disagreed or strongly disagreed, and approximately 85% of the participants agreed or strongly agreed it was vital for them to understand the postsecondary financial aid process.

Responses for Item 3 indicated that approximately 39% of the participants disagreed or strongly disagreed that they understood the differences between Pell Grants, student loans, scholarships, and work study programs. Approximately 40% of the participants agreed or strongly agreed that they had an understanding of the various types of financial aid programs and 21% responded that they neither agreed nor disagreed. The mean and median for Item 3 showed a neutral response ( $M = 2.97$ ,  $Mdn = 3.00$ ), though participants selected “Agree” as the mode ( $Mo = 4$ ) (Appendix N).

Of the participants who responded to Item 4, 28% neither agreed nor disagreed and 10% disagreed or strongly disagreed to planning to complete the FAFSA form. Approximately 60% of the participants agreed or strongly agreed that they plan to complete the FAFSA form in order to attend a postsecondary institution. Item 4 ( $M = 3.82$ ,  $Mdn = 4.00$ ) indicated most students believe they planned to complete the FAFSA form, while the mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix N).

Item 5 illustrated that approximately 10% of the participants disagreed or strongly disagreed and 31% of the participants neither agreed nor disagreed having the ability to complete the FAFSA form. However, 60% of the participants agreed or strongly agreed that they had the ability with parents/guardians to complete the FAFSA form. The mean and median ( $M = 3.72$ ,  $Mdn = 4.00$ ) for Item 5 reports that most participants were confident in their ability to complete the FAFSA form with parents/guardians. The mode was “Agree” ( $Mo = 4$ ) (Appendix N).

Approximately 53% of the participants for Item 6 agreed or strongly agreed to having to navigate the financial aid process would influence their decision to pursue a postsecondary education, however, approximately 16% of the participants disagreed or strongly disagreed and 31% neither agree nor disagree. Data from Item 6 ( $M = 3.80$ ,  $Mdn = 4.00$ ) indicates the group of participants believed navigating the financial aid process could influence their decision to pursue a postsecondary education. The mode was “Agree” ( $Mo = 4$ ) (Appendix N).

Responses from Item 7 indicated approximately 34% of participants agreed or strongly agreed they would need assistance, however, approximately 21% disagreed or strongly disagreed and 45% neither agreed nor disagreed to needing assistance from their school counselor to complete the FAFSA. The mean and median ( $M = 3.17$   $Mdn = 3.00$ ) for Item 7 was a neutral response. The mode was “Neither Agree nor Disagree” ( $Mo = 3$ ) (Appendix N).

In Item 8, approximately 21% of the participants’ responses were “Disagree” or “Strongly Disagree” and 30% “Neither Agree nor Disagree” the results from the financial aid process would affect their decision to pursue a postsecondary education, while approximately 49% agreed or strongly agreed. The mean and median ( $M = 3.36$ ,  $Mdn = 3.00$ ) for Item 8 indicates a neutral response, though the participants selected “Agree” ( $Mo = 4$ ) (Appendix N).

Item 9 data had approximately 52% of the participants who agreed or strongly agreed their family situation would influence their decision to pursue a postsecondary education, while 25% disagreed or strongly disagreed and 23% neither agreed nor disagreed. The mean and median ( $M = 3.40$ ,  $Mdn = 4.00$ ) for this item supports the belief of the participants’ family financial situation would have an influence on their decision to pursue a postsecondary education. The mode was “Agree” ( $Mo = 4$ ) (Appendix N).

The mean and median ( $M = 3.66$ ,  $Mdn = 4.00$ ) for Item 10 indicates the participants believed their family financial situation would influence what postsecondary institution they would consider attending. The mode was “Agree” ( $Mo = 4$ ) (Appendix N). The data for Item 10 indicated approximately 21% of the participants neither agreed nor disagreed and approximately 16% disagreed or strongly disagreed, however, approximately 63% of the participants agreed or strongly agreed their family financial situation would influence which postsecondary institutions they applied to.

In Item 11, approximately 78% of the participants agreed or strongly agreed that it was important for them to apply for scholarships. However, approximately 5% disagreed or strongly disagreed and 16% neither agreed nor disagreed to seeing the relevance to apply for scholarships to pursue postsecondary education. The mean and median ( $M = 4.47$ ,  $Mdn = 4.00$ ) for Item 11 indicated the group of participants recognized the importance of applying for scholarships in order to attend a postsecondary institution. The mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix N).

The data for Item 12 indicated approximately 76% of the participants agreed or strongly agreed it was important to receive scholarships to attend a postsecondary institution while 5% disagreed or strongly disagreed and approximately 19% neither agreed nor disagreed. Item 12 ( $M = 4.41$ ,  $Mdn = 4.00$ ) showed the participants believed it was important for them to receive scholarships in order to pursue a postsecondary education. The mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix N).

The mean and median ( $M = 4.07$ ,  $Mdn = 4.00$ ) for Item 13 responses indicated the participants believed they would have to work while pursuing their postsecondary education. The mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix N). Item 13 illustrated approximately 5% of

the participants disagreed or strongly disagreed and 19% of the participants neither agreed nor disagreed to their need of having to work while attending a postsecondary institution. However, 75% of the participants agreed or strongly agreed they would need to work.

Approximately 56% of the participants for Item 14 were willing to accept a student loan to pursue their postsecondary education, while 15% disagreed or strongly disagreed and 29% neither agreed nor disagreed. Item 14 ( $M = 3.56$ ,  $Mdn = 4.00$ ) data indicated the participants were willing to accept financial aid assistant through a student loan. The mode was “Agree” ( $Mo = 4$ ) (Appendix N).

**Conclusion.** A review of the data dealing with students’ perceptions of their understanding of postsecondary monetary cost as reflected in Table 6 reveals that the percentage of students selecting “Strongly Agree” or “Agree” for each of these items ranged from a high of 88% (Item 2) to a low of 35% (Item 7). While the “Strongly Agree” or “Agree” responses vary, there remain a number of students who lack an understanding of their financial needs in the postsecondary monetary costs category. Of the participants for Item 1, 67% believed they have accurately sized up the cost of attending a postsecondary institution. Approximately 62% of the participants planned to complete the FAFSA form (Item 4), while 60% were confident in their ability to complete it with their parents/guardian (Item 5). The data for these two items showed that approximately a third of the participants neither agreed nor disagreed that they plan to complete the FAFSA form with their parents/guardians. However, Item 6 indicated that 43% of the participants believed that having to navigate the financial aid process would influence their postsecondary decision-making.

The data from the group of participants for Item 3 indicated that 40% strongly disagree or disagree and 21% neither agree nor disagree to understanding the different types of financial aid

programs available to them. However, 88% of the participants selected “Strongly Agree” or “Agree” to Item 2, indicating the importance of understanding the financial aid process. Items 8, 9, and 10 showed that 48% to 63% of the participants were of the opinion that their family’s financial situation, together with the results of the financial aid process would influence their postsecondary decision-making.

Items 11, 12, and 13 showed that 75% to 78% of the participants believed it would be important to apply for scholarships and be willing to work in order to pursue a postsecondary education. Those who responded to this category were students who may or may not have had plans to pursue a postsecondary education. Of the 566 total survey participants, 470 indicated they planned to pursue postsecondary education, 425 either agreed or strongly agreed that it was important for them to receive a scholarship in order to pursue a postsecondary education (Item 12). Of the responses for Item 14, 56% indicated they were willing to accept a student loan to pursue a postsecondary education while 29% neither agreed nor disagreed and 15% disagreed or strongly disagreed.

**Subquestion: How well prepared did the participants believe they were in the components of social capital influences for postsecondary education?**

Table 7 shows the participants’ replies to each item associated to this category. The data in the table indicated the percentage and frequency of participant responses to the Likert scaled categories of “Strongly Disagree,” “Disagree,” “Neither Agree nor Disagree,” “Agree,” and “Strongly Agree.” Appendix O provides the mean, median, and mode of the responses for each of the survey items for the sample group related to this category. The number of participant responses to Items 1 to 12 ranged from 560 to 565.

Table 7

*Social Capital Influences for Postsecondary Education Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. I have often discussed postsecondary admission requirements with my school counselor.					
Frequency	103	208	151	69	33
Percentage	18.3	36.9	26.8	12.2	5.9
2. I am satisfied with the postsecondary information I received from my school counselor.					
Frequency	72	133	234	95	31
Percentage	12.7	23.5	41.4	16.8	5.5
3 I have discussed my career aspirations with my school counselor.					
Frequency	88	159	141	127	46
Percentage	15.7	28.3	25.1	22.6	8.2
4. I have discussed my career aspirations with an adult in my community.					
Frequency	18	33	93	231	190
Percentage	3.2	5.8	16.5	40.9	33.6
5. Adults in the community influenced my decision to pursue a postsecondary education.					
Frequency	26	72	135	216	113
Percentage	4.6	12.8	24.0	38.4	20.1
6. I have often discussed postsecondary admission requirements with a high school staff member other than my counselor.					
Frequency	63	130	154	153	65
Percentage	11.2	23.0	27.3	27.1	11.5
7. I would be willing to meet with a high school career counselor to discuss my postsecondary and career goals if one was available.					
Frequency	16	19	119	233	177
Percentage	2.8	3.4	21.1	41.3	31.4
8. I have often discussed my career aspirations with my parents/guardians.					
Frequency	7	18	96	191	248
Percentage	1.3	3.2	17.1	34.1	44.3
9. I have often discussed postsecondary opportunities with my parents/guardians.					
Frequency	13	31	95	198	224
Percentage	2.3	5.5	16.9	35.3	39.9

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
10. My parents were involved in my education throughout high school.					
Frequency	20	35	101	203	201
Percentage	3.6	6.3	18.0	36.3	35.9
11. Going on to postsecondary education was an expectation in my household growing up.					
Frequency	15	36	127	152	235
Percentage	2.7	6.4	22.5	26.9	41.6
12. My peers had some influence about my decision to pursue a postsecondary education.					
Frequency	54	83	169	176	80
Percentage	9.6	14.8	30.1	31.3	14.2

The mean and median ( $M = 2.51$ ,  $Mdn = 2.00$ ) for Item 1 responses indicated that the participants generally disagree to meeting often to discuss postsecondary admission requirements with their school counselor. The most common response by the participants was “Disagree” ( $Mo = 2$ ). Item 1 illustrated that approximately 55% of the participants disagreed or strongly disagreed to having met with their school counselor often to discuss postsecondary admission requirements, while approximately 18% of the participants agreed or strongly agreed and 27% neither agreed nor disagreed.

Item 2 ( $M = 2.79$ ,  $Mdn = 3.00$ ) data indicated the participants responded neither agreed nor disagreed to being satisfied with the postsecondary information they received from their school counselor. The mode for Item 2 was “Neither Agree nor Disagree” ( $Mo = 3$ ) (Appendix O). Approximately 41% neither agreed nor disagreed and approximately 36% disagreed or strongly disagreed that they were satisfied with the postsecondary information they received from their school counselor. This left approximately 23% of the participants who agreed or strongly agreed to being satisfied with the postsecondary information they received from their school counselor in order to make informed decisions about their future.

Of the participants who replied to Item 3, approximately 25% neither agreed nor disagreed, approximately 44% disagreed or strongly disagreed, and approximately 31% of the participants agreed or strongly agreed that they had discussed their career aspirations with their school counselor. Item 3 responses ( $M = 2.79$ ,  $Mdn = 3.00$ ) indicated that the participants neither agreed nor disagreed to having discussed their career aspirations with their school counselor. The mode was “Disagree” ( $Mo = 2$ ) (Appendix O).

The mean and median ( $M = 3.96$ ,  $Mdn = 4.00$ ) for Item 4 showed the participants had discussed their career aspirations with an adult in the community. The mode was “Agree” ( $Mo = 4$ ) (Appendix O). Item 4, illustrated approximately 9% of the participants’ disagreed or strongly disagreed, 17% of the participants neither agreed nor disagreed while, approximately 75% of the participants agreed or strongly agreed to discussing career aspirations with an adult in the community.

Approximately 59% of the participants responded to Item 5 as “Strongly Agree” or “Agree” that the adults in the community influenced their decision to pursue a postsecondary education, however, approximately 17% of the participants disagreed or strongly disagreed and 24% of the participants neither agreed nor disagreed. Response from Item 5 ( $M = 3.57$ ,  $Mdn = 4.00$ ) indicated the adults in the community influenced their decision to pursue a postsecondary education. Item 5 had a mode of 4 (Appendix O).

The mean and median for Item 6 was a neutral response ( $M = 3.05$ ,  $Mdn = 3.00$ ) (Appendix O). The responses for Item 6 indicated approximately a third of the participants agreed or strongly agreed they had often discussed postsecondary admission requirements with a high school staff member other than their counselor. Approximately a third of the participants disagreed or strongly disagreed and approximately third responded they neither agreed nor

disagreed to discussing postsecondary admission requirements with other staff high school staff members. The most common response from the participants was “Neither Agree nor Disagree” ( $Mo = 3$ ) (Appendix O).

Item 7 ( $M = 3.95$ ,  $Mdn = 4.00$ ) showed the participants would be willing to meet with a high school career counselor to discuss postsecondary and career goals if one was available. The mode was “Agree” ( $Mo = 4$ ) (Appendix O). The response for Item 7 indicated approximately 73% of the participants agreed or strongly agreed they would be willing to access high school career counseling services if it was available. However, approximately 6% of the participants disagreed or strongly disagreed and 21% neither agreed nor disagreed to being willing to meet with a school career counselor to discuss postsecondary and career goals if one was available.

The mean and median ( $M = 4.17$ ,  $Mdn = 4.00$ ) for Item 8 showed the participants often discussed their career aspirations with parents/guardians. The mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix O). In Item eight, approximately 5% of the participants disagreed or strongly disagreed and 17% neither agreed nor disagreed to having discussed career aspirations with parents/guardians, while 78% agreed or strongly agreed.

Item 9 indicated approximately 17% of the participants neither agreed nor disagreed and approximately 8% disagreed or strongly disagreed to discussing postsecondary opportunities with parents/guardians. Approximately 75% of the participants agreed or strongly agreed they often discussed postsecondary options with their parents/guardian. Item 9 ( $M = 4.05$ ,  $Mdn = 4.00$ ) indicated participants believed they had discussed postsecondary opportunities with parents/guardians. The mode was “Strongly Agree” ( $Mo = 5$ ) (Appendix O).

Of the participants’ response to Item 10, approximately 18% neither agreed nor disagreed and approximately 10% disagreed or strongly disagreed with this item. However, approximately

72% of the participants agreed or strongly agreed their parent/guardians were involved in their high school education. Response to Item 10 ( $M = 3.95$ ,  $Mdn = 4.00$ ) indicated participants agree with this item. The mode was “Agree” ( $Mo = 4$ ) (Appendix O).

The mean and median ( $M = 3.98$ ,  $Mdn = 4.00$ ) for Item 11 indicated participants believed there was an expectation in the home to pursue a postsecondary education. The mode for Item 11 was “Strongly Agree” ( $Mo = 5$ ) (Appendix O). In Item 11, approximately 69% of the participants agreed or strongly agreed there was an established expectation in the home to pursue a postsecondary education while growing up. However, approximately 22% neither agreed nor disagreed and approximately 9% disagreed or strongly disagreed to this item.

Approximately 46% of the participants for Item 12 agreed or strongly agreed that peers influenced their decision to pursue a postsecondary education, while 25% disagreed or strongly disagreed and 30% neither agreed nor disagreed. Item 12 ( $M = 3.26$ ,  $Mdn = 3.00$ ) indicated the participants were neutral about their peers having some influence about their decision to pursue a postsecondary education, however, the mode was “Agree” ( $Mo = 4$ ) (Appendix O).

**Conclusion.** A review of the data dealing with students’ perceptions of their social capital influences for postsecondary education reflected in Table 7 revealed that the percentage of students selecting “Strongly Agree” or “Agree” for each of these items ranged from a high of 78% (Item 8) to a low of 18% (Item 1). Though the participants’ responses varied depending on the item, it indicated there was an inconsistency of perception about their social capital influences for postsecondary education.

Items 8, 9, and 11 indicated that 69% to 78% of participants had postsecondary and career discussions and expectations in their household during high school. Approximately 72% of the participants indicated their parents/guardians were involved in their education through

high school (Item 10). The data from Item 4 indicated approximately 75% of participants discussed career aspirations with an adult in the community. Of the participants, approximately 59% believed an adult in the community influenced their decision to pursue a postsecondary education (Item 5). Participants selected more positive responses when the items referred to parents/guardian and other adults in the community as providing support for postsecondary and career counseling services than school counselors. Approximately 46% of the participants indicated that they strongly agreed or agreed that their peers had had some influence about their decision to pursue a postsecondary education (Item 12).

The participants' responses for Item 6, indicated 39% discussed postsecondary admission requirements with a high school staff member other than a counselor, however, 27% neither agreed nor disagreed and 34% disagreed or strongly disagreed. Item 3 showed that 31% of the participants believed they had discussed their career aspirations with their school counselor while 44% of the participants disagreed or strongly disagreed, and 25% neither agreed nor disagreed. Item 1 reflected 55% of the participants indicated they disagreed or strongly disagreed that they had often discussed their postsecondary admission requirements with their school counselor while approximately 18% strongly agreed and agreed and 27% neither agreed nor disagreed. Approximately 23% of the group of participants indicated for Item 2 they were satisfied with the postsecondary information they had received from their school counselor while approximately 41% neither agreed nor disagreed and 36% disagreed or strongly disagreed. The data indicated the participants were either neutral or dissatisfied with their postsecondary information they received from their counselor, however, approximately 73% of the group of participants responded they would be willing to meet with a high school career counselor to discuss postsecondary and career goals, if one were available.

## Correlation Coefficient

Research Questions 2, 3, and 4 were created to determine the existence of any relationship between students' postsecondary plans and income, counseling services, and parental educational level through ordinal data collected by an online survey. A non-parametric test, the Spearman's rho, was used to determine the level of the students' postsecondary educational plans and the variables identified in the Research Questions 2, 3, and 4. A relationship between two variables is explained through a numerical index is known as a correlation coefficient (Salkind, 2014). A correlation coefficient table has been developed by experts to provide guidance to researchers as they interpret data (Salkind, 2014). The correlation coefficient table is located in Table 8.

Table 8

### *Interpreting a Correlation Coefficient*

Size of the Correlation	Coefficient General Interpretation
.8 to 1.0	Very strong relationship
.6 to .8	Strong relationship
.4 to .6	Moderate relationship
.2 to .4	Weak relationship
.0 to .2	Weak or no relationship

Note: Adapted from *Statistics for People Who Think They Hate Statistics*, (5<sup>th</sup> ed.) by N. J. Salkind, p. 92. Copyright 2014 by Sage Publications.

## Coefficient of Determination

The coefficient of determination is an indicator of the degree to which variables share variance (Salkind, 2014; Tanner, 2012). It is often used to provide more information when the coefficient correlation is statistically significant. Calculations for the coefficient correlations for Research Questions 2, 3, and 4 are shown in the following paragraphs, along with the coefficient of determination. The coefficient of determination is calculated by the square of the  $r$ -value

multiplied by 100 provides the percentage of the variance of one variable that is explained by the variance of the other variable.

**Question 2: What is the relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education?** The Spearman's rho correlation, a non-parametric statistical test, was conducted to assess the relationship between socioeconomic status, as measured by parental income, and students' plans for postsecondary education ( $N = 532$ ). Item 15 was used from the demographic survey category which asked the participants to identify their parental income levels. The researcher coded the socioeconomic values from 1 to 6. Data from participants who selected "I don't know" or did not respond to this item were omitted from this calculation ( $N = 207$ ). Of the participants who reported as having a postsecondary plan, 37% were unaware of their family's estimated annual household income. This may have skewed the results. Participants who responded to Item 9 and who had postsecondary plans numbered 325. The recoded values are as follows:

- 0 = I do not know
- 1 = Less than \$10,000
- 2 = \$10,000 to \$25,000
- 3 = \$25,000 to \$35,000
- 4 = \$35,000 to \$50,000
- 5 = \$50,000 to \$75,000
- 6 = More than \$75,000

The researcher recoded the value for student post high school graduation plans from 0 to 6. The recoded order for Item 9 is used in Research Questions 2, 3, and 4. The recoded order is as follows:

- 0 = Other
- 1 = Undecided
- 2 = Obtain full-time employment and not enroll in further education at this time
- 3 = Enter military service
- 4 = Enroll in a trade, technical, or business training program (while employed or not employed)
- 5 = Enroll in a two-year college (while employed or not employed)
- 6 = Enroll in a four-year college/university (while employed or not employed)

(Cumberland Regional High School, 2010).

The Spearman's rho achieved an  $r$ -value = .120,  $p < 0.05$ . Table 8 indicates a weak positive relationship between socioeconomic status, as measured by parental income, and student plans for postsecondary education. The relationship was statistically significant ( $p = .026$ ). The use of the coefficient of determination  $r^2 = .014$  indicates that 1.4% of the variance of students' plans can be explained by the variance to socioeconomic status (Salkind, 2014; Tanner, 2012). The researcher acknowledges that the correlation results are so slight, it cannot be considered as to having practical significance.

**Question 3: What is the relationship between Idaho students' plans for postsecondary education and access to high school counseling services?** A Spearman's rank-order correlation was run to assess the relationship between students' plans for postsecondary education and access to high school counseling services ( $N = 532$ ). In the social capital category, Item 70 from the online survey was selected because it addressed participants' access to high school counseling services. Item 70 states, "I have often discussed postsecondary admission requirements with my school counselor" and was analyzed against participant responses to

postsecondary plans, Item 9, in the demographic category (Appendix A). The students' postsecondary plan values were coded in the same order as established in Research Question 2 and 4. Data from participants who selected "Other" were omitted from this calculation ( $N = 23$ ). The 5-point Likert scale for Item 70 responses were used and ranked: "Strongly Disagree" - 1, "Disagree" - 2, "Neither Agree nor Disagree" - 3, "Agree" - 4, and "Strongly Agree" - 5.

The Spearman's rho achieved an  $r$ -value =  $-.107$ ,  $p < 0.05$ . Table 8 indicates the relationship between students' plans for postsecondary education and access to high school counseling services was a weak negative correlation meaning as one variable increases the other decreases (Tanner, 2012). As noted by Tanner (2012), the sign of the relationship does not indicate the strength of the correlation. The negative relationship between student postsecondary plans and access to high school counseling services was statistically significant ( $p = .014$ ). The inverse relationship between the quality of the postsecondary plans and student access to high school counseling services is slightly greater than to be expected by chance. The researcher acknowledges that the correlation results are so slight, it cannot be considered as to having practical significance. The use of the coefficient of determination  $r^2 = .011$  indicates 1.1% of the variance of students' plans can be explained by the variance to students' access to counseling services.

In addition to the data from item 70, there were five items that provided information about the participants' opinions concerning the value of the postsecondary planning information from school counselors. The online survey contained six items which addressed students' perception of counseling services they received during high school for postsecondary and workforce information. These items were from the postsecondary and career awareness,

academic readiness for postsecondary education and careers, and the social capital influence for postsecondary education categories.

The data in Appendix Q shares the mean, median, and mode for the six items which pertain to high school counseling services from the online survey. The mode for each of these items indicates that the participants selected “Disagree” or “Neither Agree nor Disagree” as the most common response. Table 9 illustrates the participant frequency and percentage responses to the six items.

The responses for Item 21 in Table 9 indicated approximately a third of the participants disagreed or strongly disagreed they had received sufficient postsecondary advising from their school counselor. Another third of the participants agreed or strongly agreed they had received sufficient postsecondary advising from their school counselor and a third responded they neither agreed nor disagreed to having received sufficient postsecondary advising.

Approximately 38% of the participants for Item 46 agreed or strongly agreed their high school counselor provided academic guidance to prepare them for a postsecondary education, while approximately 32% of the participants neither agreed nor disagreed and approximately 30% of the participants disagreed or strongly disagreed. Item 47 responses indicated approximately a third (36%) of the participants disagreed or strongly disagreed they had received sufficient academic guidance from their high school counselor to prepare them to enter the workforce. A third (31%) of the participants agreed or strongly agreed and a third (33%) responded they neither agreed nor disagreed to having received sufficient academic guidance from their school counselor to prepare for the workforce

Item 70 illustrated approximately 55% of the participants disagreed or strongly disagreed to having met with their school counselor often to discuss postsecondary admission

requirements, while approximately 18% of the participants agreed or strongly agreed and 27% neither agreed nor disagreed. In Item 71 approximately 41% neither agreed nor disagreed and approximately 36% strongly disagree or disagree and 23% agreed or strongly agreed that they were satisfied with the postsecondary information they received from their school counselor. Of the participants who replied to Item 72, approximately 25% neither agreed nor disagreed, approximately 44% disagreed or strongly disagreed, and approximately 31% of the participants agreed or strongly agreed that they had discussed their career aspirations with their school counselor.

As a result of the data collected from the six survey items pertaining to counseling services based on participants' perception, there was a lack of postsecondary and career guidance received by high school students according to their perception. Participant responses to items pertaining to counseling services indicated that many students were not satisfied or were unsure about the services their school counselor provided.

Table 9

*Counseling Services Frequency and Percentage Responses*

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Q21 I received a sufficient amount of postsecondary advising from my school counselor to make decisions about my future.					
Frequency	43	142	192	151	36
Percentage	7.6	25.2	34.0	26.8	6.4
Q46 My school counselor provided academic guidance to prepare me for a postsecondary education.					
Frequency	45	122	180	164	53
Percentage	8.0	21.6	31.9	29.1	9.4
Q47 My school counselor provided academic guidance to prepare me to enter the workforce.					
Frequency	59	147	184	138	35
Percentage	10.58	26.1	32.7	24.5	6.2
Q70 I have often discussed postsecondary admission requirements with my school counselor.					
Frequency	103	208	151	69	33
Percentage	18.3	36.9	26.8	12.2	5.9
Q71 I am satisfied with the postsecondary information I received from my school counselor.					
Frequency	72	133	234	95	31
Percentage	12.7	23.5	41.4	16.8	5.5
6. I have an understanding of the educational requirements needed to pursue my chosen career.					
Frequency	20	48	113	260	120
Percentage	3.6	8.6	20.1	46.3	21.4
Q72 I have discussed my career aspirations with my school counselor.					
Frequency	88	159	141	127	46
Percentage	15.7	28.3	25.1	22.6	8.2

**Question 4: What is the relationship between parental educational level and Idaho student plans for postsecondary education?** The Spearman's rho correlation, a non-parametric statistical test, was conducted to assess the relationship between parental educational level and students' plans for postsecondary education ( $N = 532$ ). The researcher coded the parental

educational level values for Items 6 and 7 in the demographic category of the survey to reflect the amount of parent education from the least to the most. The researcher assigned ranks to the educational level as follows:

- 0 = Unknown
- 1 = No high school coursework
- 2 = Some high school coursework
- 3 = High school graduate
- 4 = Some college coursework
- 5 = A certificate from a training program
- 6 = Associate's Degree
- 7 = Bachelor's Degree
- 8 = Coursework or degree beyond a Bachelor's

The researcher used the recoded values for student plans after graduating high school which was consistent with Research Questions 2 and 3. Participants who selected “Other” ( $N = 23$ ) or chose not to respond to this item ( $N = 11$ ) were omitted from this calculation. It was noted by the researcher that the participants who had selected “Other” had the opportunity to respond as to what it meant to them. Of the participants who responded to “Other” ( $N = 23$ ), 48% indicated they plan to participate in volunteer service activities after high school graduation ( $N = 11$ ).

A Spearman’s rho correlation was run to assess the relationship between mothers’ educational level and students’ plans for postsecondary education ( $N = 532$ ). The Spearman’s rho correlation achieved an  $r$ -value = .168,  $p < 0.05$ . Table 8 indicates a weak positive correlation between mothers’ educational level and student plans for postsecondary education. The positive relationship between mother’s educational level and student postsecondary plans is statistically

significant ( $p = .0001$ ). The relationship between the quality of the students' postsecondary plans and their mothers' educational level is unlikely due to chance. The use of the coefficient of determination  $r^2 = .028$  indicates that 2.8% of the variance of students' plans can be explained by the variance in the mother's educational level (Salkind, 2014; Tanner, 2012).

The Spearman's rho correlation, a non-parametric statistical test, was conducted to assess the relationship between fathers' educational level and students' plans for postsecondary education ( $N = 532$ ). The Spearman's rho correlation achieved an  $r$ -value = .225,  $p < 0.05$ . Table 8 indicates a weak positive relationship between father's educational level and student plans for postsecondary education. The relationship between father's educational level and student postsecondary plans is statistically significant ( $p = .0001$ ). The relationship between the quality of the students' postsecondary plans and their fathers' educational level was unlikely due to chance. The use of the coefficient of determination  $r^2 = .050$  indicates that 5.0% of the variance of students' plans can be explained by the variance in the father's educational level.

## **Conclusion**

The purpose of this study is to assist state, district, and high school educational leadership to understand the influences of Idaho high school students' postsecondary decision-making. Through the review of literature, five categories developed and guided the study. The five categories were as follows, postsecondary and career awareness, postsecondary and career admissions process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and social capital influence for postsecondary education. In order to better understand the process and to improve the number of Idaho students who pursue postsecondary education, this study focused on four primary questions and five subquestions. The following conclusions are based on the data analyzed from the online survey.

Social capital influence for the postsecondary education category was identified as having the greatest impact on students' postsecondary decision-making by the greatest number of participants. The participants who planned to pursue a postsecondary education reported that postsecondary and career awareness, academic readiness for postsecondary education and careers, and postsecondary monetary cost were approximately equal in numbers of students selected these areas as having the greatest influence on their postsecondary decision-making plans. The postsecondary and career admissions process category was the least selected by the participants.

The relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education has a weak positive relationship ( $r = .120$ ) and was statistically significant ( $p = .026$ ). The relationship between Idaho students' plans for postsecondary education and access to high school counseling services had a weak negative relationship ( $r = -.107$ ). The negative correlation coefficient though weak was statistically significant ( $p = .014$ ). The relationship between parental educational level and Idaho student plans for postsecondary education indicated similar results depending on the mothers' and fathers' educational level. The correlation relationship of the participants' postsecondary educational plans between their mothers' ( $r = .168$ ) and fathers' ( $r = .225$ ) educational levels had a weak positive relationship though it was statistically significant ( $p = .000$ ).

The researcher recognized it was important to note that while the results for Research Questions 2, 3, and 4 are statistically significant, it indicates a very slight chance that the relationship between these variables was a result of random error. The researcher acknowledges that the correlation results are so slight, it cannot be considered as to having practical

significance. The small amount of variance of one variable can be explained by the variance of the other variable as it achieves significance because of the relatively large sample size.

The descriptive and analytic statistics shared in Chapter IV informs the use of each of the five categories used in this study: postsecondary and career awareness, postsecondary and career admissions process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and social capital influence for postsecondary education. The percentages and frequency of responses for the participants in each category are reported based on the 5-point Likert scale. The Likert scale ordinal data was reported through the mean, median, and mode for each item in the five categories and can be found in the Appendices K-O. The data collected in the demographic category of the online survey are reported in Appendix P. Chapter V will provide a summary of the data and recommendations for further research.

## Chapter V

### Introduction

In order to be productive citizens in society, students need to be college- and career-ready by the time they graduate from high school. In the twenty-first century, it has become imperative that students be prepared to enroll in and attend a higher education institution in order to make the most of their lives culturally and economically. A postsecondary education enables a person to contribute positively to the nation's social and economic growth. In June 2010, Georgetown University, Center on Education and the Workforce released *Help Wanted: Projections of jobs and education requirements through 2018* by Carnevale, Smith, and Strohl (2010). This national study projected the jobs and educational requirements which will be needed in the United States in the immediate future. It was projected that by 2018, 63% of all jobs will require postsecondary education or training. Students without some type of postsecondary education or training will have one third of the total number of employment opportunities as those with a postsecondary education or training. The Idaho Department of Labor (2014a) published the *Idaho Education and Training Pay* poster which indicates the potential annual earnings for individuals who have received less than a high school education through to a doctoral or professional degree. The *Idaho Education and Training Pay* poster shows Idaho's ten most abundant, high paying, and expanding career fields, all of which require postsecondary education.

It is important to review the factors hindering Idaho high school students from obtaining some type of postsecondary education or training. The purpose of this study is to assist state, district, and high school educational leaders to understand the influences that inform Idaho high school student's postsecondary decision-making. Data from the study will enable high school administration to better serve students by helping them transition to a postsecondary institution.

ACT (2006) researched the importance of states educating all students with common academic expectations that prepared them for both a postsecondary education and the workforce (Boser & Burd, 2009). The study noted that the primary mission of our public education system is to give every student the opportunity to live a meaningful and productive life, which includes earning a wage sufficient to support a family of four individuals (ACT, 2006).

Over the years, researchers studied various influences on students' postsecondary and career decision-making. Through Perna's (2006) proposed conceptual model of student college choice, a framework was established to examine the individual's selection process. This process was examined through multiple contextual layers as a result of the complexity of high school students' postsecondary decision-making. The review of extant literature provided support for the factors that play a role in students' postsecondary decision-making, which factors were reflected by the four contextual layers in Perna's (2006) proposed conceptual model of student college choice. Each of the following categories reflects an element in Perna's proposed conceptual model of student college:

- postsecondary and career awareness
- postsecondary and career admissions process
- academic readiness for postsecondary education and careers
- postsecondary monetary cost
- social capital influence for postsecondary education.

Quantitative research methods were selected to provide an in-depth study examining the factors that influenced the decisions of high school students who were planning to pursue postsecondary education and students who had no such plans. Chapter V includes a summary of results, conclusions, and implications for professional practice along with recommendations for

future research based on research findings from the four research questions and five subquestions.

### **Summary of Results**

**Question 1: Which influences have the most impact on Idaho students' decision-making for pursuing a postsecondary education?** Through the literature review, it became apparent that five themes influenced the decision-making process of high school students pursuing higher education. The sample group of participants identified which of these categories they felt had the greatest impact on their decision to pursue a postsecondary education. The results of the data can be noted that approximately equal numbers of participants selected postsecondary and career awareness, academic readiness for postsecondary education and careers, and postsecondary monetary costs as having the greatest impact on their postsecondary decision-making. Social capital influence for postsecondary education was the most selected category as having the greatest influence on the participants' decision making to pursue a postsecondary education. The postsecondary and career admission process category was the least selected by the participants as having the greatest influence. While each of the categories likely had its own measure of importance in the students' decision-making process, the data point only to the elements believed by the students to have had the greatest influence on them.

High schools have the ability to influence student postsecondary decision-making through each of the categories. The findings of this study supported the literature for each of the five categories. The Postsecondary and career awareness category supports the literature which focuses on educating students on the importance of pursuing a postsecondary education leading to an employable career which will provide a livable wage (ACT, 2006; Baum & Payea, 2004; Boser & Burd, 2009). Literature about the postsecondary and career admissions process

emphasizes the importance of providing highly qualified school personnel such as teachers, administrators, and counselors to guide and assist students, along with their parents/guardians. This guidance has significant influence on high school students as they make crucial decisions regarding their future (Duffett et al., 2005; Foote, 2011; Savitz-Romer, 2015). The literature for academic readiness for postsecondary education and careers highlights the need for students to be academically ready. This must begin as early as elementary school and continue through high school graduation to ensure students are performing at or above grade-level and are academically ready for postsecondary education and careers (ACT, 2007; Bedsworth et al., 2006; SAT, 2013).

The study's findings regarding the importance of the category postsecondary monetary cost supports the conclusion found in the review of the literature that high schools have the responsibility to provide assistance with the financial aid process and scholarship information to students and their families (Coca et al., 2011; Bedsworth et al., 2006; Grodsky & Riegle-Crumb, 2010). The findings from the social capital influence for postsecondary education category supports the literature which emphasizes the importance of students having adult mentors such as counselors, teachers, administrators, coaches, and parents who provide support and assistance to the student in his or her postsecondary decisions (Bailey et al., 2009; Elder et al., 2009; Kim & Schneider, 2005; Perna & Titus, 2005; Public Agenda, 2012). Teachers, counselors, and administrators have a great opportunity to influence students' postsecondary decision-making through developing and implementing a postsecondary and career awareness culture K-12.

***Subquestion: How well prepared did the participants believe they were in the components of postsecondary and career awareness?*** A review of the data regarding students' perceptions of their preparation in postsecondary and career awareness indicated there was an inconsistency of student responses. Slightly more than half of the participants believed their high

school courses prepared them for postsecondary education, while slightly less than half of the participants perceived they were academically ready for the workforce. More than two-thirds of the participants were confident in their perception of identifying which career to pursue and the needed educational requirements. Slightly more than half of the participants lacked confidence that their high school supplied them with adequate information about career exploration and postsecondary opportunities to make informed choices for their future. Most participants believed they had not received a sufficient amount of postsecondary advising from their school counselor.

The literature indicated that it is essential for students to make a connection of why they need a postsecondary education in order to pursue a career in which they could make a livable wage (ACT, 2006; Achieve, 2013; National Governors Association Center, 2010). When high school students are able to understand the connection that education pays more over their lifetimes, it increases a student's likelihood to make a time and financial commitment to pursue a postsecondary education or training program (Idaho Department of Labor, 2014a). The researcher concluded, based on the perception of the participants sampled, that high school personnel were not meeting postsecondary and career awareness needs for the majority of their students. Another conclusion the researcher reached regarding the perception of participants was that approximately half of the individuals believed they were academically prepared for postsecondary education or the workforce which indicates a need for improvement.

***Subquestion: How well prepared did the participants believe they were in the components of postsecondary admission process?*** Students' perceptions of their understanding of the postsecondary and career admission process varied depending on the item. Most of the participants indicated they understood the parts of the postsecondary admission process. Slightly

less than half of the participants indicated they were aware of the postsecondary application process for the institutions to which they intended to apply.

The literature supported the importance of students and their families need to understand the requirements for the postsecondary institution and the steps they need to take in order to complete the admission process (Bailey et al., 2009; Coca et al., 2009). It was recommended that high school counselors should have a greater awareness of the influence they have in providing support for understanding college requirements and the application process for students (Idaho Legislature, 2012; Smith & Zhang, 2011). Counselors provide information, guidance, and support necessary for students to understand the importance of developing a postsecondary and career plan after graduation (Chen et al., 2000; Duffett et al., 2005; Foote, 2011). High schools which provided opportunities to assist families with financial aid information and the application process, along with encouraging campus visits, increased students chances in successfully enrolling in a postsecondary institution (Chen et al., 2000; Kim & Schneider, 2005).

The researcher recognized the data collected indicated the responses were the perception of high school students in the fall 2014 of their senior year. Many of the participants who identified themselves as having plans to pursue postsecondary education were going to begin the postsecondary admission process later in the fall after the completion of the survey. The researcher concluded high school participants value the importance of understanding the postsecondary admissions process. The researcher recognized that there was an inconsistency with participants' responses of valuing an understanding of the admissions process to an actual awareness of the postsecondary application process for specific institutions. The data from the postsecondary and career admission process category may provide high school personnel insight

of where students lack the understanding of what steps are needed in order to apply to postsecondary institutions successfully.

*Subquestion: How well prepared did the participants believe they were in the components of academic readiness for postsecondary education and careers?* Students' perceptions of their academic readiness for postsecondary education varied depending on the item. The data indicated that students were inconsistent in their levels of self-awareness in regards to postsecondary academic readiness. More than half of the participants believed they had challenged themselves academically to prepare for a postsecondary education and for the workforce. The researcher notes that the data from the study and current literature from SAT (2014) and ACT (2014) testing results indicated that there was a gap in the perception of the participants of being "academically ready" for postsecondary education and the workforce. Approximately 67% of the participants believed they were academically ready to pursue a postsecondary education, while the SAT (2014) and ACT (2014) indicated that less than half of the students who completed college entrance exams were meeting the college benchmarks.

The researcher noted the inconsistency with the data collected about participants' perception regarding that more than half of them believed to have made academic challenging decisions to prepare for a postsecondary education and to enter the workforce while less than half of the participants believed that high school prepared them academically for the workforce. Almost half of the participants made postsecondary and career decisions without assistance from counselors or other high school personnel. The data from this study supported the literature suggesting the need to provide academic guidance to students in order to help them pursue a postsecondary education and career (Idaho Legislature, 2012; Smith & Zhang, 2011). The researcher concluded that the majority of students valued their high school GPA.

*Subquestion: How well prepared did the participants believe they were in the components of postsecondary monetary cost?* A review of the data regarding students' own perceptions of their understanding of the cost of postsecondary education varied depending on the item. The researcher concluded that there was an inconsistency of awareness about postsecondary costs among the participants. The data from the postsecondary monetary cost category underscores the need to increase the commitment of high school faculty and counselors to assist students in their understanding of the different types of financial aid programs and to complete the financial aid process.

The researcher noted that the data collected from the participants indicated that most of them lacked an understanding of the different types of financial aid programs available to them. On the other hand, most participants felt it was important to understand the financial aid process. Approximately a third of the participants acknowledged the need to seek assistance from their counselor to complete the FAFSA form. The researcher recognized that the data collected from the survey was based on participants' perception prior to completing the financial aid process. That the results of the monetary amount received from the financial aid process influences a student's decisions to attend a postsecondary institution supports the current literature (Bedsworth et al., 2006; Coca et al., 2011; Gibbons, 2005; Grodsky & Riegle-Crumb, 2010).

The researcher found through the study that most of the participants were willing to accept a student loan in order to pursue a postsecondary education. The literature indicated that student loans were a source of help to supplement the cost of attending college though it was daunting for students and their families to take on excessive debt, this because in many cases, low- and moderate-income students and families struggled to make the necessary payments (Advisory Report, 2002; Gasbarra et al., 2007). The literature indicated that the large remaining

expenses after grant aid, which produced excessive work and loan burdens, deterred many students from enrolling in a postsecondary institution (Advisory Report, 2002; Educational Opportunity, 2001).

***Subquestion: How well prepared did the participants believe they were in the components of social capital influences for postsecondary education?*** A review of the data regarding participants' perceptions of their social capital influences for postsecondary education varied depending on the item. The researcher concluded that there remained a substantial number of participants who lacked confidence that their needs were being met in the category of social capital influences for postsecondary through counseling services.

The items from the survey to which the participants responded pertained to school counselors, adults in the community, parents/guardian, and friends as to their influence on pursuing a postsecondary education. Each of these items had a different response based on the participants' perception in the fall 2014. Social capital was explained through an educational lens as the role of guidance, information, and support in helping students effectively navigate the postsecondary search and application process (Coca et al., 2009; Perna & Titus, 2005). The literature indicated that students who were able to develop social capital with parents and adults in the community had a better opportunity to complete the decision-making process to go on to postsecondary institutions (Choy, 2002; Elder et al., 2009; Kim & Schneider, 2005; Sokatch, 2006; Tierney & Venegas, 2006).

Most participants selected positive responses when the items referred to parents/guardian and other adults in the community as providing support for postsecondary and career counseling services, while less than a third of the participants indicated that they believed to have often met with their counselor to discuss postsecondary and workforce options. These findings supported

the research conducted by Perna and Titus (2005) which identified other adults in addition to parents as having an impact of students' decisions regarding postsecondary education. The literature noted that students greatly benefit from having counselors or other high school personnel as mentors due to their knowledge and skills to guide students through the college-going process especially if students lack the parent-student involvement in their education (Choy, 2002; Elder et al., 2009; Perna & Titus, 2005; Rowan-Kenyon, 2007).

The researcher concluded that participants' postsecondary and career decision making was often accompanied by help from caring adults. The data from the social capital influences for postsecondary education category provides high school personnel insight to the lack of postsecondary and career counseling services to which students have access throughout high school.

**Question 2: What is the relationship between socioeconomic status, as measured by parental income, and Idaho students' plans for postsecondary education?** The Spearman's rho correlation was applied to determine if there existed any relationship between students' postsecondary plans and socioeconomic status, as measured by parental income. Through the statistical analysis ( $r = .120$ ,  $r^2 = .014$ ,  $p = .026$ ), it was evident that there was a weak positive relationship that was statistically significant. The researcher acknowledges that the correlation results are so slight that it cannot be considered as to have practical significance. The small amount of variance of one variable can be explained by the variance of the other variable as it achieves significance because of the relatively large sample size. Though the correlation was weak, the results are of interest to the researcher because data from other research has found a stronger relationship.

As a result of the data, the researcher concludes that socioeconomic status is an ambiguous subject for many students and is evident that approximately 37% ( $N = 207$ ) of the participants were unaware of their family's estimated annual household income. Household income can be a sensitive subject which parents may chose not to discuss with their high school student. The researcher recognizes that the data for household income may not accurately reflect realistic students' postsecondary plans.

**Question 3: What is the relationship between Idaho students' plans for postsecondary education and access to high school counseling services?** The Spearman's rho correlation was conducted to determine if there existed any relationship between students' postsecondary plans and access to high school counseling services. Through the statistical analysis ( $r = -.107$ ,  $r^2 = .011$ ,  $p = .014$ ), it was evident that there was a weak negative relationship that was statistically significant. The researcher acknowledges that the correlation results are so slight, it cannot be considered as to have any practical significance. As indicated by the data from the Spearman's rho, there may be a lack of access to counseling services received by high school students. It may also indicate that the group of participants had postsecondary plans regardless of what counseling services were accessed during high school.

Based on the five additional survey items pertaining to counseling services, participant responses may indicate that most students were not satisfied with the services their school counselor provided. Student responses indicate that there may be a lack of student understanding of counseling services available to them and a lack of counselor availability. The aforementioned items also indicate that counselors may need to provide more transparency in regard to their role to assist students in postsecondary and career planning.

The literature supports the importance of postsecondary and career counseling services for high school students (Clendaniel, 2012; Foote, 2011; High School Action Plan, 2013; Hughes, 2012; Idaho Legislature, 2012). Previous studies found counselors play an important role in providing postsecondary guidance for parents and students (Clendaniel, 2012). Counselors need to be able to develop trusting relationships with students and their families in order to assist in providing information, guidance, and support students need to recognize the importance of developing a postsecondary education or career plan (Foote, 2011). Clarke and associates (2006) noted in their study that counselors and educators need to provide students with opportunities for career exploration as part of their career counseling curriculum.

**Question 4: What is the relationship between parental educational level and Idaho student plans for postsecondary education?** A non-parametric statistical test, the Spearman's rho correlation, was conducted to determine if there existed any relationship between students' postsecondary plans and parental educational level. Parental educational level was separated to reflect mothers' and fathers' educational levels for the correlation. Through the statistical analysis of the mothers' educational level ( $r = .168$ ,  $r^2 = .028$ ,  $p = .000$ ) and the fathers' educational level ( $r = .225$ ,  $r^2 = .050$ ,  $p = .000$ ), it was evident that there were weak positive relationships that was statistically significant. The researcher notes that the correlation results were so slight, it cannot be considered as to have practical significance.

The literature supports the findings that parental educational levels influence students' postsecondary plans (Cabrera & La Nasa, 2000; Clendaniel, 2012; Grodsky & Riegle-Crumb, 2010; Weihua & Williams, 2010). Previous research found that students whose parents that had completed at least a bachelor's degree were 20 percent more likely to have a postsecondary-going habitus than students whose parents did not have college degrees (Grodsky & Riegle-

Crumb, 2010). Researchers from the literature recognized the importance of continued parental support in the postsecondary transition process to be key to students' success in pursuing postsecondary education (Smith & Zhang, 2011).

## **Conclusions**

The participants who had planned to pursue a postsecondary education selected the social capital influence for postsecondary education category as having the greatest impact on their decision-making. Parents/guardian and other adults in the community provide guidance and mentoring to high school students in the postsecondary decision-making based on their experience. However, it is the highly-trained school counselors and other high school personnel who have the specific knowledge of the requirements needed to assist students to navigate the postsecondary decision-making process. Perhaps providing postsecondary and career-trained counselors may be an integral part in assisting students in making the connection of a postsecondary education and a successful career. A perception exists that postsecondary and career counseling services needs are not being met for high school students.

The participants perceived they were academically ready for a postsecondary education, however, the data from the 2014 SAT and ACT indicated that less than 50% of the general high school population who took the tests were college and career ready by graduation (ACT, 2014; SAT, 2014). Students and their families are often unaware of the rigorous course offerings students need to have completed in order to be academically ready to pursue a postsecondary education.

All of the correlations for Research Questions 2, 3, and 4 were significant, thus they cannot be considered to have been the result of chance, however little of the variance of one

variable was shared by the other variable, hence the correlations do not have practical significance.

### **Recommendations for Further Research**

Though each of the five categories is important to the student postsecondary decision-making, students might not recognize the impact each of these areas has on the process to successfully transition to a postsecondary education. The researcher acknowledges that this study does not ask students to rank or rate these five categories in order of importance. It is recommended that an instrument be developed to rank or rate the importance of the influences for high school students' postsecondary decision-making.

Social capital entails peer, parent, and other adult relationships which may include counselors, teachers, administrators, or coaches who influence student postsecondary decision-making. Further research is recommended to determine which other adults in the community may positively influence high school students to pursue a postsecondary education. The degree to which high school personnel provide postsecondary and career advising to students may be another area where research could be conducted. The amount of training counselors and other high school personnel receive concerning postsecondary and career planning may be of interest to future researchers. Another area which may be studied is how parents view their role with assisting their student's postsecondary decision-making.

The researcher notes that for future studies about high school students accessing counseling services, it is recommended that an instrument be developed which measures the specific reasons why students meet with counselors for reasons such as academic and career guidance, social and mental issues, and schedule changes. It is also recommended to include in

the instrument the criteria for “how often” students meet with their school counselor during high school.

The researcher notes that it would be beneficial to survey students during spring rather than fall of their senior year to obtain more concrete data for their postsecondary plans. It would be prudent to interview students to provide a personal view of their postsecondary decision-making experience. Interviewing students would allow the researcher to personalize the data through a qualitative lens.

Future studies may include a follow up to discover how many students actually implemented their postsecondary plan. Studying students’ understanding of what it means to be academically ready is an area for further consideration. Further, a longitudinal study to research Idaho’s public education system could be conducted to determine if there is an increase in the percentage of students who are academically ready to pursue a postsecondary education through the implementation of the Idaho Core Standards would merit consideration. Lastly, a study to determine academic readiness for postsecondary education by following up with graduates to determine how many students needed to take remedial classes during their freshman year at a postsecondary institution is recommended.

It would behoove future researchers to develop a more effective system to collect accurate socioeconomic data from students. It was evident through this study that over one third of the students were unaware of their family’s estimated annual household income even though they were informed in the parental consent form that they would be asked for that information.

### **Implications for Professional Practice**

The researcher notes that the descriptive data reported for this study indicate areas of improvement which have implications for professional practice for Idaho school districts. The

data collected about high school personnel postsecondary and career counseling services through the perception of participants indicate that there is a necessity to conduct further research such as a needs assessment to target areas of concern in order to expand student satisfaction with counseling services for postsecondary and career planning. The data collected from this study may be of interest to other districts of similar student demographics.

**Policy makers.** Given the findings of this and similar studies, it would be appropriate for policy makers to provide the resources needed to support the implementation of the Idaho State Board of Education's plan to increase the number of students who pursue postsecondary education. Fiscal implications would need to be addressed at the Idaho State Legislative and the Idaho State Board of Education in order to restore or increase career counselors and to reduce counselor student loads in Idaho high schools. According to the American School Counselor Association (2014) the recommended counselor to student ratio is 1:250 and many of Idaho high schools exceed the ratio. Counselor preparation programs in higher education may need to be evaluated to ensure these programs provide postsecondary and career information through courses that explore and develop the requisite knowledge and skills to disseminate information to students and their parents.

**District administration.** District administration has the responsibility to facilitate a postsecondary and career culture at each grade level. It is recommended that postsecondary and career professional development in-service be provided to counselors, teachers, and other high school personnel. Each employee needs to be able to articulate how his or her role helps to support a postsecondary and career culture. Resources which are disseminated by district personnel need to reflect the postsecondary and career culture. As resources are made available,

restoring career counselors and reducing current counselor student loads must take place to effectively provide postsecondary and career guidance to students.

Another area where district administration may influence students to pursue a postsecondary education or training program is to require a college and career readiness course as part of the high school graduation requirements for all students. Rigorous courses such as honors, concurrent credit, PTE, IB, and AP need to be available to students. Providing highly qualified teachers to teach the rigorous academic courses must be supported through professional development in order to ensure students are academically prepared for postsecondary and career opportunities.

**High school administrators.** A postsecondary and career culture needs to be implemented through every aspect of the school system. Extra-curricular activities, athletics, clubs, student organizations, and classes should have a focus on promoting postsecondary education as their end goal for each student. Postsecondary and career professional development needs to be provided to staff to ensure they have the correct information to answer fundamental questions. Administrators have the ability to approve the offering of a postsecondary and career course with the assistance of the counselors and the instructor to incorporate best practices for students.

The postsecondary and career course may focus on career exploration and its postsecondary education requirements. Juniors during the spring semester or seniors during the fall semester could elect to take this course which may include college test prep, essay writing, resume preparation, and obtaining letters of recommendations. Careers which are in demand and have growth opportunities are an area to explore with students through this course. Researching postsecondary institutions which offer the educational programs for specific careers also needs to

be included as part of the course. Educating students about the financial aid process and ensuring they have an understanding of Pell Grants, student loans, scholarships, and work study programs is another area of support which students need assistance in the postsecondary decision-making. The course may provide assistance for completing applications for postsecondary institutions. SAT and ACT data may be reviewed to assist students with how to analyze their scores.

**High school counselors.** High school counselors need to be the experts for postsecondary information. Counselors may need to be provided with the knowledge and skills to disseminate information to students and their parents. They need to be aware of the influence they have in providing information for the postsecondary transition process. Being experts in assisting students through increasing students' postsecondary awareness, providing academic guidance, assisting students through the admission and financial aid process are integral steps in helping students be successful as they pursue postsecondary education.

High school students need the assistance of highly trained school personnel to assist them with postsecondary admission requirements and processes. The postsecondary admissions process has specific timelines and requirements for students to complete. The counselors need to have the specific knowledge to meet individual student needs such as National Collegiate Athletic Association (NCAA) requirements and academic requirements to specific postsecondary institutions. Counseling resources such as time, postsecondary training, career awareness, and a manageable number of students to work with need to be present in order to develop trusting relationships with students and their families in order assist them through the admissions process. Highly-trained school counselors or other certificated personnel can make completing the FAFSA form easier. Counselors also have the ability to provide other assistance through the

financial aid process such as scholarship opportunities which are often filtered through the high school counseling services department.

Counselors need to develop a plan to communicate to parents and students the postsecondary and career guidance services they are able to provide. One suggestion would be to implement workshops in the evening or on weekends for adults and students in the community about the influences that effect students' postsecondary decision-making. High school counselors have the opportunity to recommend and encourage students to challenge themselves academically through taking honors, concurrent credit, PTE, IB, and AP courses which provide students with rigorous academic opportunities.

**High school teachers.** There is a need to ensure that high school teachers are informed about the five categories which influence students' postsecondary and career decision making. Talking points for postsecondary and career awareness, postsecondary and career admissions process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and social capital influence for postsecondary education should be provided to teachers so accurate and comprehensive information can be communicated to students. Teachers should be knowledgeable about current admission processes and requirements to provide supplemental counseling services for students. Students interact with teachers on a daily basis which may provide them with frequent opportunities to discuss postsecondary plan information. Professional development opportunities allow teachers to learn about career possibilities in specific subject areas. Meaningful learning increases when teachers provide connections between content and careers. Teachers need to be aware of the influence they have on students pursuing postsecondary education.

High school teachers influence students daily in the classroom. Teachers need access to assessment scores such as ISAT (Idaho Standards Achievement Test), PSAT, EXPLORE, PLAN, SAT, and ACT to make data-driven decisions which influence instruction. Professional development opportunities for honors, AP, IB, and concurrent credit courses need to be provided for teachers to help ensure they are implementing rigorous academic standards for students.

### **Final Thoughts**

This research has provided data which supports the literature about postsecondary decision-making influences. The five categories of postsecondary and career awareness, postsecondary and career admissions process, academic readiness for postsecondary education and careers, postsecondary monetary cost, and social capital influence for postsecondary education were the threads which became apparent as the researcher reviewed the current literature. Each of the categories has the potential to be a barrier or a resource to students' postsecondary decision-making. It has become evident to the researcher that adults play vital roles in each of these categories. Adults such as parents/guardian, teachers, counselors, and other high school personnel need to understand the influence they have on students pursuing a postsecondary education. High school students need to be supported as they begin the postsecondary decision-making process by helping them maneuver through the categories. There is a need in society for high school students to gain a postsecondary education in order to be able to compete in the global workforce, to make a livable wage, and to be productive citizens in society.

## References

- Abou-Nassif, S. M. (2011). *Self-reported factors that influence choice of college-bound students in Lebanon*. (Doctoral dissertation). Retrieved from PQDT Open. (3444927)
- Academic Benchmarks. (2014). *Common core state standards adoption map*. Retrieved from <http://www.academicbenchmarks.com/ccss-state-status>
- Achieve. (2013). *Implementing the common core state standards: The role of the elementary school leader*. Retrieved from [http://www.achieve.org/files/RevisedElementaryActionBrief\\_Final\\_Feb.pdf](http://www.achieve.org/files/RevisedElementaryActionBrief_Final_Feb.pdf)
- ACT. (2006). *Ready for college and ready for work: Same or different?* Retrieved from <https://www.act.org/research/policymakers/pdf/ReadinessBrief.pdf>
- ACT. (2007). *The forgotten middle: Improving readiness for high school*. Retrieved from <http://jc-schools.net/test/ACT/Readiness4HighSchool.pdf>
- ACT. (2008). *The forgotten middle: Ensuring that all students are on target for college and career readiness before high school*. Retrieved from <http://www.act.org/research/policymakers/pdf/ForgottenMiddle.pdf>
- ACT. (2010). *A first look at the common core and college and career readiness*. Retrieved from <http://www.act.org/commoncore/pdf/FirstLook.pdf>
- ACT. (2011). *College readiness standards*. Retrieved from <http://www.act.org/standard/pdf/CRS.pdf>
- ACT. (2013). *Enhancing college and career readiness and success: The role of academic behaviors*. Retrieved from [http://www.act.org/engage/pdf/ENGAGE\\_Issue\\_Brief.pdf](http://www.act.org/engage/pdf/ENGAGE_Issue_Brief.pdf)

- ACT. (2014). *The condition of college and career readiness 2014*. Retrieved from <http://www.act.org/research/policymakers/cccr14/pdf/CCCR14-NationalReadinessRpt.pdf>
- ACT EXPLORE. (2014). *ACT explore: The test and your scores*. Retrieved from <http://www.act.org/explorestudent/index.html>
- Advisory Report. (2002). *Empty promises: The myth of college access in America*. Retrieved from <http://www2.ed.gov/about/bdscomm/list/acsfa/emptypromises.pdf>
- Albertson Foundation. (2011). *College and career readiness: high school is not enough*. Retrieved from <http://www.jkaf.org/initiatives/postsecondary-success>
- Allen, E, & Seaman, C. A. (2007). *Likert scales and data analyses*. Quality Progress. Retrieved from <http://asq.org/quality-progress/2007/07/statistics/likert-scales-and-data-analyses.html>
- Allen, J., Robbins, S. B., & Sawyer, R. (2010). Can measuring psychosocial factors promote college success? *Applied Measurement in Education: Benefits of Measuring Psychosocial Factors*, 23, 1-22. doi: 10.1080/08957340903423503
- American School Counselor Association. (2014). *The ASCA national model: A framework for school counseling programs* (3<sup>rd</sup> ed.). Retrieved from <http://www.ascanationalmodel.org/Ascanationalmodel/media/ANM-templates/ANMExecSumm.pdf>
- Bailey, T., Constantine, J., Finkelstein, N., Hurd, N., & Tierney, W. G. (2009). *Helping students navigate the path to college: What high schools can do: A practice guide* (NCEE# 2009-4066). Washington, DC: National Center for Educational Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education.

- Baltimore County Public Schools. (2010). *Develop a research proposal: Planning for methodology – limitations and delimitations*. Retrieved from [http://www.bcps.org/offices/lis/researchcourse/develop\\_writing\\_methodology\\_limitations.html](http://www.bcps.org/offices/lis/researchcourse/develop_writing_methodology_limitations.html)
- Baum, S., & Payea, K. (2004). *Education pays 2004: The benefits of higher education for individuals and society*. Retrieved from [http://www.collegeboard.com/prod\\_downloads/press/cost04/EducationPays2004.pdf](http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf)
- Bedsworth, W., Colby, S., & Doctor, J. (2006). *Reclaiming the American dream*. Retrieved from <http://www.nassgap.org/library/docs/ReclaimingtheAmericanDream.pdf>
- Bertram, D. (2011). *Likert scales*. Retrieved from <http://poincare.matf.bg.ac.rs/~kristina/topic-dane-likert>
- Betz, N. E. (2007). Career self-efficacy: Exemplary recent research and emerging directions. *Journal of Career Assessment, 15*(4), 403-422. doi: 10.1177/1069072707305759
- Betz, N. E., Hammond, M. S., & Multon, K. D. (2007). The reliability and factor structure of the career decision self-efficacy scale-sf with African Americans. *Journal of Career Assessment, 15*(2), 194-205. doi: 10.1177/1069072706298020
- Bidwell, A. (2014). U.S. college readiness lags in math, science. *U.S. News*. Retrieved from <http://www.usnews.com/news/articles/2014/08/20/act-college-preparedness-remains-flat-for-high-school-graduates>
- Boone, H. N., & Boone, D. A. (2012). Analyzing Likert data. *Journal of Extension, 50*(2). Retrieved from <http://www.joe.org/joe/2012april/tt2.php>

- Boser, U., & Burd, S. (2009). *Bridging the gap: How to strengthen the Pk-16 pipeline to improve college readiness*. Education Policy Program, New America Foundation. Retrieved from <http://www.newamerica.net/files/NAF%20Bridging%20the%20Gap.pdf>
- Bozick, R., & Deluca, S. (2010). *Not making the transition to college: School, work, and opportunities in the lives of contemporary American youth*. Retrieved from [http://www.rand.org/content/dam/rand/pubs/working\\_papers/2010/RAND\\_WR760.pdf](http://www.rand.org/content/dam/rand/pubs/working_papers/2010/RAND_WR760.pdf)
- Brown, A. B., & Hoyt, J. E. (2003). Identifying college choice factors to successfully market your institution. *C & U Journal.*, 3-10. Retrieved from [http://www.studentclearinghouse.org/colleges/files/ST\\_UVSC\\_casestudy.pdf](http://www.studentclearinghouse.org/colleges/files/ST_UVSC_casestudy.pdf)
- Cabrera, A. F., & La Nasa, S. M. (2000). Understanding the college-choice process of disadvantage students. *New Directions for Institutional Research*, 107, 5-22.
- Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Retrieved from <http://cew.georgetown.edu/jobs2018>
- Chen, X., Choy, S. P., Horn, L. J., & Nunez, A. (2000). Transition to college: What helps at-risk students and students whose parents did not attend college. *New Directions for Institutional Research*, 107, 45-63.
- Choy, S. P. (2002). *Access and persistence: Findings from 10 years of longitudinal research on students*. American Council on Education Center for Policy Analysis. Retrieved from <http://inpathways.net/access.pdf>
- Clarke, C. P., Gushue, G. V., Pantzer, K. M., & Scanlan, K. R. L. (2006). The relationship of career decision-making self-efficacy, vocational identity, and career exploration behavior in African American high school students. *Journal of Career Development*, 33(1), 19-28. doi: 10.1177/0894845305283004

- Clendaniel, C. J. (2012). *Program design for a parent education and involvement plan*. (Doctoral dissertation). Retrieved from PQDT Open. (1510411)
- Coca, V., Nagaoka, J., & Roderick, M. (2009). *Barriers to college attainment: Lessons from Chicago*. Retrieved from <http://www.americanprogress.org/issues/higher-education/report/2009/01/27/5432/barriers-to-college-attainment-lessons-from-chicago/>
- Coca, V., Nagaoka, J., & Roderick, M. (2011). Potholes on the road to college: High school effects in shaping urban students' participation in college application, four-year college enrollment, and college match. *Sociology of Education*, 84(3), 178-211. doi: 10.1177/0038040711411280
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120.
- College Board. (2013a). *College board history*. Retrieved from <http://about.collegeboard.org/history>
- College Board. (2013b). *First-generation students*. Retrieved from <http://professionals.collegeboard.com/guidance/prepare/first-generation>
- Conklin, A. M., Dahling, J. J., & Garcia, P. A. (2012). Linking affective commitment, career self-efficacy, and outcome expectations: A test of social cognitive career theory. *Journal of Career Development*, 40(1), 68-83. doi: 10.1177/0894845311423534
- Council of Chief State School Officers. (2010). *Common Core State Standards Initiative*. Retrieved from <http://www.corestandards.org/resources/frequently-asked-questions>
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education, Inc.

- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson Education, Inc.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Cumberland Regional High School. (2010). *Senior exit survey 2010*. Retrieved from <http://www.crhsd.org/pubsurveys/Lists/Senior%20Exit/overviewOriginal.aspx>
- Cummings, H., Hayek, J., Hossler, D., Jacob, S., Kinzie, J., & Palmer, M. (2004). Fifty years of college choice: Social, political, and institutional influences on the decision-making process. *Lumina Foundation*, 5(3). Retrieved from <http://www.luminafoundation.org/publications/Hossler.pdf>
- Dennick, R., & Tavakol, M. (2011). Making sense of cronbach's alpha. *International Journal of Medical Education*, 2(1), 53-55. doi: 10.5116/ijme.4dfb.8dfd
- Dougherty, C., & Fleming, S. (2012). *Getting students on track to college and career readiness: How many catch up from far behind?* Retrieved from <http://www.nc4ea.org/linkservid/66D51685-FBE1-F823-807B4C309E3C0E24/showMeta/0/>
- Duffett, A., Johnson, J., & Ott, A. (2005). *Life after high school: Young people talk about their hopes and prospects*. Public Agenda. Retrieved from [http://www.publicagenda.org/files/life\\_after\\_high\\_school.pdf](http://www.publicagenda.org/files/life_after_high_school.pdf)
- Educational Opportunity. (2001). *Access denied: Restoring the nation's commitment to equal educational opportunity*. Retrieved from [http://www2.ed.gov/about/bdscomm/list/acsfa/access\\_denied.pdf](http://www2.ed.gov/about/bdscomm/list/acsfa/access_denied.pdf)

Elder, H. G. Jr., Erickson, L. D., & McDonald, S. (2009). Informal mentors and education: Commentary or compensatory resources? *Sociology of Education*, 82(4), 344.

Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes, T.S., Johnson, D.W., & Beechum, N.O. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. Chicago: University of Chicago Consortium on Chicago School Research. Retrieved from <http://files.eric.ed.gov/fulltext/ED542543.pdf>

Fatima, N., & Paulsen, M.B. (2004). Higher education and state workforce productivity in the 1990s. *Thought and Action: NEA Higher Education Journal*, 20(1), 75–94.

Florida Center for Instructional Technology. (2012). *Reliability and validity*. University of Southern Florida. Retrieved from <http://fcit.usf.edu/assessment/basic/basiccc.html>

Foote, C. C. (2011). *College preparation in a low-income, urban, public high school: A case study*. (Doctoral dissertation). Retrieved from PQDT Open. (3473661)

Fowler, F. J. (2014). *Survey research methods* (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.

Garson, G.D. (2012). *Testing Statistical Assumptions*. Statistical Associates Publishing. North Carolina School of Public and International Affairs. Retrieved from [ftp://71.237.45.194/FreeAgent\\_GoFlex\\_Drive/Brandon\\_Backup/2012-02-10\\_15-32-11/Memeo/2012-02-10\\_15-32-11/C\\_/Users/Brandon/Documents/eBooks/Statistics/Testing%20Statistical%20Assumptions\\_Statistical%20Associates.pdf](ftp://71.237.45.194/FreeAgent_GoFlex_Drive/Brandon_Backup/2012-02-10_15-32-11/Memeo/2012-02-10_15-32-11/C_/Users/Brandon/Documents/eBooks/Statistics/Testing%20Statistical%20Assumptions_Statistical%20Associates.pdf)

Gasbarra, P., Johnson, J., Immerwahr, J., Ott, A., & Rochkind, J. (2007). *Squeeze play: How parents and the public look at higher education today*. Public Agenda. Retrieved from [http://www.highereducation.org/reports/squeeze\\_play/squeeze\\_play.pdf](http://www.highereducation.org/reports/squeeze_play/squeeze_play.pdf)

- Gibbons, M. M. (2005). *College-going beliefs of prospective first generation college students: Perceived barriers, social supports, self-efficacy, and outcome expectations*. (Unpublished doctoral dissertation). University of North Carolina, North Carolina.
- Govan, G. V., Patrick, S., & Yen, C. (2006). How high school students construct decision-making strategies for choosing colleges. *College and University Journal*, 81(3), 19-29.
- Grodsky, E., & Riegle-Crumb, C. (2010). Those who choose and those who don't: Social background and college orientation. *The Annals of the American Academy of Political and Social Science*, 627(1), 1-35. doi: 10.1177/0002716209348732
- Harding University, (2014). *Ordinal measures of correlation: Spearman's rho and gamma*. Retrieved from <http://www.harding.edu/sbreezeel/460%20files/statbook/chapter14.pdf>
- High School Action Plan. (2013). *High school seniors: Action plan*. Retrieved from <http://www.scholarships.com/resources/college-prep/preparing-for-college/high-school-action-plan/high-school-seniors/>
- Hossler, D., Braxton, J., & Coopersmith, G. (1989). Understanding student college choice. In J. Smart (ed.), *Higher education: Handbook of theory and research* (pp. 231–288). New York: Agathon Press.
- Hossler, D., & Gallagher, K. (1987). Studying student college choice: A three-phase model and the implications for policy maker. *College and University*, 63(3), 207-221.
- Hughes, K. (2012). *The college completion agenda 2012 progress report*. College Readiness Initiatives. Retrieved from [http://media.collegeboard.com/digitalServices/pdf/advocacy/cca/12b-6368\\_CCAProgressReport\\_WR.pdf](http://media.collegeboard.com/digitalServices/pdf/advocacy/cca/12b-6368_CCAProgressReport_WR.pdf)

- Idaho Department of Labor. (2013). *2013 Education and Training Pay*. Retrieved from <http://labor.idaho.gov/publications/educationpays.pdf>
- Idaho Department of Labor. (2014a). *2014 Education and Training Pay*. Retrieved from <http://labor.idaho.gov/publications/educationpays.pdf>
- Idaho Department of Labor. (2014b). *Idaho employment: Middle skills focus of filling the gap*. Retrieved from <http://labor.idaho.gov/publications/lmi/pubs/idempnews/iecur.pdf>
- Idaho Legislature. (2012). *Reducing barriers to postsecondary education*. Office of Performance Evaluations. Retrieved from <http://www.legislature.idaho.gov/ope/publications/reports/r1201.pdf>
- Idaho State Board of Education. (2011a). *Postsecondary enrollment during the first year after high school*. Retrieved from [http://www.boardofed.idaho.gov/research\\_stats/Documents/High-School-Feedback/Postsecondary-Enrollment-First-Year-After-High-School.pdf](http://www.boardofed.idaho.gov/research_stats/Documents/High-School-Feedback/Postsecondary-Enrollment-First-Year-After-High-School.pdf)
- Idaho State Board of Education. (2011b). *Postsecondary enrollment immediately following graduation*. Retrieved from [http://www.boardofed.idaho.gov/research\\_stats/Documents/High-School-Feedback/Postsecondary-Enrollment-immediately-Following-Graduation.pdf](http://www.boardofed.idaho.gov/research_stats/Documents/High-School-Feedback/Postsecondary-Enrollment-immediately-Following-Graduation.pdf)
- Idaho State Board of Education. (2012). *Complete College Idaho: A plan for growing talent to fuel innovation and economic growth in the gem state*. Retrieved from [http://www.boardofed.idaho.gov/board\\_initiatives/cqi/documents/cqi\\_plan.pdf](http://www.boardofed.idaho.gov/board_initiatives/cqi/documents/cqi_plan.pdf)
- Idaho State Department of Education. (2014a). *Advanced Opportunities*. Retrieved from <http://www.sde.idaho.gov/site/advancedOpp/>

- Idaho State Department of Education. (2014b). *Idaho System for Educational Excellence (ISEE)*. Retrieved from <http://www.sde.idaho.gov/site/isee/>
- Kim, D. H., & Schneider, B. (2005). Social capital in action: Alignment of parental support in adolescents' transition to postsecondary education. *Social Forces*, 84(2), 1181-1206.
- Khadaroo, S. T. (March 7, 2014). *Obama, touting a college education, urges seniors: fill out financial aid form*. The Christian Science Monitor. Retrieved from <http://www.csmonitor.com/USA/Education/2014/0307/Obama-touting-a-college-education-urges-seniors-fill-out-financial-aid-form>
- Laerd Statistics. (2013). *Spearman's rho testing using SPSS*. Retrieved from <https://statistics.laerd.com/premium/sroc/spearman's-rank-order-correlation-in-spss.php>
- Leslie, L. L., & Brinkman, P. T. (1988). The economic value of higher education. *The Journal of Higher Education*, 60(5), 609-611.
- Lodico, M. G., Spaulding, D. T., & Voegtler, K. H. (2006). *Methods in educational research: From theory to practice*. San Francisco, CA: Jossey-Bass.
- Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, 35(6), 382-386.
- Macdonald, R., Reynolds, J., Sisco, L., & Stewart, M. (2006). Have adolescents become too ambitious? High school seniors' educational and occupational plan, 1976 to 2000. *Social Problems*, 53(2), 186-206.
- Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.
- McDonough, P. M. (1997). *Choosing colleges: How social class and schools structure opportunity*. Albany: State University of New York Press.

- McGaughy, C. (2011). *Understating college and career readiness and common core state standards*. Education Policy Improvement Center. Retrieved from [http://www.epiconline.org/publications/documents/20110421\\_IL\\_Workshops\\_FINAL.pdf?force\\_download=true](http://www.epiconline.org/publications/documents/20110421_IL_Workshops_FINAL.pdf?force_download=true).
- McKechnie, J. D. (2012). *Factors related to college going self-efficacy among urban African American high school students*. (Doctoral dissertation). Retrieved from PQDT Open. (3543594).
- McLeod, S. (2008). Likert scale. *Simply Psychology*. Retrieved from <http://www.simplypsychology.org/likert-scale.html>
- Mondale, S., & Patton, S. B. (2001). *School: The story of the American public education*. Boston, MA: Beacon Press.
- National Association for College Admission Counseling (NACAC) (2012). *75 Years of history and service*. Retrieved from <http://www.nacacnet.org/about/history/Documents/nacachistory.pdf>
- National Center for Education Statistics. (2001). *Paving the way to postsecondary education: K-12 intervention programs for underrepresented youth*, Washington, DC. Retrieved from <http://nces.ed.gov/pubs2001/2001205.pdf>
- National Center for Education Statistics. (2002). *Nontraditional undergraduates*. Retrieved from <http://nces.ed.gov/pubs2002/2002012.pdf>
- National Center for Education Statistics. (2012a). *The condition of education 2012* (NCES 2012-034). Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_cpa.asp](http://nces.ed.gov/programs/coe/indicator_cpa.asp)
- National Center for Education Statistics. (2012b). *Digest of Education Statistics, 2011* (NCES 2012-001), Chapter 3, Retrieved from [http://nces.ed.gov/programs/digest/d11/ch\\_3.asp](http://nces.ed.gov/programs/digest/d11/ch_3.asp)

- National Center for Education Statistics. (2013). *Characteristics of postsecondary students*. Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_csb.asp](http://nces.ed.gov/programs/coe/indicator_csb.asp)
- National Center for Public Policy and Higher Education. (2008). *Idaho measuring up 2008: The state report card on higher education*. Retrieved from [http://measuringup2008.highereducation.org/print/state\\_reports/long/ID.pdf](http://measuringup2008.highereducation.org/print/state_reports/long/ID.pdf)
- National Governors Association Center. (2010). *Setting statewide college- and career-ready*. Washington, DC. Retrieved from <http://www.nga.org/files/live/sites/NGA/files/pdf/1008COLLEGECAREERREADYGOALS.PDF>
- Nebeker, C. (2014). *Basic research concepts*. San Diego State University. Retrieved from <http://ori.hhs.gov/education/products/sdsu/topics.htm>
- Organization for Economic Cooperation and Developing Countries. (2012). *Education at a glance: OECD indicators 2012*. Retrieved from <http://www.oecd.org/unitedstates/CN%20-%20United%20States.pdf>
- O\*NET, (2013). *About O\*Net*. Retrieved from <http://www.onetcenter.org/overview.html>
- Parke, G. (2013, October 23). Higher education act seeks reauthorization. *The Chronicle*. Retrieved from <http://www.dukechronicle.com/articles/2013/10/24/higher-education-act-seeks-reauthorization>
- Paulsen, M. (1990). *College choice: Understanding student enrollment behavior*. ASHE-ERIC Higher Education Report No. 6. Washington, DC: George Washington University, School of Education and Human Development.
- Paulsen, M.B. (1996a). Higher education and productivity: An afterword. *Thought and Action: NEA Higher Education Journal*, 12(2): 135–139.

- Paulsen, M.B. (1996b). Higher education and state workforce productivity. *Thought and Action: NEA Higher Education Journal*, 12(1): 55–77.
- Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. *Higher Education: Handbook of Theory and Research*, XXI, 99-157.
- Perna, L. W. (2010). Toward a more complete understanding of the role of financial aid in promoting college enrollment: The importance of context. *Higher Education: Handbook of Theory and Research*, 25, 129-179. doi: 10.1007/978-90-481-8598-6
- Perna, L. W., & Titus, M. A. (2005). The relationship between parental involvement as social capital and college enrollment: An examination of racial/ethnic group differences. *The Journal of Higher Education*, 76(5), 485-518.
- Peters, G., & Woolley, J. (2014). Statement by the president making a public report of the commission on higher education. *The American Presidency Project*. Retrieved from <http://www.presidency.ucsb.edu/ws/?pid=12802>
- Pound, S. R. (2011). *A case study analysis of one suburban high school's college preparation program*. (Doctoral dissertation). Retrieved from PQDT Open. (3479391)
- Public Agenda. (2012). *Student voices on the higher education pathway: Preliminary insights and stakeholder engagement considerations*. Retrieved from [http://www.publicagenda.org/files/student\\_voices.pdf](http://www.publicagenda.org/files/student_voices.pdf)
- Pulliam, J. D., & Van Patten, J. J. (2013). *The history and social foundations of American education (10<sup>th</sup> ed.)*. Boston, MA: Pearson.
- Qualtrics. (2014). *Qualtrics research suite*. Retrieved from <http://qualtrics.com/research-suite/>

- Reisel, L. (2011). Two paths to inequality in educational outcomes: Family background and educational selection in the United States and Norway. *Sociology of Education*, 84(4), 261-280. doi: 10.1177/0038040711417012
- Rowan-Kenyon, H. T. (2007). Predictors of delayed college enrollment and the impact of socioeconomic status. *The Journal of Higher Education*, 78(2), 188-214.
- Saint Paul Public Schools. (2009). *Saint paul public schools survey handbook*. Retrieved from [http://rea.spps.org/sites/ce5895f7-8898-484d-a56b-b4d0bee502e6/uploads/REA\\_Survey\\_Guidelines.pdf](http://rea.spps.org/sites/ce5895f7-8898-484d-a56b-b4d0bee502e6/uploads/REA_Survey_Guidelines.pdf)
- Salkind, N. J. (2014). *Statistics for people who think they hate statistics*. (5<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications.
- SAT. (2013). *2013 SAT report on college and career readiness*. Retrieved from <http://media.collegeboard.com/homeOrg/content/pdf/sat-report-college-career-readiness-2013.pdf>
- SAT. (2014). *2014 SAT results: opportunities missed in the class of 2014*. Retrieved from <https://www.collegeboard.org/releases/2014/program-results-reveal-missed-opportunities-areas-promise-students>
- Savitz-Romer, M. (2015). Guest perspective: Preparation gaps. *Journal of College Access*, 1(1), 56-59.
- Sawyer, R. (2008). *Benefits of additional high school course work and improved course performance in preparing students for college*. ACT Research Report Series. Retrieved from [http://www.act.org/research/researchers/reports/pdf/ACT\\_RR2008-1.pdf](http://www.act.org/research/researchers/reports/pdf/ACT_RR2008-1.pdf)
- Schneider, M. (2009). Obama's educational hopes face achievement realities. *The Journal of the American Enterprise Institute*. Retrieved from

<http://www.american.com/archive/2009/april-2009/obama2019s-education-hopes-face-achievement-realities/>

Slavin, R. E. (2007). *Educational research: In an age of accountability*. Boston, MA: Pearson Education.

Smith, W. L., & Zhang, P. (2011). From high school to college: The transition experiences of black and white students. *Journal of Black Studies*, 45(5), 828-845. doi: 10.1177/0021934710376171

Sneva, J. N. (2011). *Exploring career decision-making self-efficacy, career maturity attitudes, and racial identity attitudes of college students of color*. (Doctoral dissertation). Retrieved from PQDT Open. (3460800)

Sokatch, A. (2006). Peer influences on the college-going decisions of low socioeconomic status urban youth. *Education and Urban Society*, 39, 128-146. doi: 10.1177/0013124506291783

Strive Partnership Report. (2011). *Continuous improvement: Cincinnati public schools college access alliance*. Retrieved from [http://www.strivenetwork.org/sites/default/files/images/2011%20Strive %20Partnership%20Report.pdf](http://www.strivenetwork.org/sites/default/files/images/2011%20Strive%20Partnership%20Report.pdf)

Tanner, D. T. (2012). *Using statistics to make educational decisions*. Thousand Oaks, CA: Sage Publications.

Tate, K. A., Caperton, W., Kaiser, D., Pruitt, N. T., White, H., & Hall, E. (2015). An exploration of first-generation college students' career development beliefs and experiences. *Journal of Career Development*, 1-17. doi: 10.1177/0894845314565025

- The Association for Educational Communications and Technology. (2001). *What is descriptive research?* Retrieved from [http://learngen.org/~aust/EdTecheBooks/AECT\\_HANDBOOK96/41/41-01.html](http://learngen.org/~aust/EdTecheBooks/AECT_HANDBOOK96/41/41-01.html)
- The Institute for Higher Education Policy. (2013). *College readiness issue brief: An essential ingredient to success*. Washington DC: Pathways to College Network. Retrieved from <http://www.pathwaystocollege.net/pdf/support.pdf>
- The White House. (2009). *President Barack Obama address to the joint session of congress*. Retrieved from [http://www.whitehouse.gov/the\\_press\\_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress](http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress)
- Tierney, W. G., & Venegas, K. M. (2006). Fictive kin and social capital: The role of peer groups in applying and paying for college. *American Behavioral Scientist*, 49(12), 1687-1702. doi: 10.1177/0002764206289145
- Treasure Valley Education Partnership (TVEP). (2013). *2013 Baseline report card*. Retrieved from [http://idahotvep.org/media/files/2013\\_TVEP%20Report%20Card.pdf](http://idahotvep.org/media/files/2013_TVEP%20Report%20Card.pdf)
- U.S. Census Bureau. (2012). *State & county quick facts*. Retrieved from <http://quickfacts.census.gov/qfd/states/16/1652120.html>
- U.S. Department of Education. (2013). *Higher education opportunity act 2008*. Retrieved from <http://www2.ed.gov/policy/highered/leg/hea08/index.html>
- U.S. Department of Education. (2014). *Federal pell grant program*. Retrieved from <http://www2.ed.gov/programs/fpg/index.html>
- U.S. National Archives & Records Administration. (2014). *Servicemen's readjustment act 1944*. Retrieved from <http://www.ourdocuments.gov/doc.php?flash=true&doc=76>

United States Courts. (2014). History of brown v. board of education. Retrieved from

<http://www.uscourts.gov/educational-resources/get-involved/federal-court-activities/brown-board-education-re-enactment/history.aspx>

United States Senate Committee. (2013). *The civil rights act of 1964*. Retrieved from

<http://www.judiciary.senate.gov/about/history/CivilRightsAct.cfm>

West Ada School District. (2014). *School choice and websites*. Retrieved from

<http://www.meridianschools.org/Pages/Home.aspx>

Weihua, F., & Williams, C. M. (2010). The effects of parental involvement on students' academic self-efficacy, engagement and intrinsic motivation. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 30(1), 53-74. doi: 10.1080/01443410903353302

World Book Dictionary. (2005). *The world book dictionary*. Chicago, IL: World Book Dictionary, Inc.

Wyse, S. E. (2012). *4 main benefits of survey research*. Retrieved from

<http://www.snapsurveys.com/blog/4-main-benefits-survey-research/>

## Appendix A

### Online Student Survey

#### Postsecondary Decision Making

##### Q95 Postsecondary Decision-Making Influences

Q1 Thank you for taking the time to complete this online senior survey about your postsecondary decision-making process. The data gathered will provide insight to high school personnel so they can more effectively guide students through the transition from high school to a postsecondary institution successfully. A postsecondary institution is defined as a professional technical training program, community college, college, or university.

Q2 By continuing with the survey, you are providing your personal consent to participate in the study by your own free will in addition to your parental/guardian consent. At any time if you choose to discontinue taking the survey you may do so by exiting the survey without repercussions for not completing the survey. The survey will be anonymous. Anonymous means that no one, not even the researcher, will be able to connect the data to the individual participant. If there is an item you are not comfortable addressing you may skip the item.

Q3 Please read the items carefully and take your time, it is not a timed survey. The survey has demographic data with its responses and five areas with items that can be answered by selecting the following:

- Strongly Disagree
- Disagree
- Neither Agree or Disagree
- Agree
- Strongly Agree

Thank you again for your participation.

##### Q17 Postsecondary & Career Awareness

Q18 Select the response that best describes your reaction to the statement.

Q19 I have access to information about postsecondary information.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q20 I am confident that my high school courses prepared me academically for a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q21 I received a sufficient amount of postsecondary advising from my school counselor to make decisions about my future.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q22 High school supplied me with adequate information about career exploration for me to make informed choices for my future.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q23 I know what career I want to pursue after high school graduation.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q24 I have researched the level of effort it will take to pursue my desired career.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q25 I have an understanding of the educational requirements needed to pursue my chosen career.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q26 High school prepared me academically for the workforce.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q27 High school supplied me with adequate information about postsecondary opportunities for me to make informed choices for my future.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q28 Postsecondary Admission Process

Q29 Select the response that best describes your reaction to the statement.

Q30 It is important to me to understand the postsecondary admission process.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q31 The career center in my high school was a good resource to help me through a postsecondary application process.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q32 I plan to apply to one or more postsecondary institutions this fall.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q33 It is important for me to complete an application for each postsecondary institution I am considering.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q34 It is important for me to request a letter of recommendation as part of the postsecondary application process.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q35 It is important for me to complete a postsecondary entrance exam (SAT/ACT/Compass).

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q36 Will visiting a postsecondary campus during the school year influence your decision to attend a postsecondary institution?

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q37 I am aware of the postsecondary application process for the institutions to which I am going to apply.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q38 I am aware of the postsecondary application deadlines for the institutions to which I am going to apply.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q39 Academically Prepared

Q40 Select the response that best describes your reaction to the statement.

Q41 My GPA was important to me throughout high school.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q42 It was important to me to take rigorous academic courses (honors/AP/concurrent credit courses).

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q43 I challenged myself academically to prepare for a postsecondary education and the workforce.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q44 I feel academically prepared to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q45 I took Professional Technical Education Courses (PTE) in high school to prepare to enter the workforce. For example business, culinary arts, engineering, marketing, graphic art, broadcasting, welding, collision repair, health occupation courses, etc.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q46 My school counselor provided academic guidance to prepare me for a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q47 My school counselor provided academic guidance to prepare me to enter the workforce.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q48 Other high school personnel provided academic guidance to prepare me for a postsecondary education.

- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)

Answer If Other high school personnel provided academic guidance to prepare me for a postsecondary education. Agree Is Selected

Q49 Please check the box or boxes that identify the individual(s) who provided you academic guidance postsecondary education.

- Career Counselor (1)
- Teacher (2)
- Librarian (3)
- Clerical Staff (4)
- Administrator (5)

Q50 Other high school personnel provided academic guidance to prepare me to enter the workforce.

- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)

Answer If Other high school personnel provided academic guidance to prepare me to enter the workforce. Agree Is Selected

Q51 Please check the box or boxes that identify the individual(s) who provided you academic guidance postsecondary education.

- Career Counselor (1)
- Teacher (2)
- Librarian (3)
- Clerical Staff (4)
- Administrator (5)

Q52 Postsecondary Cost

Q53 Select the response that best describes your reaction to the statement.

Q54 I have an estimation of what it would cost me to attend a postsecondary institution.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q55 It is important for me to understand the postsecondary financial aid process.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q56 I understand the difference between Pell Grants, student loans, scholarships, and work study programs.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q57 I plan to complete the Free Application for Federal Student Aid (FAFSA) form.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q58 I am confident in my ability to complete the FAFSA form with my parents/guardians.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q59 Having to navigate the financial aid process will affect my decision to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q60 I will need assistance from my school counselor to complete the FAFSA form.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q61 The results of the financial aid process will affect my decision to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q62 My family's financial situation will influence my decision to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q63 My family's financial situation will influence which postsecondary institutions I consider.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q64 It is important to me to apply for scholarships so I can pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q65 It is important for me to receive scholarships so I can pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q66 I will need to work, while I pursue my postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q67 I am willing to accept a student loan in order to pursue my education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q68 Social Capital

Q69 Select the response that best describes your reaction to the statement.

Q70 I have often discussed postsecondary admission requirements with my school counselor.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q71 I am satisfied with the postsecondary information I received from my school counselor.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q72 I have discussed my career aspirations with my school counselor.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q73 I have discussed my career aspirations with an adult in my community.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q74 Adults in the community influenced my decision to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q75 I have often discussed postsecondary admission requirements with a high school staff member other than my counselor.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q76 I would be willing to meet with a high school career counselor to discuss my postsecondary and career goals if one was available.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q77 I have often discussed my career aspirations with my parents/guardians.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q78 I have often discussed postsecondary opportunities with my parents/guardians.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q79 My parents were involved in my education throughout high school.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q80 Going on to postsecondary education was an expectation in my household growing up.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q81 My peers had some influence about my decision to pursue a postsecondary education.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q96 Demographics

Q94 Please mark the response that best applies to you.

Q4 What is your gender?

- Male (1)
- Female (2)

Q5 Please enter your Race/Ethnicity background:

- American Indian or Alaskan Native (1)
- Asian (2)
- Black/African American (3)
- Native Hawaiian or Other Pacific Islander (4)
- White (5)
- Hispanic or Latino Ethnicity (6)
- Two or More Race (7)
- Unclassified (8)

Q6 What describes your mother's highest level of education?

- No high school coursework (1)
- Some high school coursework (2)
- High school graduate (3)
- Some college coursework (4)
- A certificate from a training program (5)
- Associate's Degree (6)
- Bachelor's Degree (7)
- Coursework or degree beyond a Bachelor's (8)
- Unknown (9)

Q7 What describes your father's highest level of education?

- No high school coursework (1)
- Some high school coursework (2)
- High school graduate (3)
- Some college coursework (4)
- A Certificate from a training program (5)
- Associate's Degree (6)
- Bachelor's Degree (7)
- Coursework or degree beyond a Bachelor's (8)
- Unknown (9)

Q8 Please check the box or boxes that may apply to you:

- I am an English Language Learner (English is not your first language) (1)
- I have had a 504 plan (2)
- I have had an Individual Educational Plan (IEP) (3)
- I have participated in the Gifted and Talented program (GT) (4)
- I have had free/reduced meals at school (5)
- No one in my family has attended a postsecondary institution (6)
- None of the above (7)

Q9 What are your plans after graduating high school?

- Enroll in a trade, technical, or business training program (while employed or not employed) (1)
- Enroll in a two-year college (while employed or not employed) (2)
- Enroll in a four-year college/university (while employed or not employed) (3)
- Enter military service (4)
- Obtain full-time employment and not enroll in further education at this time (5)
- Undecided (6)
- Other (7) \_\_\_\_\_

If Obtain full-time employment... If Selected, then skip to What is your high school grade point.... If Undecided is Selected, then skip to What is your high school grade point.... If Other is Selected, then skip to What is your high school grade point....

Q10 Of the five categories select which one has had the greatest impact on your pursuing a postsecondary education.

- Postsecondary and Career Awareness (1)
- Postsecondary Admission Process (2)
- Academic Readiness (3)
- Postsecondary Monetary Costs (4)
- Social Capital (parent/adult/peer relationships and influences with student) (5)

Q11 Of the five categories select which one has had the least impact on your pursuing a postsecondary education.

- Postsecondary and Career Awareness (1)
- Postsecondary Admission Process (2)
- Academic Readiness (3)
- Postsecondary Monetary Costs (4)
- Social Capital (parent/adult/peer relationships and influences with student) (5)

Q12 Please check the box or boxes that identify the individual(s) who has influenced your decision to pursue a postsecondary education.

- Father (1)
- Mother (2)
- Aunts/Uncles (3)
- Grandparents (4)
- Sibling(s) (8)
- Friends (5)
- High School Adult - counselor, teacher, or administrator (6)
- Adult from the community (7)

Answer If Please check the box or boxes that identify the individual(s) who has influenced your decision to...High School Adult – counselor, teacher, or administrator is Selected

Q13 Please check the boxes that identify the individual(s) who have provided academic guidance:

- Administrator (1)
- Teacher (2)
- Coach (3)
- Librarian (4)
- Clerical staff (5)
- Counselor (6)
- Other (7) \_\_\_\_\_

Q14 What is your high school grade point average (GPA)?

- 4.00 and above (1)
- 3.5 to 3.99 (2)
- 3.0 to 3.49 (3)
- 2.5 to 2.99 (4)
- 2.0 to 2.49 (5)
- 1.99 and below (6)
- I don't know (7)

Q15 What is your family's estimated annual household income?

- Less than \$10,000 (1)
- \$10,000 to \$25,000 (2)
- \$25,000 to \$35,000 (3)
- \$35,000 to \$50,000 (4)
- \$50,000 to \$75,000 (5)
- more than \$75,000 (6)
- I do not know (7)

Q16 Does your family rent or own a house?

- Rent (1)
- Own (2)
- Neither (3)

## Appendix B

### Email to Content Experts

Date:

Hi \_\_\_\_\_!

You have been selected to assist in validating a survey for high school seniors regarding their postsecondary decision-making process. Your area of knowledge and experience working with high school seniors in assisting them in their decision to pursue a postsecondary education will be greatly appreciated in completing the validation process for the online survey statements.

The data gathered will provide insight to high school personnel so they can more effectively guide students through the transition from high school to a postsecondary institution successfully. The survey has demographic data and five categories which are

- Postsecondary and career awareness
- Social capital
- Academic readiness
- College admissions process
- Postsecondary monetary costs.

These five categories are influences and barriers which affect a students' postsecondary decision-making process. The online survey will have 68 items which will be administered to high school seniors after they have returned a parental/guardian consent form.

Each question will be listed in an excel spreadsheet and will be given a score from the content expert based on a rating scale. If you are willing to assist the researcher in the validation process for this online survey, please email [shawkins@nnu.edu](mailto:shawkins@nnu.edu). Once a response has been received, then instructions for the validation process will be provided. The validation process will take approximately an hour of your time.

Thank you for your willingness to participate in the survey validation process.

Sincerely,

Shana Hawkins  
NNU Doctorial Student

## Appendix C

### Pilot Survey Student Feedback

1. Do you believe the survey is anonymous?  
 Yes  No
2. Do you understand that by participating in the survey you are providing your own consent?  
 Yes  No
3. Did you need further explanation after reading the directions for the survey?  
 Yes  No
4. What terminology/vocabulary if any, were you unsure of the meaning?
5. What statements if any, were unclear to you?
6. What statements if any, did you think you did not have enough information for a response?
7. What statements if any, did you not want to answer?
8. What demographic items if any, were uncomfortable to answer?
9. For which, if any of the demographic items, did you not have enough information to answer?
10. Any other input which would be helpful for the researcher to be aware of.

**Appendix D**  
**District Research Proposal Site Approval**

January 14, 2014

Northwest Nazarene University  
Attention: HRRC Committee  
Helstrom Business Center 1<sup>st</sup> floor  
623 S University Boulevard  
Nampa, Idaho 83686

RE: Research Proposal Site Access for Miss Shana Hawkins

Dear HRRC Members:

This letter is to inform the HRRC that Administration at Valley School District has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and purpose of the study.

Miss Hawkins has permission to conduct her research in the district of and with students of Valley School District. The authorization dates for this research study are July 2014 to April 2015.

Respectfully,

Dr.  
Superintendent

**Appendix E**  
**High School A Research Proposal Site Approval**

January 22, 2014

Northwest Nazarene University  
Attention: HRRC Committee  
Helstrom Business Center 1<sup>st</sup> floor  
623 S University Boulevard  
Nampa, Idaho 83686

RE: Research Proposal Site Access for Miss Shana Hawkins

Dear HRRC Members:

This letter is to inform the HRRC that Administration at Meridian Joint School District has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and purpose of the study. Miss Hawkins has permission to conduct her research with students at High School A in Valley School District. The authorization dates for this research study are July 2014 to April 2015.

Respectfully,

Principal

**Appendix F**  
**High School B Research Proposal Site Approval**

January 17, 2014

Northwest Nazarene University  
Attention: HRRC Committee  
Helstrom Business Center 1<sup>st</sup> floor  
623 S University Boulevard  
Nampa, Idaho 83686

RE: Research Proposal Site Access for Miss Shana Hawkins

Dear HRRC Members:

This letter is to inform the HRRC that Administration at Valley School District has reviewed the proposed dissertation research plan including subjects, intervention, assessment procedures, proposed data and collection procedures, data analysis, and purpose of the study. Miss Hawkins has permission to conduct her research with students at High School B in Valley School District. The authorization dates for this research study are July 2014 to April 2015.

Sincerely,

Principal

**Appendix G**  
**HRRC Approval**

**Northwest Nazarene University** [jabankard@nnu.edu](mailto:jabankard@nnu.edu)  
[via email.submittable.com](http://email.submittable.com)

Mar 19, 2014

Dear Shana,

The HRRC has reviewed your protocol: A Quantitative Study Exploring Factors that Influence the Decision of College-Bound Students. You received a "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Joseph Bankard  
[jabankard@nnu.edu](mailto:jabankard@nnu.edu)  
HRRC Member

## **Appendix H**

### **Verbatim Instructions**

Hi \_\_\_\_\_!

Thank you for your willingness to participate in this study.

You will have the opportunity to participate in a study about your postsecondary decision-making process by taking an online survey. The data gathered will provide insight to high school personnel so they can more effectively guide students through the transition from high school to a postsecondary institution successfully. Please take the Parental/Guardian Consent form home for signatures and return the form. Once the form is returned, then you will receive the link to the online survey.

There are a few items in which you will need to be aware of when answering the survey questions.

- A postsecondary institution is defined as a professional technical training program, community college, college or university.
- What is your family's approximate annual household income, if you are not aware of the information, take an opportunity to ask your parent/guardian.
- The information you disclose is anonymous. Anonymous means that no one, not even the researcher, will be able to connect the data to the individual participant.

This process is completely voluntary and you can select to discontinue your involvement at any time.

Do you have any questions or can I clarify anything?

Thank you again for your participation.

## **Appendix I**

### **Informed Consent**

DATE

Dear High School Senior Parents/Guardians:

This year, I have the opportunity to conduct a research study with your student and other students as a part of my graduate program at Northwest Nazarene University. I am currently an employee in the Joint Meridian School District and have been working with high school students for 13 years. The study has been reviewed by the Research Review Committee at Northwest Nazarene University along with the Joint Meridian School Board and has been successfully approved.

The benefits that may result from the research will be to improve the number of students enrolling in a postsecondary education institution and to provide strategies to decrease barriers which discourage students from going on to a postsecondary institution.

The procedures are as follows:

- You will be asked to sign an Informed Consent Form, to allow your student to participate in the study.
- Your student will respond to a set of items through an electronic survey which will focus on the influences and barriers for high school student going on to a postsecondary institution. The responses will be either “Strongly Agreed, Agree, Neither, Disagree, or Strongly Disagree” with an open-ended question at the end of each section of the survey. The survey should take no more than 20 minutes to complete.
- Your student will be asked to respond to demographic questions at the end of the electronic survey. It should take less than 5 minutes to respond to these items.
- Your student responses will be anonymous. Anonymous means that no one, not even the researcher, will be able to connect the data to the individual participant.

I anticipate that there is minimal risk involved for your student’s learning over the course of the study.

Your student’s participation in this project is completely voluntary. In addition to your permission, your student will be asked if he or she would like to take part in this study. Any student may stop taking part at any time. The choice to participate or not will not impact your student’s grades or status at school.

All information that is obtained during this research project will be kept strictly secure and will not become a part of your student’s school record. The results of this study may be used for a research paper and presentation. Pseudonyms or codes will be substituted for the names of the children and the school. This helps protect anonymity.

In the space at the bottom of this letter, please indicate whether you do or do not want your student to participate in this project. The second copy is to keep for your records. If you have any

questions about this research project, please feel free to contact me either by e-mail, or telephone. Please keep a copy of this form for your records.

The results of my research will be available after August 1, 2015. If you would like to have a copy of the results of my research or have any questions, please contact me at 208-371-0420 or my advisor, Dr. Dennis Cartwright, at 208-880-9781.

Sincerely,

Shana Hawkins  
208-371-0420  
shawkins@nnu.edu

\*\*\*\*\*

I have read this form. I understand that nothing negative will happen if I do not let my student participate. I know that I can stop his/her participation at any time. I voluntarily agree to let my student participate in this study as follows:

YES \_\_\_\_\_ may participate in this study.

NO \_\_\_\_\_ may NOT participate in this study.

Student's printed name: \_\_\_\_\_

Parent/Guardian printed name: \_\_\_\_\_

Parent/Guardian signature: \_\_\_\_\_

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

## **Appendix J**

### **Assent for Student Participants**

Thank you for taking the time to complete this online senior survey about your postsecondary decision-making process. The data gathered will provide insight to high school personnel so they can more effectively guide students through the transition from high school to a postsecondary institution successfully. A postsecondary institution is defined as a professional technical training program, community college, college or university.

By continuing with the survey, you are providing your personal consent to participate in the study by your own free will in addition to your parental/guardian consent. At any time if you choose to discontinue taking the survey you may do so by exiting the survey without repercussions for not completing the survey. The survey will be anonymous. Anonymous means that no one, not even the researcher, will be able to connect the data to the individual participant.

Please read the items carefully and take your time, it is not a timed survey. The survey has demographic data and five main areas with questions and an open-ended question. The items can be answered by selecting Strongly Disagree = 1, Disagree = 2, Neither = 3, Agree = 4, and Strongly Agree = 5. Thank you again for your participation.

## Appendix K

### Postsecondary and Career Awareness Survey

<b>Postsecondary and Career Awareness</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
1. I am confident that my high school courses prepared me academically for a postsecondary education.	566	3.65	4.00	4
2. I received a sufficient amount of postsecondary advising from my school counselor to make decisions about my future.	564	2.99	3.00	3
3. High school supplied me with adequate information about career exploration for me to make informed choices for my future.	562	3.22	3.00	4
4. I know what career I want to pursue after high school graduation.	564	3.80	4.00	5
5. I have researched the level of effort it will take to pursue my desired career.	561	3.60	4.00	4
6. I have an understanding of the educational requirements needed to pursue my chosen career.	561	3.73	4.00	4
7. High school prepared me academically for the workforce.	564	3.18	3.00	3
8. High school supplied me with adequate information about postsecondary opportunities for me to make informed choices for my future.	564	3.36	3.00	4
Total Postsecondary and Career Awareness		3.47	3.50	

## Appendix L

### Postsecondary and Career Admission Survey

<b>Postsecondary and Career Admission</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
1. It is important to me to understand the postsecondary admission process.	565	4.22	4.00	5
2. I plan to apply to one or more postsecondary institutions this fall.	563	3.96	4.00	5
3. It is important for me to complete an application for each postsecondary institution I am considering.	561	4.16	4.00	4
4. It is important for me to request a letter of recommendation as part of the postsecondary application process.	562	4.00	4.00	4
5. It is important for me to complete a postsecondary entrance exam (SAT/ACT/Compass).	560	4.25	4.00	5
6. Visiting a postsecondary campus during the school year may influence your decision to attend a postsecondary institution?	562	4.06	4.00	4
7. I am aware of the postsecondary application process for the institutions to which I am going to apply.	562	3.40	3.00	4
Total Postsecondary Admission		4.00	4.00	

## Appendix M

### Academic Readiness for Postsecondary Education and Careers Survey

<b>Academic Readiness for Postsecondary Education and Careers</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
1. My GPA was important to me throughout high school.	565	4.12	4.00	5
2. It was important to me to take rigorous academic courses (honors/AP/concurrent credit courses).	564	3.51	4.00	3
3. I challenged myself academically to prepare for a postsecondary education and the workforce.	562	3.77	4.00	4
4. I feel academically prepared to pursue a postsecondary education.	561	3.73	4.00	4
5. My school counselor provided academic guidance to prepare me for a postsecondary education.	564	3.10	3.00	3
6. My school counselor provided academic guidance to prepare me to enter the workforce.	563	2.90	3.00	3
7. Other high school personnel provided academic guidance to prepare me for a postsecondary education.	563	3.29	3.00	4
8. Other high school personnel provided academic guidance to prepare me to enter the workforce.	563	3.09	3.00	4
Total Academic Readiness		3.44	3.50	

## Appendix N

### Postsecondary Monetary Cost Survey

<b>Postsecondary Monetary Cost</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
1. I have an estimation of what it would cost me to attend a postsecondary institution.	561	3.67	4.00	4
2. It is important for me to understand the postsecondary financial aid process.	562	4.27	4.00	4
3. I understand the difference between Pell Grants, student loans, scholarships, and work study programs.	562	2.97	3.00	4
4. I plan to complete the Free Application for Federal Student Aid (FAFSA) form.	562	3.82	4.00	5
5. I am confident in my ability to complete the FAFSA form with my parents/guardians.	559	3.72	4.00	4
6. Having to navigate the financial aid process will affect my decision to pursue a postsecondary education.	562	3.50	4.00	4
7. I will need assistance from my school counselor to complete the FAFSA form.	563	3.17	3.00	3
8. The results of the financial aid process will affect my decision to pursue a postsecondary education.	563	3.36	3.00	4
9. My family's financial situation will influence my decision to pursue a postsecondary education.	561	3.40	4.00	4
10. My family's financial situation will influence which postsecondary institutions I consider.	563	3.66	4.00	4
11. It is important to me to apply for scholarships so I can pursue a postsecondary education.	561	4.17	4.00	5
12. It is important for me to receive scholarships so I can pursue a postsecondary education.	560	4.41	4.00	5
13. I will need to work, while I pursue my postsecondary education.	561	4.07	4.00	5
14. I am willing to accept a student loan in order to pursue my education.	564	3.56	4.00	4
<b>Total Postsecondary Cost</b>		3.68	4.00	

## Appendix O

### Social Capital Influence for Postsecondary Education Survey

<b>Social Capital Survey</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
1. I have often discussed postsecondary admission requirements with my school counselor.	564	2.51	2.00	2
2. I am satisfied with the postsecondary information I received from my school counselor.	565	2.79	3.00	3
3. I have discussed my career aspirations with my school counselor.	561	2.79	3.00	2
4. I have discussed my career aspirations with an adult in my community.	565	3.96	4.00	4
5. Adults in the community influenced my decision to pursue a postsecondary education.	562	3.57	4.00	4
6. I have often discussed postsecondary admission requirements with a high school staff member other than my counselor.	565	3.05	3.00	3
7. I would be willing to meet with a high school career counselor to discuss my postsecondary and career goals if one was available.	564	3.95	4.00	4
8. I have often discussed my career aspirations with my parents/guardians.	560	4.17	4.00	5
9. I have often discussed postsecondary opportunities with my parents/guardians.	561	4.05	4.00	5
10. My parents were involved in my education throughout high school.	560	3.95	4.00	4
11. Going on to postsecondary education was an expectation in my household growing up.	565	3.98	4.00	5
12. My peers had some influence about my decision to pursue a postsecondary education.	562	3.26	3.00	4
Total Social Capital		3.50	4.00	

## Appendix P

### Demographic Data Frequency and Percentage Responses

#### *Demographic Data Frequency and Percentage Responses*

##### 1. What is your gender?

	Frequency	Percentage
Male	274	49.3
Female	285	50.7

##### 2. Please enter your Race/Ethnicity background.

	Frequency	Percentage
American Indian or Alaskan Native	10	1.8
Asian	9	1.6
Black/African American	14	2.5
Native Hawaiian or Other Pacific Islander	5	0.9
White	434	77.6
Hispanic or Latino Ethnicity	44	7.9
Two or More Race	22	3.9
Unclassified	21	3.8

##### 3. What describes your mother's highest level of education?

	Frequency	Percentage
No high school coursework	10	1.8
Some high school coursework	24	4.3
High school graduate	88	15.7
Some college coursework	110	19.7
A certificate from a training program	28	5.0
Associate's Degree	68	12.2
Bachelor's Degree	142	25.4
Coursework or degree beyond a Bachelor's	50	8.9
Unknown	39	7.0

## 4. What describes your father's highest level of education?

	Frequency	Percentage
No high school coursework	8	1.4
Some high school coursework	26	4.7
High school graduate	104	18.8
Some college coursework	71	12.8
A certificate from a training program	22	4.0
Associate's Degree	36	6.5
Bachelor's Degree	135	24.4
Coursework or degree beyond a Bachelor's	98	17.7
Unknown	54	9.7

## 5. Please check the box or boxes that may apply to you:

Note: Students may have selected more than one option

	Frequency	Percentage
I am an English Language Learner	57	10.1
I have had a 504 plan	33	5.8
I have had an Individual Educational Plan (IEP)	39	6.9
I have participated in the Gifted and Talented program	67	11.8
I have had free/reduced meals at school	138	24.4
No one in my family has attended a postsecondary institution	58	10.2
None of the above	293	51.8

## 6. What are your plans after graduating high school?

	Frequency	Percentage
Enroll in a trade, technical, or business training program (while employed or not employed)	20	3.6
Enroll in a two-year college (while employed or not employed)	52	9.4
Enroll in a four-year college/university (while employed or not employed)	327	58.9
Enter military service	39	7.0
Obtain full-time employment and not enroll in further education at this time	12	2.2
Undecided	62	11.2
Other	43	7.7

7. Of the five categories select which one has had the greatest impact on your pursuing a postsecondary education?

	Frequency	Percentage
Postsecondary and Career Awareness	95	21.8
Postsecondary Admission Process	35	8.0
Academic Readiness	87	20.0
Postsecondary Monetary Costs	97	22.3
Social Capital (parent/adult/peer relationships and influences with student)	121	27.8

8. Of the five categories select which one has had the least impact on your pursuing a postsecondary education?

	Frequency	Percentage
Postsecondary and Career Awareness	59	13.6
Postsecondary Admission Process	103	23.7
Academic Readiness	93	21.4
Postsecondary Monetary Costs	71	16.3
Social Capital (parent/adult/peer relationships and influences with student)	109	25.1

9. Please check the box or boxes that identify the individual(s) who has influenced your decision to pursue a postsecondary education.

Note: Students may have selected more than one option.

	Frequency	Percentage
Father	340	60.1
Mother	358	63.3
Aunts/Uncles	165	29.2
Grandparents	198	35.0
Sibling(s)	191	33.7
Friends	243	42.9
High School Adult – teacher, counselor, administrator	206	36.4
Adult from the community	169	29.9

---

 10. What is your high school grade point average (GPA)?
 

---

	Frequency	Percentage
4.00 and above	98	17.3
3.5 to 3.99	199	35.9
3.0 to 3.49	121	21.8
2.5 to 2.99	74	13.4
2.0 to 2.49	19	3.4
1.99 and below	13	2.3
I don't know	30	5.4

---



---

 11. What is your family's estimated annual household income?
 

---

	Frequency	Percentage
Less than \$10,000	19	3.4
\$10,000 to \$25,000	29	5.2
\$25,000 to \$35,000	51	9.2
\$35,000 to \$50,000	56	9.9
\$50,000 to \$75,000	72	12.7
more than \$75,000	132	23.7
I do not know	197	35.4

---



---

 12. Does your family rent or own a house?
 

---

	Frequency	Percentage
Rent	126	22.8
Own	410	72.4
Neither	17	3.1

---

## Appendix Q

### Counseling Services for Postsecondary and Career Survey

<b>Counseling Services for Postsecondary and Career</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>Mode</b>
Q21 I received a sufficient amount of postsecondary advising from my school counselor to make decisions about my future.	564	2.99	3.00	3
Q46 My school counselor provided academic guidance to prepare me for a postsecondary education.	564	3.10	3.00	3
Q47 My school counselor provided academic guidance to prepare me to enter the workforce.	563	2.90	3.00	3
Q70 I have often discussed postsecondary admission requirements with my school counselor.	564	2.51	2.00	2
Q71 I am satisfied with the postsecondary information I received from my school counselor.	565	2.79	3.00	3
Q72 I have discussed my career aspirations with my school counselor.	561	2.79	3.00	2

## Appendix R

### Human Research Review Committee Approval



## Appendix S

### Consent for Theoretical Framework

Rightslink Printable License

Page 1 of 4

### SPRINGER LICENSE TERMS AND CONDITIONS

Nov 11, 2013

This is a License Agreement between Shana Hawkins ("You") and Springer ("Springer") provided by Copyright Clearance Center ("CCC"). The license consists of your order details, the terms and conditions provided by Springer, and the payment terms and conditions.

**All payments must be made in full to CCC. For payment instructions, please see information listed at the bottom of this form.**

License Number	3266111168036
License date	Nov 11, 2013
Licensed content publisher	Springer
Licensed content publication	Springer eBook
Licensed content title	STUDYING COLLEGE ACCESS AND CHOICE: A PROPOSED CONCEPTUAL MODEL
Licensed content author	Laura W. Perna
Licensed content date	Jan 1, 2006
Type of Use	Thesis/Dissertation
Portion	Figures
Author of this Springer article	No
Order reference number	
Title of your thesis / dissertation	Idaho High School College-Going Decision Making Influences
Expected completion date	Apr 2015
Estimated size(pages)	150
Total	0.00 USD
Terms and Conditions	

Introduction

The publisher for this copyrighted material is Springer Science + Business Media. By clicking "accept" in connection with completing this licensing transaction, you agree that the following terms and conditions apply to this transaction (along with the Billing and Payment terms and conditions established by Copyright Clearance Center, Inc. ("CCC"), at the time that you opened your Rightslink account and that are available at any time at <http://myaccoimt.copyright.com>).

#### Limited License

With reference to your request to reprint in your thesis material on which Springer Science and Business Media control the copyright, permission is granted, free of charge, for the use indicated in your enquiry.

Licenses are for one-time use only with a maximum distribution equal to the number that you identified in the licensing process.

This License includes use in an electronic form, provided its password protected or on the university's intranet or repository, including UMI (according to the definition at the Sherpa website: <http://www.sherpa.ac.uk/romeo/>). For any other electronic use, please contact Springer at ([permissions.dordrecht@springer.com](mailto:permissions.dordrecht@springer.com) or [permissions.heidelberg@springer.com](mailto:permissions.heidelberg@springer.com)).

The material can only be used for the purpose of defending your thesis, and with a maximum of 100 extra copies in paper.

Although Springer holds copyright to the material and is entitled to negotiate on rights, this license is only valid, subject to a courtesy information to the author (address is given with the article/chapter) and provided it concerns original material which does not carry references to other sources (if material in question appears with credit to another source, authorization from that source is required as well).

Permission free of charge on this occasion does not prejudice any rights we might have to charge for reproduction of our copyrighted material in the future.

#### Altering/Modifying Material: Not Permitted

You may not alter or modify the material in any manner. Abbreviations, additions, deletions and/or any other alterations shall be made only with prior written authorization of the author (s) and/or Springer Science + Business Media. (Please contact Springer at ([permissions.dordrecht@springer.com](mailto:permissions.dordrecht@springer.com) or [permissions.heidelberg@springer.com](mailto:permissions.heidelberg@springer.com)))

#### Reservation of Rights

Springer Science + Business Media reserves all rights not specifically granted in the combination of (i) the license details provided by you and accepted in the course of this licensing transaction, (ii) these terms and conditions and (iii) CCC's Billing and Payment terms and conditions.

**Copyright Notice: Disclaimer**

You must include the following copyright and permission notice in connection with any reproduction of the licensed material: "Springer and the original publisher /journal title, volume, year of publication, page, chapter/article title, name(s) of author(s), figure number (s), original copyright notice) is given to the publication in which the material was originally published, by adding; with kind permission from Springer Science and Business Media"

Warranties: None

Example 1: Springer Science + Business Media makes no representations or warranties with respect to the licensed material.

Example 2: Springer Science + Business Media makes no representations or warranties with respect to the licensed material and adopts on its own behalf the limitations and disclaimers established by CCC on its behalf in its Billing and Payment terms and conditions for this licensing transaction.

**Indemnity**

You hereby indemnify and agree to hold harmless Springer Science + Business Media and CCC, and their respective officers, directors, employees and agents, from and against any and all claims arising out of your use of the licensed material other than as specifically authorized pursuant to this license.

**No Transfer of License**

This license is personal to you and may not be sublicensee!, assigned, or transferred by you to any other person without Springer Science + Business Media's written permission.

**No Amendment Except in Writing**

This license may not be amended except in a writing signed by both parties (or, in the case of Springer Science + Business Media, by CCC on Springer Science + Business Media's behalf).

**Objection to Contrary Terms**

Springer Science + Business Media hereby objects to any terms contained in any purchase order, acknowledgment, check endorsement or other writing prepared by you, which terms are inconsistent with these terms and conditions or CCC's Billing and Payment terms and conditions. These terms and conditions, together with CCC's Billing and Payment terms and conditions (which are incorporated herein), comprise the entire agreement between you and Springer Science + Business Media (and CCC) concerning this licensing transaction. In the event of any conflict between your obligations established by these terms and conditions and those established by CCC's Billing and Payment terms and conditions, these terms and conditions shall control.

**Jurisdiction**

All disputes that may arise in connection with this present License, or the breach thereof, shall be settled exclusively by arbitration, to be held in The Netherlands, in accordance with Dutch law, and to be conducted under the Rules of the 'Netherlands Arbitrage Instituut' (Netherlands Institute of Arbitration). **OR:**

**All disputes that may arise in connection with this present License, or the breach thereof, shall be settled exclusively by arbitration, to be held in the Federal Republic of Germany, in accordance with German law.**

**Other terms and conditions:**

**vl.3**

**If you would like to pay for this license now, please remit this license along with your payment made payable to "COPYRIGHT CLEARANCE CENTER" otherwise you will be invoiced within 48 hours of the license date. Payment should be in the form of a check or money order referencing your account number and this invoice number RLNK501156664.**

**Once you receive your invoice for this order, you may pay your invoice by credit card. Please follow instructions provided at that time.**

**Make Payment To:  
Copyright Clearance Center  
Dept 001  
P.O. Box 843006  
Boston, MA 02284-3006**

**For suggestions or comments regarding this order, contact RightsLink Customer Support: [customercare@copyright.com](mailto:customercare@copyright.com) or +1-877-622-5543 (toll free in the US) or +1-978-646-2777. Gratis licenses (referencing \$0 in the Total field) are free. Please retain this printable license for your reference. No payment is required.**

<https://sl00.copyright.com/App/PrintableLicenseFrame.jsp?publisherID=62&publisherName=Springer...> 11/11/2013

## Appendix T

### Consent for 2013 Education & Training Pay



Shana Hawkins <shawkins@nnu.edu>

---

## Education & Training Pay

2 messages

---

**Shana Hawkins** <shawkins@nnu.edu>

Thu, Dec 5, 2013 at 4:10 PM

To: bob.fick@labor.idaho.gov

Mr. Fick

I am currently a doctoral student at NNU. I am writing to seek the Idaho Department of Labor's permission to use the 2013 Education & Training Pay information in my dissertation.

Will you respond to this email by stating if approval is granted.

Thank you for your assistance with this process.

Shana Hawkins

---

**Bob Fick** <Bob.Fick@labor.idaho.gov>

Thu, Dec 5, 2013 at 4:14 PM

To: Shana Hawkins <shawkins@nnu.edu>

The use of the Education & Training Pay information is approved assuming the Idaho Department of Labor will be credited as the source.

bobfick

**Bob Fick** | Communications Manager  
 Communications & Research  
 Idaho Department of Labor  
 317 West Main Street | Boise, ID 83735  
[208-332-3570 ext. 3628](tel:208-332-3570)

Fax: [208-334-6455](tel:208-334-6455)

[Bob.Fick@labor.idaho.gov](mailto:Bob.Fick@labor.idaho.gov)

---

The information contained in this e-mail from the Idaho Department of Labor may be privileged, confidential or otherwise protected from disclosure. People who share such information with unauthorized individuals may face penalties under state and federal law. If you receive this e-mail in error, please reply to the sender that the e-mail has been received in error and delete this message.

## Appendix U

### Consent Interpreting a Correlation Coefficient



Welcome, Shana

[Advanced Search Options](#)

1 2 3  
PAYMENT REVIEW **CONFIRMATION**

### Step 3: Order Confirmation

[Start new search](#)

[View your Order History](#)

**Thank you for your order!** A confirmation for your order will be sent to your account email address. If you have questions about your order, you can call us at +1.855.239.3415 Toll Free, M-F between 3:00 AM and 6:00 PM (Eastern), or write to us at [info@copyright.com](mailto:info@copyright.com). This is not an invoice.

**Confirmation Number: 11283197**

**Order Date: 12/10/2014**

If you paid by credit card, your order will be finalized and your card will be charged within 24 hours. If you choose to be invoiced, you can change or cancel your order until the invoice is generated.

#### Payment Information

Shana Hawkins  
shawkins@nnu.edu  
+1 (208)3710420  
Payment Method: n/a

[Order Details](#)

#### Statistics for people who (think they) hate statistics

- **Order detail ID:** 65968422
- **Order License Id:** 3525360878139
- **ISBN:** 9781452277714
- **Publication Type:** Book
- **Author/Editor:** Salkind, Neil J.
- **Permission Status:** **Granted**
- **Permission type:** Republish or display content
- **Type of use:** Republish in a thesis/dissertation
- [View details](#)

<b>Requestor type</b>	Academic institution
<b>Format</b>	Print, Electronic
<b>Portion</b>	chart/graph/table/figure
<b>Number of charts/graphs/tables/figures</b>	1
<b>Title or numeric reference of the portion(s)</b>	Table 5.3 Interpreting a Correlation Coefficient
<b>Title of the article or chapter the portion is from</b>	Chapter 5 Ice Cream and Crime Computing Correlation Coefficients
<b>Editor of portion(s)</b>	NA

<b>Author of portion(s)</b>	NA
<b>Volume of serial or monograph</b>	NA
<b>Issue, if republishing an article from a serial</b>	NA
<b>Page range of portion</b>	92
<b>Publication date of portion</b>	2014
<b>Rights for</b>	Main product
<b>Duration of use</b>	Life of current edition
<b>Creation of copies for the disabled</b>	no
<b>With minor editing privileges</b>	no
<b>For distribution to</b>	United States and Canada
<b>In the following language(s)</b>	Original language of publication
<b>With incidental promotional use</b>	no
<b>Lifetime unit quantity of new product</b>	Up to 499
<b>Made available in the following markets</b>	K-12, education, professional
<b>The requesting person/organization</b>	Shana Hawkins, NNU Dissertation Student
<b>Order reference number</b>	
<b>Author/Editor</b>	Neil J. Salkind
<b>The standard identifier</b>	High School Postsecondary Decision Making Processes
<b>Title</b>	Statistics for People who (think they) hate statistics
<b>Publisher</b>	Sage Publication
<b>Expected publication date</b>	May 2015
<b>Estimated size (pages)</b>	215
<b>Note:</b> This item will be invoiced or charged separately through CCC's <b>RightsLink</b> service. <a href="#">More info</a> <b>\$ 0.00</b>	
<b>This is not an invoice.</b>	
<b>Total order items: 1</b>	
<b>Order Total: 0.00 USD</b>	

[Get Permission](#) | [Products And Solutions](#) | [Partners](#) | [Education](#) | [About Us](#) | [Engineering Copyright & Content](#)  
[Privacy Policy](#) | [Terms & Conditions](#)

Copyright 2014 Copyright Clearance Center