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THE EFFECT OF PARENTAL INVOLVEMENT ON STUDENT-ATHLETE ACADEMIC PERFORMANCE, ACADEMIC SELF- EFFICACY, FUNCTIONAL INDEPENDENCE, AND ACHIEVEMENT OF ADULTHOOD CRITERIA

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The Effect of Parental Involvement on Student-Athlete Academic Performance, Academic Efficacy, Functional Independence, and Achievement of Adulthood Criteria

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Parental involvement in student- athletes' lives is ubiquitous and important. Despite efforts of many to determine the best means for student-athletes to succeed academically, little is known about the relationship between levels of parent involvement and an athlete's ability to succeed academically. Having an involved, but not over-involved, parenting relationship is key to having their children develop the necessary academic skills to be ready for the realm of collegiate athletics.

The purpose of this non-experimental quantitative analyses of NCAA Division I student-athletes in the Big Sky Conference was to examine the relationship (if any) among parental involvement, academic performance, academic self-efficacy, functional independence, and the achievement of adulthood criteria. Participants included four hundred and sixty-one student-athletes from a population of 3,000 representing ten different institutions.

An independent t-test was conducted to explore the difference between student-athletes' GPAs with a high and low amount of parental involvement. Findings revealed no statistically significant differences between a high and low level of involvement and student-athletes' GPAs. Three non-parametric Spearman Rho tests were employed to determine the relationship between parent involvement and academic self-efficacy, functional independence and the achievement of adulthood criteria. Findings revealed a positive, and strong or medium correlation among all three tests. Further analyses through three one-way ANOVAs indicated that student-athletes with the highest level of parent involvement had the lowest GPA's and student-athletes with a medium amount of involvement had the highest GPA's. Additionally, student-athletes with the highest academic self-efficacy had the highest cumulative GPA's.

Future studies should include a random sample that contains a more diverse representation of student-athletes with below a cumulative 3.0 GPA. Future studies should also use a mixed methods approach with parents that include further analyses of involvement.

Keywords: Parent Involvement, academic self-efficacy, functional independence, adulthood, student-athlete

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Dedication

I dedicate this dissertation to all NCAA student-athletes. May you let your internal compass drive you, your mind and intuition help you make your own decisions, and your desire for learning take you far beyond your sport.

I would also like to dedicate this dissertation to my husband Landon Gardner, for pushing me, encouraging me, supporting me, and not killing me through the long and arduous journey of earning this doctorate. I simply could not have done it without you.

Acknowledgement

This dissertation derived from a deep frustration of everyday phone calls from parents of student-athletes. As a former DI soccer student-athlete, I could not even begin to comprehend how parents would think of calling their son or daughter's athletic academic advisor. By the end of this dissertation, I was astonished at how much I learned. Parent involvement with NCAA collegiate student-athletes is not a bad thing. In fact, it's great. However, there is a fine line between a heavy amount of involvement and not enough amount of involvement. It's difficult for many parents to find that sweet spot, but after conducting this study, I am committed more than ever to helping parents find this delicate balance.

This dissertation would not have been possible without my parents, Doug and Gael Harris. Somehow, and someway, they found the time and the energy to raise five human beings with the most appropriate amount of involvement. While becoming a parent myself during this dissertation and understanding the love one can have for a child, I have more respect for my own parents than ever before. Through their 44 years of marriage (most of that raising kids) they are the best role models that I could ever ask for. I am fortunate to have grown up with my four crazy siblings Jud, Lauren, Jenny, and Shelby. They continue to impress me by what they do every day and their support of me in this program means more than they will ever know.

I could not have finished this dissertation without my chair, Dr. Frances L. O'Reilly. I had more fun in this process getting to know her than I did actually graduating. Truly though, she encompassed what a dissertation chair should be in every way possible. I have never met a stronger willed, determined, tenacious, gracious, and humble individual. Her sense of humor and ability to laugh at and with me through this journey is truly what got me to the finish line. Her ability to guide and mentor is astonishing and she does it with such ease and grace. I owe so

much of this degree to her and I will always have an overwhelming sense of gratitude and respect for her.

I am grateful for Dr. Travis Dorsch, who helped guide me to what I wanted to study and how I wanted to study it. As intimidating as I was (and still am) by him, I am forever thankful for being such a valued member of my committee. His ability to mentor is extremely unique and I appreciated his encouragement to forge my own path as a researcher. His attention to detail is phenomenal and I will forever be indebted for all of his time that went into edits on this dissertation. Not to mention, allowing me to use his modified instruments for this study. I hope that we can continue to have a relationship and I cannot thank him enough for the work he has done for the NCAA on this subject matter.

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I would like to thank Dr. John Matt for his guidance on this dissertation. He helped me explore the different types of statistics I could use for this dissertation, yet he gave me the freedom to pick and choose what I wanted to discover. His calming nature and comforting demeanor put me at ease in my most stressful times. His leadership abilities are inspiring and I admire his diplomacy.

I owe Dr. Dusten Hollist a debt of gratitude for being willing to serve as a member of this committee and for his ideas, knowledge, and expertise. Sitting in his undergraduate statistics class as a 19-year-old, I would have never imagined that he would help me earn my doctorate 12

years later. Our athletic department is beyond fortunate to have him as our faculty athletic representative, and the work that he does for UM student-athletes is appreciated far beyond belief.

Dr. Dan Lee is a phenomenal instructor and an individual that I admire and respect very much. He helped me develop this study in his quantitative and statistics courses. When writing this dissertation, I referenced his resources from his coursework frequently. I would like to thank Dr. Bill McCaw for his logical, detail oriented, and fantastic way of teaching. I learned so much in his classes and am thankful for his devotion to excellence. His professionalism and the amount of time that he spends on student feedback does not go unnoticed and is respected more than he knows. He taught me more about leadership than I could learn from any textbook, and most importantly, he taught me to continue to remember to sharpen my saw.

Lastly, I cannot forget to thank my son Sawyer. Although he is only five months old, I can tell that he is going to be the biggest adventure of my life. I will try to have a medium amount of parent involvement when raising him, but I can’t promise that I won’t be calling his academic advisor.

Chapter One: Introduction to the Study

> Once upon a time, parents would help their children move into dorm rooms and apartments, then wave good-bye for the semester. Not anymore. Baby boomers have arguably been more involved in their children's educations and their lives in general than any preceding generation of parents, university observers say. And boomers see no reason why that hands-on approach should change just because their children have moved out of the house and onto campus. (Lum, 2006, p.1)

"Of the nearly 8 million students currently participating in high school athletics across the United States, only 480,000 of them will compete at NCAA schools" (NCAA, About Us, 2018). These select student-athletes get a chance to attend institutions of higher education to further their education and participate in intercollegiate athletics. This education affords them an opportunity to gain independence from their parents and help propel them into the workforce. They no longer have a curfew, have to ask permission to use the car, or tell their parents where they are spending their time. For many, it is the first time in their lives that they have had a taste of independence. From this newfound autonomy, student-athletes have a chance to learn one of the most important skills in life: how to become an independent, self-sufficient adult.

The first step for many in accomplishing this skill is learning how to manage their time. This is not an easy task because for many, time has always been managed for them. In high school, many parents helped remind their children when they had practice, when to do their homework, and what time their dinner would be ready. Jumping into the world of NCAA Division I athletics where student-athletes must be able to successfully juggle all aspects of their lives is often too difficult, and too fast. Many of today's student-athletes have moved out from under their parent's roof, but are still attached by "technological umbilical cords".

Statement of the Problem

The problem this study is designed to address is that student-athletes' dependence on parents inhibits their growth process and prolongs their progression to adulthood (Dorsch, Lowe, Dotterer, & Lyons, 2016). The transition from high school to college athletics is a huge step for many student-athletes. Getting used to the new academic requirements while attempting to balance the demands of their sport, social lives, mental health, new environments, proper nutrition, and getting enough sleep can be a demanding transition for student-athletes. Every student-athlete is expected to figure out how to navigate their new life while succeeding athletically, academically, and socially. To scaffold this transition, many universities offer support through mentoring and tutoring programs, freshman seminar classes, and weekly meetings with advisors or coaches. However, these once a week meetings or classes can only offer strategies for success. It is ultimately up to each student-athlete to figure out his or her own formula for success, and even their own definition of success.

For many student-athletes, the pressure of falling in line and managing this transition is too overwhelming. So, just as in high school, they rely on their parents for help with problems throughout their entire collegiate career. What they are not realizing is that this involvement is overlapping in all areas of their life, and many are slowly losing sight of their own functional independence and ultimately are prolonging the successful transition to adulthood. "Functional independence encompasses the ability to organize and carry out practical and personal affairs without parent's assistance" (Dorsch, et al., 2016, p.11). Watson (2014) stated that the level of constant monitoring from parents is frustrating and exhausting. While some parents see that nothing is wrong with consistently intervening, many psychologists believe that this

behavior can be problematic, hindering maturation processes, and making them less self-sufficient. (Watson, 2014)

Parents become a part of their student-athlete's day-to-day decision making processes and are often the first people they contact when something goes awry. Instead of taking a moment to reflect on what went wrong or what should be the next logical step to find a solution to their problem, student-athletes call or text their parents. When these same student-athletes graduate from college and join the work force, for many of them it is the first time that they have actually had to ever make a difficult decision independently. Bradley-Geist & Olson-Buchanan (2014) support this opinion by stating that young adults who rely on their parents should be responsible for making decisions on their on because for many, it's often too difficult to break their well- established patterns of consistent interaction with their parents.

Simultaneously, many parents believe they are genuinely helping by e-mailing their son's and daughter's professors, by calling the Residence Life office so their son can switch roommates, or by calling their daughter's academic advisor to suggest a science course they should take during their sport season. Parents make themselves available 24/7 in the event that their son or daughter forgets their social security number at the doctor's office or if they need help composing an email to their professor or coach. For many parents, it is also a difficult transition for them when their son or daughter starts college. Levine and Dean (2012) believed that for many campus administrators, the consistent parent-child interaction actually causes more problems than solutions. In many cases, parents may overreact and get frustrated because they usually know about the problems before the university does. "It's not unheard of for students to tell parents just how unhappy they are. The parents get alarmed, calls one of us and says, 'Would

you check on my child?' You go and check on this child. The child says, 'What? I'm fine. That was yesterday.' " (p.83).

Parental involvement in collegiate athletics has increasingly become a hot topic for coaches, administrators, staff, and instructors. Indeed, Dorsch and colleagues highlight a need for an appropriate level of parent involvement. "Parental involvement is not a problem that necessarily needs to be solved, but rather a resource that needs to be enhanced" (Dorsch, T. Personal Communication, 2017). The student-athlete's transition to making independent decisions when they enter the world of collegiate athletics can be challenging because parents have been involved in the sport development their entire lives (Dorsch, Lowe, Kaye, Arnett, 2017).

Purpose of the Study

While much of the existing research builds a strong case that parental involvement in their child's education positively impacts the child, there is limited research suggesting that too much involvement may hinder student-athletes' life developmental process. "Because parents continue to play an important supportive role for athletes during emerging adulthood, it is surprising that researchers have yet to fully explore the impact of parent involvement on student-athlete development during the college transition" (Dorsch, et. al. 2016, p.i).

The purpose of this dissertation is therefore to ascertain the relationship among parental involvement, academic performance, academic self-efficacy, functional independence, and attainment of adult criteria of student-athletes in the Big Sky Conference. Founded in 1963, the Big Sky Conference spans across nine different states and sponsors championships in 16 sports including men's and women's cross country, indoor and outdoor track and field, basketball and tennis, football, women's volleyball, golf, softball and soccer. The Conference's full members

are: Eastern Washington University, University of Idaho (non-football member), Idaho State University, University of Montana, Montana State University, University of North Dakota, Northern Arizona University, University of Northern Colorado, Portland State University, Sacramento State, Southern Utah University, and Weber State University. Additionally, the Big Sky Conference has two football affiliate members, (University of California, Davis and California Polytechnic State University) and two men's golf affiliate members, (Binghamton University and University of Hartford) (Big Sky Conference, 2017).

Research Questions

According to Boudah (2011), research questions clearly and specifically identify the topic one aims to investigate. To measure the relationships of student-athlete's academic performance and parental involvement, the researcher will use the following four research questions to guide this study: a) What is the relationship between parental involvement and academic performance of student-athletes in the Big Sky Conference? b) What is the relationship between parental involvement and student-athlete's academic self-efficacy? c) What is the relationship between parental involvement and functional independence? d) What is the relationship between parental involvement and the achievement of adulthood criteria?

According to Creswell (2009), "Quantitative research questions inquire about the relationships among variables that the investigator seeks to know. They are frequently used in social science research and especially in survey studies" (p. 132). According to Hoy (2010), quantitative studies test objective theories that examine the relationship between variables. In the present study, parental involvement will serve as the independent variable and cumulative grade point average (GPA), academic self-efficacy, functional independence, and the attainment of adulthood criteria served as the dependent variables.

Definition of Terms

In order to better understand this study, the following definitions of terms will be used:

Academic Performance. How student-athletes perform academically through their cumulative grade point average on a 4.0 GPA scale. In this study, student-athletes will self-identify their own cumulative grade point average (GPA) on a 4.0 scale (Dictionary.com, GPA, 2017).

*Academic Self-Efficacy. "*Academic self-efficacy refers to an individual's belief (conviction) that they can successfully achieve a designated level on an academic task or attain a specific academic goal" (Bandura, 1997).

Big Sky Conference. The governing conference for 12 full time schools and 16 different sports. This conference spans the Western United States across portions of Montana, California, Washington, Oregon, and Arizona, Colorado, Utah, North Dakota, and Idaho (Big Sky Conference, 2017).

Emerging Adulthood. Arnett (2000) stated that Emerging Adulthood is neither adolescence nor young adulthood but instead focuses on ages 18-25 that is often distinguished by relative independence and from social roles and normative expectations.

Functional Independence. Functional independence encompasses the ability to organize and carry out practical and personal affairs without parent's assistance (Hoffman, 1984). An eight-question scale will be used to assess functional independence of student-athletes using questions such as, "I ask my parents what to do when I get into a tough situation" and "I call my parents whenever anything goes wrong".

Full-time. Full-time enrollment is based on taking 12 or more credits each semester or each quarter. NCAA student-athletes are required to complete several progress toward degree requirements each semester, with one of these rules requiring all DI student-athletes to maintain a full time course load throughout each term or quarter. If a DI student-athlete drops below 12 credits at any time during the academic year, they automatically become academically ineligible and cannot compete in competition until they are back enrolled in 12 credits (NCAA Division I Operating Manual, 2013).

Helicopter Parent. Overly protective parents that tend to hover over their offspring (Cline & Fay, 1990). The term includes such anecdotes as parents writing term papers for their children or contacting college professors to argue about grades (Bradley-Geist & Olson-Buchanan, 2014).

NCAA. The National Collegiate Athletic Association oversees 1,123 colleges and universities and has 98 voting athletic conferences. "The National Collegiate Athletic Association is a member-led organization dedicated to the well-being and lifelong success of college athletes" (NCAA Division I Operating Manual, p. 110, 2017).

Parent. A biological mother or father. Although many student-athletes may have guardians that do not involve their biological mother or father, this study aims to study only the biological parents (Dictionary.com, Parent, 2017).

*Parent Communication***.** For purposes of this study, the word "communicate" is defined as text, e-mail, phone, face-to-face, skype, Facebook, Face Time, Snap Chat, Instagram, and any other form of technological social media communication (Dorsch et. al., 2017).

Parent Involvement. Anytime a parent is a part of their child's life including the provision of tangible and intangible resources (Bradley-Geist & Olson-Buchanan, 2013). This involvement

is normally initiated by the parent(s) and usually concerns questions about their child's school, social, and athletic life.

Parent Academic Involvement. When parents influence, provide advice, provide help or assistance with anything related to their son or daughter's academics. Examples may be helping pick out classes for the following major to emailing their academic advisor to helping them with homework (Dorsch et. al., 2017).

Student-athlete. A student-athlete is an individual who engages in an intercollegiate sport, maintaining the academic and athletic requirements for eligibility to compete in athletics as well as to take courses at his or her respective institution (WebLaws.org, 2013). For purposes of this study, the population of student-athletes will compete in NCAA sanctioned sports as opposed to club or intramural sports.

Delimitations of the Study

Steinberg (2011) stated that the delimitations of a study help explain the inclusion criteria of a study. The population for this study included student-athletes in the Big Sky Conference that compete on one of the NCAA Division I designated men's and women's sports teams. This population included 3000 male and female student-athletes across 16 different athletic teams that range from 18-26 years old. There are seven men's teams and nine women's teams in the Big Sky Conference. They include: men's basketball, football; men's cross country; men's indoor track and field; men's outdoor track and field; men's tennis; men's baseball; men's golf; women's soccer; women's outdoor track and field; women's indoor track and field; women's cross country; women's tennis; women's golf; women's volleyball; and women's softball. The student inclusion criterion is that they must have officially been on a team roster and not in the process of trying out or walking on to a team and were enrolled in at least 12 full time credits.

Another delimitation of this study is that this survey is limited to the Big Sky Conference and no other Division I NCAA athletic conferences. The last delimitation of this study is that this survey was originally limited to 11 full time conference members in the Big Sky Conference and not the two football affiliate members and two men's golf affiliate members in. Although there are technically 12 full time members in the Big Sky Conference, the present study also does not include the University of Idaho because their football team does not compete in the Big Sky Conference. The 11 institutions that are therefore included in this study are: Eastern Washington University, Idaho State University, University of Montana, Montana State University, University of North Dakota, Northern Arizona University, Portland State University, Sacramento State, Northern Colorado University, Southern Utah University and Weber State University.

Limitations of the Study

Hoy (2010) stated that the limitations of a quantitative study help describe the general weaknesses of a study. Salkind (2012) stated that "survey research allows the researcher to get a broad picture of whatever is being studied. If sampling is done properly, it is not hard to generalize to millions of people, as is done on a regular basis with campaign polling" (p. 203). However, in this study the participants were not randomly selected making this study a non-experimental design by nature. The second limitation of this study is that by not having a random sample, the results of this study from the sample cannot be generalized back to the population.

The third limitation in this study is that the responses of this survey are limited to the participants providing accurate and truthful information. Hoy (2010) stated that by nature survey research is limited by truthfulness of the participants. Although the researcher will rely on the participants providing accurate information, there is no way to guarantee that all of the participants are providing truthful responses. The fourth limitation includes the threats to internal

and external validity. Creswell (2009) stated, “Experimental researchers need to identify potential threats to the internal validity of their experiments and design them so that these threats will not likely arise or are minimized” (p. 162). Specifically, in this study, the internal validity threat of mortality occurred. Creswell (2009) describes mortality as participants dropping out of an experiment due to different reasons. “Internal validity threats are experimental procedures, treatments, or experiences of the participants that threaten the researcher’s ability to draw correct inferences from the data about the population in an experiment” (Creswell, 2009, p. 162).

It is also possible that external validity threats occurred. “External validity threats arise when experimenters draw incorrect inferences from the sample data to other persons, other settings, and past or future situations” (Creswell, 2009, p. 162). Specifically, the interaction of history and treatment, meaning that the results of an experiment are time bound so a researcher cannot generalize the results to past or future situations” (p. 165). The second external validity threat that may have occurred is the interaction of setting and treatment. Creswell (2009) stated that because of the characteristics of the setting of participants in an experiment, a researcher cannot generalize individuals in other settings” (p. 165).

The fourth limitation of this study is that one institution chose not to participate in this study due to their own departmental policies and procedures. The last limitation of this study is that there was not an equal representation of men and women. There were twice as many female student-athlete respondents (302) that participated in this study than male student-athlete respondents (149).

Significance of the Study

While much of the existing research builds a strong case that parental involvement in their child’s education positively impacts the child, there is limited research suggesting that too

much involvement could hinder student-athlete's life developmental process (Dorsch et al., 2016). "Although the popular literature abounds with anecdotes of over-parenting, there is very little empirical research in this domain. Indeed, Somers and Settle (2010) called academic research on the topic 'anemic'" (Bradley-Geist & Olson-Buchanan, 2014, p. 314). "There remains analytical gaps constraining the ability of student affairs leaders to explain, not simply describe how certain factors influence student-athletes' academic success" (Comeaux & Harrison, 2011, p. 235).

A deeper understanding of these relationships will help the Big Sky Conference and NCAA member institutions assist student-athletes in becoming academically successful and functionally independent. This study is also significant because it will be beneficial to the academic support staff of student-athletes. Helping academic advisors learn more about the population of their student-athletes and their relationship with their parents is advantageous in academic advising practices. This study will contribute to the general field of student-athlete psychological well-being, student-athlete development, and inform future best practices for NCAA member institutions. The results of this study will be shared with Big Sky Conference student-athletes, coaches, and administrators.

This study is also significant because it will help inform the greater body knowledge on the topic of student-athlete development. Student-athletes need to be aware of their dependency issues on their parents and parents also need to be cognizant of how their involvement may negatively affect their children. It is imperative that student-athletes have a keen sense of self-awareness if they want to succeed not only in their collegiate experiences, but also throughout life. Scott (2014) stated that authentic leadership is characteristic of leaders who have a high

sense of self-awareness (p. 39). Avolio, Luthans, and Walumba (2004) (as cited in Scott, 2014) defined authentic leaders as:

> Those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values/moral perspective, knowledge, and strengths; aware of the content in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character. (p. 39)

Scott (2014) reiterated that authentic leaders are focused on purpose rather than ego. "Authentic leaders seek to guide their community rather than control it and strive to lead followers by means of authenticity and shared goals" (p. 40). Having a shared vision in athletics is crucial if teams want to find success in their sport and team cohesion. Senge (1990) also speaks of a shared vision in his book, *The Fifth Discipline*. Senge (1990) stated that a shared vision is an extremely powerful force and that systems thinking is the cornerstone of organizations because the whole always exceeds the sum of its parts.

Summary

In summary, this dissertation is designed to examine the relationship among parental involvement, academic performance, academic self-efficacy, functional independence, and achievement of adult criteria in student-athletes in the Big Sky Conference. Although existing research builds a strong case that parental involvement in a child's education positively impacts the child, there is limited research suggesting that too much involvement could hinder student-athlete's life developmental process (Dorsch et. al. 2016). This study will help fill this gap in literature. Also, the results of this study will help student-athletes, coaches, advisors, and administrators in the Big Sky Conference become aware of potential implications from the amount of parent involvement in student-athlete's lives. This chapter introduced the study and

stated the problem and purpose of the study. This chapter also described the four research questions that will help guide this study. The delimitations and limitations were acknowledged and well as a comprehensive definition of terms was detailed, and the significance of the study was described. Chapter two will explain the purpose of the review of literature and address the quality indicators of a literature review as articulated by Boote and Beile (2005). Chapter two will also provide a comprehensive review of literature on parental involvement in higher education in regards to this study.

Chapter Two: Review of the Literature

At its simplest, a literature review evaluates and explains the existing body of research on a given subject. The author uses critical thinking skills to review the strengths and weaknesses of prior research and to discuss the themes of the collective body of work. On a deeper level, the literature review should provide the reader with a clear understanding of what is and what is not within the scope of the investigation with supporting discussion to warrant inclusion and exclusion (Boote & Beile, 2005). Evaluation of a literature review should determine whether the author met this objective. This literature review for this dissertation was conducted according to guidelines provided by Boote and Beile (2005), who suggested five categories of criteria for analyzing literature reviews. The first category, *Coverage*, evaluates both the completeness of the literature review and the author's justification for the content of the final product. The author must thoroughly search the literature and sift through the results to determine what should be included and discussed, what should be mentioned, and what should be discarded. Support for these judgments should be clear and complete.

Boote and Beile's (2005) second category, *Synthesis*, evaluates the author's success in summarizing the existing literature and identifying remaining work on the subject. This category addresses conflicting information in the literature and the author's ability to promote or refine theories to resolve such conflicts. This demonstration of critical thinking is evidence of the skills commensurate with a doctoral degree (Boote & Beile, 2005, p. 7). This thought is echoed by Pan, (2008) who stated that the major purpose of a literature review is to synthesize literature in order to arrive at defensible conclusions.

Methodology is Boote and Beile's third category, assessing the author's success in critically discussing current and prior methods including strengths and flaws. Methodology may

also include current trends in findings within the research. The fourth category is *Significance*, where the author should discuss both the practical and scholarly significance of the research problem (Boote & Beile, 2005). *Rhetoric* is the final fifth category that embodies good organization and unambiguous discussion.

In line with Boote and Beile (2005), the first goal of this chapter is to inform the reader of previous research which has contributed significantly to the background of the NCAA, parent involvement, self-efficacy, academic self-efficacy, and emerging adulthood. The second goal of this chapter is to explain the rationale of selecting student-athletes at the eleven DI institutions in the Big Sky Conference. The third goal of this chapter is to explicate the quantitative design as the most appropriate method for investigating the problems associated with too much parental involvement in student-athletes lives. The fourth goal of this chapter is to portray the study's significance in a manner that is strengthened by providing existing knowledge in the field. Lastly, the fifth goal of this chapter is to provide clear and concise evidence for a discussion in a well organized manner.

The National Collegiate Athletic Association

Founded in 1906, the National Collegiate Athletic Association (NCAA) is an organization that represents higher education institutions across three divisions: Division I, Division II, and Division III (NCAA Well Being, 2017). "Division I schools are typically the largest universities, and compete in a minimum of 14 male and female sports. These schools often have world class-facilities, attract the top athletes in the country, and receive the most media attention" (Sporting Solutions, 2017). **"**Nearly half a million college athletes make up the 19,500 teams that send more than 54,000 participants to compete each year in the NCAA's 90 championships in 24 sports across three divisions" (NCAA, 2017). The three divisions that make

up the NCAA are committed to the lifelong success of all of the student-athletes. Division I schools generally have the biggest student bodies, manage the largest athletics budgets and offer the most amount of scholarships. DI has nearly 350 colleges and universities, more than 6,000 athletic teams, and 170,000 student-athletes. (NCAA, Division I, 2017)

If a student-athlete does not pursue or simply does not get recruited to a Division I institution (DI), often times they will seek out Division II (DII) opportunities to continue playing their sport and further their education. Another reason a student-athlete may choose a DII institution may be because of location, quality of education, playing time, or to play more than one sport. "Division II schools tend to be smaller than Division I schools and students usually finance their education with a combination of athletic and educational scholarships" (Sporting Solutions, 2017). Division II is a collection of more than 300 NCAA colleges and universities that provide thousands of student-athletes opportunities to compete at a high level of athletics while excelling in the classroom and engaging in the broader campus experience. (NCAA, Division II, 2017)

For a more intimate experience that still offers a competitive sporting and competition environment, student-athletes may pursue a Division III (DIII) experience. They may pursue this experience for many of the same reasons that student-athletes pursue a DII institution. However, because there are no athletic scholarships at the DIII level, many DIII student-athletes rely heavily on academic or other non sport related scholarships. "Division III schools are the smallest of the NCAA institutions. DIII schools are not allowed to offer any athletic scholarships (Sporting Solutions, 2017). More than 180,000 student-athletes at 450 institutions make up Division III, the largest NCAA division both in number of participants and number of schools. (NCAA, Division III, 2017)

"The pressures on athletes, especially those in big time, revenue-producing sports, are well known physical exhaustion, mental fatigue, media attention, and demanding coaches. The time demands alone are onerous" (Eitzen, 1987, p. 236). Depending on the sport and division, student-athletes may spend anywhere from 30-60 hours a week dedicated to sport demands in addition to the physical exhaustion and mental fatigue (Eitzen, 1987). Finding a delicate balance between athletics, academics, and personal social lives time can be very difficult for student-athletes. Eddie, Comeaux, and Harrison (2011) emphasized that striking the balance between academics and athletics remains a serious concern for many athletic departments, especially in big time generating sports. With many athletic departments now resembling business models, those that provide academic support to student-athletes are now pressured more than ever. With how much money sports can bring in (mainly men's basketball and football) through Television/Media contracts and other sources of sport generated revenue, it's no wonder that the pressure to succeed is also felt by all of those involved, including student-athletes. In 2011 alone, the total revenue for the NCAA was $757 million dollars (Comeaux & Harrison, 2011).

Parental Involvement

"Parent involvement described in the literature encompasses behaviors in which parents interact with their student and/or the institutional representatives concerning their student's college experience" (Cullaty, 2011, p. 426). Bradley-Geist and Olson-Buchanan, (2014) describe parent involvement as anytime a parent is a part of their child's life including the provision of tangible and intangible resources. This involvement normally is initiated by the parent(s) and usually concerns questions about their child's school, social, and athletic life (2013). Parents are usually the instigators for getting their children involved and many often introduce them to different sports (Hemery, 1986). Many parents have been active athletes themselves, with some

even acting as the child's first coach. They are highly committed to their children's careers. To that end, "They invest money, time, and emotional support in helping them climb the latter of success" (Wuerth et al., 2004, p. 22).

"The amount of involvement that parents have in the athletic activities of their children falls on a continuum from under involved, to moderate, to overinvolved" (Hellstedt, 1987, p. 153). "Under involvement refers to a relative lack of emotional, financial, or functional investment on the parts of parents" (p. 153). Whereas, moderate levels of involvement include firm and supportive parental direction, but with flexibility so that the ultimate decisions are made by the athlete (p. 153). Hellstedt (1987) stated that overinvolved parents have an excessive amount of involvement in all areas of their children. Some even perhaps, have a hidden agenda hoping that their own children's success may open the door for later opportunities. Some over involved parents may even go as far as not being able to have separate lives or needs from their own children.

Finding a balanced parenting style and a moderate level of involvement is important not only for the parent-child relationship, but also because it helps with the relationships with coaches, professors, and administrators. Additionally, by providing a moderate level of involvement, parents position their children to become independent, autonomous, and to start taking responsibility for their own lives. "Student affairs administrators worry that a high level of parent involvement prevents students from achieving important learning outcomes" (Cullaty, 2011). "That is, the phenomenon of increased parental involvement may place parents at odds with the mission of colleges and universities to transform teenagers into adults with the ability to take responsibility for their own lives and contribute to society" (Lewis, 2006; Shapiro, 2002, as cited in Cullaty, 2011, p. 425). **"**The literature on college student-parent relationships reveals that

the way parents are involved with their college-aged children is changing. Since 2000, articles in higher education publications have documented a trend of more intense parental behavior on college campuses" (Cullaty, 2011, p. 426). Echoing these sentiments is Stringer, Cunningham, O'Brien, and Merisotis, (1988) who stated that out of a nationally representative survey of 750 parents by the Institute for Higher Education Policy, found that 72% of parents helped their children fill out applications to college and 57% spoke with an admissions officer (Stringer, Cunningham, O'Brien, & Merisotis, 1988 as cited in Cullaty, 2011, p. 426).

However, it is important to acknowledge that parental involvement is not all bad during the college transition. In fact, "Student-athletes experience higher levels of academic success and athletic satisfaction, and lower levels of depression, when parents are moderately or highly engaged in the student-athlete's academic and athletic pursuits" (Dorsch et al., 2017, p. 5).

Self-Efficacy

Bandura (1977) believed that self-efficacy stresses the active role individuals play in shaping the course of their life where their decisions, actions, and experiences, play a big role in deciding whether or not to undertake challenging activities. Bandura (1977) defined self-efficacy as the "conviction that one can successfully execute the behavior required to produce the outcomes" (p. 193). Specifically, Bandura identified four main sources of self-efficacy: personal mastery, physiological reactions, vicarious experiences, and forms of persuasion. All four of these sources have the potential to influence a student's perceived self-efficacy beliefs. Bandura posited "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3).

The first source, *personal mastery*, derives from students' personal accomplishments and Bandura (1977) stated that they are the strongest source for enhancing perceptions of self-

efficacy. “In general, frequent success boosts self-efficacy, whereas consistent failure experiences usually undermine it. However, this process is not completely automatic, as personal accomplishments are interpreted in light of one’s self-regulatory processes, such as self-evaluations, attributions, and goal setting” (Steca, Bassi, Caprara, & Fave, 2011, p. 30). The second source, *physiological reactions,* included student’s biological or even physical reactions. For example, “If a student gets extremely anxious during class, he or she may interpret the rapid heart rate as indicator of personal ineffectiveness” (Steca et al., p. 30). The third source, *vicarious experiences,* states that “adolescents can also judge their level of self-efficacy through vicarious experiences such as modeling; defined as the behavioral cognitive and affective changes resulting from observing others” (p. 30). The fourth source, *social persuasion,* can play a key role in having an influence on perceived self-efficacy. Steca and colleagues (2011) state that in a learning environment, teachers may promote positive efficacy beliefs by providing encouragement after a student misses a few problems on an exam and letting them know that they will do better next time. In this context, they may also provide specific feedback “that clearly link performance and progress, with strategy use (i.e. “You failed because you used a wrong way to study. I’ll suggest…”)” (p. 30). “This form of social persuasion has a strong long-lasting effect as it encourages students to view academic success and failure in terms of controllable personal strategies that can be learned and progressively improved” (p. 30).

Bandura (1997) stated that coaches search for resilient self-efficacy, which is known as mental toughness (p. 383). “The more prior success raises athlete’s sense of efficacy, the higher the goals they set for themselves and the better they perform” (p. 383). Bandura (1977) alluded that a stable sense of efficacy and resilience helps teams stay composes under pressure. “Great

teams have the efficacy to come from behind and win games when, for one reason or another they are not playing their best". (p. 383)

Interestingly, Bandura (1977) stated that athletes that have the same athletic capabilities more than likely would not perform at the same level due to their differing levels of perceived self-efficacy. "Gifted athletes plagued by self-doubts perform far below their potential, and less talented but highly self-assured athletes can outperform more talented competitors who distrust their capabilities" (pp. 385-386). Competitive sports also reveal the fragility of perceived self-efficacy. A series of failures that can undermine belief in one's efficacy sends professional athletes into performance slumps (p. 386)

Academic Self-Efficacy

Academic self-efficacy is the belief that an individual can perform successfully in school or attain an academic goal (Bandura, 1997). It can also be described as an individuals' confidence in their ability to function and succeed in an educational setting (Hutchison, Follman, Sumpter, & Bodner, 2006). Self-efficacy beliefs influence academic choices, as most students are prone to engage in tasks in which they feel confident. In fact, many avoid academic choices where they have low confidence or have performed poorly in the subject manner before. This is especially true in post secondary education, where students have greater control over what courses they take, what their intended major may be, and their general academic career paths (Bassi et al., 2011, p. 29). "There is ample empirical evidence that self-efficacy beliefs are related to and exert an influence on academic achievement, either directly or through the influence of other personal achievement predictors such as previous achievement, skills, and mental abilities" (Bassi et al., 2011, p. 29). Institutions and educators should play a vital role in

raising the academic self-efficacy levels and academic achievement of their students (Museus, 2011).

In *Self-efficacy in Changing Societies*, a collection of chapters relating to self-efficacy and edited by Albert Bandura, Barry Zimmerman (1995) stated that: Bandura (1977, 1986) developed scales to measure perceived academic efficacy. Related to academic functioning, self-efficacy refers to variations across different tasks, such as increasingly complex math problems (p.203). Students can transfer their own self-efficacy beliefs across different subjects and have varying strengths of their own self-efficacy (Zimmerman, 1995). "Self-efficacy involves perceptions where students judge their own capabilities, and not necessarily how they feel about themselves in general" (p.203). It is important to note that academic efficacy beliefs can also differ from subject to subject. A student can have high efficacy beliefs in science, but have low efficacy beliefs in math. Efficacy beliefs are measured before a student performs a given task and many beliefs are also context dependent, meaning that some students may a higher and stronger sense self efficacy in a competitive environment with other students than a non competitive environment (Zimmerman, 1995).

Self-Efficacy and Academic Motivation

Motivation has been consistently linked with academic self-efficacy and academic performance (Bandura, 1995; Zimmerman, 2000). Zimmerman (2000) stated that the "higher the efficacy beliefs the more successfully the students performed" (p. 214). Students with high self-efficacy often approach their academics with confidence and approach difficult tasks as something to be mastered and not avoided. Students with low self-efficacy tend to perceive tasks to be more difficult than they really are (Zimmerman, 2000, p. 214). Bassi et. al. stated students with low self efficacy "…are likely to attribute their failure to inborn and permanent lack of

ability" (p. 29). Tinto (1987) argued that students who have high academic self-esteem and are academically integrated are more than likely to stay on their college campuses. In a *Conceptual Model of Academic Success for Student-Athletes*, Comeaux and Harrison (2011) stated that "academic integration is expected to influence goal, sport, and institutional commitment and, ultimately academic success" (p. 239). Along with a family's socioeconomic education and parent's education, Comeaux and Harrison explained, "Family's support and expectations of college are as vital to the student-athlete's success as the student-athlete's own expectations about his or her future" (p. 239). Zimmerman (1995) stated that Bandura (1977) "hypothesized that efficacy beliefs influence level of effort, persistence, and choice of activities" (p. 204). Schunk (1991) also specified that students with a high sense of efficacy for accomplishing an educational task will participate more readily, work harder, and persist longer when they encounter difficulties than those who doubt their capabilities. He also indicated that self-efficacy is associated with motivation, specifically in the form of perceived self-efficacy correlating positively with academics (Schunk, 1991).

Self-efficacy is also related to mental effort when students learn material from school that they first perceived as difficult. In other words, how a student thinks they will do on an academic task or function impacts their ability to perform. Bandura (1997) stated that students who have developed their abilities should perform well on tests. However, possessing knowledge does not mean that they will perform well under difficult conditions. Zimmerman (1995) stated that students with the exact same knowledge of a subject matter may not necessarily perform the exact same on a test because of their differing levels of self-efficacy. They "may differ considerably in their perceived efficacy because successful performance requires self-regulation of motivation, disruptive thought processes, and aversive emotional reactions. Efficacy beliefs,

therefore, contribute to academic performance over and above actual ability" (Zimmerman, 1995, p. 213).

Functional Independence

Autonomy refers to the notion of self-governance and the ability to make separate decisions from those of their parents (Steinberg, 2011). Kuh (1993) stated that college students have reported that autonomy is one of the primary learning outcomes from their experiences outside the classroom. In *Psychological Separation of Late Adolescents from Their Parents,* Hoffman (1984) stated that one of the most influential paradigms that has come out of psychoanalytic theory has been the concept of separation-individuation (Paris, 1976). Generally referred to as psychological separation, "the individual's drive toward healthy personal adjustment is critically dependent on his or her ability to psychologically separate from the parents and gain a sense of identity as a separate individual" (Hoffman, 1984, p. 170).

Hoffman (1984) helped explain the psychological separation of adolescents from their parents by breaking it down into four aspects: a) functional, b) emotional, c) conflictual, and d) attitudinal independence. "The efforts to act independently may be reflected during adolescence as the ability to manage and direct one's practical and personal affairs without the help of mother or father. This definition is labeled as functional independence" (p. 171). He further explained that attitudinal independence "as the image of oneself as being unique from one's mother and father, having one's own set of beliefs, values, and attitudes" (p. 171). He also defined emotional independence as "freedom from an excessive need for approval, closeness, togetherness, and emotional support in relation to the mother and father" (p. 171). Conflictual independence on the other hand is defined as "freedom from excessive guilt, anxiety, mistrust, responsibility, inhibition, resentment, and anger in relation to the mother and father" (p. 172).

In a study conducted by Hoffman (1984), with 75 male and 75 female undergraduate college students between the ages of 18-22 at the University of North Carolina at Chapel Hill, Hoffman examined the relationship of these students with their parents. In his results, it appeared that for both males and females, greater emotional independence from their parents was related to better academic adjustment. (p. 175). "In terms of personal adjustment in work, greater independence from both parents was to be related to less academic academic problems for both males and females" (177). This provides support for Teyber's (1983) assertion that adolescents having difficulty psychologically separating from their parents may have less academic success. (Hoffman, 1984). "It is evident that an adolescent's greater need for emotional support from his or her parents in some way interferes with successful productivity in academic work" (Hoffman, 1984, p. 177). In order to help gradually move their child toward independence, Hoffman (1984) suggested a gradual process with no ambivalence or hostility towards the process or towards the child.

In *Leaving and Returning Home in 20th Century America*, Frances and Calvin Goldscheider (1994) support Hoffman by indicating that a vital move towards functional independence is living independently from their parents. They explained living independently may be the most important indicator of being an adult. Even if the young adult is working full time or attending school, "many college students feel that their friends see them as somehow not truly adult and their parents may feel that they have failed to raise their children properly" (p. 3).

During college, most student-athletes try to find their own day-to-day routine. Some student-athletes are in serious and monogamous relationships while others date a few people every month. Depending on scholarship status and cost of attendance, some student-athletes have part-time employment to help offset the costs of living expenses while others do not have any

time for anything but their school and their sport. Much of the first year of college for student-athletes is figuring out this balance between what they can handle academically, socially, and athletically. It does seem understandable then why many student-athletes rely on their support networks such as family and parents to help them navigate through the tumultuous first year of college. In *The Seasons of a Man's Life*, Daniel Levinson (1978) studied and interviewed men that reflected on their earlier college years. From these interviews, he developed a theory that included development in the late teens and the twenties.

> Levinson called ages 17-33 the novice phase of development and argued that the overriding task of this phase is to move into the adult world and build a stable life structure. During this process, the young person experiences a considerable amount of change and instability while sorting through various possibilities in love and work in the course of establishing life structure (Arnett, 2000, p. 470).

Achievement of Adulthood Criteria

The theory of emerging adulthood (Arnett, 2000) asserts that parents remain key socialization agents during this development stage because youth rely on parents for support as they become autonomous (Dorsch, Lowe, & Dotterer, 2016). Arnett, (2000) stated that "Emerging adulthood is having left the dependency of childhood and adolescence, having not yet entered the enduring responsibilities that are normative in adulthood, emerging adults often explore a variety of possible life directions in love, work, and world views" (p. 469). Arnett (2000) argued that emerging adulthood is distinct demographically.

> Demographic changes in the timing of marriage and parenthood in recent decades have made a period of emerging adulthood typical for young people in industrialized societies.

> Postponing these transitions until at least the late twenties leaves late teens and early twenties available for exploring possible life directions. (p. 471)

Arnett (2000) also described that "emerging adults do not see themselves as adolescents, but many of them also do not see themselves entirely as adults" (p. 471). Along with demographics, age is also a rough indicator of adulthood as well because many people in their late 20s and early 30s still do not believe they have fully reached adulthood (Arnett, 2000, pp. 471-472). "Perhaps it is difficult for young people to feel that they have reached adulthood before they have established a stable residence, finished school, settled into a career, and married" (Arnett, 2000, p. 472).

> The characteristics that matter most to emerging adults in their subjective sense of attaining adulthood are not demographic transitions but individualistic qualities of character. Specifically, the top two top criteria for the transition to adulthood in a variety of studies have been accepting responsibility for one's self and making independent decisions. A third criterion, also individualistic but more tangible, becoming financially independent also ranks consistently near the top. (Arnett, 2000, p. 473)

In a study of 48 first-semester college freshman, Ashton (2002) analyzed frequency and content of different types of communication with parents. In Ashton's study, students made an average of 6.03 e-mail contacts weekly with parents. E-mail increased during stressful periods, and women were somewhat more likely to use e-mail than men. Students from close families which had stressed independence made more contacts but sought less specific academic and social advice from parents than other students. Students from authoritarian families made most requests for advice. Students from permissive families made fewest contacts and sought little social or academic advice (Ashton, 2002). Ashton notes that in a similar study, Sprague (1999)

found that female undergraduates reported a higher likelihood of seeking parental advice on what were termed “low intimacy” topics, which included issues such as dropped a class, cutting classes for legitimate reasons, and financial concerns” (Ashton, 2002, p. 327).

As student-athletes make the adjustment from high school to college, it is important for them to strive for independence and rely less on their parents for things that they can be doing on their own. However, in order to maintain a healthy and stable relationship, speaking and communicating with parents is inevitable. In *Protective Effects of a Parent-College Student Communication During the First Semester of College*, a study of 746 first year college students, Small, Morgan, Abar, and Maggs (2011) discovered: “Regular communication of warmth, expectations, and encouragement is feasible and may continue to play an important and protective role as students and their parents evolve toward establishing adult relationships.” (p. 548). They discovered that students turn to their parents for help mainly during times of stress and report that they value the assistance they receive.

It is clear that socioeconomic factors play a role in how often student-athletes may communicate with their parents. Additionally, when student-athletes need reassurance about decisions, they may speak with their parents. When they get reassurance, confidence, self-esteem and self-efficacy may all be enhanced. Ashton’s attachment theory supports this opinion. The attachment theory suggested rather than providing consistent advice, simple means of contact help make students feel more secure about their own decisions. Ashton (2002) stated that more thank likely, students from authoritative families may have a higher amount of contact than from those from permissive homes. However, Ashton (2002) also indicated that it is possible that authoritarian parents may require frequent contact to help keep their children dependent on them.

Small and colleagues (2011) discovered that today's college parents still heavily influence their child's transition into college. "Advances in communication technology make frequent communication between parents and college students easy and affordable" (p. 547). "In addition to advances in enabling technology, changing societal expectations and norms regarding the frequency and nature of parent-student contact may contribute to increased communication (p. 548).

In *Parental Attachment, Separation-Individualism, and College Student Adjustment: A Structural Equation Analysis of Mediational Effects*, Mattanah, Hancock, Brand, and Hansen (2004) found that: "Secure parental attachment and healthy levels of separation-individuation have been consistently linked to greater college student adjustment" (p. 213). It is clear to see that students with healthy and secure relationships with their parents while in college have a stronger sense of self than students that are heavily dependent on their parents.

> Students with a stronger and healthier sense of themselves as individuals would be better equipped to handle the demands for independent functioning that accompany the college transition, including developing an academic schedule, negotiating a new and often complex social world, and developing the internal motivation to wake up at a reasonable time, attend classes, and keep up with class assignments. (Mattanah et. al, 2004, p. 213).

Levine and Dean (2012) stated that there is no single reason for the rise in parent involvement, but the ease of staying in touch and accessibility of smart phones may be part of the answer. "It's easy to stay in touch. It is also the norm for students to start phoning immediately after class and call someone. They can text and email in class. Parents are high on the list for many" (p. 87).

Most NCAA student-athletes are extremely driven and high-achieving individuals that have found success in several avenues of their lives. Transitioning from high school to college, their abilities are tested where they are now alone and expected to make independent decisions. Afraid that these decisions may hinder their past successes, it is only natural for them to quickly text or call Mom or Dad for continued support. Levine and Dean (2012) support this opinion by stating that this is a generation that may not have coping skills because their entire lives, they have done very little wrong. This is a generation that needs constant reaffirmation and attention, because when they grew up, there was no sense of losing, coping, or even dealing with adversity. "Everyone won a trophy or ribbon" (p. 90).

Perhaps one of the most influential pieces of literature on this topic comes from Dorsch, Lowe, Dotterer, and Lyons (2016) who studied 514 student-athletes at Utah State University and Purdue University via an 84 question online survey. In building from their findings, they published a *Parent Guide Evidence-Based Strategies for Parenting the College Student-Athlete* and an *Administrator's Manual for working with Today's Student- Athletes*. These resources address the critical need of continued translatable research in this area. "During the college transition, student-athletes have to balance sport, academic, and social pursuits. Parent involvement is an integral, but potentially problematic, aspect of this transition. Therefore, the need exists to address the impact of parent involvement on student-athlete development" (Dorsch et al., 2014, p. 1).

Dorsch and colleagues discussed their findings on student-athletes' perceptions of parent involvement and their developmental outcomes. "After controlling for individual and family demographic factors, results indicated that parent academic and athletic engagement positively predicted student-athlete academic self-efficacy". However, it is interesting to note that they also

found that support from parents and parent academic engagement were strong negative predictors of functional independence and support from parents was a negative predictor attainment of adult criteria (Dorsch, et al., 2016, p. 21). In their study of 514 student-athletes from two different DI institutions, Dorsch et. al. (2016) reported that generally, student-athletes perceived their parents to be supportive in their academics without being overinvolved. An exact definition of over involvement was not defined.

> Indeed, the distributions of parent involvement variables revealed that 31% of student-athletes reported receiving "weekly" support and 50% reported engaging in contact with their parents "a few times a month". Almost half (45%) of the student-athletes "agreed" that their parents were academically engaged and 56% strongly agreed. (Dorsch et. al. 2016, p. 9)

There is little reported in the literature about student-athlete's academic performance when they have a low level of parental involvement in their lives. Thus, this study helps aid in the gap in literature in this arena. "Importantly, this gap also exists across the literature on parent involvement in intercollegiate athletics, as no research to date has been conducted to identify parental involvement strategies and/or assess links between parent involvement and student-athlete outcomes" (Dorsch, et al., 2016, p. 4). Interestingly, the literature states that parent involvement does impact a student-athlete's perceptions and feelings on how successful they can be in academics which according to Dorsch et. al (2017) is academic self-efficacy. In fact, Dorsch and colleagues found that, "Higher levels of parent contact are associated with lower levels of of student-athlete academic self-efficacy. Specifically, higher levels of parent contact are associated with lower levels of academic self-efficacy and individuation" (Utah State University, Families in Sport Lab, 2017, Parent Contact).

"Emerging data from Lowe (2015) which had a prospective longitudinal design with four measurement occasions, also provides evidence for concurrent links between changes in parent involvement and changes in student outcomes across the first year in college" (Dorsch et al., 2016, p. 3).

> For example, results revealed that increases in parent support giving and parent-student contact over the first year in college were linked to steeper declines in emotional independence among freshman across the first year in college. Despite the contributions of this body of literature, there remains a lack of clear conceptual and operational definition of parent involvement in the college context. (Dorsch et. al. 2016, p. 3)

Results from Dorsch et. al.'s 2015 study reiterates what has already been found in the literature in that parents play a very important role in the development of emerging adults into higher education institutions.

> Considering these models explained a significant proportion of variance (up to 34%) in individuation, specifically emotional and functional independence, results strongly imply more parent involvement may inhibit the developmental task of becoming autonomous for student-athletes during emerging adulthood. Rather, a moderate amount of involvement (e.g., talking/texting via phone a few times a week, every few weeks ask student-athlete how he/she is doing, and let him/her know direct conversation's every few weeks) seems to be more developmentally appropriate for promoting individuation, especially among student-athletes. (Dorsch et. al., p. 22, 2015)

In 2017, Dorsch and colleagues published another final report to the NCAA titled, *Promoting Positive Parent Involvement: Developing a Novel Online Education Module for Parents of NCAA Student-athletes*. The results of this report were conducted in two phases. In

the first phase, the research team interviewed 32 parents of student-athletes across three NCAA Divisions. In the second phase, 455 student-athletes from across the three NCAA Divisions participated in an online survey. This stage of the research was "Designed to address specific aspects of parent involvement that predict positive developmental outcomes" (Dorsch et al., 2017, p. 2).

After they conducted their research, in conjunction with Utah State University's Families in Sports Lab and other institutional study partners, they published an online resource for all Divisions within the NCAA called, *Intercollegiate Athletics, Parent Education Working Together to Create a Productive Student-Athletic Experience*. On this website, coaches, staff, administrators, parents can view recorded interviews that they conducted with their participants and the findings that they found from their study. They also have parent learning modules and student-athlete development resources. Their research displayed an association between a moderate level of parent involvement and positive student-athlete outcomes. They found that roughly one in two student-athletes report communicating with their parents a few times a month and that student-athletes prefer different ways to communicate more often than others. In fact, they found that 42% of student-athletes report texting with their parents daily. Interestingly, they found that over half of all the student-athletes report not communicating with their parents through email. "Individuals agree that parent contact has the potential to promote or negate student-athlete development. Our findings reveal that parent contact is linked to student-athletes' feelings that they can be successful in academics, which is referred to as academic self-efficacy" (Utah State University, Families in Sport Lab, 2017, Parent Contact). In their research, Dorsch and colleagues suggested "to enhance student-athletes' feelings of competence in the classroom as well as independence during college, it is crucial parents maintain an appropriate amount of

contact and recognize student-athletes' busy schedules, while also touching base every now and then". (Utah State University, Families in Sport Lab, 2017, Parent Contact)

Dorsch and colleagues found that about six in ten student-athletes feel very confident in their academic pursuits. In fact, 40% of all NCAA student-athletes that they interviewed feel mostly confident in their ability to do the most difficult work in their classes (Utah State University, Families in Sport Lab, 2017, Academic Efficacy). In a video showing interviews with participants regarding academic efficacy, one Division II administrator said that sometimes student- athletes get into a major that they do not even enjoy because of pressure from their parents. One recorded interview summarized that she has seen several parents tell their child that they are going to be a doctor when the student could not be weaker in science and math. She concluded that the biggest help that a parent can do is let their child pursue their passion (Utah State University, Families in Sport Lab, 2017, Academic Efficacy).

> Individuation reflects both the level of independence and the degree to which NCAA student-athletes feel they have attained the standards required for adulthood. Independence is reflected by the level of emotional and functional maturity student-athletes feel in relation to their parents, such as how much they depend on a parent's approval for, and assistance in, making decisions. Attainment of the standards for adulthood is reflected by the degree to which student-athletes feel they have achieved responsibility for themselves, notably in their financial matters and life decisions. Just two in ten student-athletes across NCAA Divisions report being emotionally and functionally independent from their parents; therefore, it is clear many student-athletes do not yet feel self-sufficient. About four in ten student-athletes report having made some progress in attaining the standards necessary for adulthood. Specifically, only about 20%

> strongly agree that they have achieved financial independence, and six in ten strongly agree they are accepting total responsibility for themselves. These results align with findings from The National 2012 Clark University Poll of Emerging Adults, conducted by Dr. Jeffrey Arnett, in that 62% of 18-21 year-olds reported having achieved adulthood in some ways but not in others. Key NCAA stakeholders also acknowledge that the college transition is a critical time for student-athletes to develop independence, and unanimously agree that parents' strategies for involvement are integral to facilitating positive individuation among student-athletes. (Utah State University, Families in Sport Lab, 2017, Individuation)

After student-athletes graduate from college, it is the hope of administrators, coaches, advisors, and parents that they transition straight into full time employment if they are not pursuing graduate school. However, for many student-athletes, they only start looking for employment *after* they graduate. During this time of transition, they may move back in with their parents to save money. Goldscheider and colleagues (1994) stated that close to 40% of the current generation of emerging adults move back into their parent's home and then out again at least once in their twenties (pp. 1-4). Arnett (2000) explained that for many "American emerging adults, in their early twenties, physical proximity to parents has been found to be inversely related to the quality of relationships with them" (p. 475).

In an article written in the Los Angeles Times, titled *The Lost Joys of the Empty Nest*, author Amy Koss stated that one in three (approximately 22.9 million) 18-34 year olds live with their parents.

> Thanks to wacky economics, out nests don't stay as empty as we thought they would. Now, when I think back at the tears I shed dropping the kids at college, I have to roll my

> inner eye. Had I known how briefly they would be gone, I surely would have spent more time naked around the house, or at least appreciated how leftovers remained unmolested, exactly as I left them. I'd have celebrated how long a roll of toilet paper lasted and treasured the adorable tininess of our utility bills. (Koss, 2017)

Koss acknowledged that all of the 18-34 year olds come to this trend by different ways. Many students graduate with too much debt to even think about affording their own place to live whereas some simply cannot find employment.

Coaches and Leadership

Coaches support of academics in collegiate athletics is an essential aspect of the student-athlete experience. If coaches emphasize the importance of obtaining a degree and focusing on academics, student-athletes are more likely to perform well in school (Alder & Alder, 1985). "The importance coaches place on academics and their relationships and communication with academe may be significant predictors of student-athletes' academic success and persistence" (Unruh, 1999, p.16). Additionally, making an investment in finding out who the student-athlete is as a person and not as a player is also key to when regarding student-athlete's academic success. Coaches must know not only whom they are working with but also make an effort to get to know every one of his or her players and have a vested interest in what they want to do after they graduate from college. In the Intercollegiate Athletic Parent Education Videos, many coaches spoke about the joy of seeing their student-athletes graduate from college and become independent adults. John Wooden (1999) stated that a coach must know the game and his players to be able to provide proper leadership and welcome the responsibility wholeheartedly (p. 5). Above all, Wooden (1999) stated that coaches are teachers. They have to be able to effectively teach their players the various fundamental aspects of the game (p. 3). However, "the coach must

never forget that he is a leader and not merely a person with authority" (p. 4). Wooden (1999) also believed that next to parents, students spend more time with teachers than anyone else and that "the coach is a teacher who will provide by far the most influence" (p. 4). For most NCAA student-athletes, although they may still frequently communicate with their parents, most of them spend more time with their coaching staff throughout their four or five years of eligibility. This is especially true for out of state NCAA student-athletes.

> Therefore, it is not only the duty but also the obligation of the coach to be fully aware of and to handle this responsibility with grave concern. The powerful influence of example should be a sacred trust for all of those who are in the position to help mold the character of young people their formative years. (Wooden, 1999, p. 4)

Although effective leadership must come from the coaches at varying levels, it is important for coaches to give others an opportunity to lead and also to follow. When student-athletes practice effective leadership skills and witness effective leadership, it helps them gain independent skills and confidence. "A team without leadership is like a ship without a rudder that is certain to wander aimlessly and will probably end up going around in circles getting nowhere" (Wooden, 1999, p. 5). While coaching at Indiana State University, John Wooden created a pyramid for success where he defined success as, "peace of mind which is a direct result of self-satisfaction in knowing you made the effort to become the best of which you are capable" (Edelhauser, 2007). "Only the individual himself can correctly determine his success. You may be able to fool others, but you can never truly deceive yourself, except, perhaps, for a short time" (Wooden, 1999, p. 15). Although every part of the Pyramid is directly relevant to being a dynamic leader, there are two parts of the pyramid that directly relate to student-athletes creating

a healthy separation from their parents that coaches should seek to understand: skill and initiative.

Skill:

> At the very center of the Pyramid of Success is Skill. You have to know your stuff and that includes a mastery of details. This is true whether you're an athlete, a surgeon, or a CEO. You'd better be able to execute properly and quickly and that requires Skill. As much as I value experience, and I value it greatly, I'd rather have a lot of skill and less experience that the other way around. Mastery of the skills you need in your job requires learning and it is why leaders and those who are high achievers are lifelong learners. I had this motto tacked on my office wall for many years: "It's what you learn after you know it all that counts. “Skill is an ongoing and lifelong process. (Wooden, 2017)

Initiative:

> Failure to act is often the biggest failure of all. Initiative is the ability to act. Simple as that. You must prepare thoroughly in all ways. If you have done that you must then summon the wherewithal to apply Initiative. Failure happens. None of us is perfect but you must train yourself not to fear failure. Fear instead inaction when it is time to act. This is true in all areas of life. Proper preparation must be followed with Initiative. As I reminded myself and others often: "Be quick, but don't hurry." That's a good motto for Initiative. (Wooden, 2017)

Mike Krzyzewski or “Coach K” is a highly successful coach of the Duke men’s basketball team for the past 31 years. At Duke, “Coach K” has led the Blue Devils to five NCAA Championships and 12 Final Four appearances in the NCAA Collegiate Men’s Basketball Championships (Krzyzewski, 2000). He consistently promotes a sense of belonging between his

players by striking the delicate balance between leading and following and allowing his players enough autonomy while still being a highly respected coach. Among his tenure and history of basketball success, one of the biggest reasons why he so legendary is his sense of mentorship and the notion of a basketball family. He consistently strives for his team to get to know each other outside of basketball in any way possible. Since his inception into coaching, it is clear to see that his players act more like a family than a team. In an interview with Coach K in 2011, Sim Sitkin and Richard Hackman stated that he is one of only three coaches in NCAA history to have won more than four or more National DI basketball titles. "He is the author of five books, a much-in demand speaker, and the host of a popular radio show, "Beyond Basketball," in which he discusses leadership issues with a wide variety of guests from all sectors of society" (2011, p. 497).

> I made it a point to talk to four to six guys every day, and about things other than basketball "When is your family coming over?" or "I heard this is happening, what do you think?" That kind of thing. I got to know them as people, which helped me understand the dynamics that I had to work with on the team. (p. 497)

A coach must have a good relationship with their players in order to be successful. "Coach K" is a true example of a transformational leader. When considering transformational leadership, leaders and followers raise each other to higher levels of motivation and morality (Burns, 1978, p.20). In transformational leadership, relationships are key because leaders and followers work together to achieve common goals.

> It is true that your best player can lead you to the Promised Land, but your most talented player can also lead you to the junk pile. Because that best player is going to have a lot of

> influence, you want to make sure before he comes in that you can have a good relationship with him. (Sitkin & Hackman, 2011, p. 496)

Leadership in Sport

Given the multitude of leadership definitions, it is important to remember that one definition is not exhaustive. According to Peter Northouse, (2010) in *Leadership: Theory and Practice* leadership is a "process whereby an individual influences a group of individuals to achieve a common goal" (p. 2). In *On Leadership*, John Gardner (1990) stated that leadership is "the process of persuasion of example by which an individual (or team) includes a group to pursue objectives held by the leader or shared by the leaders and their followers" (p. 1).

In *Contemporary Leadership in Sport Organizations*, David Scott (2014) stated that there are many opportunities for leadership within sport organizations: "While it is important to remember that individuals at any level can demonstrate aspects of leadership, sport organizations offer a wide variety of formal leadership and managerial opportunities" (p. 5). "Coach K" supports this opinion, "You can learn about being a better leader from everybody. You can go and study an orchestra. You can go study a basketball team, a business, or whatever. That's why I love talking about leadership. There is so much you can do to develop it" (Sitkin & Hackman, 2011, p. 500).

In *Leadership Challenge*, James Kouzes and Barry Posner (2007) stated that the four most common qualities that people look for in a leader are: 1) Honesty, 2) Forward looking, 3) Competency and 4) Inspiring (p. 29). In order for student-athletes to build leadership skills in order to help aid in their development of becoming an independent and self sufficient adult, they must be able to be competent in all areas of their life. Similarly, from the Duke Leadership Academy, Sim Sitkin and Allan Lind (2006) created the *Six Domains of Leadership* that is taught

at most NCAA student-athlete national leadership seminars. The first domain, *Personal Leadership* starts with leaders earning credibility amongst their team. In order for them to do this, they must have their own unique character and identity for followers to identify with (2006, p. 2). The second domain, *Relational Leadership* emphasizes "the importance of forging strong ties with others in the team" (p. 4). "The key to relational leadership lies in the actions that convey that the leader cares about and understands those he or she leads and in actions that allow the followers to feel that they "know" the leader" (p. 4). The third foundational domain, *Contextual Leadership* involves teams having their own identity and the leader being able to orchestrate all of the moving parts through simplification and clarification (p. 5). The fourth domain, *Inspirational Leadership,* "involves building a desire for greatness or excellence by raising expectations and encouraging the team to accept challenges by simultaneously raising enthusiasm and confidence" (p. 7). *Supportive Leadership* is the fifth domain that involves being transparent, empathetic, and helping the the team be aware of current problems without "beating around the bush". It also involves helping the team be secure "in their own capacity to see the problem, act realistically, and take appropriate action" (p. 8). The last domain and certainly not the least important is *Ethical Leadership.* An ethical leader must act as the head of the team that instills a "personal responsibility (ethics, values, and commitment to the common good) and a level of actionable understanding for what is needed, so that each member has the ability and desire to act in a way that advances the greater good" (p. 9). It is imperative that student-athletes work on learning these skills to be independent self-sufficient leaders. When recruiting students, coaches rely as much on character as they do they do talent. "Coach K" stated that he would not recruit students that do not have great character:

> In fact, we wouldn't continue to recruit a kid who we felt would not eventually "get it," because his great talent could turn out to be destructive rather than constructive. So character is a significant part of our recruiting. Grades too, of course, but character is probably the main thing. I want to see that the kid is someone who will listen to his coach, that he has shown respect to his parents and other authorities he has dealt with, and that he is willing to learn. (Sitkin & Hackman, 2011 p. 496)

According to Stogdill (1956) there are many different traits and skills are characteristic of leaders and while a leader may lead in one situation, he or she may not lead in another situation. According to Hoy and Miskel (1986) this trait approach theory progressed as people recognized that traits are affected by inheritance, learning, and environmental factors. Yukl (2002) however, did say that there are traits and skills associated with effective leadership that one can work to enhance. Coaches must be able to adapt and adjust to the different personalities and situations that comes with coaching a team.

Authentic Leadership is characteristic of leaders who have a high level of self-awareness and are supportive of followers (Scott, 2014). In order for student-athletes and coaches to be leaders, they must have a high level of self-awareness. As people become more secure as leaders, it gets easier to share leadership and empower others (Sitkin & Hackman, 2011, p. 495). According to Avolio, Luthans, and Walamba (2004) authentic leaders are:

> Those who are deeply aware of how they think and behave and are perceived by others as being aware of their own and others' values, perspective, knowledge, and strengths; aware of the context in which they operate; and who are confident, hopeful, optimistic, resilient, and of high moral character. (as cited in Scott, 2014, p. 39)

When coaching and leading coaches must also be able to adapt to the different situations at hand. For example, if the team is exhausted toward the middle of practice, the coach must be sensitive to his or her followers and know how hard to push his or her athletes. According to Hersey and Blanchard (1996) situational leadership states that leaders adapt to the demands of different situations and alter behaviors in response to followers. According to Gary Yukl (2010) leaders seek the appropriate mix of behaviors that will be effective in a given situation. According to Fred Fiedler (1967) who created the Fiedler Contingency Model, explained that leadership effectiveness is based on matching appropriate leadership with the situation.

Peter Senge (1990) also wrote much about shared leadership in his book *The Fifth Discipline.* Senge stated that systems thinking is the cornerstone of organizations. His theory states that the whole always exceeds the sum of its parts and that a shared vision is an extremely powerful force. Group members share a vision as a central motivating factor. According to Senge, changing a group requires changing individuals which requires motivation. In turn, motivation empowers individuals and therefore systems. In summary, Senge believed that creating change can happen through the processes system aspects of an organization as well as motivation and sharing a vision. Coach K also believed that there are many leaders on teams:

> Leadership is plural, not singular, so there can be a number of leaders. You want to make sure that as you are developing your senior leaders, you don't stifle a freshman who has great leadership qualities. You give them opportunities to help the older leader and then by the time they do get to be that older person, they are even better at what they do. (Sitkin & Hackman, 2011, p. 495)

Stephen Covey (2013) conveyed that there is no quick fix to anything. Essentially stating that with positive mental attitudes and success formulas, teams do not just magically succeed. He

called this the law of the farm. Much like farming, leaders and followers much prepare the ground, put a seed in it, cultivate it, weed it, water it, and then gradually nurture growth and development to full maturity. This is particularly important for student-athletes to learn because by understanding that success takes time, they will begin to recognize that failures in life are a part of the equation. By comprehending that it is okay to make mistakes and that success does not just automatically happen, student-athletes will be better apt to handle difficult situations and adversity on their own. Additionally, it is imperative to know when to take a break. It is no secret that participating in and succeeding in collegiate athletics takes work. Work from student-athletes, coaches, staff, and administrators in athletics. To avoid burnout, one must lead a balanced life and take time to recharge the batteries. Covey (2013) called the act of renewing, preserving and enhancing oneself is the greatest asset one can give to oneself. Rejuvenating the physical, social and emotional, mental, and spiritual aspects of oneself is imperative (p. 300). Covey (2013) called this act of renewal "sharpening the saw". Coach K also believed that finding the right balance in life is essential. "As a leader and a career-oriented individual, you must take care not to allow one aspect of your life to so consume you that you neglect the others" (Krzyzewski, 2006, p. 13).

> It is a big thing for me to stay fresh and balanced. I try not to have irritants in my own life so that when I come to my business life, I'm not bringing my life into the business. I've found that maintaining a fairly active health life, faith life, and family life are pillars that help me to become a better leader. (Sitkin & Hackman, 2011 p. 500)

Above anything else, Covey (2013) stated that sharpening the saw is the single most important factor a person can do for themselves:

> This is the single most powerful investment we can ever make in life-investment in ourselves, in the only instrument we have with which to deal with life and to contribute. We are the instruments of our own performance, and to be effective, we need to recognize the importance of taking time regularly to sharpen the saw. (p. 301)

Conclusion

The goals of this chapter build from the advice of Boote and Beile (2005). First, this chapter sought to inform the reader of previous research which has contributed significantly to the background of the NCAA, parent involvement in student-athletes lives, self-efficacy, academic self-efficacy, emerging adulthood, and why leadership is important in all of these facets. Second, it sought to explain the rationale of selecting student-athletes at the eleven DI institutions in the Big Sky Conference. As noted in the literature, further research needs to be completed in this arena. There is a substantive need for further connections between the types of students, the amount of interaction with their parents, and if there is a relationship to adulthood and functional independence. Third, it sought to defend the quantitative design as an appropriate method for investigating the problems associated with parental involvement in student-athletes lives. The established methodology has been determined in this study based on findings in recent literature. Lastly, the study's significance is strengthened through providing existing knowledge in the field.

This existing literature illustrates how often and some of the potential reasons student-athletes communicate with their parents. It also demonstrated the impact of parental involvement in student-athlete's lives. While it is clear that there is frequent communication amongst college students and their parents, and that a moderate level of involvement is a positive thing, what is not clear is the types of student-athletes that are communicating with their parents most

frequently and how parental involvement is related to emerging adulthood and functional independence. In addressing this gap, results from this study have the potential to inform administrators, coaches, student-athletes, and parents in the Big Sky Conference and across NCAA's member-institutions.

Chapter Three: Methodology

The purpose of this study was to ascertain the relationship, among parental involvement, academic performance, academic self-efficacy, functional independence, and attaining adulthood criteria of student-athletes in the Big Sky Conference. A non-experimental quantitative design was used to determine these relationships. This quantitative study aimed to highlight the association of parent's involvement in NCAA DI student-athlete's lives in the Big Sky Conference. Benefits of parental involvement have been illustrated in the literature, the impact on parental involvement and its relationship to functional independence, and attaining adult criteria needs further explored. In this study, parental involvement was the independent (criterion) variable and academic performance, academic self-efficacy, functional independence, and achievement of adult criteria were the dependent (predictor) variables.

According to Boudah (2011) the researcher must have a thorough understanding of the methods and design as well as the problem or question he or she is researching. An exhaustive understanding of the question and all of the potential ways to study the problem and or question is extremely important. A key responsibility of the researcher is to determine which method and design will best help understand the research question. The research question should drive the selection of the research methodology and appropriate design. In light of this, the aim of this chapter is to establish a clear connection between the problem being studied and the chosen methodology.

Research Design

According to Creswell (2009) research design is the plan to conduct research. It involves a philosophy, strategies of inquiry, and specific methods for reporting results. According to Hoy (2010) quantitative studies test objective theories via the examination of relationships between or

among variables. A non-experimental quantitative design was used to assess the relationship among Big Sky Conference student-athlete's parental involvement, and academic performance, academic self-efficacy, functional independence, and attaining adult criteria. Specifically, the design of this study was a 22 item, multiple choice survey administered through Qualtrics survey management system. Creswell (2009) stated that survey research provides a numeric description of trends attitudes, or opinions of a population using sample size. This differs from experimental research, which seeks to determine if a specific treatment influences outcome by applying treatment to one group and not the other. According to Hoy (2010), quantitative methodologies are best suited to examine the relationship among variables, and are thus capable of empirically testing objective theories.

Research Questions

According to Boudah (2011), research questions clearly and specifically identify the topic one aims to investigate. A well-written question helps guide or determine the appropriate design and method. According to Creswell (2009), "Quantitative research questions inquire about the relationships among variables that the investigator seeks to know. They are frequently used in social science research and especially in survey studies" (p. 132). To measure the relationship, among parental involvement, academic performance, academic self-efficacy, functional independence, and attainment adult criteria of student-athletes in the Big Sky Conference, the following four research questions guided this study: a) What is the relationship between parental involvement and academic performance of student-athletes in the Big Sky Conference? b) What is the relationship between parental involvement and student-athlete's academic self-efficacy? c) What is the relationship between parental involvement and functional independence? d) What is the relationship between parental involvement and the achievement of adulthood criteria?

Research Hypothesis

According to Steinberg (2011), a research hypothesis states what the researcher expects to find. Creswell (2009) stated, "Testing of hypothesis employs statistical procedures in where the investigator draws inferences about the population from a study sample. Hypotheses are used often in experiments in which investigators compare groups" (pp. 132-133). Steinberg (2011) noted that a research hypothesis indicates the expected findings whereas a null hypothesis states that there is no expected effect on the dependent variables due to the independent variable. For purposes of this study, it was hypothesized that there would be a statistically significant and experimentally important relationship among parental involvement and academic performance, academic self-efficacy, functional independence, and achievement of adult criteria of student-athletes in the Big Sky Conference. The null hypothesis was that there would be no experimentally important or experimentally consistent relationship among parental involvement and academic performance, academic self-efficacy, functional independence, and achievement of adulthood criteria of student-athletes in the Big Sky Conference.

Sample and Participants

The participants in this study were a nonprobability sample that included full-time undergraduate, graduate, and post baccalaureate student-athletes at eleven Big Sky Conference member institutions. According to Salkind (2012), in a nonprobability sample, the probability of selecting a single individual is not known. The eleven institutions in this study share the same sports programs. The institutions included in this study are: (Eastern Washington University, Idaho State University; University of Montana; Montana State University; University of North Dakota; Northern Arizona University; University of Northern Colorado; Portland State University; Sacramento State; Southern Utah University; and Weber State University). The two

football affiliate members (University of California Davis and California Polytechnic State University) and the two men's golf affiliate members (Binghamton University and University of Hartford) were not included in this study because they do not share all of the same sports of the other eleven participating members. In the present analyses, there was no comparison between the eleven full time institutions in any way. Their names had to be known to seek proportional representation. The sixteen sports that are included in the study that all eleven institutions have in common include: men's basketball, football; men's cross country; men's indoor track and field; men's outdoor track and field; men's tennis; men's golf; women's basketball; women's soccer; women's outdoor track and field; women's indoor track and field; women's cross country; women's tennis; women's golf; women's volleyball; and women's softball.

Participants were drawn from a population of 3,000 male and female student-athletes across 16 different sports and range from 18-26 years old. Again, the independent variable that helped guide this study was parental involvement and the dependent variables included academic performance (GPA), academic self-efficacy, functional independence, and the achievement of adulthood criteria. According to Raosoft (2004), with a 5% margin of error, a 95% confidence interval, and a 50% response distribution, the researcher determined the sample for this study should include 341 student-athletes.

Variables in the Study

Cozby and Bates (2015) described a variable as "any event, situation, behavior, or individual characteristic that varies. Any variable must have two or more levels or values" (p. 73). Creswell (2009) noted that in quantitative research, the use of variables are commonly used in three ways:

> The researcher may compare groups on an independent variable to see its impact on a dependent variable. Alternatively, the investigator may relate one or more independent variables to one or more dependent variables. Third, the researcher may describe responses to the independent, mediating, or dependent variables. (p. 133)

Salkind (2012) stated that a "dependent variable represents the measure that reflects the outcome of a research study" (p. 24). Whereas, "an independent variable represents treatments or conditions that the research has either direct or indirect control over to test their effects on a particular outcome" (Salkind, 2012, p. 25). Although no variables were manipulated in this study, Hoy (2010) stated that independent variables can be thought of as manipulated or treatment variables where dependent variables can be considered as outcome or effect variables (p. 50).

Independent variable. For purposes of this study, the independent variable (predictor) variable was parental involvement. Student-athletes indicated how often they are in contact with their parents in person, e-mail, phone, texting, and social media. The prompts for this variable included student-athletes ranking on a seven item Likert scale from *not at all* to *daily*.

Dependent variables. In this study, there were four dependent (criterion) variables, which included academic performance, academic self-efficacy, functional independence, and achievement of adult criteria. Academic performance was measured by student-athlete's self reported cumulative GPA. Academic self-efficacy was measured by a five-item Likert scale indicating a student's academic efficacy. The questions included in this instrument include: 1) *I'm certain I can master the skills taught in my classes this year,* 2) *I'm certain I can figure out how to do the most difficult work in my classes,* 3) *I can do almost all of the work in my classes if*

I don't give up, 4) *Even if the work is hard, I can learn it,* 5) *I can do even the hardest work in my classes if I try*.

Functional independence was measured using an eight-item instrument that will describe different aspects of relationships with parents. Using a Likert scale from "Not at all true of me" to "Very true of me", student-athletes indicated their answers to the following prompts: 1) *My parent(s) wishes have influenced my selection of friends,* 2) *When I am in difficulty, I usually call upon my parent(s) to help me out of trouble,* 3) *I often ask my parent(s) to assist me in solving personal* problems, 4) *My parent(s) wishes have influenced my choice of major at school*, 5) *I generally consult with my parent(s) when I make plans for an out-of-town weekend,* 6) *I ask my parents what to do when I get into a tough situation,* 7) *I do what my parent(s) decide about most questions that come up,* 8) *I call my parent(s) when anything goes wrong*.

Achievement of adult criteria was measured by using a two-item instrument for standards of being an adult where student-athletes rated how they believe they have achieved the standards. These included student-athletes indicating on a Likert scale of strongly agreeing to strongly disagreeing that they have 1) Accepted responsibility for themselves and 2) Make independent decisions. Aside from the reported GPA (a dependent variable) the independent and dependent variables in this study as are considered an ordinal level of measurement because these variables can be ordered along a continuum that reflect rankings. "Not only can these values be placed in categories, but they can be ordered as well. For this reason, the ordinal level of measurement often refers to variables as ranking of various outcomes, even if only two categories are involved" (Salkind, 2012, p. 112). In this study, GPA is considered a ratio level of measurement because the student-athletes are reporting their own GPA and it is possible, although unlikely, that they could report an absolute zero GPA. Salkind (2012) stated that ratio level of

measurement “describes variables that have equal intervals between them but also have an absolute zero” (p. 113).

Data Collection

After obtaining written permission from all Big Sky Conference (BSC) institutions, and Institutional Review Board (IRB) approval, an online survey was e-mailed to academic advisors at each institution. These individuals then e-mailed the survey to all student-athletes. Prior to taking the survey, prospective participants read the confidentiality agreement and provided informed consent. After the survey was completed, participants received an explanation of research and how they were able to obtain a copy of the aggregated results. The responses from the survey were analyzed using SPSS which affords the analyses of descriptive and inferential statistics within the survey sample.

Three follow-up e-mails were sent to non-respondents to maximize student-athlete participation. If results were still unsuccessful, academic advisors were contacted via phone. Demographic information was also collected from the student-athletes including which team they play on, their academic year in school, their major, their ethnicity, age, gender, if they are a transfer or international student-athlete, their living situation, parent’s level of education and marital status, and if they have siblings.

Procedures

The researcher obtained permission and support from the Big Sky Conference Commissioner, Andrea Williams. Travis Dorsch (Utah State University) was also contacted by the researcher, and granted permission to use four modified instruments from his NCAA 2017 Innovations in Research and Practice Grant. The first instrument measuring parent academic involvement is derived from Wolf, Sax, and Harper (2009), and includes four items from their

study from the University of Southern California entitled, *Parental Engagement and Contact in the Academic Lives of College Student-athletes*. Dorsch and colleagues (2017) reported this Cronbach alpha as .73. The second instrument measured academic self-efficacy. This scale includes five items from the Academic Efficacy subscale of the Patterns of Adaptive Learning Scales. Published by Midgley (2000), it is designed to "examine the relationship between a student's learning environment and a student's motivation, affect, and behavior" (Statistic Solutions, 2017). The Patterns of Adaptive Learning Study has been proven valid by a number of different studies. Based on scores from the PALS and fourth-grade and college levels, the authors were able to calculate a Crobach alpha in the .63-.67 range that provided numerical evidence of reliability and validity (Statistic Solutions, 2017). Dorsch and colleagues (2017) found the Cronbach alpha to be at .90. The third instrument was used to measure achievement of adult criteria through two statements from Arnett's (2000) theory of emerging adulthood. Dorsch and colleagues measure this Cronbach alpha at .76. The last instrument helped measure functional independence by "student-athlete perceptions of freedom from excessive reliance on parent help with practical and personal affairs" (Dorsch et al., 2017, p. 28). This 13-item scale was created by Hoffman (1984). Dorsch and colleagues (2017) found the Cronbach alpha for this instrument to be at .91.

Creswell (2009) noted that while conducting research, it is imperative that the researcher engage in ethical practices and to also be able to anticipate ethical issues that may arise (p. 73). In *Research Ethics for Social Scientists,* Israel and Hay (2006) also noted that it is important for researchers to develop a trust and be willing to protect their participants, promote the integrity of the research, and also guard against misconduct and impropriety that might reflect on their institutions.

> Although researchers should be excited and enthusiastic about their work, the most important thing to remember is that human beings are serving as participants in the research. These individuals must be treated so that their dignity is maintained in spite of research outcomes. (Salkind, 2012, p. 85)

Reliability and Validity

Salkind (2012) stated that "assessment tools have to be reliable and valid because they are the first line of defense against incorrect conclusions" (p. 115). "Reliability occurs when a test measures the same thing more than once and results in the same outcome (Salkind, 2012, p. 115); whereas, validity represents the accuracy of the instrument in measuring the variables of interest. Creswell (2009) stated that when researchers consider all issues related to validity and reliability, this helps with accuracy and also credibility of the findings. "A test can be reliable but not valid, bit a test cannot be valid without first being reliable. In other words, reliability is a necessary, but not sufficient condition of validity" (Salkind, 2012, p. 127).

Salkind (2012) stated that samples should be selected from populations in such a way that you maximize the likelihood that the sample represents the population as much as possible. However, he also stated, "No matter how hard a researcher tries, it is impossible to select a sample that perfectly represents the population" (p. 103). In this study, a random sample was not drawn because the researcher wanted to send the survey out to as many student-athletes in the Big Sky Conference as possible, therefore aiming for a census. If the researcher gained a census, the results of this study would be generalizable to other populations in the NCAA. Pallant (2010) stated that the reliability of instruments is assessed through the establishment of Cronbach alpha values which are considered acceptable at the $\alpha = .70$ level. The four instruments used in this study are considered reliable due to Pallant's (2010) criterion.

Data Analyses

Creswell's (2009) guidelines for analysis of data were followed in this study. First, Creswell (2009) stated that a researcher should report information about who participated in the study, and then a researcher should provide an analysis of data for the independent and dependent variables. As a third step, Creswell (2009) suggests that a researcher report inferential statistics on the descriptive data. The descriptive statistics used in this study were reported according to Creswell's (2009) advice and Dorsch and colleagues (2015) data analysis. Specifically, means, standard deviations, Cronbach alphas, ranges, and frequencies were reported. To determine the frequencies for each response, each category in the Likert scale was given a number and then summed for a total score. Group differences was also conducted to determine if there were mean level differences in the criterion variable (parent involvement) and the demographic variables such as race, gender, academic classification, and sport.

For purposes of this study, the researcher had planned to have two steps to the data analysis. First, a t-test for independent means was run where the GPA was the dependent variable (GPA) and the independent variable was parent involvement. Salkind (2012) stated that the "t-test for independent means is a commonly used inferential test of the significance of the difference between two means based on two independent, unrelated groups" (p. 184). Through this test, the researcher was able to ascertain if there is a relationship between a student-athlete's GPA and the amount of parental involvement in their lives. Specifically, the researcher aimed to find out if there was difference between a high amount of parental involvement and a student-athlete's GPA and if there was a relationship between a low level of involvement and a student-athlete's GPA. The second step was to run three different correlations where parent involvement served as the criterion or independent variable and adult criteria, academic self-efficacy and

functional independence served as the predictor or dependent variables for each of the tests. To run these correlations, Spearman's Rho tests were used. Steinberg (2011) stated that a Spearman's Rho test is a nonparametric test that measures the non-linear relationship and strength between two variables on an ordinal or ranking level. After the original analyses, the researcher wanted to dive deeper into the differences and relationships amongst the variables in the study by running additional tests. These supplementary tests are described in chapter four.

A priori Assumptions

The first assumption in this study was the a priori assumption, an assumption that is set prior to conducting the study. According to Cozby and Bates (2015) to help eliminate researcher bias, quantitative studies must establish predetermined critical values for the statistical analysis. For purposes of this research, the alpha level was set at .05 and the effect size was .3 that is a medium effect size by Cohen (1988). The second assumption in this study was the statistical assumptions, which will be later described.

Null Hypothesis

As described earlier in chapter three, the null hypothesis states that there is no expected effect on the dependent variables due to the independent variable (Steinberg, 2011). Salkind (2012) stated that the null hypothesis represents no relationship between the variables that are being studied and that the "null hypothesis acts as both a starting point and a benchmark against which the actual outcomes of a study will be measured" (p. 28). For purposes of this study, the null hypothesis that helped guide this study was that there is no experimentally important or experimentally consistent relationship between parental involvement and academic performance, academic self-efficacy, functional independence, and achievement of adulthood criteria of

student-athletes in the Big Sky Conference. In quantitative studies, a researcher will either fail to reject or reject the null hypothesis as a researcher can never prove a null hypothesis to be true.

Statistical Assumptions

Prior to conducting the data analyses, the researcher confirmed that the statistics ran in this study are nonparametric. Steinberg (2011) defined a nonparametric test as statistics that are not based on population parameters reflecting the fact that population parameters are missing or irrelevant. Pallant (2010) stated that there are two assumptions for nonparametric tests. The first includes the utilization of random sampling techniques. The second assumption includes independent observations in which each variable cannot be part of another category and that each variable does not influence the other variable. Although there was not a random sample in this study (included in the limitations), the second assumption of variables not influencing other variables and maintaining independent observations was met.

Summary

The purpose of this chapter was to help explain the connection between the problem being studied and the chosen methodology. In this chapter, the methodology was explained through the description of the research design, research questions, research hypothesis, population and sample, variables in the study, the data collection and research procedures, how this study is considered reliable and valid, assumptions, as well as how the data were analyzed. To conclude, the purpose of this study is to ascertain the relationship, if any, between parental involvement, academic performance, academic self-efficacy, functional independence, and attaining adult criteria of student-athletes in the Big Sky Conference. A non-experimental quantitative design was used to ascertain these relationships, where by a t-test and Spearman's Rho were conducted to compare the relationships amongst the variables. Although the benefits of

parental involvement have been shown in the literature, the impact on the involvement and its relationship to functional independence and achievement adult criteria needs to be further explored. This study will also add to the existing body of literature on this topic and aid in further discussion and development of resources provided for parents of NCAA student-athletes.

Chapter Four: Results

The purpose of this study was to ascertain the relationship, among parental involvement, academic performance, academic self-efficacy, functional independence, and attainment of adult criteria of student-athletes in the Big Sky Conference. Participation in this study required an opt-in from student-athlete respondents through an online survey. Data collection occurred in the spring 2018 semester. Analyses of the data includes descriptive statistics for both the independent and dependent variables along with inferential statistics.

An email was sent to the 27 academic advisors in the Big Sky Conference and 11 Senior Women's Administrators informing them of the purpose of the study (Appendix A). Three weeks later, the exact same e-mail with the survey link was sent. Two weeks later, a follow up phone call was made to academic advising offices that had no student-athlete responses. One week later, a final e-mail reminder was sent to each institution to encourage participation.

When enumerating the descriptive and inferential statistics of the study, a total number of student-athlete respondents is given as well as the total number of institutions that chose to participate in the study. Student-athlete respondents answered sixteen demographic questions as well as six areas pertaining to the purpose of the study: cumulative GPA; how often they are in contact with their parents; how often their parents are involved in their academics; and how they perceive their academic self-efficacy, functional independence, and attaining adult criteria. Aside from GPA, these six areas were presented with a Likert scale and added up for an overall score. This process will be further explained in the inferential statistics section.

Descriptive Statistics

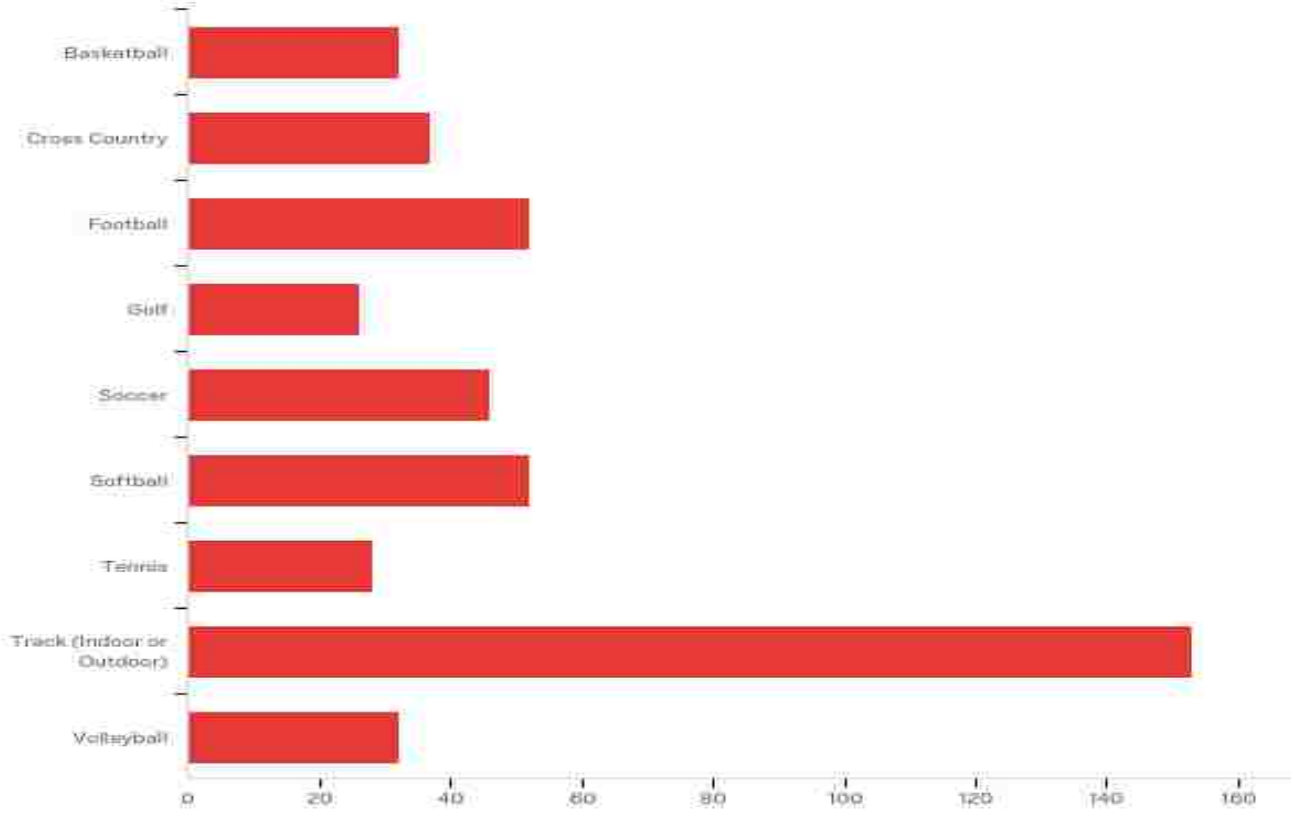
According to Steinberg (2011) descriptive statistics include summary statistics such as a mean and standard deviation. They help paint a clear picture of the sample of the study along

with a description of the independent and dependent variables. Ninety percent (10 out of the 11 institutions) chose to participate in the study. Across these 10 institutions, respondents were fairly evenly distributed with a mean of 44 responses per institution. As described in chapter three, data regarding each institution was only collected for proportional representation and not for comparison. A total of 461 student-athletes responded to the survey and an additional 14 opted out of the survey.

Demographic Information

Figure 1

Participation by Sport

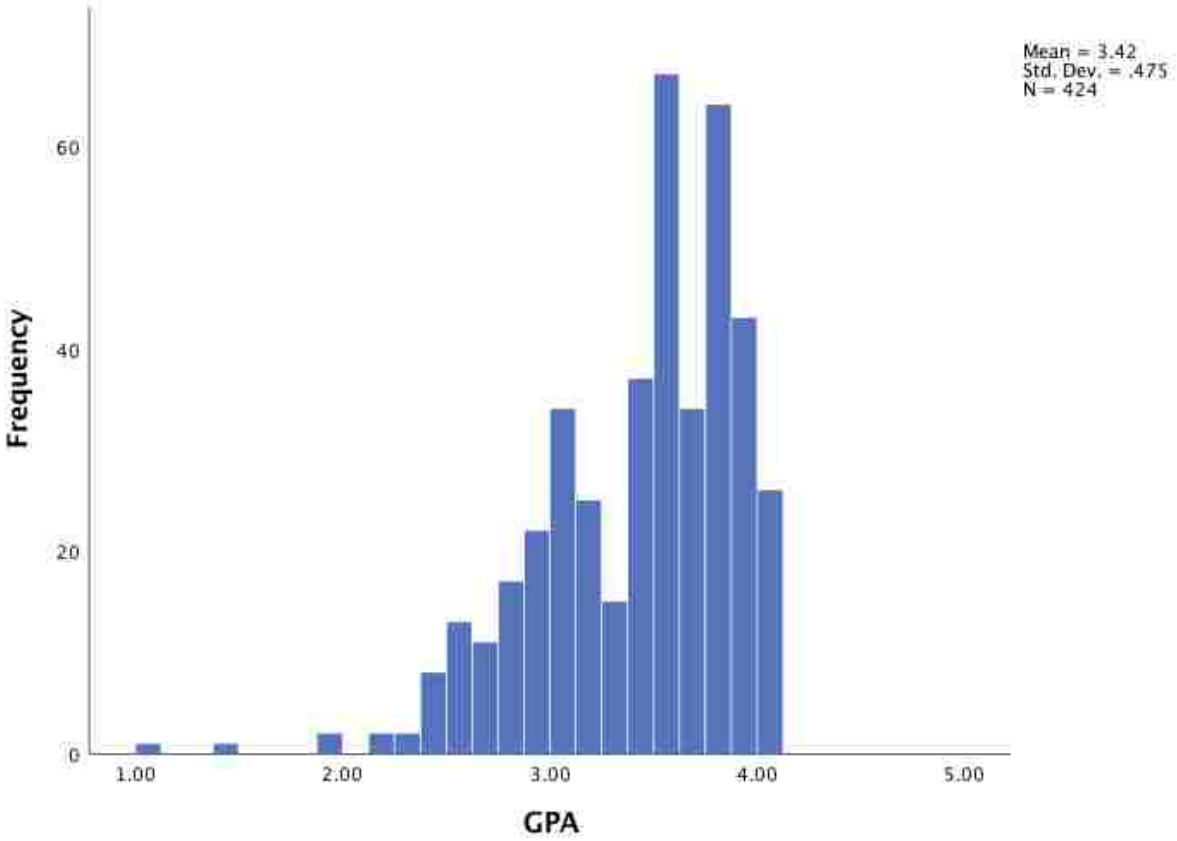


Sixty-seven percent of the student-athlete respondents (n=302) indicated they were playing on a women's team while 33% (n=149) indicated they were playing on a men's team.

Ten student-athletes did not respond. There was strong representation from the sixteen sports surveyed (Figure A) with a total of 458 responses. Track and field had the most overall most responses with 153 student-athletes. Remaining responses included: basketball (32), cross country (37), football (52), golf (26), soccer (46), softball (52), tennis (28), and volleyball (32).

Figure 2

Grade Point Average



Four-hundred twenty-seven student-athletes reported their cumulative GPA (Figure 2). The median response for this question was a 3.5 (n=23) with a mean of 3.42. Responses ranged from 1.0 to 4.0. Three outlier responses were deleted from this question (999, 555, and 777). Of the 424 responses recorded, 81% (n=345) had above a 3.0 GPA where only 18% (n=79) had below a 3.0 GPA. Many NCAA student-athletes do well in the classroom not necessarily because they want to, but because they *have* to. Due to academic benchmarks to maintain eligibility

(called progress toward degree requirements), student-athletes are aware that if they do not do well in school, they cannot participate in their sport. Depending on their academic year, the benchmarks differ. For example, prior to the second year of enrollment they must have a 1.8 cumulative GPA. Prior to the third year of enrollment, they must have a 1.9 cumulative GPA and have completed 40% of their degree requirements. Prior to the fourth year of enrollment, student-athletes must maintain a 2.0 or higher cumulative GPA and have completed 60% of their degree requirements (NCAA, 2018, Progress Toward Degree Requirements).

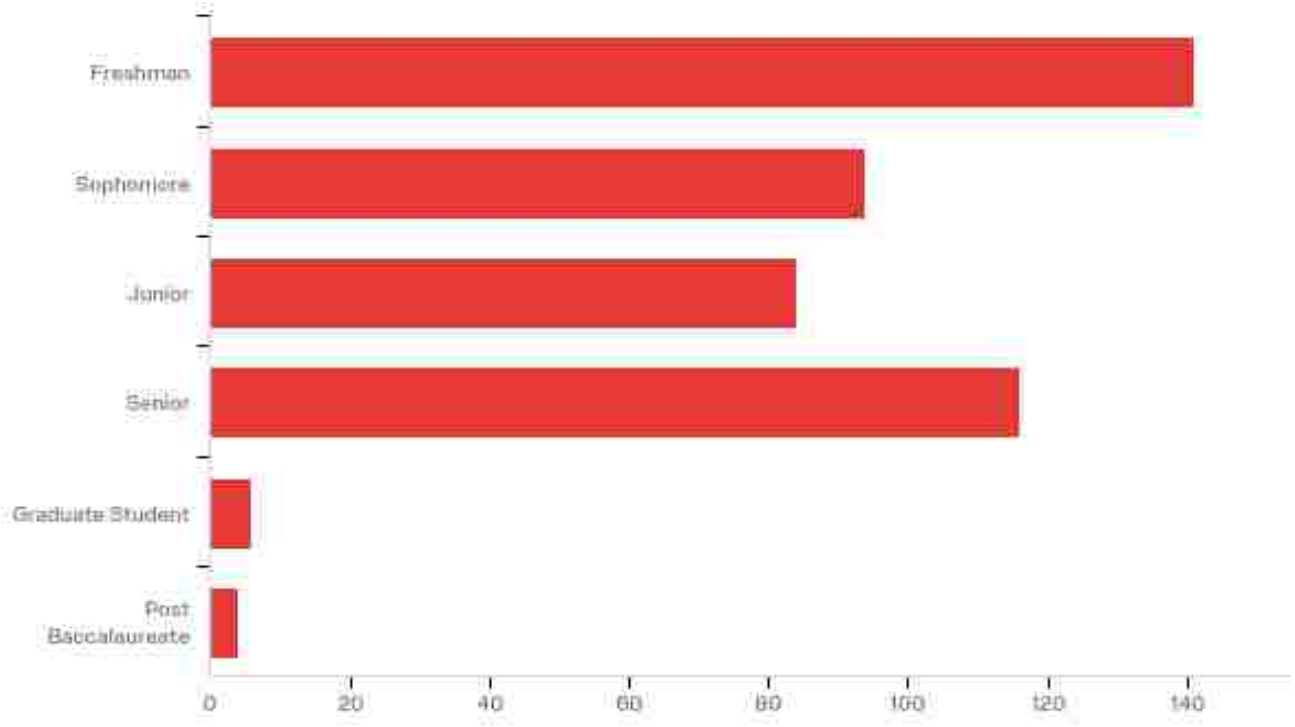
Today's student-athletes are succeeding academically and are graduating at higher rates than ever before. Last year, the graduation success rate for NCAA DI student-athletes was 87% (NCAA, 2018, Graduation Rates). Also on the rise are institutions' Academic Progress Rates (APRs) which essentially holds institutions accountable for their student-athletes academic progress through retention, eligibility, and graduation metrics for each academic year and term. NCAA President Mark Emmert stated that he was excited to see APR numbers on the rise for the 12th consecutive year. He also noted that he was specifically more excited about what exactly those numbers mean. "Thousands of college athletes continue to make real progress toward earning their degrees. A college degree, combined with the skills they learn while participating in sports, will provide countless opportunities for them later in life" (Hosick, 2018).

Academic majors varied amongst the participants in this study. Four-hundred thirty-three student-athletes indicated a major with a total of 97 different majors recorded. Health and Human Performance/Exercise Science was the most recorded major (72) with Business (68), Communication Studies (62), Biology (27), and Elementary Education (23) rounding out the top five. There was a strong representation of all four classes in this study with 141 freshmen, 94 sophomores, 84 juniors, and 116 seniors participating. Six graduate students and four post

baccalaureates also responded to the survey, thus making a total of 445 student-athlete respondents. Ninety-five percent of the 437 student-athlete respondents were 18- 22 years of age, and 10% indicated that they were transfer student-athletes from either a two-year institution or another four-year institution.

Figure 3

Class Distribution



Forty-six student-athlete respondents (10%) indicated that they live with parents, family, or a significant other, whereas 189 student-athlete respondents (43%) reported living with teammates or other student-athletes only. In regards to the location in which they live, 40% or 176 student-athlete respondents stated that they live in residence halls whereas 54% or 237 responses indicated that they live in an off-campus apartment or house. Eighty-six percent or 374 of the respondents are United States citizens and 14% or 60 student-athletes indicated that they were non United States citizens. Three hundred thirty-three or 75% of respondents identified as

white, 28 or 6% identified as African American, 20 or 4% identified as Hispanic, 14 or 3% identified as Hawaiian or Pacific Islander, 13 or 2% identified as Asian American, 5 or 1% identified as American Indian or Alaskan Native, and 25 or 5% indicated that they were multiracial or "other". Regarding birth order, 141 student-athlete respondents or 33% indicated that they are the oldest sibling, 37% or 160 respondents stated that they are a second child, 66 student-athletes or 15% indicated that they are a third child, and 75 or 17% indicated that they are fourth or later.

When asked about their parents' highest level of education, 35% or 153 student-athlete respondents stated a bachelor's degree was the highest degree their mother had obtained while 29% or 125 indicated that a bachelor's degree was the highest level of education for their fathers. Eighteen percent or 79 student-athlete respondents indicated that their mother and father's highest level of education was a master's degree. Fathers had twice the amount of doctorates with 18 responses or 4% out of 431 student-athlete respondents while mothers had 7 or 1% out of 432 student-athlete respondents. Three hundred fifty-nine or 82% of student-athlete respondents indicated that their fathers were married and 347 or 80% of student-athlete respondents reported that their mothers were married.

The results showed that 46% (n=199) of student-athlete respondents indicated that they text with their parents on a daily basis and 65% (n=272) respondents indicated that they do not email with their parents. This is consistent with Dorsch and colleagues' (2017) research that found 42% of student-athletes reported texting with their parents daily and that over half of all student-athletes reported not communicating with their parents via email. In regard to parent academic involvement, 48% (n=207) student-athlete respondents indicated that their parents are

interested in their academic progress and 41% (n=177) respondents indicated that their parents stress the importance of getting good grades.

Overall, the student-athlete respondents were confident in their academics. 43% (n=182) respondents were confident they could master skills taught in their classes, 40% (n=167) respondents felt very confident in their ability to do the most difficult work in their classes, 68% (n=287) respondents indicated that they can do almost all of the work in their classes if they don't give up, 62% (n=264) respondents indicated that even if the work is difficult, they can learn it, and 57% (n=242) respondents indicated that they can do the hardest work in their classes if they try. These results also align with Dorsch and colleagues (2017) who found that 40% of all NCAA student-athletes feel mostly confident in their ability to do the most difficult work in their classes.

In regard to adult criteria, student-athlete respondents indicated that they have mostly achieved the standards of being an adult. Fifty-five percent (n=235) stated that they strongly agree that they accept responsibility for themselves, and 45% (n=193) respondents strongly agree that they make independent decisions. When analyzing the data concerning functional independence, 46% (n=195) respondents indicated that their parent(s)' wishes have not influenced their choice of major at school, yet the exact same amount of respondents (46% n=195) indicated that their parent's wishes have somewhat influenced their selection of friends. 25% (n=105) indicated that they do not consult their parents when they make plans for an out-of-town weekend but 53% (n=222) indicated that they more than likely would call their parents if something went wrong. Three hundred nine respondents or 74% stated that they more than likely would contact their parents when they are in difficulty to help get them out of trouble, and 71%

or 297 respondents indicated that they more than likely do what their parent(s) decide about questions that come up.

Inferential Statistics

According to Steinberg (2011), "With its inferential use, a statistic is used to draw conclusions about the characteristics of a larger group from which the sample was drawn" (p. 148). In this study, participants were not randomly selected which made the study a non-experimental design by nature with a non-probability sample. By not having a random sample, the results of this study cannot be generalized to the broader population of NCAA student-athletes.

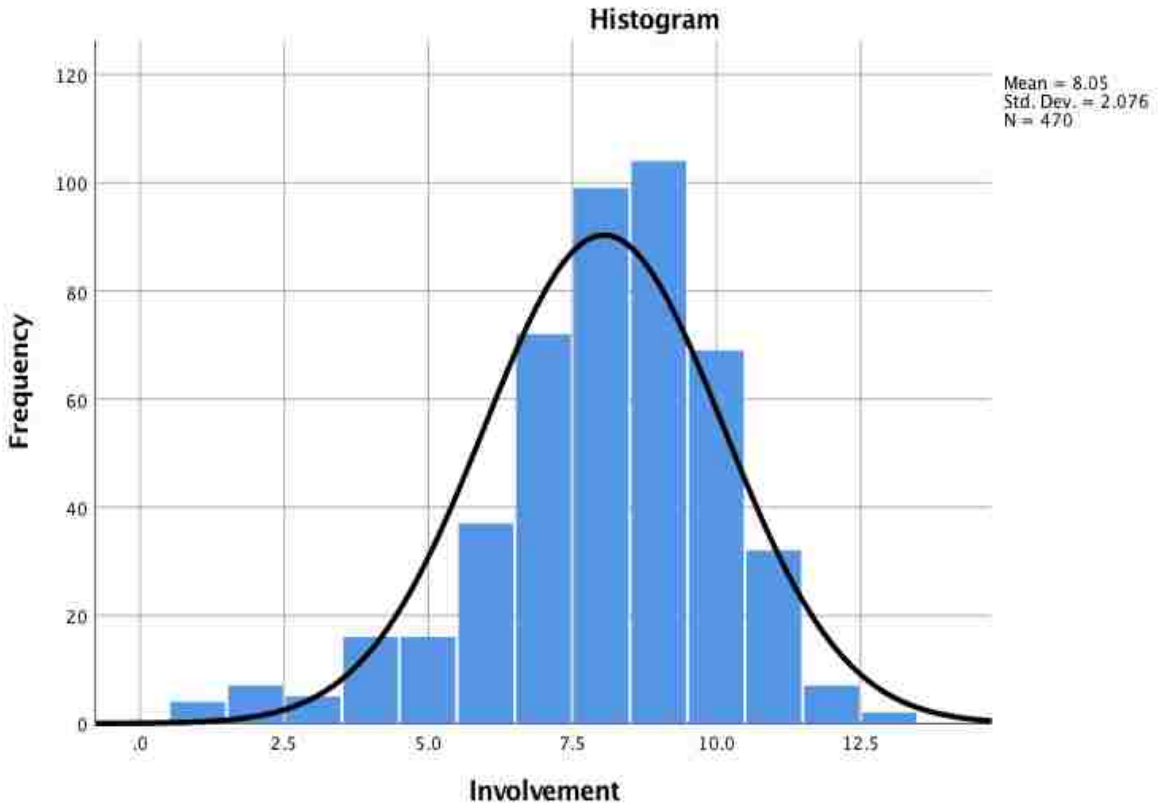
Sample Size. In this study, the population consisted of 3,000 student-athletes at 10 different institutions in the Big Sky Conference. According to Raosoft (2004), with a population of 3000, a 5% margin of error, a 95% confidence interval, and a 50% response distribution, the total sample size should have included 341 student-athletes. Four hundred seventy-five student-athletes replied to the survey and 14 opted out of the study with a total sample size of 461 student-athletes.

Management of Non-Responses. Due to the voluntary nature of each question, not all 461 student-athletes answered every question. For example, a student-athlete respondent could have provided their GPA but not their major or academic self efficacy. Pallant (2010) stated "When you are doing research, particularly with human beings, it is very rare that you will obtain complete data from every case" (p. 211). Depending on the statistical test, some of the participants' empty data could not be used and were therefore dropped from that particular test. This missing data resulted in the pairwise exclusion of cases (Pallant 2010) that excludes cases only if they are missing the data required for the specific analysis.

T-Test. To explore the difference (if any) between the GPA of student-athletes with a low level of involvement and a high level of parental involvement, the researcher determined that a t-test was an appropriate test for analysis. Salkind (2012) stated that the "t-test for independent means is a commonly used inferential test of the significance of the difference between two means based on two independent, unrelated groups" (p. 184). Through this test, the researcher was able to ascertain if there was a difference between a student-athletes' GPA with a high and low amount of parental involvement in their lives. As stated in chapter three, the literature does not have an exact operational definition of a low, moderate, or high level of parent involvement. Parental involvement was measured by asking participants how often they communicate with their parents through e-mail, in-person contact, phone, texting, and social media. On a Likert scale, participants could answer from "not at all" to "less than 3 times a month" to "2-3 times a month" to "4 times a month" to "3 times a week" to "4 times a week" to "daily". A total involvement score was created for each student-athlete respondent for each question from 1-7. Then, each question was added together for a total score for parental involvement with the maximum amount of involvement score being 35. A frequency distribution of the total involvement scores was created (figure 4) with a mean score of 8.05 and a standard deviation of 2.

Figure 4

Parent Involvement



After reviewing this histogram, it was determined that a high level of involvement can be descried as one or more standard deviations away from the mean, and defined as a total involvement score as a 10 or more. A low level of involvement can be described as one standard deviations away from the mean, and defined as 6 or less. Therefore, a medium level of involvement would be a score of 7-9. After determining the GPA's of the student-athletes with a high and low level of parental involvement, the researcher was able to run an independent t-test to determine if there was a difference in the GPA's. Tables 1-4 help describe the results of this test.

Table 1

One sample statistics for GPA's with a high and low level of parent involvement

	N	*M*	*SD*	Std. Error Mean
Low	73	3.4621	.42667	.04994
High	102	3.3626	.51935	.05585

Table 2

Independent sample t-test for GPA's with a high and low level of parent involvement

	Levene's Test of Equality of Variances		t-test for Equality of Means			
	F	Sig.	*t*	df	Sig. (2-tailed)	Mean Difference
Equal Variances Assumed	3.812	.053	1.343	173	.181	.09941
Equal Variances not assumed			1.387	169.660	.167	.09941

Note. Test Value = 0. Differences in GPA are not significant at the p <.001 level

T-TEST

An independent sample t-test was conducted to compare a low and high level of parent involvement. The analysis of the t-test revealed that there was not a statistically significant difference between the GPA of student-athletes with a low level of parent involvement (M = 3.46, *SD* = .42) and a high level of parent involvement (M = 3.36, *SD*= .51) conditions; *t* (73) = 1.34, *t* (102) = 1.38, p = .18. Creswell (2009) indicated that the effect size indicates the strength of a relationship between variables and that effect sizes are most meaningful in combination with a case that lacks statistical significance. Pallant (2010) also noted that effect size statistics provide an indication of the magnitude of the differences and not just whether the difference could have occurred by chance. Steinberg (2011) noted that there are many different ways to compute effect size, with the simplest and direct way is to divide the difference of the means by any one of the standard deviations. For purposes of this study, the researcher found the effect size to be .2 which is defined as a small effect size, therefore not meeting *a priori*. Essentially, this small effect size means that 20% of the variability in the dependent variable or GPA is due to the independent variable or parent contact. What is also clear from analyzing the data is that student-athlete respondents are communicating with their parents very frequently. Forty-six percent of the 470 respondents indicated that they text with their parents on a daily basis and 84% of respondent's text at least three to four times a week. This reaffirms the literature that college students are communicating more than ever with their parents, bolstering Dorsch and colleagues' (2017) findings that "76% of student-athlete's text at least a few times a week" (p.33).

ANOVA with low, medium, and high parent involvement. Once the t-test was run between a high and low level of involvement, the researcher derived a curious inquiry in comparing the means of more than two groups by adding in a medium level of parent

involvement. According to Pallant (2010) the best way to compare means of more than two groups is through a one-way Analysis of Variance or (ANOVA). An ANOVA involves one independent variable (GPA) which has a number of different levels (low, medium, and high). An ANOVA also compares the variability in between the different groups believed to be due to the independent variable with the variability within each of the groups (believed to be due to chance). "An F ratio is calculated, which represents the variance between the groups divided by the variance within the groups. A large F ratio indicates that there is more variability between the groups than there is within each group" (Pallant, 2010, p. 249). Tables three through five indicates the results for the one-way ANOVA.

Table 3

Descriptives on a One-Way ANOVA with GPA's on a Low, Medium, High Level of Involvement

GPA	*N*	*M*	*SD*	Std. Error Mean
Low	73	3.4621	.42667	.04994
Medium	247	3.4657	.60835	.03871
High	103	3.3397	.56681	.05585
Total	423	3.4344	.57214	.02782

Note: Medium amount of involvement has highest GPA and a high amount of involvement has the lowest GPA

Table 4

Test of Homogeneity of Variances

GPA	Levene Statistic	df1	df2	Sig.
Based on Mean	1.573	2	420	.209
Based on Median	1.217	2	420	.297
Based on Median and with adjusted df	1.217	2	372.281	.297
Based on trimmed mean	1.344	2	420	.262

Table 5

ANOVA

GPA	Sum of Squares	df	Mean Square	*F*	Sig
Between Groups	1.221	2	.611	1.873	.155
Within Groups	136.920	420	.326		
Total	138.141	422			

Table 4 indicates the homogeneity of variance which helps determine if samples are obtained from a population are of equal variances (Pallant, 2010). A one-way between subjects ANOVA was conducted to compare the effect of parent involvement on GPA on a low, medium, and high level of involvement. There was not a statistically significant effect of parent involvement on GPA at the $p < .05$ level for the three conditions [$F(1.22, 136.92) = 1.8$, $p = .155$]. To calculate the effect size, the researcher calculated eta squared which is one of the most common effect size statistics (Pallant, 2010). To do this, the researcher divided the sum of squares within groups (136) divided by the group total (138). According to Cohen (1988), the result of (.9) is a large effect size. Interestingly, the researcher found that those student-athletes with the highest level of parent involvement have the lowest GPA's of the three groups of student-athlete respondents that were compared. Additionally, in this sample, it can be concluded that student-athletes' with a medium level of parent involvement have the highest GPA's.

Spearman's Rho with parental involvement and academic self-efficacy. When determining the relationships between parent involvement and academic self efficacy, functional independence, and attaining adulthood criteria the researcher determined that the non-parametric test of Spearman rho would be the best test to use because for each correlation, there are two continuous variables. Pallant (2010) stated that a Spearman rho is designed for use with an ordinal or ranked data. To determine whether the two variables are related and to determine the strength of the relationship, the researcher reviewed the correlation coefficient. "The closer to 1 the more 'confident' of a positive linear correlation and the closer to –1 the more confident of a negative linear correlation. When the correlation coefficient is close to zero there is no evidence of any relationship" (Steinberg, 2011, p. 432). Tables six through eight help show the results of these relationships.

Table 6

Spearman's Rho correlation of Parental Involvement and Academic Self-Efficacy

		Involvement	Efficacy
Involvement	Correlation Coefficient	1.000	.783
	Sig. (2-tailed)		.000
	N	470	422
Efficacy	Correlation Coefficient	.783	1.000
	Sig. (2-tailed)	.000	
	N	422	422

In determining the direction of the relationship between the independent variable (parent involvement) and the dependent variable (student-athlete's self-efficacy), the researcher can conclude that there is a positive correlation between the independent variable (parent involvement) and the dependent variable (academic self-efficacy), $r = .78$, $n = 422$, $p < .001$. In this correlation, the more parental involvement, the higher the academic self efficacy. The correlation coefficient of .78 also suggests a strong or large correlation as set forth by Cohen's (1988) effect sizes (small effect $r = .10$ to .29, medium effect .30-.49, and a large effect of $r = .50$ to 1.0). Pallant (2010) suggests to find out how much variance two variables share; a researcher can determine their coefficient of determination by squaring their correlation coefficient. In this correlation, the coefficient of determination is .61 which indicates 61% of shared variance between the two variables essentially stating that parent involvement helps explain nearly 61% of the variance in student-athlete respondents scores on the academic self-efficacy scale. The

results of this correlation are consistent with Dorsch et. al. (2016) findings that parent academic engagement positively predicted student-athlete academic self-efficacy.

Spearman's Rho with parental involvement and achievement of adulthood criteria.

Table 7

Spearman's Rho correlation of Parental Involvement and Achievement of Adulthood Criteria

		Involvement	Adulthood
Involvement	Correlation Coefficient	1.000	.692
	Sig. (2-tailed)		.000
	N	470	421
Adulthood	Correlation Coefficient	.692	1.000
	Sig. (2-tailed)	.000	
	N	421	421

In determining the direction of the relationship between the independent variable (parent involvement) and the dependent variable (achievement of adulthood criteria), the researcher can conclude that there is a positive correlation between the two variables, $r = .69$, $n = 421$, $p < .001$. In this case, the more parental involvement, the higher the achievement of adulthood criteria. Essentially, the more parents are involved with their student-athletes, the more the student-athletes perceive themselves as being an adult. The correlation coefficient of .69 suggests a strong or large correlation as set forth by Cohen (1988). In this correlation, the coefficient of determination is .48 which indicates 48% of shared variance between the two variables essentially stating that parent involvement helps explain nearly 47% of the variance in student-athlete respondents scores on the achievement of adulthood criteria scale.

Spearman's Rho with parental involvement and functional independence.

Table 8

Spearman's Rho correlation of Parental Involvement and Functional Independence

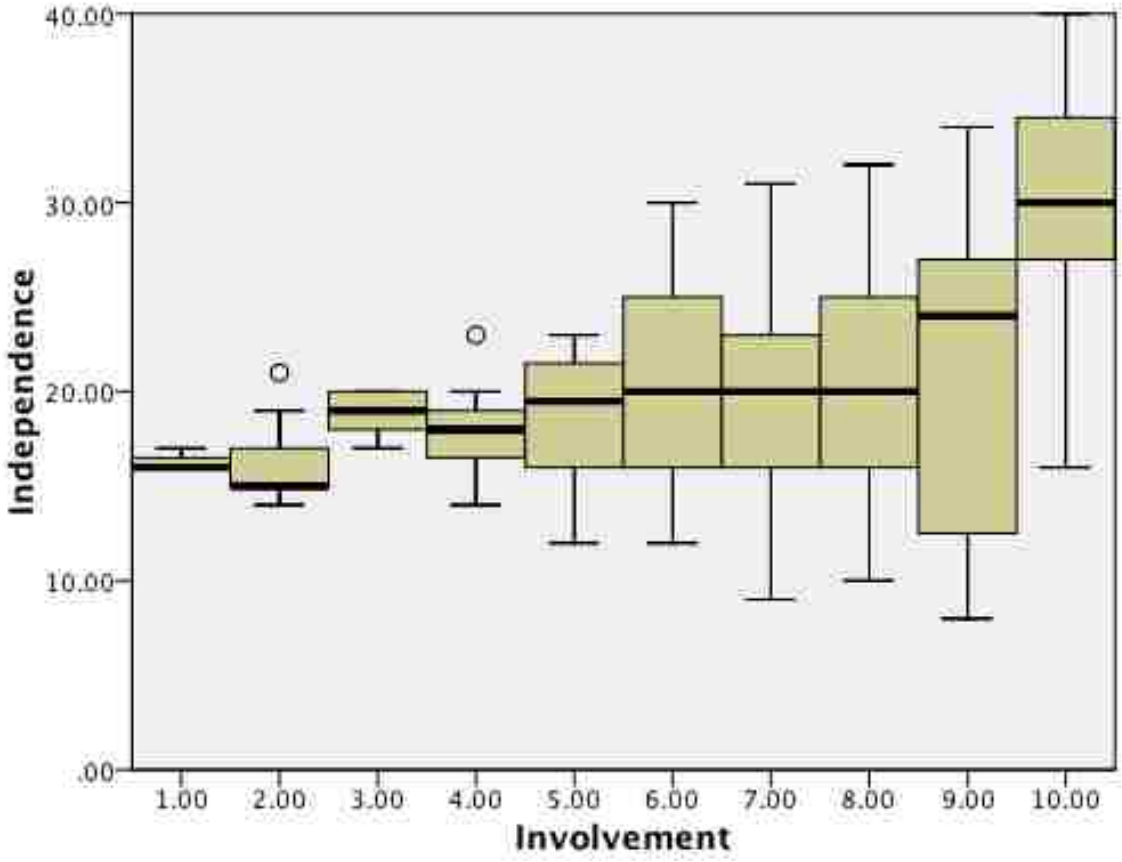
		Contact	Independence
Contact	Correlation Coefficient	1.000	.402
	Sig. (2-tailed)		.000
	N	470	415
Independence	Correlation Coefficient	.402	1.000
	Sig. (2-tailed)	.000	
	N	415	415

In determining the direction of the relationship between the independent variable (parent involvement) and the dependent variable (functional independence) the researcher can conclude that there is a positive correlation between the two variables r =.402, n = 415, p <.001. In this case, the more parental involvement, the higher the functional independence. The correlation coefficient of .40 also suggests a medium correlation as set forth by Cohen (1988) In this correlation, the coefficient of determination is .40 which indicates 40% of shared variance essentially stating that parent involvement helps explain 40% of the variance in student-athlete respondents scores on the functional independence scale. It is important to note that on the scale, the closer score to zero, the more functionally independent a student-athlete perceives themselves. Better depicted in in figure 5, student-athletes' respondents have a medium, steady

level of independence until a certain point. As parents get more involved (score of 9 and 10), the student-athletes actually become less functionally dependent.

Figure 5

Functional Independence and Parent Involvement



Note: 40 = less functionally independent

Hypothesis Testing

As stated in Chapter three, to measure the relationship, if any, among parental involvement, academic performance, academic self-efficacy, functional independence, and attaining adult criteria of student-athletes in the Big Sky Conference, the following four research questions guided this study: a) What is the relationship between parental involvement and

academic performance of student-athletes in the Big Sky Conference? b) What is the relationship between parental involvement and student-athlete's academic self-efficacy? c) What is the relationship between parental involvement and functional independence? d) What is the relationship between parental involvement and the achievement of adulthood criteria? For purposes of this study, it was hypothesized there would be a statistically significant and experimentally important relationship among parental involvement and academic performance, academic self-efficacy, functional independence, and achievement of adult criteria of student-athletes in the Big Sky Conference. The null hypothesis being tested is that there is no experimentally important or experimentally consistent relationship among parental involvement and academic performance, academic self-efficacy, functional independence, and achievement of adult criteria of student-athletes in the Big Sky Conference.

To reiterate the previous results of the tests, for the first research question, the researcher did find statistically significant results at the $p < .001$ level therefore rejecting the null hypothesis that there is no experimentally consistent or statistically significant difference between parent involvement and academic performance. The researcher also met the effect size or experimental importance (.3) as set forth in a-priori. Therefore, the researcher rejects the experimental importance null. In regard to the second, third, and fourth research question, the researcher did find positive correlations therefore rejecting the null hypothesis and also rejecting the experimental importance null.

Additional Statistical Analysis

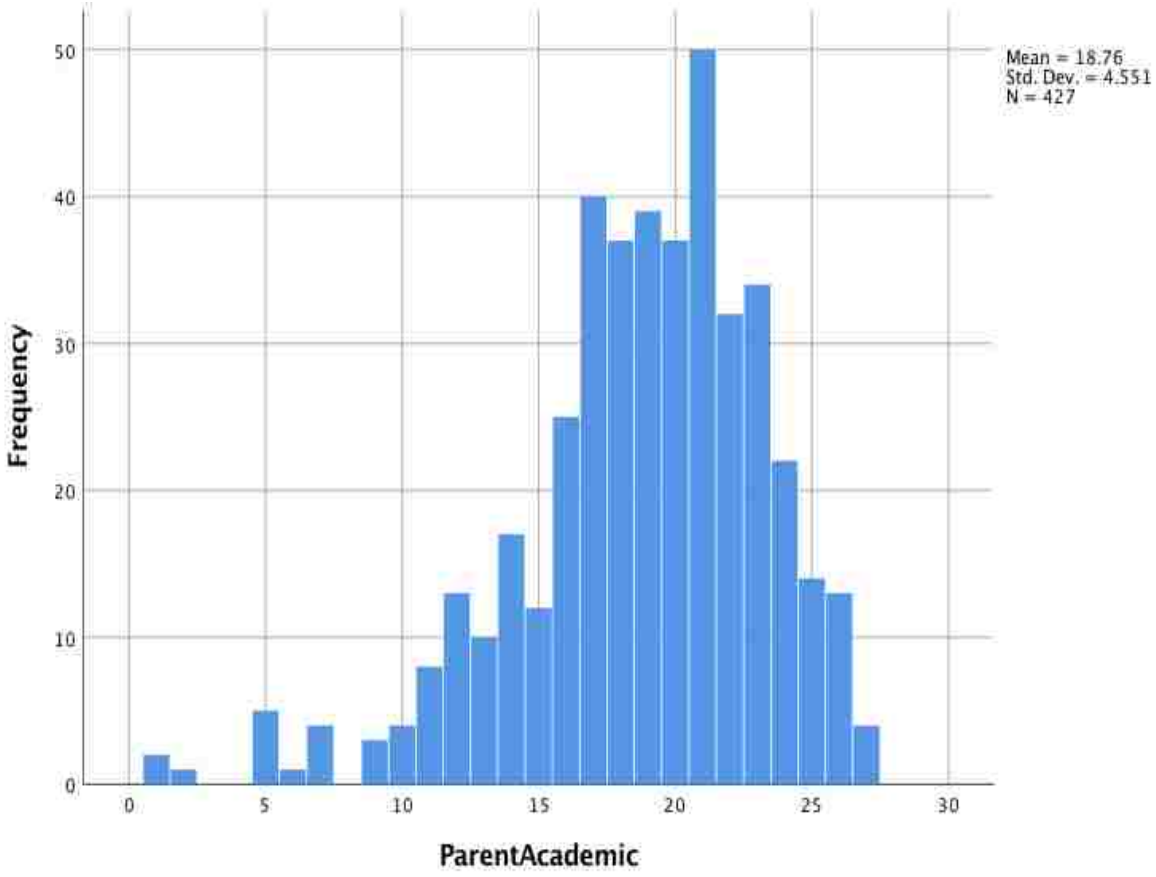
Upon determining the difference between the GPA's of student-athletes with a high and low level of involvement, and also looking at the relationship between parent involvement and academic self-efficacy, functional independence, and attaining adult criteria the researcher

conducted two additional analyses in search of trends in the data. The two additional analysis were: a) ANOVA determining a difference in GPA's of a low, medium and high level of parent academic involvement and b) ANOVA determining a difference in GPA's for student-athlete respondents with a low, medium, and high level of academic self-efficacy.

ANOVA with a low, medium, and high parent academic involvement. As mentioned in Chapter Three, parent academic involvement was measured by using four questions on a Likert scale from "strongly disagree" to "strongly agree" regarding how involved parents are in their academics. Each response was worth from 1-7 points and then totaled up for each question. Student-athletes received a total parent academic involvement score with 28 being the maximum score. A frequency of parent academic involvement was run (Figure 6) and a low, medium, and high level of parent academic involvement was determined based off of the mean and standard deviation. Low academic involvement $\geq$ 14, medium level of academic involvement was 15-21, and a high level of academic involvement $\leq$ 22. A One-way ANOVA was run to compare the means of the three groups where again, the independent variable is GPA. Tables 9 and 10 display the results of this statistical test.

Figure 6

Distribution of Parent Academic Involvement



Note: Low Academic Involvement ≥ 14 Medium Level of Academic Involvement = 15-21, High Level of Academic Involvement ≤ 22

Table 9

One Way ANOVA with Parent Academic Involvement and GPA

GPA	Sum of Squares	df	Mean Square	*F*	Sig.
Between Groups	.012	2	.006	.026	.974
Within Groups	96.577	421	.229		
Total	96.589	423			

The results from the one-way ANOVA was conducted to explore the impact of parental academic involvement on GPA as measured by the parent academic involvement scale. Student-athlete respondents were divided into three groups according to their parent's level of involvement (low parental academic involvement group: 14 or less; medium academic involvement group: 15-21; high level of academic involvement group: 22 or greater). There was not a statistically significant difference at the $p < .05$ level. With a .026 F ratio, the researcher can conclude that there is very small variability between the groups. The effect size, calculated using eta squared, by taking the sum of squares in between groups and dividing it by the group total was .0001 which, according to Cohen (1988) is a very small effect size. However, the researcher believed it was worth exploring these differences through a post-hoc comparison. Although post-hoc tests are run when results are statistically significant, the researcher still ran the post-hoc to simply determine the difference in GPA's between the three groups. Pallant (2010) stated that post-hoc comparisons are used when a researcher wants to look at a whole new

set of comparisons. Specifically, the researcher wanted to see if there was a difference in GPA's with student-athletes that have a low, medium, and high level of parent academic involvement. As shown in Table 10, a post-hoc comparison using the Tukey HSD test indicated that the mean GPA scores between the three groups were slightly different. Specifically, student-athlete respondents with the lowest amount of parental academic involvement have the lowest GPA's where the student-athlete respondents with a medium amount of parental academic involvement have the highest GPA's.

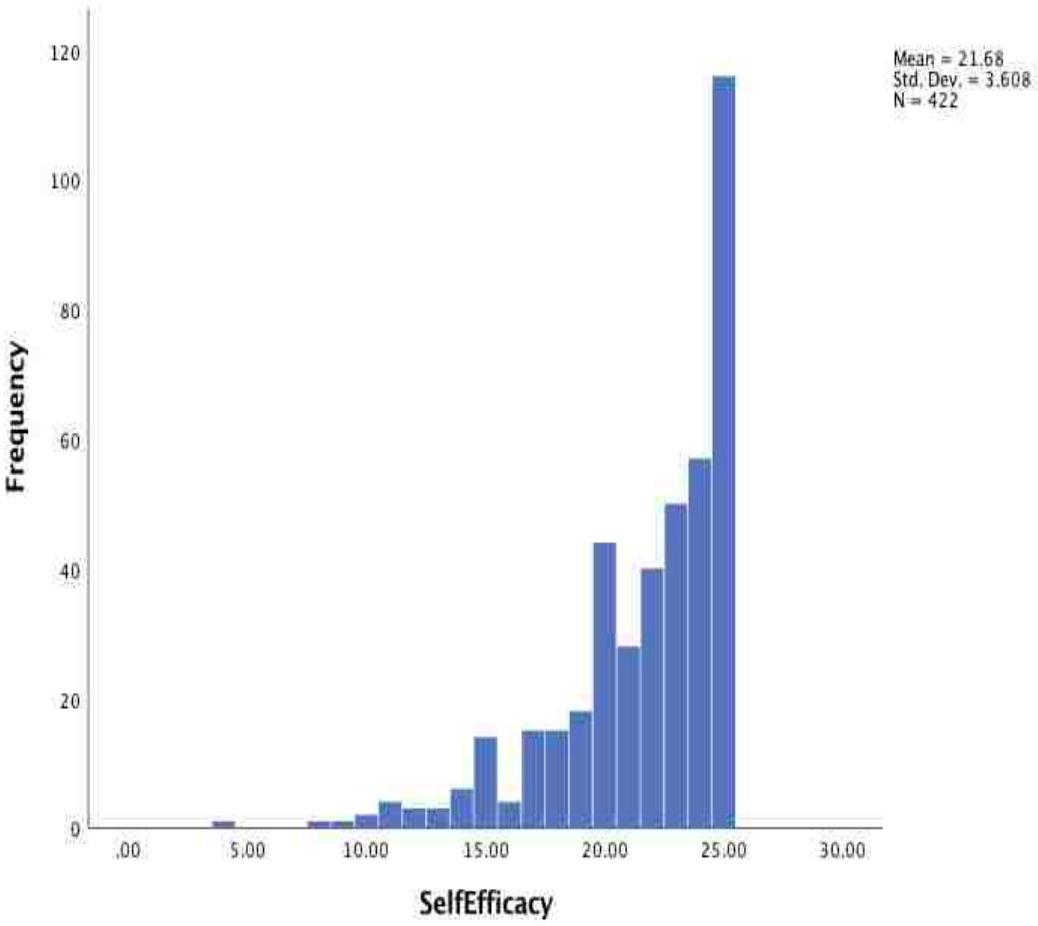
Table 10

Tukey Post Test with Parent Academic Involvement and GPA

Academic Involvement	*N*	GPA
Low	67	3.4091
Medium	238	3.4240
High	119	3.4187
Sig.		.971

Figure 7

Student-Athlete Academic Self-Efficacy



Note: Low self efficacy ≥ 18, medium self-efficacy 19-23, and high self-efficacy ≤ 24

Note: M=21.68, SD= 3.6, N= 422

ANOVA with a low, medium, high student-athlete self-efficacy. As stated in Chapter two, Bandura (1977) stated that self-efficacy is the belief that one can successfully accomplish the desired outcomes, where academic self efficacy is the belief that one can perform successfully in school. Learning that results were not statistically significant when looking at the differences between parent academic involvement and GPA, the researcher wanted to further explore if there was a difference between a low, medium, and high level of self efficacy and

GPA. Essentially, determining if student-athletes who believe they can do well in school have higher GPA's. As shown in Figure 7, a frequency of student-athlete academic self efficacy was run with $M = 21.68$, $SD = 3.6$, and $N = 422$. Similar to how parent academic involvement scores were totaled, each student-athlete responded to five questions through a Likert scale from "not at all" to "very true". Each response was scored from one to five and then summed for a total self-efficacy score. The maximum self-efficacy score a student-athlete respondent could receive was 20. Based on the mean of the frequency distribution, the researcher determined a low, medium, and high level of self efficacy and separated the GPA's of the three groups to run an ANOVA (table 11).

Table 11

One Way ANOVA with Academic Self Efficacy & GPA

GPA	Sum of Squares	df	Mean Square	*F*	Sig.
Between Groups	6.642	2	3.321	15.471	.000
Within Groups	88.014	410	.215		
Total	94.657	412			

Table 12

Tukey Post Test with Self Efficacy and GPA

Self Efficacy	*N*			
Low	68	3.18		
Medium	173		3.40	
High	172			3.54
Sig.		1.00	1.00	1.00

A one-way ANOVA was conducted to explore the impact of academic self efficacy on GPA as measured by the academic self efficacy scale. Student-athlete respondents were divided into three groups according to their total academic self-efficacy score (low academic self-efficacy group: 18 or less; medium academic self-efficacy group: 19-21; high academic self-efficacy group: 22 or greater). There was a statistically significant difference at the $p < .01$ level. With a 15.47 F ratio, the researcher can conclude that there a strong variability between the groups. The effect size, calculated using Eta Squared, was .07 which, according to Cohen (1988) is a medium effect size. As shown in Table 12, a post-hoc comparison using the Tukey HSD test indicated that the mean GPA scores between the three groups were different. As displayed in the post-test, student-athlete respondents with the lowest academic self-efficacy have the lowest GPA and student-athlete respondents with a high level of academic self-efficacy have the highest GPA. These findings are consistent with the literature on Zimmerman (2000) who stated that the higher the self efficacy beliefs, the more successfully students performed.

Summary

This chapter provided the findings of the statistical analysis through descriptive and inferential statistics in the form of displays and also narrative format. A summary of the results of the inferential statistics can be found in Table 12. Demographics, sample size, and the management of non responses were also discussed. In summary of the findings related to the independent and dependent variables originally being studied, there was a statistically significant and experimentally important relationship between parent involvement and student-athlete academic performance, academic self-efficacy, functional independence and attaining adulthood criteria. Therefore, the findings reject the null hypothesis. Upon further investigation between three additional ANOVA's, the researcher discovered six additional findings.

1. Student-athlete respondents with a medium level of parental involvement had the highest GPA (N = 247, M = 3.465, SD = .6, F =1.8, P =.155, r =.9).
2. Student-athlete respondents with a high level of parental involvement had the lowest GPA. (N =103, M = 3.33, SD =.56).
3. Student-athlete respondents with a medium level of parent *academic* involvement had the highest GPA (N = 238, M = 3.42, F =.026, P =.974, r =.001).
4. Student-athlete respondents with a low level of parental *academic* involvement had the lowest GPA (N = 67, M = 3.40, F = .026, P = .974, r = .001).
5. Student-athlete respondents with higher academic self-efficacy had the highest GPA (N = 172, M = 3.54, F = 15.47)
6. Student-athlete respondents with a high level of parent involvement are less functionally independent (N = 415, r = .402, P = <.001).

Table 13

Test Results

Dependent Variable	**Type**	**Independen *t* Variable**	**Type**	**Statistical Test**	***P* Value**	**Correlation Coefficient**	**Effect Size**	***F* Value**	**Statistically Significant Results?**
GPA	Interval/ Continuous	Parent Involvement	Categorical (1 = low, 2=high)	Independent T-test	.00		.3 (Medium)		Yes
GPA	Interval/ Continuous	Parent Involvement	Categorical (1 = low, 2 = medium, 3= high)	One-Sided ANOVA	.155		.9 (Large)	1.873	No
GPA	Interval/ Continuous	Parent Academic Involvement	Categorical (1= low, 2 = medium, 3 = high)	One-Sided ANOVA	.97		.001 (Small)	.026	No
Academic Self-Efficacy	Ordinal	Parent Involvement	Ordinal (0 = no involvement; 35 = high involvement)	Spearman Correlation	.00	.783	. 783 (Large)		Yes
Adult Criteria	Ordinal	Parent Involvement	Ordinal (0 = no involvement; 35 = high involvement)	Spearman Correlation	.00	.692	.692 (Large)		Yes
Functional Independence	Ordinal (0 = high independence 40 = not independent	Parent Involvement	Ordinal (0 = no involvement; 35 = high involvement)	Spearman Correlation	.00	.402	.402 (Medium)		Yes
GPA	Ratio	Self Efficacy	Ordinal (1 = low, 2 = medium, 3 = high)	One-Sided ANOVA	.00		.07 (Small)	15.41	Yes

Chapter Five: Conclusions and Recommendations

Creswell (2009) stated that quantitative survey design provides a numeric description of trends, attitudes, or opinions of a population by using a sample size that often employs relationships among variables. In this study, the researcher determined the effect of parental involvement on student-athlete academic performance, academic self-efficacy, functional independence, and attaining adult criteria. This study was developed to help fill a gap in the literature and inform leaders in the field. An introduction to the study was described, a comprehensive review of literature was provided, the methodology was explained, and results were provided. This chapter will explain challenges of the study, implications for leaders in the field, and also recommendations for future scholars.

Huberty (1993) stated that researchers have been using statistics in research for nearly 300 years. In today's world, many researchers still use statistics, but they place a very high value on the results of their statistical tests. Carver (1993) stated that several researchers claim their study to be significant when they are in fact small and not important, and a critical misuse of the *p* value is to determine causation between variables. That is, we cannot use the *p* value to determine if a treatment of the independent variable resulted in a specific effect on the dependent variable.

One of the most common alternatives to researchers relying solely on statistical significance is evaluating result importance by consulting effect size. Effect sizes measure the experimental importance or practical significance of a study. An effect size is subjective to the researcher because what may be experimentally important to one researcher may not be important to the next researcher. Additionally, the effect size is determined by the researcher prior to conducting the study. Although researchers essentially choose their own effect sizes, the

most popular guidelines are Cohen's (1988) guidelines for a small (.2), medium (.3), and large effect size (.5). After a researcher runs a statistical test, they must be able to put it together in context and look at the overall big picture to determine what their p-value truly means. If their study is statistically significant, they need to determine if it's also important. They also need to revisit their original research questions to ensure that they have been answered. Salkind (2012) stated that the success of a study often depends on how well has the original research question been answered and what contributions have been made in building from past research.

In this dissertation, three of the four research questions were statistically significant and also experimentally important indicating that the results of this study are not due to mere chance. Thompson (1993) indicated that if a study is found statistically significant there is something besides chance alone that gave the researcher the observed sample. The researcher is confident that this dissertation can help contribute to the literature surrounding the problem that this study originally aimed to address: student-athlete's dependence on parents inhibits their growth process and prolongs their progression to adulthood. This dissertation could also help change parenting styles and behaviors of student-athletes in the Big Sky Conference.

Challenges of the Study

It is unfortunate that not all of the targeted institutions wanted to participate in this study. The researcher tried to establish rapport with the other academic advisors in the conference (as much as one could within the short time frame). The one institution that did not participate stated the reason for non-participation was because they are deliberate with protecting their student-athletes' and the information they receive. The advisor stated that administration and the student-athlete advisory committee reviewed the abstract of this study (provided by the researcher upon request) and voted not to pass it on to their student-athletes. Whether or not this actually

happened is unknown; however, the researcher could not help but question what the advisor meant by stating that they are protecting their student-athletes from information they receive. Rather, it seemed they were sheltering or hindering them from participating in any kind of research, let alone within their own athletic conference. Making sure not to pressure, the researcher did not inquire further.

Participating in any kind of approved research and learning the results is something that individual athletic departments should wholeheartedly be open to be included in the information gathered. Whether or not a student-athlete wants to participate in a survey should be up to the individual student-athlete. However, as a former student-athlete in this very same conference, the researcher is aware of the high volume of e-mails student-athletes receive, that student-athletes can be a targeted population, and that not all academic advisors or administrators may have the same appreciation for research. Nonetheless, it remains a challenge.

Another challenge of this study was not having a good representation of student-athletes that had below a 3.0 GPA. In this study, 345 student-athlete respondents had a 3.0 GPA or higher and only 79 respondents had below a 3.0 GPA. Granted, it was great to see the student-athlete respondents have excellent GPA's, but the researcher had hoped for more of a representation from student-athletes that had below a 3.0 GPA. There was no real way to specifically recruit the student-athletes with below a 3.0 GPA, and the researcher had no incentives to award participation.

Implications for Leaders

Student-Athletes. The results of this study are important for student-athletes in the Big Sky Conference for two reasons. First, results may help student-athletes reflect, evaluate, and analyze their very own behaviors. If student-athletes are cognizant that they perform better in

school and are more functionally independent when their parents are moderately involved in their lives, they may actually reflect on just how involved their parents are in their own lives. Additionally, by reflecting on their own involvement and relationship with their parents, it may help them become better parents themselves. Revisiting the term Authentic Leadership, Scott (2014) stated that authentic leaders have a high level of self-awareness. By having a high level of self-awareness, student-athletes become more confident and secure in their own abilities to make their own decisions, and it also helps create a healthy separation from parents.

The second reason the results of this study are important for student-athlete leaders is because if they perceive themselves doing well in their academics, they are more than likely going to do well. Understanding that student-athletes in this sample who had the highest GPA's also had the highest self-efficacy is paramount to reflecting on their own academics. Much like many of them do in their sport, if they visualize themselves doing well in school, they more than likely will. Or, they will at least do better than if they had low confidence and a negative attitude towards their academics. As mentioned in Chapter Two, Bandura (1977) stated that athletes that have the same athletic capabilities won't perform the same because of differing levels of perceived self-efficacy. As shown by the results of this study, this statement is also true in academics and in educational settings. This reaffirms Zimmerman (2000), who stated that the higher the academic self-efficacy beliefs, the higher the students perform. Also, it is important to remember that student-athletes with a high sense of efficacy for accomplishing an educational task will work harder and persist longer when they encounter difficulties than those that doubt their capabilities (Bandura, 1977).

Revisiting the theory of emerging adulthood, Arnett, (2000) stated that young people making the transition to college have left the dependency of childhood, but are not quite adults.

Arnett (2000) stated that many emerging adults do not see themselves as adolescents but they also do not yet see themselves as adults yet either. Student-athletes are not expected to make the same decisions as adults, nor should they. It is not the time in their lives where they have to make mortgage payments or go to a 9am-5pm job. However, they should be making their own independent decisions as much as they are able. As mentioned in Chapter Two, the top two criteria for preparing for the transition to adulthood in a variety of studies have been accepting responsibility for one's self and making independent decisions (Arnett, 2000).

Educators. For purposes of this study, the term "educators" encompasses anyone that is directly involved with the success of student-athletes (coaches, administrators, academic advisors, professors, trainers, etc.) When educators interact with parents, it will be important for them to keep the results of this study in mind for three reasons. First, these results may help them understand that parental involvement in their student-athlete's lives is a good thing. In this study, it was shown that a medium level of overall involvement shows that student-athletes perform better in school, they are more functionally independent, and they also have more adulthood criteria. Student-athletes with a low amount of academic involvement had the lowest GPA's and student-athletes with a high amount of parent involvement are less functionally independent. By understanding the results of this study, it may help them understand their own involvement with parents and help the parents strike a balance of medium level of involvement.

Secondly, the results of this study can help educate parents and their student-athletes. Having conversations with student-athletes and parents about the importance of having a medium amount of involvement will be useful, especially at the start of their student- athlete's career. Again, Wooden (1999) stated that coaches are teachers, not just merely people with authority. In college, student-athletes spend more time with coaches more than any other

authoritative figure, therefore providing more influence than anyone. As such powerful influences, coaches should take this responsibility seriously. Educators can send out information about resources regarding parenting in collegiate athletics or direct parents to other resources such as Dorsch and colleagues' (2017) Online Education Module for Parents of NCAA Student-athletes.

Unruh, (1999) stated that the importance coaches place on academics and their relationships may be significant predictors of student-athletes' academic success and persistence. It is evident that coaches, administration, and advisors' support of academics in collegiate athletics is an essential aspect of the student-athlete experience. In fact, it is imperative that all entities involved in the support of the student-athlete experience understand that parents are a vital component of that success. If they all emphasize the importance of obtaining a degree and focusing on academics, student-athletes are more likely to perform well in school (Alder & Alder, 1985).

Finally, the results of this study can help educators raise the academic self-efficacy levels in student-athletes. Museus (2011) supported this opinion by stating that institutions and educators should play a vital role in raising the academic self-efficacy levels of their students. If educators see a particular student-athlete being down about a particular class or subject, they should be able to talk to them about the class and encourage them to stay with it and remain optimistic about the outcomes. By stressing not just the importance of academics, but also academic self-efficacy, educators can help their student-athletes perform better in school. As Newman, Couturier, and Scurry, (2004) stated that teaching and learning will always be the core goals of higher education. However, instead of providing the opportunity and resources that allow learning, they must take responsibility for learning.

Parents. The results of this study will also help parents in four ways. First, by learning the results of this study, parents will learn that leaving the big decisions up to their student-athletes is a part of psychological separation. Revisiting Chapter Two, psychological separation or "individuation" can be considered a healthy personal adjustment that is critically dependent on the ability to psychologically separate from parents and gain a sense of identity as a completely separate individual (Hoffman, 1984, Arnett, 2000). Secondly, they will become aware that by having a medium level of involvement, their student-athlete may have more positive outcomes in academics, functional independence, and attaining adult criteria. Essentially, interacting with them on a moderate level is for their student-athlete's own benefit. As Comeaux and Harrison (2011) alluded, "Family's support and expectations of college are as vital to the student-athlete's success as the student athlete's own expectations about his or her future" (p. 239).

Having too much involvement, or even too little involvement could hinder their student-athlete's success in many areas of their life. As noted by Hoffman (1984), adolescents' greater need for emotional support from his or her parents interferes with successful productivity in academic work. Parents must find their own delicate balance of moderate interaction between their student-athletes and educators. Mattanah and collegaues (2004) suggested that secure parental attachment and healthy levels of separation-individuation have been consistently linked to greater college student adjustment. This also relates back to Ashton's (2002) attachment theory, where he suggested that parents need to help their children feel more secure about their own independent decisions and not just load them with advice.

Third, as a result of this study's findings that a high level of involvement actually hinders functional independence, parents may learn that they need to be careful with being overly involved and give them enough autonomy to help lead them towards functional independence.

Cullaty (2011) stated that college students reported that autonomy is one of the primary learning outcomes for their experiences outside of the classroom. As a result of this study, some parents may even learn that they are actually not involved enough in their student-athlete's lives.

Fourth, by learning this study's outcomes, parents can help educate other parents and have constructive conversations about some of the positive interactions and developments they may have had with their student-athletes. From six years of academic advising in DI athletics, the researcher is aware that there will always be parents that believe an excessive high amount of involvement is good for their son or daughter for a variety of reasons. Either they think their son or daughter has no time, they have always taken care of things for them before, they do not believe their son or daughter is capable, they enjoy taking care of things for their son or daughter, or simply because it comes second nature to them and they do not think about the possible long term negative effects of an extreme amount of involvement. Instead of an educator, spouse, or their own student-athlete talking to them, other parents may be the only way to get through to these excessively involved parents.

Recommendations for Future Studies

After conducting the study and analyzing and interpreting the data, the researcher has four recommendations for future studies. Creswell (2009) stated that validity is the extent to which an instrument measures what it is supposed to measure and and performs how it is supposed to. Content validity refers to the appropriateness of the content of an instrument, which essentially accurately assesses what the researcher wants to know. In this study, content validity was met. The instrument (Qualtrics) was sound, and helped the researcher discover the answers to the research questions. However, they did not meet external validity, which is the extent to which the results of a study can be generalized from a sample to a population. For future studies,

it would be highly recommended to obtain a random sample so that the results can in fact be generalized back to the population. By obtaining a random sample, the researcher could also gain a more diverse representation of cumulative GPA's. Although the researcher did receive a solid sample size of 461 student-athlete respondents, 81% or 345 out of 427 student-athlete respondents had above a 3.0 GPA. The researcher is aware that the low academically achieving student-athletes (GPA below a 3.0 GPA) often have difficulties even checking their e-mail, let alone taking a survey that is not required of them with no incentives. For future studies, it would be interesting to obtain a better representation of the student-athletes with below a 3.0 GPA perhaps through an incentivized text message directly to their phones.

Although demographic questions are useful to help the researcher gain a perspective of their population and to learn more about the sample, after analyzing this study, the researcher determined too many demographic questions may have been asked. For future studies, it is recommended to have less demographic questions. There were 16 questions in this study that the researcher reported as raw data. Although responses were interesting, this may have been too many questions. As shown in the survey in Appendix B, question number 11 (with whom they currently live), number 12 (with whom they live during the school year), and number 14 (their birth order) were not directly applicable to this study and could have been left out. Although 22 questions was considered a short survey by the researcher, 5-7 minutes may have seemed like an eternity for student-athlete respondents. From analyzing the results, it was clear to see that the further the study went on, the more the student-athlete respondents dropped out of the study or just did not answer the questions. By eliminating unnecessary questions, the survey could have been shorter. This may have resulted in more responses toward the end of the survey.

A small, but potentially important detail for future studies would be to put the "meat of the study" or most important questions for what the researcher is going to analyze at the beginning of the study. This may have helped with mortality, an internal threat to validity. Campbell and Stanley (1963) stated that mortality, otherwise known as subject attrition may bias the results. Question #3 (inquiring which sport they played) had the most responses with 458. By question #22 (which measured functional independence), 43 student-athlete respondents had either dropped out of the survey or did not answer with a total of 415 student-athlete respondent's. Although this is still a 90% response rate for the last question on the survey, it would be interesting to see the results if they included the other 10% of the sample.

The last recommendation for future studies would be to utilize a mixed methods approach with parents and student-athletes. Creswell (2013) stated that mixed methods research is an approach to inquiry that combines or associates both qualitative and quantitative forms. It involves philosophical assumptions, the use of qualitative and quantitative approaches, and mixing both approaches in a study. Thus, it is more than simply collecting and analyzing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either qualitative or quantitative research.

Summary

Dewey (1916) pointed out that experience and education cannot be directly equated and that learning experiences should meet certain stringent criteria. They should be growth enhancing, arouse curiosity, strengthen initiative, and enable the individual to create meaning. It was this concern for learning that led him to place such a great emphasis on experience. Emphasizing experience outside of the classroom, student-athletes learn just as much from their student-athlete experience as they do from their formal education. Parents and educators can

support today's student-athletes by helping them become informed through constant communication, letting them make their own autonomous decisions, and by encouraging independent thinking.

The problem this study was designed to address is that student-athletes' dependence on parents inhibits their growth process and prolongs their progression to adulthood. Although this dissertation did not solve this problem, it helped fill a gap in the literature and will help inform leaders in the field. The four research questions of this dissertation were answered and recommendations were made for future studies. After analyzing the results of this study, the researcher has determined that a moderate level of parent involvement is the best way that parents can support their student-athletes in their college experience. Hellestedt (1987) stated that a moderate level of involvement includes firm and supportive parental direction, but with flexibility so that the ultimate decisions are made by the athlete. This aligns with Dorsch and colleagues' (2016) assertion that an appropriate or moderate level of involvement is linked with positive student-athlete outcomes.

Cozby and Bates (2015) stated that research is important because it can provide us with the best answers to questions and is a way "to satisfy our native curiosity about ourselves, the world, and those around us" (p. 3). It is important that research on this topic continue. It is imperative that every NCAA student-athlete remain curious, inquisitive, and confident in their ability to make their own decisions. Salkind (2012) stated that researchers have a passion for understanding what they study and coming as close as they can to finding the "truth". "Although these truths can be elusive and sometimes even unobtainable, researchers work toward discovering them for the satisfaction of answering important questions and then using this information to help others" (p.1).

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Appendix A

Email to Academic Advisors

From: Gardner, Grace
Sent: Friday, December 29, 2017 8:19 AM
To: Gardner, Grace (Grace.gardner@mso.umt.edu)
Subject: Big Sky Conference Survey

Good morning fellow academic advisors of the Big Sky Conference,

My name is Grace Gardner and I am an advisor for the Department of Intercollegiate Athletics at the University of Montana (UM). I oversee men's basketball, women's volleyball, track and field, and cross country. As a former student-athlete at the University of Montana, I have a deep appreciation for the competitiveness and prestige of this conference and I hope your year is going well.

As a doctoral candidate in the Department of Educational Leadership at UM, I am studying the relationship (if any) between parental involvement, academic performance, academic self-efficacy, functional independence, and the achievement of adulthood criteria of student-athletes in the Big Sky Conference. I am emailing you requesting to see if you would be able to send out a survey link to all of your student-athletes once your classes start up again. The Big Sky Conference Commissioner, Andrea Williams has given me permission to send the survey out and this study has also been approved by the University of Montana IRB #265-17. The survey will approximately take 5-7 minutes. No individual, team, or institutional names will be used in this dissertation.
I know the beginning of spring semester/term is a nuthouse, but if you could please send the below e-mail message out to your student athletes within the first few weeks of school (at your discretion) I would be forever grateful! I am hoping to close the survey the third week in February. If you have questions, or if you would like a copy of the survey results please let me know.

Thank you in advance for your help and happy New Year!

Grace

Grace Gardner, MPA, Ed.D Candidate
Athletic Academic Services
DEPARTMENT OF INTERCOLLEGIATE ATHLETICS
UNIVERSITY OF MONTANA
(406)243-4420 www.gogriz.com

PLEASE EMAIL THE FOLLOWING MESSAGE TO ALL OF YOUR STUDENT-ATHLETES (ONCE YOUR FALL GRADES HAVE BECOME OFFICIAL & STUDENT-ATHLETES ARE BACK ON CAMPUS).

Hello,

My name is Grace Gardner and I am a doctoral candidate in the department of Educational Leadership at the University of Montana. You are invited to participate in an online survey for a research study that should take approximately 5-7 minutes. The purpose of this study will be to examine the relationship (if any) between parental involvement, academic performance, academic self-efficacy, functional independence, and the achievement of adulthood criteria of student-athletes in the Big Sky Conference. You must be at least 18 years old to participate in this study. Please click here to take the survey. OR copy and paste this link into a different browser:
https://umt.co1.qualtrics.com/jfe/form/SV_2mkItMDykwDobUp
Thank you!

Grace

Grace Gardner
Ed.D Candidate
University of Montana
E:grace.gardner@mso.umt.edu
C: (406) 531-2588

Appendix B

Survey

Survey

SURVEY CONSENT FORM

You are invited to participate in an online survey that should take approximately 10 minutes. The purpose of this study will be to examine the relationship (if any) between parental academic involvement, academic performance, academic self efficacy, functional independence, and adult criteria of student-athletes in the Big Sky Conference.

Investigators

Grace Gardner (doctoral candidate): grace.gardner@mso.umt.edu
Dr. Frances O'Reilly (professor): Francee.O'Reilly@mso.umt.edu

Participation & Risks

Your participation in this survey is voluntary, and responses will be kept anonymous to the degree permitted by the technology being used. This survey has no anticipated risks, compensation, or other direct benefits to you as a participant.

Withdrawal

You have the option to not respond to any questions that you choose and withdrawal from this study at any time. Participation or non participation will not impact your relationship with the University of Montana or your institution. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

Contact Information

If you have any questions about the research, please contact the Principal Investigator, Grace Gardner via email at grace.gardner@mso.umt.edu or the faculty advisor, Dr. Frances O'Reilly at Francee.O'Reilly@mso.umt.edu. If you have any questions regarding your rights as a research subject, contact the UM Institutional Review Board (IRB) at (406) 243-6672.

Confidentiality

There will be no individual, team, or institutional names that will be used in this dissertation, final reports, or publications.

Please print or save a copy of this page for your records.

○ I have read the above information, agree to participate in this research project, and confirm that I am at least 18 years old.

○ I do not wish to participate in this study.

Are you playing on a men's or women's team?

○ Men's

○ Women's

The main NCAA sport that you play is: (Select one)

☐ Basketball

☐ Cross Country

☐ Football

☐ Golf

☐ Soccer

☐ Softball

☐ Tennis

☐ Track (Indoor or Outdoor)

☐ Volleyball

What institution do you attend?

○ Eastern Washington University

○ Idaho State

○ Montana

○ Montana State

○ North Dakota

○ Northern Arizona

○ Northern Colorado

○ Portland State

○ Sacramento State

- ○ Southern Utah
- ○ Weber State

What is your academic classification in college? (Select one)

- ○ Freshman
- ○ Sophomore
- ○ Junior
- ○ Senior
- ○ Graduate Student
- ○ Post Baccalaureate

What is your current cumulative college GPA?

What is your academic major?

How do you describe yourself?

- ○ American Indian or Alaskan Native
- ○ Asian or Asian American
- ○ Black or African American
- ○ Hispanic or Latino
- ○ Hawaiian or Pacific Islander
- ○ White
- ○ Mutiracial
- ○ Other

What is your current age? (In years)

- ○ 18-20

- ○ 21 or older

Are you a transfer student? (Select one)

- ○ No
- ○ Yes, from a 2-year college
- ○ Yes, from another 4-year NCAA college
- ○ Yes, from a 4-year non- NCAA college

With whom do you currently live?

- ○ I live alone
- ○ With parents, family, or significant other
- ○ With teammates or other student athletes only
- ○ With a mix of student athletes and others
- ○ Only with other students who are not athletes
- ○ Only with others who are not students at this school

Where do you currently live during the school year?

- ○ Residence hall or other campus housing/apartment
- ○ Fraternity or Sorority house
- ○ Off campus apartment or house

Are you an international student?

- ○ Yes
- ○ No

What is your birth order?

- ○ Only child, no siblings
- ○ Youngest child
- ○ Middle child

- ○ Oldest child

What is your mother's highest level of education?

- ○ Some high school
- ○ High school graduate or GED
- ○ Some college
- ○ Associate degree
- ○ Bachelor's degree
- ○ Master's degree
- ○ Professional degree
- ○ Doctorate degree
- ○ MD
- ○ JD
- ○ Other

What is your mother's marital status?

- ○ Married
- ○ Single, never married
- ○ Living with partner, not married
- ○ Widowed
- ○ Divorced
- ○ Seperated
- ○ Other

What is your father's highest level of education?

- ○ Some high school
- ○ High school graduate or GED
- ○ Some college
- ○ Associate degree
- ○ Bachelor's degree

- ○ Master's degree
- ○ Professional degree
- ○ Doctorate degree
- ○ MD
- ○ JD
- ○ Other

What is your father's marital status?

- ○ Married
- ○ Single, never married
- ○ Living with partner, not married
- ○ Widowed
- ○ Divorced
- ○ Seperated
- ○ Other

CONTACT WITH PARENTS (Parent Involvement)

In the past few months, how often have you and your parent(s) communicated with each other using the following methods?

	Not at All	Less than 3 times a month	2-3 times a Month	4 Times a Month	3 Times a week	4 Times a week	Daily
In Person	○	○	○	○	○	○	○
E-Mail	○	○	○	○	○	○	○
Phone (cell and/or land line)	○	○	○	○	○	○	○
Texting	○	○	○	○	○	○	○
Social Media (i.e. Facebook, Video Chatting e.g. Skype or FaceTime)	○	○	○	○	○	○	○

PARENTAL ACADEMIC INVOLVEMENT

Please rate how much your parent(s) take part in your academics in the following statements.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
My parent(s) and I discuss what classes I should take.	O	O	O	O	O	O	O
My parent(s) and I discuss what I am learning in class.	O	O	O	O	O	O	O
My parent(s) are very interested in my academic progress.	O	O	O	O	O	O	O
My parent(s) stress the importance of getting good grades.	O	O	O	O	O	O	O

ACADEMIC SELF EFFICACY

	Not at all true	Slightly true	Somewhat true	Moderately true	Very true
I'm certain I can master the skills taught in my classes this year.	O	O	O	O	O
I'm certain I can figure out how to do the most difficult work in my classes.	O	O	O	O	O
I can do almost all of the work in my classes if I don't give up.	O	O	O	O	O
Even if the work is hard, I can learn it.	O	O	O	O	O
I can do even the hardest work in my classes if I try.	O	O	O	O	O

ADULT CRITERIA

Below are two standards for being an adult. Please rate how much you think you have achieved these standards.

	Strongly Disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Accepting responsibility for yourself.	O	O	O	O	O	O	O
Making independent decisions.	O	O	O	O	O	O	O

FUNCTIONAL INDEPENDENCE

The following list of statements describes different aspects of your relationship with your parent(s). Please rate how each statement applies to you.

	Not at all true of me	A little bit true of me	Moderately true of me	Quite a bit true of me	Very true of me
My parent(s) wishes have influenced my selection of friends.	O	O	O	O	O
When I am in difficulty, I usually call upon my parent(s) to help me out of trouble.	O	O	O	O	O
I often ask my parent(s) to assist me in solving personal problems.	O	O	O	O	O
My parent(s) wishes have influenced my choice of major at school.	O	O	O	O	O
I generally consult with my parent(s) when I make plans for an out-of-town weekend.	O	O	O	O	O
I ask my parents what to do when I get into a tough situation.	O	O	O	O	O
I do what my parent(s) decide about most questions that come up.	O	O	O	O	O
I call my parent(s) whenever anything goes wrong.	O	O	O	O	O

Explanation of Research

Thank you for participating in this survey! The results of this study will help the researcher better understand the relationship between parental involvement and Big Sky Conference NCAA student-athlete's academic performance, academic self-efficacy, functional independence, and achievement of adulthood criteria.

If you would like a copy of the results, or have specific questions about this study, please contact Grace Gardner at grace.gardner@mso.umt.edu or (406) 531-2588.

Appendix C

Modified Instrument Scales

1. **Contact with Parents (Parent Involvement)** – Adapted from Dorsch et al. (2015) students rated how often they are in contact with their parents in person, through e-mail, phone, texting and social media. Ratings were through a Likert scale from *not at all* to *daily*.

2. **Parent Involvement Scale** –Four items from *Parental Engagement and Contact in the Academic Lives of College Student-athletes.* Original author De'Sha Wolf, Linda Sax, and Casandra Harper (2009). Adapted from Dorsch et al. (2015).

   Please rate how much your parent(s) take part in your academics in the following statements.
   Strongly Agree/Disagree/Somewhat disagree/Neither agree nor disagree/Somewhat agree/Agree/Strongly agree
   1) My parent(s) and I discuss what classes I should take
   2) My parent(s) and I discuss what I am learning in class
   3) My parent(s) are very interested in my academic progress
   4) My parent(s) stress the importance of getting good grades.

3. **Academic Self-Efficacy Scale**. Five items from the Academic Efficacy subscale of the Patterns of Adaptive Learning Scales. Originally published by Carol Midgley (2000), intends to "examine the relationship between a student's learning environment and a student's motivation, affect, and behavior" (Statistic Solutions, 2017). Adapted from Dorsch et al. (2015).

   Not at all true/Slightly true/ Somewhat true/ Moderately true/Very true
   1) I'm certain I can master the skills taught in my classes this year
   2) I'm certain I can figure out how to do the most difficult work in my classes
   3) I can do almost all of the work in my classes if I don't give up
   4) Even if the work is hard, I can learn it
   5) I can do even the hardest work in my classes if I try.

4. **Attainment of Adulthood Criteria-** Two statements from Jeffrey Arnett's (2000) theory of emerging adulthood. Adapted from Dorsch et al. (2015).

   Below are two standards for being an adult. Please rate how much you think you have achieved these standards.
   Strongly Agree/Disagree/Somewhat disagree/Neither agree nor disagree/Somewhat agree/Agree/Strongly agree
   1) Accepted responsibility for yourself.
   2) Make independent decisions.

5. **Functional independence Scale** - 8 items from 13 item scale that helps measure "Student-athlete perceptions of freedom from excessive reliance on parent help with practical and personal affairs" (Dorsch et. al, 2017, p. 28). Originally created by Jeffrey Hoffman (1984) and adapted by Dorsch et al. (2015).

   The following list of statements describes different aspects of your relationship with your parent(s). Please rate how each statement applies to you.
   Not at all true of me/A little bit true of me/ Moderately true of me/ Quite a bit true of me/ Very true of me
   1) My parent(s) wishes have influenced my selection of friends
   2) When I am in difficulty, I usually call upon my parent(s) to help me out of trouble
   3) I often ask my parent(s) to assist me in solving personal problems
   4) My parent(s) wishes have influenced my choice of major at school
   5) I generally consult with my parent(s) when I make plans for an out-of-town weekend
   6) I ask my parents what to do when I get into a tough situation
   7) I do what my parent(s) decide about most questions that come up
   8) I call my parent(s) when anything goes wrong.